

April 1976

# House & Home

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## SAVING ENERGY

How to do it  
How to sell it p.60

### Also:

Working out an apartment disaster p.74

New fourplex design—a ten-day sellout p.80



# "Tredway™'s installed cost is very close to vinyl-asbestos tile. And we haven't had a single callback on any Armstrong Tredway floor."



An interview with  
Rochester builder,  
Art Titus of Ryan Homes



## How does the cost of Tredway compare to vinyl-asbestos tile?

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"In fact, because we've eliminated the underlayment, Tredway costs us considerably less than any other cushioned vinyl material."



Regular flooring can ridge or split



Tredway adjusts to subfloor changes

## Does Tredway live up to your expectations?

"Definitely. We liked the flexibility, the convenience, and the speedy installation. The fact that Tredway didn't show ridging or buckling certainly was something we were all happy about. Tredway's elasticity eliminates these problems because it expands and contracts to meet subfloor shifts."

## What about callbacks?

"So far, we haven't had a single complaint. What we're looking for is satisfied customers. When a product gives you that, the way Tredway has, you know it's doing the job for you."

## Has Tredway affected your schedule?

"Very much so. We've been able to schedule Tredway's installation toward the end of the job. So we don't suffer the wear and tear, the damage we run into with vinyl-asbestos tile. And scheduling the floor installation after all the kitchen guys are done sure makes the new homeowner happier."

## How about repairs?

"So far, we haven't had to make any. But we think it's

great to have a product where you don't have to rip up the whole works and reprepare the subfloor the way you have to do with vinyl-asbestos tile."

## What have been your customers' reactions to Tredway?

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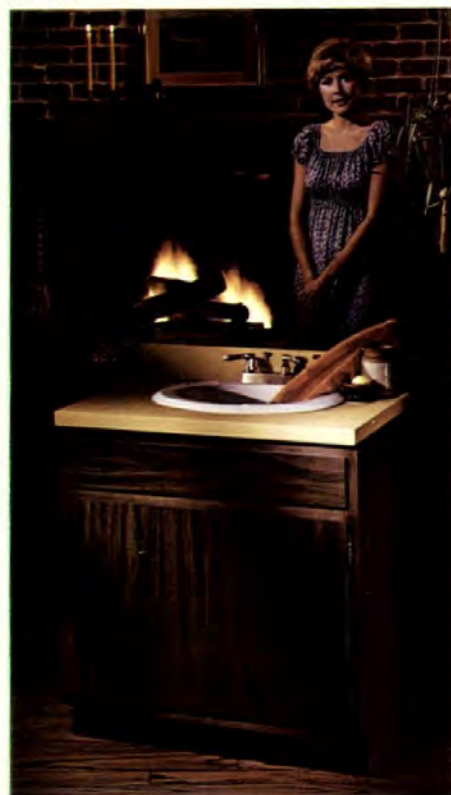
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Montreal



Saratoga



Kensington



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# House & Home

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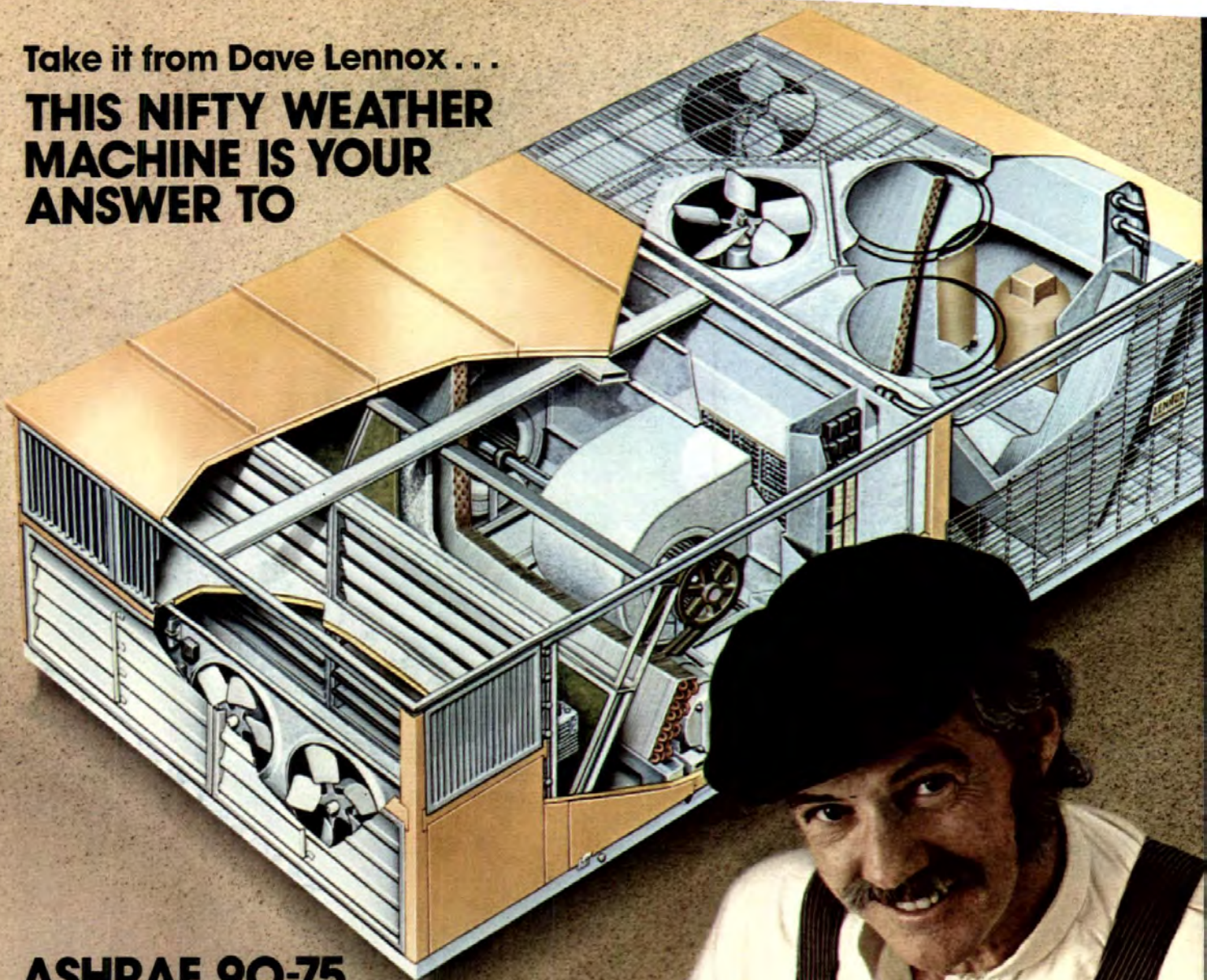
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# Once again the S&Ls get things their own way in Washington

Congress marched right up to the brink of a decision to eliminate the savings and loan industry's favorite protective device—deposit yield ceilings, usually referred to as Regulation Q—and then marched back.

It chose instead to lock the ceilings in place by statute until 1981.

Further, it now looks as if the ceilings will be safe indefinitely unless the marketplace proves that Regulation Q can no longer prevent deposits from running out of mortgage-lending thrift institutions.

The big winner is the savings-and-loan industry. Not only are S&Ls gathering up all kinds of new powers on Capitol Hill, they are escaping the burden of having to push an annual extension of the Q ceilings through Congress every year. That chore had been getting a bit difficult, that with allegations in Congress that the ceilings provide for an outright rip-off of the small saver.

**The hold-down.** The ceilings limit the amount of interest that banks and thrifts may pay on deposits of small denominations. The ceilings, S&Ls insist, are therefore a necessary shelter for thrifts from deposit raids by banks.

In the Senate the lobbyists for the thrift industry had won their fight in December, when the upper chamber approved the Financial Institutions Act (FIA), originally intended to end Regulation Q, the act, in its much-mended final version, was lavish in giving new powers to thrifts and was so muted in its possibility of dropping Q that the latter seemed quite safe.

**The fire-eater.** On the House side, the Banking Committee's chairman Henry Reuss (D., Wis.) had breathed fire against Regulation Q in November. His "Discussion Principles" for financial institution reform flatly stated that "in no event" would Q be allowed to continue beyond a transition period of five years, and they had added: "There should be no promise of a final review before the ceilings are eliminated."

Could Reuss have sold that viewpoint to his House colleagues it might have become law, for he and the Ford administration both see Q as out-of-

date, anticompetitive and inequitable. Assistant Attorney General Thomas Kauper of the Justice Department's antitrust division told Congress:

"The ceilings have caused small savers to receive less than the full market value for their funds. In addition, they lessen the incentives of financial institutions toward cost-saving efficiencies."

**And the pleaders.** Kauper was only one witness at the hearings Reuss held on Regulation Q last winter, however. When the sessions ended, it was clear that almost all other witnesses were ardently in favor of the ceilings. The AFL-CIO joined lenders and builders of houses in warning Congress that lifting the ceilings could force mortgage rates up catastrophically.

Those few witnesses from academic and consumer groups who were willing to risk removal of Q could not agree on what ought to replace it as a stimulus to a supply of mortgage money.

**Bank angle.** There was another consideration that worked in favor of the retention of the deposit ceilings.

From January on, a burst of publicity about "problem banks" sent Reuss racing toward an even more ambitious financial restructuring—a complete consolidation of all bank regulation. To achieve that outsized objective in an election year—against solid opposition from the central bank, the White House and the big banks—would be possible only if such ancillary issues as Q were soft-pedaled.

So, reversing direction, Reuss decided to endorse the FIA almost word for word and attach it to his controversial bill for bank regulation. That way, said a committee aide, the FIA could serve as "ballast" to float the more important bank material.

**Someday? Well, maybe.** The debate over Q in Congress was subsumed, therefore, rather than resolved. Asked what he now expects to happen to Q after 1981, the House committee chairman replied: "It may well be that Regulation Q will be continued. On the other hand, if it leads to disintermediation, it may be conked. But it would be too traumatic to do that now."

That leaves it to the market to prove the case opponents make against Q—that it leaves housing at the mercy of specialized lending institutions which run short of money in tight money periods. The S&Ls' high short-term interest rates make it impossible for them to keep on borrowing short and lending long to make home loans.

**Cry wolf.** So far the S&Ls and savings banks—in spite of all dire warnings—have seldom run into any problem with a net outflow of funds. In the last 21 years the S&Ls' deposits failed to rise from one month to the next in only five months.

But the rate of that deposit growth has fluctuated with increasing severity. And even during recent months, when inflation and short-term rates were at trough rather than peak levels, there have been signals that small depositors are increasingly looking for yields higher than Regulation Q permits. For example, in the week that Reuss made his decision to accept the Senate treatment of Regulation Q, some 106,000 bidders—far more than ever bid before at a Treasury auction—put in tenders totaling \$29 billion for some \$3.5 billion of U.S. notes offered for sale. The note yield of 8% was a half point above the Regulation Q ceiling on deposits.

**Hope eternal.** Looking ahead, a banking industry lobbyist insists that he is hopeful the marketplace will upset Q:

"If there is another 1974, people will become more interest-sensitive than ever before," he explains. "And in a capital-short economy, corporate borrowers will get more ingenious about how to tap all savings dollars—even the small ones."

If so, Congress may have to come back even before 1981 to make another pass at the shibboleth that is Regulation Q. For it is hard to see how the FIA will do what one House committee economist defines as the goal:

"What we want is depository institutions that will be viable for a number of years to come, and to resolve the questions raised by the increasing difficulty in maintaining Q and the increasing incursion of the federal government into the housing market."

**Partisans of Q.** Some attitudes have hardened, however, since Congress began to deliberate whether to end Regulation Q and the specialized mortgage role of thrift institutions. One of the principal architects of the Senate-passed FIA says, "One thing I've learned in three years on this project is that when thrifts say they don't want to become second-class banks, they are in dead earnest. At this point it has become a kind of holy war."

And even more distasteful than the opposition of the thrift industry, when Congress asks itself whether Q should go, is the congressional fear that big federal subsidies would have to replace it as the grease that keeps the mortgage machine running. A former Federal Reserve governor, Sherman Maisel, and Economist James Pierce of the House Banking Committee have proposed similar complex plans whereby federal interest subsidies to the thrifts would permit them to remain specialized even if Q were removed.

**A whole new start?** Mortgage Banker Philip Jackson, who has succeeded Maisel as the Fed's top mortgage specialist, even speculates that it may be necessary to adopt a remedy that would be very hard indeed politically—abolishing the whole vast gamut of housing-related subsidies which the government gives to homeowners, landlords, builders, lenders and many others.

Jackson thinks the many billions involved might all have to be rechanneled into the pockets of the low and moderate-income mortgage borrowers who would be hurt the most if Q went.

If that seems politically unrealistic at this stage, Reuss and the National Association of Home Builders' Lawrence Simons, have already got as far as a brief dialogue about what might happen if—someday—Regulation Q does go.

Said Simons at a Reuss hearing last December:

"What we are saying is, do not restructure [the financial system] without deciding what you are going to do with housing,"

—STAN WILSON

McGraw-Hill World News,  
Washington



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## Wall Street and Washington join to save state housing agencies

"We're out of the housing business," Pennsylvania's Governor Milton Shapp complained at a press conference early this year.

He was speaking of the Pennsylvania Housing Finance Agency and its multifamily construction program, but he could have been talking about many of the other 40 or so state housing agencies around the country. Most of them had been practically shut out of the money markets for a year, and so their housing pipelines were closing down.

Now that's changing.

**New climate.** The near-paralysis that afflicted the municipal bond markets in the wake of the dual debacles of New York State's Urban Development Corp. [News, May '75] and New York City's brush with default is wearing off. Long-term interest rates have eased and, most of all, the promise of a new HUD program is reviving investment interest in state housing agency obligations.

The new program is a coinsurance scheme. If it is carried out as presently envisioned, it will amount to federal guarantees for large chunks of the agencies' mortgage portfolios. Since these in turn constitute most of the tangible backing for the moral-obligation bonds by which the agencies are largely financed, the plan amounts to partial federal backing of state bonds not backed at all (except with a promise) by the states.

**An 80-20 split.** HUD's working proposal shapes up like this:

- Part or all of an agency loan portfolio would be designated as coinsured.

- The state agency would absorb the first 3% of any losses in the coinsured portfolio.

- After that, HUD would absorb 80% of any further losses, the agency 20%.

- The agency would pay HUD an insurance premium to be determined for the protection, but probably 0.5% of the coinsured portfolio.

- Sanford Witkowski, director of HUD's Office of Policy and Program Analysis and Development, warns that all those numbers are still negotiable. "They represent the agency's present thinking," he explains. But he adds that they will not change drastically from those levels.

**HUD's limitations.** At the moment, HUD's coinsurance would be only a partial blessing for the agencies. Witowski notes that federal statutes prevent HUD from coinsuring an amount greater than 20% of the total volume of mortgages it fully insures in any one year. Thus, for example, \$3 billion in Tandem Plan money would allow HUD to insure an additional \$600 million in state-agency mortgages. But Witowski guesses the agencies may need between \$1 billion and \$2 billion a year.

The statutes are also subject to change, however. A measure is before the House to ease the limitation, and one has already been passed by the Senate.

**Timely move . . .** Coinsurance looks like a good bet to become reality before the election. "The



'Said it couldn't be done'  
BAY STATE'S WHITE

Secretary [Mrs. Hills] is interested in the program," Witowski reveals. "She wants it, and she wants every consideration of it expedited."

Once the regulations are finished and published in the *Federal Register*, HUD must wait 30 days for comments, consider action on any received and answer them before the program

can start up. All this could conceivably be finished as early as May.

**. . . especially for some.** Some of the state agencies are eager to cash in on the HUD initiative and perhaps first among them is the Massachusetts Housing Finance Agency. The tentative government plan was hardly announced when MHFA rushed into print with plans of its own for selling \$100 million in new long-term housing bonds.

At the time, MHFA had about \$410 million in short-term notes outstanding that it has been unable to roll over into long-term debt because of market conditions.

The agency was also encouraged by an earlier sale of \$16,750,000 in long-term bonds on Feb. 5 that went unexpectedly well. "People said it couldn't be done," boasted MHFA's Executive Director William J. White, "and the offering was oversubscribed."

The agency accepted an interest rate of 8.58% on these (moral-obligation) bonds.

**Other borrowers.** In January three other state agencies did even better: Illinois State Housing Development Authority sold a \$31,170,000 issue at 7.77%; Michigan HDA, \$40 million at 8.09%; and South Dakota HDA, \$11,555,000 at 7.37%. More recently, Virginia HDA offered \$20 million at about 7.6%, and the New Jersey agency was preparing a \$60 million issue.

**Hopeful dealer.** The HFA underwriters include the New York brokerage of Paine, Webber, Jackson & Curtis Inc. The firm's vice president in charge of public finance, Thomas Caine, is feeling quite optimistic these days.

"The HFAs were caught in a shortage of available funds," he comments. "But now we're in a period where more dollars are available. And people are looking for attractive investments now."

"I think they will do more borrowing [later this year], and I think coinsurance will definitely lower the interest rates they will have to pay."

All of which means that many state agencies will soon have the option again of financing new projects.

—H. S.

## What would a Levitt do in today's market? Other homebuilders may soon find out

It could be argued that what the housing industry needs these days is a new Bill Levitt: Someone who can revitalize the industry in spite of high costs and nervous consumers.

The industry may be on the verge of getting one. His name: William J. Levitt.

At 69, the founder of Levitt and Sons and of the housing industry as it has existed in the postwar era, is setting up shop anew. And he's making noises as though he plans to revolutionize the business all over again.

**The return.** "I'm re-entering the housing field," he says.

"We want to build one-family houses and sell for \$25,000. The answer is new technology. We have not yet scratched the surface of panelized or modular construction. . . . We plan to introduce a few [innovations] that will revitalize the present atrophied construction business."

"We hope to be in full swing by spring of next year."

**Familiar ground.** Levitt's new company is occupying new offices in the motherland: Long Island. They are in the town of Greenvale, five miles northeast from the old Levitt and Sons headquarters in Lake Success and nine miles from the legendary potato field where the origi-

nal Levittown made history in 1949.

Levitt is making it clear that Levitt Industries, as he now calls himself, is not to be confused with the other company that still bears his name. Levitt and Sons, now in the hands of a trustee as part of a divestiture agreement with the Justice Department, bears little resemblance to the company he sold to ITT in 1968. It is even being redubbed Levitt Corp.

It is moving too, but out of the heartland altogether, to Greenwich, Conn. It has no present plans to build on Long Island. Its old headquarters are for sale.

**Once and future king?** Bill Levitt can be forgiven if he feels wistful about all that: His old company built 130,000 homes, and he was with it for 45 years after founding it in 1929.

But he seems disinclined to worry about the past. Instead, at an age when most men are deep in retirement, he's selling the ocean-going yacht he retired with some years ago and is starting anew.

His record as a builder will be a tough act to follow, and he doesn't say much yet about how he plans to do it.

But he does sport a knowing smile these days.

—HAROLD SENEKER



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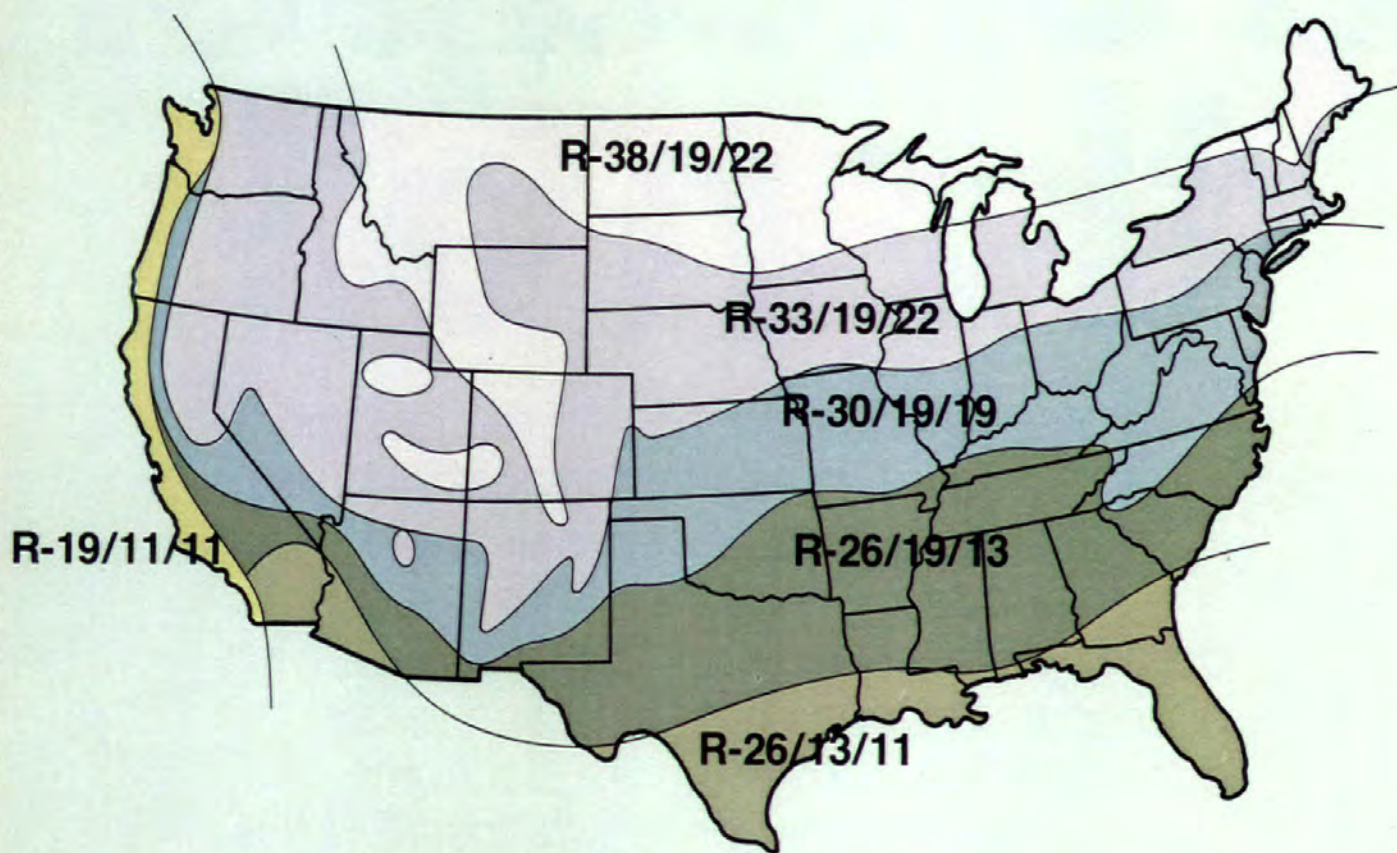
And Energy-Per-Month cost (EPM) is fast becoming the second biggest selling feature of your houses, next to price itself.

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The result? Recommendations  
which represent a balance between  
the cost of any additional insulation  
and the value of the energy saved.  
*Guidelines to the most economical*  
amount of insulation for ceilings,  
walls and floors in each area.

The new standards recom-

mended above are averages for  
each heating/cooling zone,  
expressed in "R's"—the Resistance  
an insulating material offers to the  
passage of heat.

In more familiar terms, the R  
numbers for ceiling insulation  
translate to about 12" (R-38) of



# Cheaper than oil. Knows it, and he expects know it, too!

Here are some practical ways of achieving these new optimum levels of insulation and of providing more affordable housing

**Insulate ceilings to new, recommended R-values.** You can use layers of batts, or combine batts with blowing foam. Insulating the attic to the economical R level is probably the single most important factor in achieving an energy-saving home.

**Proper R with two-by-four studs, too.** If you prefer using two-by-four studs, 16" on center, you can install R-13 full-wall batt insulation between the studs, then sheathe the exterior with rigid foam board. This increases insulation value to about R-19.

**Insulate floors over unheated areas.** Install a minimum of R-11 in Southern zones, up to R-22 in Northern areas. Where required, vapor barrier should be placed toward the warm-in-winter side.

**Two-by-SIX studs, 24" on center — cuts framing lumber by 30 percent!** Thicker walls, to hold thicker insulation (R-19 batts), give needed strength with less lumber, often at less cost, than the usual two-by-four studs, 16" on center. Also, you can use lumber of less expensive grade, and two-by-THREE studs for interior non-load-bearing partitions.

**Save money on smaller-capacity equipment.** An energy-tight house often permits you to specify smaller, less costly heating and cooling equipment. When possible, position it centrally for increased efficiency.

fiberglas\* building insulation in a northern city like Minneapolis to about 8" (R-26) for most southern states.

And a full 6" (R-19) batt, even for the balmy West Coast!

**How to hold costs down.** The diagram above gives a few valuable

tips on how to build energy-tight homes without driving costs through the roof.

These ideas are tried and proven by builders of super-insulated houses. Houses that cost little more than conventional dwellings, and are slashing heating and air-conditioning bills.

You're looking at the new facts of life. They're not going to go away.

Builders must respond just as quickly and dramatically to the realities of EPM—the homeowner's Energy-Per-Month costs for heating and cooling—as Detroit has to the realities of MPG.



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# HOW warranty's success triggers a rush of competitors

HOW is not alone. Others besides NAHB have thought of homeowners' warranties—and they are now testing them.

One such warrantor is based in Jenkintown, Pa., a suburb of Philadelphia. There the Zinman Group, an old and established insurance agency whose home-building clients include Levitt and Sons and The Richards Group on Long Island as well as General Development in Florida, is getting one such program off the ground. The insurer is the Mutual Fire, Marine and Inland Insurance Co., based in Philadelphia.

**Lesser charge.** Zinman's first warranty customer is a large one: Korman Corp., the biggest builder in Philadelphia and one of the biggest townhouse builders in the country last year.

The attraction is obvious. Korman gets virtually what the NAHB insurance package offers, but at 50% less. The premium charged by the Home Owners Warranty Corp. (HOW) is \$2 per \$1,000 of selling price. Korman will pay only \$1 per \$1,000, although it will have to do much of the record keeping involved.

"I believe the extra HOW dollar is their advertising and administrative cost," explains Jack Zinman, "and we haven't gone out and pushed this program." Perhaps for that reason, Zinman says other builders have not yet expressed much interest.

**HOW's progress.** The Home Builders Association of Greater Philadelphia and Suburban Counties has been pushing HOW, on the other hand, and it is happy with the initial response.

"About 80% of our members are joining," says Richard P. Eitner, the HBA's executive vice president, "and at least three builders are joining us as a direct result of having it available."

Spokesmen for Korman, the HBA and Zinman all feel that most builders in the area will adopt one warranty or the other eventually.

**Florida plan.** Another program has been under way, more or less, since 1973. It is called the CP Program for Homes and is run from Dunedin, Fla. by James Brandt, who is incorporated as First American Consumer Protection Corp.

Although Brandt has gotten the necessary regulatory approvals from 26 states, he has so far been operating only pilot programs in Illinois, Indiana, Michigan and Florida, covering perhaps 1,000 homes.

"The only statistics the insurance company had to go on were from the English program," Brandt explains. (He works with the Foremost Insurance Co. in Grand Rapids, Mich.) He got his idea from a trip to Australia, where he saw a down-under version of the British warranty program that has also served as the prototype for HOW.

"The actuarial results have been better than we thought," says Brandt, and he sounds interested in expansion.

**Brandt's option.** The Brandt program is designed to work through local trade associations. It also costs the builder \$2 per \$1,000 (the association gets 50¢). However, Brandt offers a cheaper option: \$1 per \$1,000 for coverage for the first two years, and an option to the homebuyer to cover structural defects for the next eight years, if he wants to pay for it.

Unlike HOW, Brandt does not require a builder to place all his units under the CP program. Brandt is not afraid of drawing

only poor-risk units. He figures competitive markets will make that requirement superfluous.

Brandt is enthusiastic about the possibilities of warranties. "There's about a \$500-million market out there," he figures, "if you include all the mobile homes and the used-home market. It's been my experience that for every mortgage for a new house that's sold, there are four to six for used houses."

**Extremity.** Covington Brothers in Fullerton, Calif. has also been offering a warranty program of its own. It is called Extremity [News, Oct. '75], and Vice President George Liolios says Covington is satisfied with results it's getting.

"We feel it's definitely helping sales," he explained. "We even get calls from people who bought houses from us before we started offering it—and who now want to buy it."

"We've thought of offering it to other builders (most of California does not have HOW), but the underwriter (El Dorado Insurance Co. of Palo Alto, Calif.) wants more actuarial experience."

**Workingman's plan.** A labor union has also gotten into the warranty business. Local 640 of the International Brotherhood

of Electrical Workers and the Arizona chapter of the National Electrical Contractors Assn. have set up a joint warranty program for the Phoenix area called Electro-Guard.

The contractor guarantees a house's basic electrical system (not including fixtures and appliances) for the first year, and Electro-Guard covers it for the next nine. The participants have set up a nonprofit corporation to perform any work required under the warranty program.

**Used houses.** Some insurance companies are also offering warranties—usually for one year or at most 18 months—on used homes. The carriers include American Home Shield Corp. in Dublin, Calif.; Certified Homes Corp., Columbia, Md.; Commerce & Industry Insurance Co. of New York (starting up a new program to be marketed through Alexander & Alexander Inc., an insurance broker in Newark N.J.); and St. Paul Insurance Co. in Minneapolis, Minn., which has a pilot program going in Colorado.

**The big one.** How does HOW feel about its competitors? Largely unconcerned. They are all small fish in the pond, and HOW is the hippopotamus. Said a HOW spokesman:

"We now have over 51,000 units covered, built by more than 3,000 builders across the country."

At least one "competitor" is gladly joining forces with the NAHB entry. He is William Brown, proprietor of W. Brown Custom Homes in Dallas, Tex. He has been offering a five-year warranty that covers everything HOW covers in its first year (workmanship and materials; the basic plumbing, heating, cooling and electrical systems; and structural defects).

**HOW now, Brown?** As he was being interviewed for this article, Brown learned from his secretary that the local HBA—the Home and Apartment Builders Association of Metropolitan Dallas—had just voted to join the HOW program. Brown seemed delighted.

"I'll definitely sign up," he said immediately. "We'll work HOW into our program, and continue to cover ourselves where it doesn't."

—H.S.

## First Mortgage fights off Chapter 10

First Mortgage Investors has fended off one threat to its survival, for the time being at least—a petition by four of its banker-lenders to throw the desperately troubled REIT into a Chapter 10 bankruptcy [News, Oct. '75].

The banks made their move last September in Federal District Court in Boston, where FMI maintains its offices. (It is controlled from Miami Beach.) The banks charged that other creditors were being favored improperly in attempts to resolve the REIT's debt woes.

**Debt.** The four petitioners held \$3,350,000 in FMI debt (out of total debt exceeding \$400 million): Bowery Savings Bank of New York City, \$2,750,000; Anchor Savings Bank, New York City, \$300,000; Elmira Savings Bank of Elmira, N.Y., \$200,000; and Home Savings Bank of Upstate New York, based in Albany, \$100,000.

The four agreed to participate in a network of agreements among other creditor banks and insurance companies, FMI and holders of FMI's public debt. The pacts aim at restructuring the REIT's balance sheet. FMI has said it can move toward consummating these agreements as soon as the Chapter 10 petition is withdrawn.

**Watchful waiting.** The four savings banks, though they appeared to be mollified, did not seem to have been lulled. They have warned FMI that if the agreements aren't executed in a "timely" fashion, they will move to reinstate their petition.

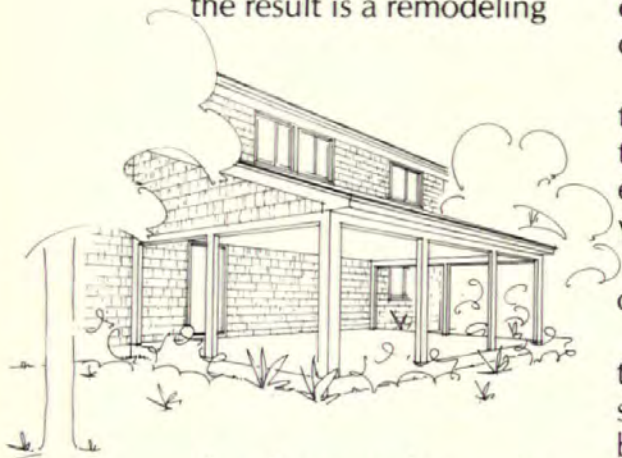
The REIT would seem to have little choice but to go along. Its managing trustee, Dennis Coyle, has repeatedly warned that the only way the company can stay out of bankruptcy—either Chapter 10 or Chapter 11—is by consummating the restructuring plan.



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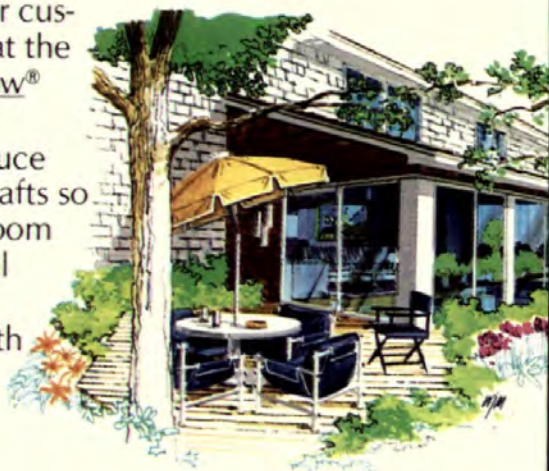
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## Bigger revival now expected—maybe well over 1.5 million starts

Harbingers of a stronger housing revival have appeared in droves since the first of the year.

They suggest that the consensus housing forecast of some 1.5 million units in 1976 will have to be revised upward.

The uptrend isn't visible in first-quarter statistics, partly because the severe winter hampers building in much of the country. The second quarter should show a stronger-than-normal rebound.

These are findings of Advance Mortgage Corporation's current semi-annual survey, *U.S. Housing Markets*, which compares housing trends in 17 major markets in the U.S. Advance, with headquarters in Detroit, is a subsidiary of Citicorp, New York.

**The good news.** The favorable signals include a sudden and very sharp reduction in both home-loan and apartment-loan rates since the first of the year; the steepest decline in eight years in rental vacancy rates; January savings flows more favorable than expected and even more favorable than last year's record flows; explosively strong existing home demand in at least half the local markets surveyed; and widespread reports of builders' sales gains since the new year.

**Spurt in permits.** One of the most widely followed indicators, new housing permits, jumped 10.7% to a 1.14-million annual rate in January. This was up 65% from January 1974 and the best level since May 1974.

How significant are these signals? Here is how Advance Mortgage's president, Robert J. Mylod, evaluates them:

"Conventional mortgage rates made the sharpest overnight decline we can remember in mid-January—an average of  $\frac{3}{4}$ % in many local markets (to an average of  $8\frac{1}{2}$ % for good 80% loans). Similar sharp rate declines heralded the housing recoveries of 1968 and 1971.

"In apartment mortgages, we're now very close to the 10% constant (annual payment of interest plus principal) that many developers feel would turn on new rental construction."

**Savings flows.** Mylod also points out that many thrift institution executives are now projecting that savings flows in the first half will be at least as

good as last year's record flows, and probably better. And because these institutions are so much more liquid this year, more of this inflow must be committed to mortgage investment than was the case last year.

"The last time rental vacancies declined so sharply was in 1968," he adds. "That was followed, with no time lag at all, by the start of the long apartment boom that lasted through 1973.

"Demand for existing homes in at least half the markets we survey is nothing less than explosive. We hear of sales agreements being executed in duplicate and triplicate, in case the first buyer does not qualify. Part of this, certainly, reflects a craving for detached homes close in, which cannot be gratified in new housing. But part is simply a demand for housing, period, and at least in these markets there is not an adequate new supply."

**Sales.** Mylod says that from most of his markets he hears reports of excellent sales gains since the first of the year, though, as he says one observer

cautions, "still not back to normal."

"We saw these spring crocuses at this same time last year and they wilted quite rapidly," the Advance president warns. "But this year's sales health seems more solidly based than last year's rebate-hypoed color.

"If the second quarter comes in good—not just by rebound—and gaining, and if mortgage rates do not bounce up again with an increase in the supply of housing product, then it will be time to revise upward the standard forecast for this year, which appears to be about 1.5 million units.

"The key to this year's volume lies in what happens in the rental sector. There will be some gain in one-family starts, certainly. But last year was already close to an average one-family year, and better than five of the last 10 years. Only the feverish years of 1971-73 were substantially better."

**The bad news.** There are some negative aspects of this year's housing economy, the Advance Mortgage survey points out.

One is the uneven distri-

bution of demand.

It is weak in every sector in some of the former glamour markets—the Florida markets Phoenix, Atlanta and, to a lesser extent, Denver. Areas which depend significantly on retiree and second-home buyers are not yet on the road to recovery.

Demand is also flat in the markets of the Northeast, where local economies have been hurting longer than most other regions of the country.

But there are offsetting factors, Mylod stresses. Washington D.C., the southwestern and West Coast markets and some areas of the major Midwest markets show tremendous strength in every sector. And probably even stronger than these major markets are the small towns and rural areas of the farm states and the energy-extraction states.

**High costs.** Another negative is cost. The newest area of worry is land costs, which have special importance, because they help to determine the price range in which a home is built. In a half dozen markets, builders are running out of lots and new lots will come in substantially higher than the old. In markets which are hilly or densely built up or overtaxing their sewer and water systems, there is an extreme shortage of buildable land within a  $1\frac{1}{4}$ - to  $1\frac{1}{2}$ -hour commute. Such lots as are available have increased astronomically in the last year and may cost more than a complete home in the more fortunate areas.

There is a new turn in the condominium market, the survey notes, and it promises a substantial reduction in the inventory now 150,000 completed units.

"These units," says Mylod "will be more effective competitors in this year's market because the majority of them are now in stronger, more determined hands—their lenders' hands. These new owners will accept losses to unload or convert their units that the original developers could not afford. They have the resources to give condo sales better-than-market financing instead of, as previously, less favorable. They are not unloading at any cost; it will be an orderly market. But sales and conversions from this inventory will cut into potential one-family and rental markets."

## Les Nelson to buy builder in East

After a year of wheeling and dealing to save his company [H&H, Feb.], L. B. Nelson has turned to acquisitions.

The head of the L. B. Nelson Corp. has just signed a letter of intent to buy Freeman Associates, a single-family builder with headquarters in Silver Spring, Md., a Washington suburb. L. B. Nelson, a building and apartment management company, is based in Menlo Park, Calif.

**Something for all.** The deal appears to benefit both parties.

Executive Vice President Robert Friedman of Freeman Associates says the company's founder and president, Carl M. Freeman, 66, wants to retire. The merger permits him to sell his 62% interest in his company.

The minority stockholders get a premium over the company's recent market price. Freeman has been reporting red ink in the recent housing depression, and its stock has been selling over the counter at  $1\frac{1}{2}$  to 2. Nelson is offering either  $1\frac{1}{2}$

shares of L. B. Nelson, (selling at 2 when the offer was made), or \$1.11 in cash and \$3.89 in 6% notes maturing in five years for each Freeman share. (There is one little catch: The interest on the notes will accrue, but not be paid, during the first two years.)

The proposal is also beneficial to Nelson. He would get stock with a book value of about \$7.50 a share—and a stable of home-building expertise—for about \$5 a share.

**Westward tilt.** Despite this move eastward, Nelson's center of gravity seems likely to remain firmly on the West Coast. This is the part of the country Nelson knows best, and the part to which he still directs most of his attention.

As if to stress his main interest, Nelson announced another deal shortly before this one. It gives him an opportunity to buy up 1,150 completed home sites over a ten-year period in California's San Bernardino County.

Nelson's revenues fell 60% to \$19.3 million in 1975, but the corporation reported a profit.



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## K&B making strong Chicago comeback with back-to-basics strategy

Some years ago Kaufman and Broad Homes, the Chicago division of Kaufman and Broad of Los Angeles, was worried about homeowners who were posting cardboard lemons on their lawns to protest shoddy construction. Partly because of the lemons and partly because of a downturn in the national housing market, K&B's Chicago sales plummeted from 1,275 units in 1970 to 416 in 1974.

In 1976, however, the only lemons in sight at K&B are in the drinks of the top brass. Despite a problem year for the industry in 1975, K&B increased sales to 550 units, or \$20 million. What's more, the division plans to more than double its number of subdivisions this year, and it expects sales to climb to between 750 and 850 units.

**Emphasis on quality.** "We have overcome our problems and are on the way back," said James P. Joyce, the division president. "Eli Broad's intention is to concentrate on his divisions in California, Toronto and Chicago in getting back to the basics of value and beating the competition. That's what we're doing."

Those who know K&B in Chicago—Ron Nelson, vice president of Great Lakes Mortgage Co., for instance—say that K&B

started on the road back by putting extra effort into quality control.

"They made quality control almost a fetish," Nelson said. "They went all out in designing numbers of people who had no responsibility other than quality control."

**Market techniques.** Quality control brought some customers back, but K&B is betting that more will be attracted by several new midwestern marketing twists. Those include two zero-lot-line developments and one attempt to bring back the once-popular but now nearly extinct duplex.

"These zero-lot-line developments will be like nothing you have ever seen," said Joyce. "There will be no zippy, pop-art, California look to them. We are landscaping them like the best multifamily developments with curvilinear streets, setbacks of 40 feet or more, and rolling berms heavily planted with large trees and plenty of other vegetation."

**Up to \$33,000.** Joyce claims the zero-side-yard units will really be traditional single-family homes set on narrower lots. Capitalizing on the resulting lower land costs, K&B will attempt to market the homes in the \$29,000-\$33,000 range, prices that they say will allow

the average multifamily buyer to enter the single-family market.

As for the duplexes, while K&B isn't predicting a massive reemergence of the side-by-side residences, the division does predict that, under certain cir-



K&B's JOYCE  
"We have overcome"

cumstances, the design will enable it to market homes that have some of the low-density appeal of single-family homes at townhouse prices. The circumstances in question are plots of improved land acquired from other builders that give K&B a running start on the land costs.

**More subdivisions.** Altogether K&B plans to open five new subdivisions in Chicago in 1976, an exponential increase from the four developments

they had in operation in 1975.

"We haven't been represented in all areas of the Chicago market," said Joyce. "We want to be. We are optimistic about 1976. We want to be ready to take advantage of a market that could turn out to be a good one. If it doesn't materialize, we'll be satisfied to get our sales in smaller numbers from each of the developments."

Joyce believes, however, that the market could show a major upswing later this year. Despite rumblings in Washington and concern over variable interest rates for S&Ls, Joyce says mortgage money is more readily available now than it has been for months. He predicts that mortgage money will loosen further as savings continue to set records in the S&Ls.

**Federal policy.** "The decrease we see coming in the conventional mortgage rate will be combined with a winding down of the federal programs instituted to breathe life into the housing industry," said Joyce.

"You know that this industry and the country in general must—and I believe will—learn not to rely on the artificially supported 7¾% rate. It has been available only because of subsidies, and if my predictions are correct, those subsidies are at an end."

—M. K.

## Supreme Court refuses to disturb Petaluma's restrictions on builders

It took close to two years and a lot of hard work to get the Petaluma case up to the Supreme Court [NEWS, Mar. '74 *et seq.*]. Its moment in the Washington limelight proved to be just that, however, a very brief moment.

The court disposed of Construction Industry Association of Sonoma County vs. City of Petaluma (docket no. 75-923) last February 23 along with some 400 other cases processed that day. Petaluma rated just two curt, legalistic sentences which said, in effect, that the court would not review the case.

The dismissal let stand an appellate court ruling that the California town's controversial slow-growth plan was legal. The plan currently allows only 500 homes a year to go up within the city limits.

Harry Lockwood, president of the CIA of Sonoma, now the

northern division of the Associated Building Industry, said: "We are disappointed . . . The lack of housing [that will result] will make prices artificially higher and thus hurt the consumer."

**Reaction.** Petaluma officials were pleased, but profess to be unsurprised. They noted that the appellate court had based much of its decision last Aug. 13 on other recent Supreme Court decisions.

Builders were dismayed. Dick Randall, chairman of the Associated Building Industry of Northern California, said the decision was based on technicalities. One unfortunate result, he contended, would be a flood of growth-restricting ordinances by other communities across the country.

**Landlord victory.** Another case refused that day benefited

landlords: a Chicago case testing laws that, in most states (except in Alaska and South Carolina), permit landlords to search the rooms and seize assets of tenants delinquent in their rent. No warrant or hearing is required.

The laws do not violate guaranties of due process and freedom from unreasonable search and seizure, the appellate court had ruled, because no action by the state is involved.

**Ban on tie-in sales.** The Supreme Court did elect to hear a case that pits a Louisville developer, Fortner Enterprises, against U.S. Steel Homes Credit Corp., the mortgage subsidiary of U.S. Steel.

Fortner alleges an antitrust violation in 1962, when Homes Credit made financing for a development conditional on Fortner's purchase of U.S. Steel

prefabricated homes. Material supplied, the suit contends, proved defective.

**Redline ruling.** A federal district judge in Cincinnati ruled for the first time that redlining a neighborhood for racial reasons is illegal under the Civil Rights Act of 1968.

The act, Judge David Porter observed, makes it illegal to refuse to sell or rent "or deny dwelling" because of race.

The defendant, Oakley Building and Loan Co., was accused of refusing a mortgage to a white couple, Mr. and Mrs. Robert Laufman, for a house in the racially mixed North Avondale section of Cincinnati because the area was redlined. A motion by Oakley claiming that redlining was not yet outlawed by Congress drew the judge's 23-page opinion; the case itself was not decided.



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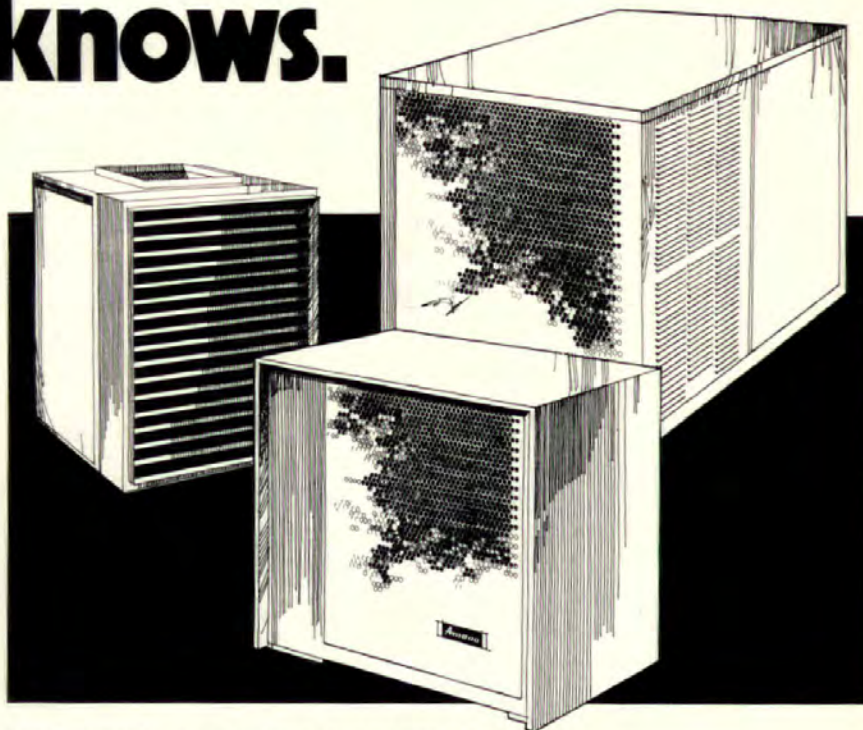
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# Japan discovers the 2x4-and U.S. lumber mills discover a market

West Coast lumber producers are looking forward to a new long-term market in Japan, where the housing industry is starting to adopt platform-frame construction in place of the traditional post-and-beam method.

Both the United States and Canada are now promoting the exportation of dimension lumber to Japan. Most of the lumber is expected to be supplied from the Pacific Northwest states and western Canada. The Western Wood Products Assn. (WWPA), Portland, Ore. estimates that the U.S. share of the market might be as much as 5 billion board feet annually, yielding \$1 billion a year in trade benefits.

**Enter, the 2x4.** Japanese importers report that beginning in 1976, the country has a five-year target of 8.6 million housing units.

The door was opened in the summer of 1974 when the Japanese government published a standard for frame construction lumber, and adopted a new building code and manual explaining and sanctioning the use of 2x4 lumber in homebuilding. Until then, builders had to get special permission for platform-frame construction. The Japanese made the switch partly because of American restrictions on log exports, and partly because of rising construction costs.

**Labor saving.** So far, the number of platform-frame houses is miniscule, but gaining popularity. Of the 1.45 million units expected to be built in this fiscal year (ending in March), only 2,500 will be of 2x4 construction. But next year, more than 10,000 of the "North America-type homes" are predicted, according to Haruyo Matsubara, executive director of the Japan Trade Center in San Francisco. He expects the method to be used widely in the future.

Conventional Japanese construction uses posts and beams with mortised joints. The Japan Trade Center says it takes about 2,700 man hours to complete an average house this way, compared to 500 hours when 2x4s are used. Since 1970, carpenters' daily wages have jumped from \$10 to as high as \$33, and nearly 60% of the building cost of the



American-style framing is demonstrated by U.S. carpenters building model house on laboratory grounds of Japan's Ministry of Construction.

average house is in labor (as against 15.5% in the U.S.). At the same time, land prices have skyrocketed.

**Architects' criticism.** Most Japanese houses are less than half the size of their U.S. counterparts, with much smaller rooms. The specifications formulated by the Ministry of Construction for the 2x4 method contain provisions to assure that design and construction will be adapted to Japanese tastes, including, for example, Tatami rooms, where mats are used as floor coverings.

Japanese architects have been critical of the innovations, saying that platform-frame houses are not suitable for the country's climate or preferences. Most Japanese buy only one house in

a lifetime, and some are concerned that the 2x4 houses may lack quality and fail to withstand earthquakes. And for carpenters trained in connecting members with precisely chiseled mortises, the idea of driving nails with a machine gun-like power hammer is revolutionary. In the Japanese building trade, tatakai-daiku or hammer-and-nail carpenter means a poorly skilled carpenter.

**Builders' enthusiasm.** Many homebuilders are eager to switch to the new system, however. The Japan Home Builders Assn. is establishing a nationwide network of regional offices to promote it among local builders. Some carpenters' unions are organizing indoctrination courses. Mitsui Home has its

own training course for carpenters and is developing a 2x4 town in the Tokyo area. Nishii Iwai started speculation sales last April and plans to build several hundred houses. Other builders have similar projects scheduled. A development near Osaka will combine traditional platform-frame and prefabricated houses. With all the activity in this field by local builders, there is unlikely to be much place in the market for developers from the U.S. or elsewhere.

Trading companies like Mitsui and Kanematsu-Gosho are realigning their organizations to handle the expected large-volume imports of 2x4s.

**Scramble for trade.** Matsubara said Canada, particularly British Columbia through the Forest Industries Council of British Columbia, has been more active than the U.S. in promoting 2x4 sales.

However, a large U.S. delegation visited Japan last fall on a trade mission sponsored by the Pacific Northwest Region Commission. The group included Governors Robert V. Straub of Oregon and Daniel Evans of Washington, Lieutenant Governor John V. Evans of Idaho and representatives of the lumber and plywood industries. This spring, under sponsorship of PNRC, 12 to 15 Japanese government officials and housing leaders will be brought to Seattle for a Japanese-American wood symposium.

Robert Hunt, WWPA director of marketing services, said, "We will conduct seminars, take Japanese through mills and building sites, and stress the value of our quality control—they will accept products graded here without further grading."

**Obstacles.** Several trade barriers must be ironed out before lumber export can proceed smoothly, according to Hunt. The Japanese have slightly different grading specifications and require reinspection and labeling after the lumber arrives in Japan, adding extra costs which eventually have been passed on to the homebuyer.

Most exports to Japan have been Douglas fir and hemlock.

—JENNESS KEEN

McGraw-Hill World News  
San Francisco



Tilt-up panel is assembled in American manner by Japanese carpenters. This model house is going up in downtown area so crowds can take a look.



Hammer-nail method is replacing Japan's system of mortised joints.



Prefabrication is also popular in Japan. This is a component factory.



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# ZONOLITE THERMOCLAD



A plasterer demonstrates the ease and simplicity of the Thermoclad system, applied here over an 8 x 8 foot panel of exterior gypsum over metal studding. In the first photo, Thermoclad insulation



with its factory laminated fiberglass mesh, is applied to the gypsum board. In the second photo, the strong, cementitious prime coat is troweled over the insulation. And in the third photo, the



attractive, textured finish coat is sprayed over the prime coat. Both prime and finish coats can be troweled or sprayed. The result is superior insulation and the attractive finish shown at the right.







## Chicago company sets up shop to "shop" builders' salesmen

The idea of "shopping" a salesman is as old as the first builder who ever wondered whether his sales force might be capable of greater deeds. Builders have tried to answer this question by doing everything conceivable from planting bugs in salesmen's telephone receivers to hiring mothers-in-law to con salesmen into believing they are bona fide customers.

Such do-it-yourself schemes didn't always work out too well, so now an independent company in the Chicago area has taken on the job and is offering its shopper service to builders for a fee.

The company has made some surprising discoveries since its debut, and it has detailed some of these findings for builders' overall guidance.

**Builder mistakes.** "Shopping is a tough problem," says David M. Froberg, president of Commercial Marketing & Management Consultants Inc. (Comco) of Hinsdale, Ill., the real estate consulting firm that offers the new service.

"Builders who did go to the bother of using shoppers to try to evaluate their sales force found they had no point of reference. They were comparing themselves to themselves. They knew their project but they didn't know how things were done at other projects."

Froberg says builders also found it difficult to avoid conflict of interest and negative reactions by the sales force in attempts at disguised sales evaluations.

"Let's face it," he explains gently, "sometimes the salesperson is the builder's daughter."

"An evaluation can best be done only from the outside. Some builders have tried planting bugs in sales offices to eavesdrop. But sooner or later the salesmen discover what's going on."

**Printed guidelines.** Believing that there are a goodly number of salesmen in the homebuilding industry who are little more than order takers and who might just as well be selling watches as houses, Comco set about devising an objective set of house salesmen's guidelines. In 1972 the firm copyrighted an informational package called "400 Questions." It covered the de-

tailed aspects of the three main sections of homebuilding: construction and site, area amenities and homeowners associations.

"If a salesman could answer our 400 questions, we figured he had the knowledge to do a good selling job," says Edward Havelik, vice president of Comco, "but then the problem was finding out whether the salesman could put that knowledge to work in actual selling."

**TV as a no-no.** The obvious solution to that problem was to do what many builders found it impossible to do, find and train professional but impartial shopping teams. At the builder's request, the teams would visit his projects unannounced.

"We recruited people from within our own organization and from the outside," says Havelik, "and it was surprising the

"You never shop a salesman when times are good," adds Zale, "but when things slow up you begin to wonder, and you pick apart everything you can—including the performance of your salesman."

**An end to doubt.** According to Zale, a builder can't avoid having doubts about his sales force in hard times, even though he may know the trouble is with the market and not with the people he has selling.

"So you shop your sales force to reassure yourself that your marketing approach is OK," says Zale, "and 90% of the time the shoppers come back and tell you things that you already know. It's still reassuring to have a second point of reference."

Zale claims that a good shopper program, conducted either by an outside organization like

"Another thing: If you're going to shop a salesman correctly, you should not just be the tough-sale-no-buy customer that most shoppers imitate. Rather, the shopper should follow through right to the point of signing papers for the closing and, if necessary, leaving a check for the deal."

"The tough sale is only one aspect of salesmanship. Even more valuable for the builder is the view of his sales force on the average deal that does go through. Is the salesman sloppy in his paperwork? Does he live up to pre-sale promises? How is his follow-through? All these are as important as his ability to handle the really tough customer."

**'The big problem.'** Norman Hassinger, vice president for sales and marketing with Kaufman & Broad Homes in Chicago, hasn't used outside shopper services but believes in shopping his own people three times a year.

"The big problem for the builder who wants to shop his sales force, or hire a service to do it for him, is finding people who have an ability to evaluate salesmanship and yet maintain a front that doesn't alert the salesman," said Hassinger.

"It's incredibly hard to find people with both these talents. We've tried to resolve that by sending non-professional shoppers out with hidden recorders."

"Then I get the tape and personally evaluate it. You're always amazed at what you find in these tapes. There's always room for improvement, and unless you can get a view of your salesman in a one-to-one situation, you'll never know whether he's hurting you or helping you."

Given all the difficulties Comco's Froberg still praises the shopper approach to evaluating sales teams. The program Froberg says, has prompted one Chicago condominium builder to hold weekly meetings with his sales force to evaluate the traffic of the past week.

"That builder's business is booming," Froberg says, "because he realized that how you sell is just as important as what you sell."

—MIKE KOLBENSCHLAG

McGraw-Hill News, Chicago



Builders commenting on the shopping of salesmen. Norman Hassinger of K&B is at left, Edward Zale of Meadow Edge appears above, and Ronald Benach of Lexington Development is at right.

sort of information they brought back. In one case a salesman in a very high-priced condominium development received negative comments for putting his feet up on the desk and watching TV when he wasn't selling. People would come in and see that and immediately get turned off."

**Builders' views.** After shopping the sales force, Comco provides a builder with a detailed report on findings—with consultation if problems arise.

The effectiveness of such programs can probably be judged best by builders who have used them. Edward Zale, president of the Meadow Edge Co., which builds townhouses in Arlington Heights, Ill., says he ordered the shoppers into his sales offices. He believes the approach has merit.

Comco or by the builder himself, can help prevent a builder from turning home selling into football.

"You know that when a football team does poorly the coach gets fired whether he deserves it or not," said Zale. "When home sales are off the tendency is to fire the salesman and start afresh. It's easy to make a mistake in this area and lose a very good salesman. Shopping makes you a little more secure."

**Critic's judgment.** Ronald Benach, president of the Lexington Development Corp. in Schaumburg, Ill., has mixed emotions about shoppers.

"We've been shopped," he says, "and my impression is that the people picked for the assignment need to be virtually professionals in sales evaluation. In most cases, they're not."



Standing on 72 heavily wooded acres, Crowfields is a showcase for new ideas in luxury condominium development. The 160 uniquely clustered two and three bedroom townhouses and villas will occupy only 25% of the land, leaving much of the natural beauty unspoiled. The rough-cut siding and stone architecture is designed to blend with this rustic setting. Recreation facilities include two lakes, heated pool, clubhouse and landscaping that complements the surroundings. Architect: Lawrence J. Traber



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## Builders on move: Bren makes company a family act—other changes

The Donald L. Bren Co., a California builder based in Sherman Oaks, adds two executives. One is **Charles D. Bren**, brother of founder **Donald**. Chuck comes in as director of marketing after running his own marketing firm and managing a project for Resort Associates in Sun Valley, Idaho. He had been part of the company before that, from 1962 to 1972.

The other addition is **Michael S. Linsk**, a new vice president and chief financial officer. Linsk is another alumnus of The Larwin Group [News, March].

Speaking of Larwin alumni, **Richard L. Weiss**, the ill-fated building company's former president, becomes co-chairman of the National Council of the Housing Industry. It is a group of 42 manufacturers and suppliers, and it is affiliated with the National Association of Home Builders.

Warmington Development, based in Irvine, Calif., gets a third-generation president. He is **James Warmington**, who takes over from his father **E.G. (Ed) Warmington**. Ed's father founded the business in 1926 to build mansions for a new breed of Californians, the film stars.

On the opposite coast, New York City's Starrett Housing Corp. gets a new chairman and co-chief executive with old ties to the business. He is **Paul Milstein**, 53, who was president of Starrett's joint-venture partner, National Kinney Corp., from 1971 to 1973. Their venture, called Starrett City, was launched in Brooklyn during Milstein's tenure. Milstein replaces **Robert S. Olnick**, 61, who retires but will act as a consultant. **Henry Benach**, Starrett's other co-chief executive, remains as president.

In Pennsylvania, meanwhile, Polaron Homes (Middleburg) appoints **Ed Davison** as district sales manager in Rhode Island and Connecticut for its modular division.

Not to leave out the Midwest, the Builders Association of Greater Indianapolis installs **John S. Rooze** as president for 1976, succeeding **Frank O. Spivey**.

And Atlanta's Hooker/Barnes Realty gets a new president, **John D. Wilson**, and begins a substantial expansion. It will

now sell used homes as well as its own new homes and condominiums.

**LENDERS:** Lomas & Nettleton, based in Dallas, Tex., names **Charles W. Wingo**, 44, executive vice president. He assumes ad-

a subsidiary of which he had been executive vice president. Ferkin was Levitt and Sons' top mortgage man for 16 years.

Stockton, Whatley, Davin & Co., the big Jacksonville mortgage banker and developer, loses

acceptance Corp. He is **George R. Hansen**, who comes from Commercial Mortgage Insurance Inc. **DIED:** **John MacLeod**, 82, of a heart attack at his home in Newport Beach, Calif. He came to the U.S. from Scotland at 16



BREN'S BREN . . .  
Rejoins the family



. . . AND LINSK  
Another Larwin grad



HOOKE/BARNES' WILSON  
Steps into an expansion



MACCO'S MACLEOD  
The industry loses a giant

ministration of the company's commercial loan division.

Colonial Mortgage Service Co. of Philadelphia, promotes **Anthony A. Nichols** to senior vice president in charge of income-property and construction loans.

Down in Miami, General Development Corp. advances **Louis H. Ferkin** to the presidency of GDV Financial Corp.,

its widely known chairman and chief executive, **J.J. (Jack) Daniel**. He resigns to take the title of publisher with the Florida Publishing Co., a Seaboard Coast Line Industries subsidiary that publishes the *Jacksonville Journal* and five other dailies.

National Homes Corp. (Lafayette, Ind.) brings in a new president for its mortgage subsidiary, National Homes Ac-

ceptance Corp. He is **George R. Hansen**, who comes from Commercial Mortgage Insurance Inc. **DIED:** **John MacLeod**, 82, of a heart attack at his home in Newport Beach, Calif. He came to the U.S. from Scotland at 16

## Deltona taking over Cavanagh's projects on Florida West Coast

If the Federal Bankruptcy Court in New York agrees—and it is expected to—Deltona Corp. will take over development of the major Florida real estate holdings of Cavanagh Communities Corp.

Both companies have headquarters in Miami. Cavanagh is in Chapter 11 proceedings.

President Frank Mackle Jr. says Deltona sees the agreement as the best way of delivering homesites to the thousands of buyers at Cavanagh's Rotonda subdivisions on the Cape Haze peninsula on the Florida Gulf coast. Twenty-six thousand acres and eight subdivisions are involved.

The developments are situated about 15 miles north of Fort Myers in Charlotte County. The most significant is Rotonda West, a 5,100-acre project laid out in the form of a wagon wheel. It is noted as the scene of the Superstars TV special.

**The 'promised' land.** Mackle is dealing only with First National City Bank of New York, the major Rotonda lender. He

sees his job as delivering to 6,000 Rotonda West buyers something that is as close as possible to what was promised. That includes seven golf courses, which could involve one of the first compromises to be attempted. Mackle notes that his Deltona development of 14,000 people in central Florida gets along nicely with one course.

Mackle says most of the Rotonda buyers are making payments despite Cavanagh's financial problems and allegations by the Federal Trade Commission of unfair business practices by Cavanagh in Florida and Arizona. The company has denied the charges.

**'Helluva problem.'** Mackle says Deltona, also a Citibank borrower, was asked by the bank to take a look at the Rotonda developments to see if they could be rescued.

"It's not a bad looking place," he said. "But it is a helluva problem, one we didn't seek out. We do business with Citibank and they asked us to take a look. It

is no bonanza for us to take over a sour deal. We did it mostly for the bank and for the state of Florida, which gets a bad name when things like this happen."

**Difference of views.** Deltona will collect the money coming in, send it along to Citibank and get it back for doing the work on roads and utilities.

Speaking for President Joel H. Jankowitz of Cavanagh is David Strong, an administrative assistant. He puts the situation this way:

"Cavanagh has retained Deltona to manage the eight subdivisions . . . Cavanagh will continue to own the property but Deltona will make virtually all decisions relating to management, subject to the board of directors of Cape Cave Corp. (a Cavanagh subsidiary that owns the acreage). The contract with Deltona is for three years."

Mackle's view is that he has a perpetual contract with the bank, and that he will have no conversation with Jankowitz.

—FRED SHERMAN

McGraw-Hill News, Miami





**Eighteen Decorator Color Schemes.** Striking bathrooms you can build, designed by House Beautiful, professionally color styled. Six basic room designs, each featuring bathroom fixtures in one of Eljer's Fashion Colors. Three professionally created color schemes for each bathroom (18 full-page photos) to prove the decorating versatility of Eljer's six, subtle colors (Denim Blue, Frost Green, Misty Rose, Natural, Desert Gold® and Twilight Blue®)... complete with floor plans to help you create tastefully styled bathrooms your prospects will fall in love with. Each design created of locally available products—all identified by name and manufacturer.

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# Building and land stocks extend their rally but S&Ls fall back

Builder, land and mobile home stocks have scored sharp new gains but the lender issues have stalled amid indications that the housing industry's new year rally on Wall Street has run out of steam.

HOUSE & HOME's index of 25 widely representative issues seesawed from 181.25 to 182.67 in the month ended March 1. Share prices of January 1965 equate with 100 on the index.

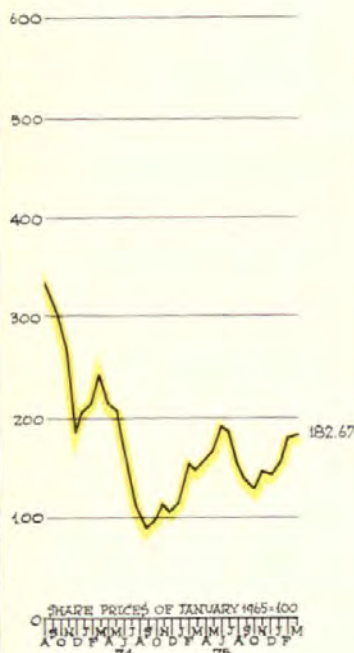
The building sector's strong gains were offset by a steep decline among the savings and loan stocks and a lackluster performance by the mortgage issues.

Housing issues have out-gained Standard & Poor's 500-stock index by a 2-to-1 margin this year, but the housing analyst for Loeb, Rhoades & Co., a major brokerage, has just warned:

"It is our opinion that the current up-cycle in building stocks is already fairly well advanced." He also cautioned:

"We have a negative investment posture toward building stocks for the longer term, based on our judgment that housing prospects for the next decade aren't bright."

Issues on HOUSE & HOME's index are overlined in yellow in the tables that follow. Here's the graph of all 25 stocks.



Here's how the stocks in the five divisions performed.

	March '75	Feb. '76	Mar '76
Builders	126	174	185
Land developers	94	92	113

Mortgage cos.	199	227	229
Mobile homes	409	562	622
S&Ls	103	138	121

Company	Mar. 1 Bid/close	Chng. Prev. Month
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## BUILDING COMPANIES

AVCO Comm. Devel.-d PC	5 1/2	
American Cont. Homes	OT 1 1/2	+ 1/4
American Urban Corp.	OT 1/2	
Bramalea Con. (Can.)	TR 6 1/4	+ 3/4
Campanelli Ind.	OT 2 1/4	+ 1 1/2
(New American Ind.)		
Capital Divers (Can.)-d OT	1 1/4	
<b>Centex Corp.</b>	<b>NY 11 1/4</b>	<b>+ 1 1/2</b>
Cervill Communities	AM 7 1/4	+ 2 1/2
Cheezem Dev. Corp.	OT 1	+ 1/2
Christiana Cos.	AM 2 1/2	+ 1/2
Cons. Bldg. (Can.)	TR 2.51	+ 31
Dev. Corp. Amer.	AM 5	+ 1/2
Edwards Indus.	OT 4	+ 1 1/2
FPA Corp.-d	AM 4 1/4	+ 1 1/2
Carl Freeman Assoc.	OT 2 1/4	+ 1 1/2
Frouge Corp.-d	OT 5	+ 1/2
General Builders-d	AM 1 1/4	+ 1/4
Hoffman Rosner Corp.-d OT	1 1/4	
Homewood Corp.	OT 5 1/2	- 1/4
Hunt Building Corp.	OT 2 1/4	+ 1/2
<b>Kaufman &amp; Broad</b>	<b>NY 8 1/4</b>	<b>+ 1 1/2</b>
Key Co.	AM 2 1/4	+ 3/4
Leisure Technology-d	AM 2	
Lennar Corp.	NY 5 1/4	
McCarthy Co.-d	PC 1 1/4	+ 1/4
McKeon Const.	AM 2 1/4	+ 1/2
H. Miller & Sons	AM 8 1/2	+ 1/2
Mitchell Energy & Dev.	AM 2 1/4	- 1 1/2
Orion Homes Corp.	AM 6 1/4	- 1 1/2
Presidential Realty	AM 3 1/4	+ 1
Presley Development	AM 12 1/2	+ 2 1/2
Pulte Home Corp.	AM 3 1/2	+ 3/4
Robino-Ladd Co.-d	AM 1	
Rossmore Corp.	AM 3 1/4	+ 3/4
<b>Ryan Homes</b>	<b>AM 23 1/2</b>	<b>- 1</b>
Ryland Group	OT 17	+ 1 1/2
<b>Shapell Industries</b>	<b>NY 14 1/4</b>	<b>+ 1 1/2</b>
Standard Pacific	AM 6 1/4	+ 1/4
Universal House & Dev.-d	PC 1 1/2	+ 188
<b>U.S. Home Corp.</b>	<b>NY 7 1/4</b>	<b>+ 1 1/2</b>
Washington Homes	OT 3 1/2	+ 1/4
Del E. Webb	NY 5 1/4	+ 1/2
Westchester Corp.-d	OT 1 1/4	+ 1 1/2

## SAVINGS & LOAN ASSNS.

American Fin. Corp.	OT 7 1/4	+ 1 1/2
Calif. Fin.	NY 6 1/4	+ 3/4
<b>Far West Fin.</b>	<b>NY 6 1/4</b>	<b>+ 1 1/2</b>
Fin. Corp. Santa Barb.	AM 11 1/4	- 1/4
<b>Fin. Fed.</b>	<b>NY 11 1/2</b>	<b>- 1 1/2</b>
<b>First Charter Fin.</b>	<b>NY 14 1/4</b>	<b>- 2 1/2</b>
First Lincoln Fin.	OT 3	- 1/4
First S&L Shares	AM 7 1/4	- 3/4
First Surety	OT 4 1/4	+ 1/2
First West Fin.	OT 1 1/4	+ 3/4
Gibraltar Fin.	NY 12 1/4	- 1 1/2
Golden West Fin.	NY 15	- 1
<b>Great West Fin.</b>	<b>NY 16</b>	<b>- 1 1/2</b>
Hawthorne Fin.	OT 11 1/4	+ 1/2
<b>Imperial Corp.</b>	<b>NY 12 1/2</b>	<b>- 1 1/2</b>
Transohio Fin.	NY 10	
(Union Fin.)		
United Fin. Cal.	NY 8 1/4	+ 1/4
Wesco Fin.	NY 13	- 1 1/4

## MORTGAGING

<b>Charter Co.</b>	<b>NY 5 1/4</b>	<b>+ 1</b>
CMI Investment Corp.	NY 12 1/2	+ 1 1/2
<b>Colwell</b>	<b>AM 6 1/4</b>	<b>+ 3/4</b>
Cont. Illinois Realty	NY 2 1/4	
<b>Fed. Nat. Mtg. Assn.</b>	<b>NY 15 1/4</b>	<b>- 3/4</b>
Fin. Resources Gp.	OT 7 1/4	+ 1 1/2
(Globe Mortgage)		
<b>Lomas &amp; Net. Fin.</b>	<b>NY 8 1/4</b>	<b>+ 1</b>
<b>MGIC Inv. Corp.</b>	<b>NY 15 1/4</b>	
Palomar Fin.	AM 2 1/4	+ 1 1/2
United Guaranty Corp.	NY 11 1/2	+ 1
(formerly FMIC Corp.)		
Western Pac. Fin. Corp. OT	3	- 1/4
(formerly So. Cal. Mort. & Loan Corp.)		

## REAL ESTATE INV. TRUSTS

Alison Mtg.-d	NY 2 1/4	
American Century	AM 2 1/4	+ 3/4
API Trust	OT 3 1/4	- 1/4
(formerly Arlen Prop. Inv.)		
Atico Mtg.	NY 3 1/4	+ 1 1/2
Baird & Warner	OT 7 1/4	+ 1/2
Bank America Rity.	OT 7	- 3/4
Barnes Mtg. Inv.	OT 3 1/4	
Barnett Mtg. Tr.-d	NY 2	+ 1 1/2
Beneficial Standards Mtg. AM	3 1/4	+ 1 1/2
BT Mort. Investors	NY 3 1/4	+ 1 1/2
Cameron Brown	NY 3 1/4	+ 1
Capitol Mortgage SBI	NY 2 1/4	+ 1
Chase Manhattan	NY 3 1/4	- 1/2
CI Mortgage Group	NY 1 1/4	+ 1 1/2
Citizens Mtg.-d	AM 1 1/4	
Citizens & So. Rity.-d	NY 4 1/4	+ 2 1/2
Cleve. Trust Rity. Inv.	OT 2 1/4	

Company	Mar. 1 Bid/close	Chng. Prev. Month
Colwell Mtg. Trust	AM 3 1/4	+ 1
Conn. General	NY 17	- 3/4
Cousins Mtg. & Eq. Inv. NY	2 1/4	+ 1
Diversified Mtg. Inv.	NY 2	+ 1/2
Equitable Life	NY 20 1/4	+ 1 1/2
Fidelco Growth Inv.	AM 5	+ 1 1/2
First Memphis Realty	OT 2 1/4	+ 3/4
First of Denver-d	AM 2 1/4	
First of Pennsylvania	NY 3	+ 3/4
Franklin Realty	AM 2 1/4	+ 1/4
Fraser Mtg.	OT 10 1/2	+ 1/2
Gould Investors-d	AM 3 1/4	+ 3/4
Great Amer. Mgmt. Inv. NY	1 1/2	+ 1/4
(Formerly Great Amer. Mtg. Inv.)		
Guardian Mtg.	AM 2 1/4	+ 1
Gulf Mtg. & Realty	AM 3	+ 3/4
Hamilton Inv.	OT 1 1/4	
Heitman Mtg. Investors	AM 2 1/4	+ 3/4
Hubbard R. E. Inv.	NY 12 1/4	+ 1/2
ICM Realty	AM 8 1/4	- 1/4
Mass Mutual Mtg. & Rity. NY	11 1/4	+ 3/4
Mission Inv. Trust	AM 1 1/2	+ 1 1/2
(formerly Palomar)		
Mony Mtg. Inv.	NY 8 1/4	+ 3/4
Mortgage Trust of Amer. NY	3 1/2	- 3/4
National Mortgage Fund-d	OT 3 1/4	
Nationwide R.E. Inv.	OT 5	+ 3/4
(Galbreath Mtg. Inv.)		
North Amer. Mtg. Inv.	NY 7 1/4	+ 1 1/2
Northwest Mutual Life Mtg. & Rity.	NY 11 1/4	- 3/4
PNB Mtg. Rity. Inv.	NY 6 1/4	+ 1/4
Pernt. R. E. Inv. Tr.	AM 10 1/2	+ 1/4
Security Capital	AM 8 1/4	- 1 1/2
Realty Income Tr.	AM 6 1/4	- 1/4
Republic Mtg. Inv.	NY 2 1/2	+ 1 1/2
B. F. Saul R.E.I.T.	NY 3 1/4	- 1/4
Security Mtg. Inv.	AM 1 1/4	+ 1/4
Stadium Realty Tr.-d	OT 2 1/2	
State Mutual SBI	NY 2	+ 3/4
Sutro Mtg.	NY 5 1/4	+ 3/4
UMET Trust	NY 2	+ 1/2
United Realty Tr.	AM 5 1/4	+ 1 1/2
(Larwin Realty & Mortgage Trust)		
U.S. Realty Inv.	NY 3	+ 1
Wachovia Realty Inc.	NY 4 1/2	+ 1
Wells Fargo Mortgage	NY 7 1/4	- 1/4

## LAND DEVELOPERS

<b>AMREP Corp.</b>	<b>NY 2 1/4</b>	<b>+ 3/4</b>
Arvida Corp.	OT 5 1/4	- 3/4
Crawford Corp.	OT 4	
<b>Deltona Corp.</b>	<b>NY 7 1/4</b>	<b>+ 2 1/2</b>
Fairfield Communities	OT 1 1/4	
<b>Gen. Development</b>	<b>NY 6 1/4</b>	<b>+ 1 1/2</b>
<b>Horizon Corp.</b>	<b>NY 3 1/4</b>	<b>+ 1 1/2</b>
Landmark Land Co.	AM 1 1/4	+ 3/4
(Gulf State Land)		
Land Resources	OT 1 1/4	+ 1 1/2
Major Realty	OT 1 1/4	+ 3/4
<b>McCulloch Oil</b>	<b>AM 4 1/2</b>	<b>+ 3/4</b>
Sea Pines Co.	OT 3 1/4	

## MOBILE HOMES & MODULES

<b>Champion Home Bldrs.</b>	<b>AM 5 1/4</b>	<b>+ 3/4</b>
Conchemco	AM 10 1/4	- 5/8
De Rose Industries-d	AM 2 1/4	+ 1/2
<b>Fleetwood</b>	<b>NY 19 1/4</b>	<b>+ 3 1/2</b>
<b>Golden West</b>	<b>AM 8 1/2</b>	<b>+ 5/8</b>
Mobile Home Ind.	NY 4 1/4	+ 1 1/2
Monarch Inc.	OT 2 1/4	+ 1 1/4
<b>Redman Inc.</b>	<b>NY 4 1/4</b>	<b>+ 3/4</b>
Rex Noreco	NY 1 1/4	+ 1/4
<b>Skyline</b>	<b>NY 20 1/2</b>	<b>+ 1</b>
Town and Country	AM 2 1/4	- 1/4
Zimmer Homes	AM 7 1/4	+ 1 1/2

Brigadier Inc.	OT 1.12	- 63
Hodgson Homes-d	OT 1 1/2	- 1/2
Liberty Homes	OT 2 1/4	+ 1/4
Lindal Cedar Homes	OT 3 1/2	+ 3/4
Nationwide Homes	AM 22 1/4	+ 3 1/4
Shelter Resources	AM 3 1/4	+ 3/4
Swift Industries	OT 1 1/4	

## DIVERSIFIED COMPANIES

American Cyanamid	NY 25 1/4	- 1 1/2
Amer. Standard	NY 23 1/4	+ 1 1/2
Amterre Development	OT 7 1/4	+ 1 1/2
Arlen Realty & Develop.	NY 3 1/4	+ 1/4
AVCO Corp.	NY 9 1/4	+ 1 1/2
Bendix Corp.	NY 56 1/2	+ 6 1/4
Boise Cascade	NY 28 1/4	+ 1 1/2
Building & Land Tech.-d OT	1 1/4	
CNA Financial (Larwin)	NY 8 1/4	- 1/4
Campeau Corp.	TR 5 1/4	+ 1/2
Castle & Cooke	NY 15 1/2	- 1 1/2
(Oceanic Prop.)		
Champion Int. Corp.	NY 24 1/4	+ 3/4
(U.S. Plywood-Champion)		
Citizens Financial	AM 1 1/4	+ 5/16
City Investing	NY 10 1/4	+ 1 1/2
(Sterling Forest)		
Cousins Properties	OT 2 1/4	+ 3/4
ERC Corp.	OT 16 1/4	- 1/4
(Midwestern Fin.)		
Evans Products	NY 7 1/4	+ 3/4
Ferro Corp.	NY 32 1/4	+ 5 1/4
First Gen. Resources-d OT	5 1/4	+ 1/4

Company	Mar. 1 Bid/close	Chng. Prev. Month
First Rity. Inv. Corp.	AM 1 1/4	+ 3/4
Forest City Ent.-d	AM 5 1/4	+ 3/4
Flagg Industries	AM 2 1/4	+ 3/4
Frank Paxton Corp.	OT 10 1/4	+ 3/4
(Builders Assistance Corp.)		
Fuqua Corp.	NY 7 1/4	+ 1/2
Georgia Pacific	NY 49 1/4	- 1/2
Glassrock Products	AM 4 1/4	+ 1/4
Great Southwest Corp.	OT 3 1/4	+ 1/4
Gulf Oil (Gulf Reston)	NY 23	- 1 1/2
Gulfstream Land & Dev.	AM 6	+ 1 1/2
(Bel-Aire Homes)		
INA Corp. (M. J. Brock)	NY 37 1/4	- 1 1/2
Inland Steel (Scholt)	NY 49 1/2	+ 1 1/2
International Basic Econ.	OT 1 1/4	+ 1/2
International Paper	NY 74 1/4	+ 3 1/4
Inter. Tel. & Tel.	NY 28 1/4	+ 3/4
Leroy Corp.	OT 1 1/2	
Ludlow Corp.	NY 8	+ 3/4
Monogram Industries	NY 10 1/4	+ 2 1/2
Monumental Corp.	OT 12	+ 1/2
(Jos. Meyerhoff Org.)		
Mountain States Fin. Corp.	OT 4	+ 1/4
National Homes	NY 5 1/4	+ 1/2
National Kinney	AM 2 1/4	+ 1/4
(Units Bldg.)		
NEI Corp.-d	OT 1 1/4	
Penini Corp.	AM 5 1/4	+ 3/4
Philip Morris	NY 54 1/4	- 2 1/2
(Mission Viejo Co.)		
Pope & Talbot	NY 21 1/4	+ 2 1/2
Republic Housing Corp.	AM 2 1/4	+ 1/2
Rouse Co.	OT 4 1/4	+ 1/2
Santa Anita Consol.	OT 6 1/4	+ 3/4
(Robt. H. Grant Corp.)		
Tenneco Inc.	NY 26 1/4	- 1
(Tenneco Realty)		
Time Inc.	NY 63	- 3
(Temple Industries)		
Tishman Realty	OT 13	+ 1 1/2
Titan Group Inc.	OT 1 1/4	+ 1/2
UGI Corp.	NY 15 1/2	- 1/4
Weil-McLain	NY 10 1/4	+ 1 1/2
Westinghouse	NY 17 1/4	+ 3/4
(Coral Ridge Prop.)		
Weyerhaeuser	NY 43 1/4	- 1 1/2
(Weyer Real Est. Co.)		
Whittaker (Vector Corp.)	NY 4 1/4	+ 3/4
Wicks Corp.	NY 12 1/4	+ 1 1/4

## SUPPLIERS

Armstrong Cork	NY	31¼	+ 3¼
Automated Bldg. Com.-d	AM	3¾	
Bird & Son	OT	95	- 1
Black & Decker	NY	24¼	- 2½
Carrier Corp.	NY	16¼	+ 1¼
Certain-teed	NY	19¾	+ 1¾
Crane	NY	74¼	+ 7½
Dexter	NY	18½	+ 2½
Dover Corp.	NY	58¼	+ 2½
Emerson Electric	NY	37½	- ¾
Emhart Corp.	NY	27¼	- ¾
Fedders	NY	8	+ 2
Flintkote	NY	18½	- ½
GAF Corp.	NY	14¾	+ 7/8
General Electric	NY	52½	- 2½
Goodrich	NY	26¼	- 1½
Hercules	NY	37½	+ 2½
Hobart Manufacturing	NY	25½	+ ¾
Int. Harvester	NY	27¼	+ ¾
Johns-Manville	NY	29¾	+ 3½
Kaiser Aluminum	NY	32½	+ 1
Keene Corp.	NY	6½	+ ¾
Leigh Products	AM	10¼	+ ¾
Masco Corp.	NY	25¾	- 3¼
Masonite Corp.	NY	33	- 1
Maytag	NY	34	+ 1
National Gypsum	NY	14¼	+ 1
Norris Industries	NY	35½	+ 3½
Overhead Door	NY	9	+ 5/8
Owens Corning Fibrgl.	NY	52	- 2
Pollack Corp.	NY	59¼	+ ½
PPG Industries	NY	46¼	+ 4½
Reynolds Metals	NY	38½	+ 5/8
Rohm & Haas	NY	75¼	+ 7¼
Ronsom	NY	5½	+ ¼
Roper Corp.	NY	18¾	- ¾
St. Regis Paper	NY	48¼	+ ¾
Scovill Mfg.	NY	16	+ 2½
Sherwin Williams	NY	40¾	+ 2½
Sik Corp.	NY	11½	+ 1½
Slatier Electric	OT	5¼	+ 1¼
Stanley Works		25	+ 1
Tappan	NY	10½	+ 1½
Thomas Industries	NY	11½	+ 1½
Triangle Pacific	NY	10½	+ 2½
U.S. Gypsum	NY	21½	+ 2
U.S. Steel	NY	79½	- 3¼
Wallace Murray	NY	17	+ 2½
Jim Walter	NY	40½	- 1¾
Whirlpool Corp.	NY	32¼	+ 3



# The Soft Kitchen:



## It makes your selling job softer, too.

When a would-be homeowner steps onto GAFSTAR® Brite-Bond™ Citation flooring, she'll love the soft, super-cushioned sensation and the urethane surface that needs no waxing to keep its bright shine. And you'll be a step closer to making a sale. Because our super-cushioned floor is an "extra" well worth its price in creating an atmosphere of luxury.

Of course, a floor won't sell an entire house. But the good impression you make with GAFSTAR Brite-Bond Citation speaks to people of the quality you've put into every room. And you can't have it much softer than that.

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H&H APRIL 1976 35



# GREAT MOMENTS IN PLYWOOD.



## 1947. A 200-TON PLYWOOD FLYING BOAT TAKES TO THE AIR.

TIME magazine ran the headline "IT FLIES"—and everyone in the country knew what it meant.

At 1:40 p.m. on November 2, 1947, Howard Hughes opened the throttle on a great moment in plywood history.

"The Spruce Goose," larger than a Boeing 747, climbed out of



the water and into the air for one mile over Long Beach Harbor.

Why was plywood used? For the same practical reasons builders use plywood today.

Availability. Steel and aluminum were hard to get.

Strength. Pound for pound, plywood is stronger than steel. The plywood hull was able to withstand the stresses of rough water better than a metal structure, according to the Hughes engineers.



Cost. The flying boat was completed at a cost per pound less than any other large experimental plane.

The plywood sections were nailed and glued together. When the glue set, the nails were pulled out and the holes filled with putty.

Don't laugh at the Spruce Goose just because it never flew again.

The real purpose of this colossal achievement was not actually the

transportation of armies so much as it was discovery. Lessons that would, as Senator Harry Cain said and Hughes believed, usher in the future.

And they did.

## 1954. THE FASTEST, SIMPLEST FLOOR EVER INVENTED.

This is the year of the 2.4. Single Floor—a combination subfloor and underlayment that saves time and materials.

One layer of extra thick 1½-inch plywood is installed over 4-inch girders at 48 inches on center. But for a superstiff floor, builders used 2-inch joists at 32 inches on center.

Presto! A plywood breakthrough.





The panels have a precisely-engineered tongue and groove joint that eliminates the need for nailing. Another big time-saver. And the surface is so smooth that resilient tile, linoleum, carpeting and hardwood flooring can be placed right over the plywood.

**2.4.1 Single Floor.** One of the plywood moments.

## 8. THE COST CUTTER HAS A PRETTY FACE.

This was the year that plywood—the tough, economical, workable building material—came to me:

Textured plywood the beautiful, as well. Textured plywood. It comes in different styles and textures. For kinds of apartments, townhouses, offices and commercial buildings.

Textured plywood is tough. When properly nailed, it's a 2-in shear wall. Resists wind and impact. And weathers beautifully.



Textured plywood is a cost-saver, too. APA® Single Wall can save 30% to 40% on siding-finish costs.

## 9. PLYWOOD KEEPS THE SQUEAKS AND THE SQUAWKS OUT OF FLOORS.

A little squeak in a finished floor has always been a big call-back problem for builders.

The 1969 solution: the APA



field-glued plywood single floor.

The system consists simply of on-site gluing of 5/8- or 3/4-inch plywood to wood joists.

The assembly acts as a series of T-beams that increases the floor's stiffness. So joist size can be reduced. Or the span increased. Or the spacing increased.

Properly constructed, the system can eliminate squeaks and nailpopping forever—because glue prevents nails from riding.

Other advantages? Fewer call-backs. Single-layer construction cuts costs because it's both subfloor and underlayment. You get longer spans with the same size joists. And use 25 percent fewer nails.

And the glued floor system continues to quietly sweep the country. In homes. Townhouses. Apartments. Offices.

Shhhhhhh.

## 1972. MOD 24 SAVES \$200 PER HOUSE.

What a year.

The year of the Mod 24 house with plywood over lumber framing, spaced on a 24-inch module.

And it worked. Saved about \$200 per house just like the NAHB Time and Methods study said it would.

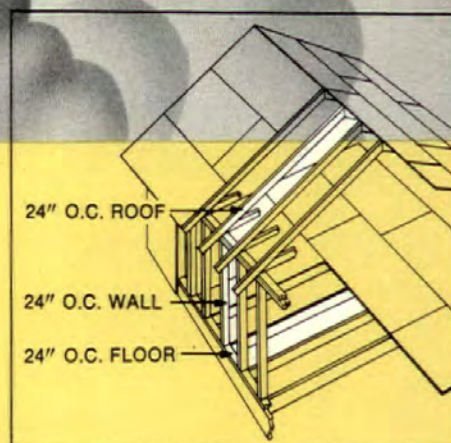
So APA promoted Mod 24 to builders throughout the country.

With these facts: Less lumber is needed because all framing for floors, walls and roofs is spaced 24

inches on center. Less labor is required because there are fewer pieces to order, inventory, handle and install. And, in many cases, you can stick with the same thickness of plywood now used at 16 inches on center.

What about the builder who doesn't use APA single wall? Can he still save with Mod 24? Sure. About 40¢ per linear foot using double-wall construction spaced 24 inches on center.

That's just one example of why Mod 24 is a great cost cutter in 1976, too.



### AMERICAN PLYWOOD ASSOCIATION

**American Plywood Association  
Department H-046  
Tacoma, Washington 98401**

Please send me more information on:

- ☐ Textured Plywood.
- ☐ Mod 24
- ☐ 2•4•1 Single Floor System.
- ☐ APA Glued Floor System.

My great moment in plywood was \_\_\_\_\_

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

**THE COST CUTTER**



# Kohler

**There are products  
designed to wear out.  
And there is that which  
endures. Kohler  
enameled cast iron  
endures. Beautifully.**

A Kohler enameled cast iron tub remains beautiful to look at. Stays rich and radiant this year, next year, and for many years to come.

There's good reason. Cast iron tubs have a strength, depth of color, vividness, and lustre that other materials cannot match. Cannot retain. (The stain and acid resistant enamel on a Kohler tub is five times thicker than on a steel tub.)

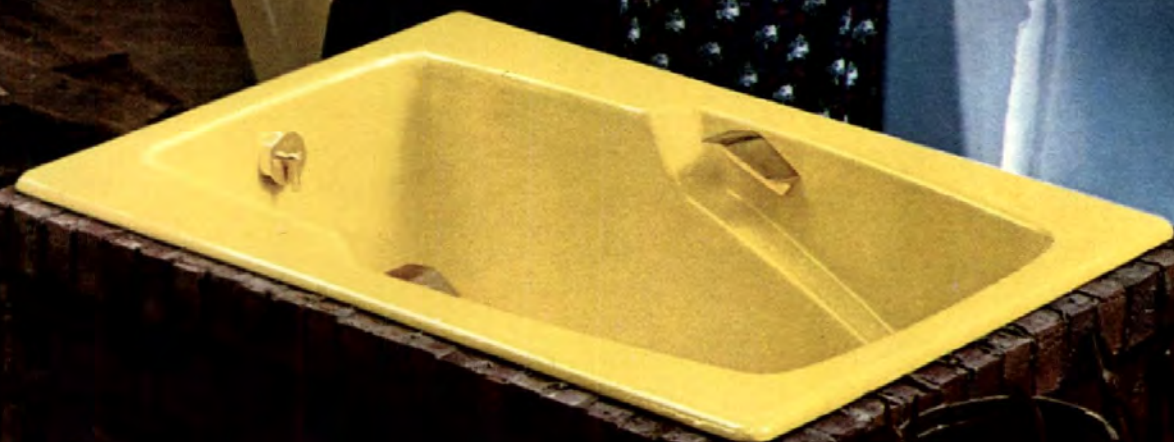
Your customer will experience the quality feel – the solid warmth, the color, the quiet security, the comfort.

Kohler cast iron tubs come in a wide variety of shapes and sizes. And Kohler offers an unmatched selection of colors, including Black Black, the bold accents and original deep tones ... 13 in all. We offer slip resistant bottoms – and safety grip rails.

(B)



(A)



(C)





# endurables

And consider this.

They're a better value. The Kohler cast iron tub you install today will serve your customer beautifully after furniture and appliances have been replaced.

There's a Kohler cast iron tub for every building and remodeling plan. There is no better value than a Kohler enameled cast iron tub. That's what your customer wants today.

(A) Sunflower Steeping Bath, 20-in. deep, with special comfort and safety features. In 13 colors, plus white.

(B) The 16-in. Mendota... has slip-resistant bottom. Shown in Mexican Sand.

(C) The Caribbean — 6-ft. long, 3-ft. wide. Has Safeguard, grip rails. Shown in New Orleans Blue.

(D) The Guardian — for extra safety. Shown in Pink Champagne.

(E) The Birthday Bath in Antique Red. Ball and claw feet in gold electroplate.

(F) The Villager for economical comfort. Shown in Harvest Gold.



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OF  
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CIRCLE 39 ON  
READER SERVICE CARD



# Aggressive remodelers seek a bigger slice of the housing dollar

Recession or no, 1975 was the best year ever for residential remodeling. And home improvement contractors are still far from satisfied.

Last year, the industry grew 17.5% to \$25.5 billion. Of this total, \$11.5 billion in home improvements was professionally installed, says the National Home Improvement Council (NHIC), which recently held its fifth annual convention at Bal Harbour, Fla.

**More is better.** Remodeler Bob Brockmeyer of Webster Groves, Mo., one of the 600 conventioners, summed up the industry's mood and prospects:

"Established contractors have just gone through a really good year, even though profit margins tended to slip a little. Now we're looking to boost volume even more, and that's why we're here—to learn better ways to get more customers."

A HOUSE & HOME straw poll confirmed Brockmeyer's comments. Convention-goers were asked to name their three most important business goals for 1976. Almost without exception, they listed: 1) to increase dollar volume; 2) to widen profit margins; and 3) to stabilize and expand sales forces.

**Pushing harder.** The NHIC's newly elected president, John J. Butler of GAF Corp., proposed a series of programs aimed at boosting remodelers' share of the market.

One program—a management institute to upgrade remodelers' skills at the local level—is scheduled to start this year in New England and then spread to chapters across the country.

Butler's other proposals include: establishing a consumer complaint bureau to screen customers' gripes; increasing Washington lobbying activities; and beefing up promotion efforts aimed at encouraging homeowners to remodel with NHIC members. These programs, however, must await the availability of funds and action by various committees.

**Tom Tully's law.** NHIC members did agree to launch a nationwide campaign designed to push a new law through state legislatures. The aim: to duplicate an Illinois statute that allows homeowners to add up to \$15,000 in improvements with-

out having their assessed valuations increased for four years.

The membership was briefed on details of the Illinois law and methods of encouraging legislators to enact similar laws.

Cook County assessor Thomas Tully, who proposed the law in Illinois, received an award for his efforts. In presenting the award, NHIC vice president and general counsel Randolph Seifert said:

"The Tully law is a model for the nation. It allows homeowners to upgrade their present housing without the penalty of an immediate tax increase, and this can stimulate the entire home improvement industry."

**Individual strategies.** Overflow crowds were seen most often at nuts-and-bolts sessions that focused on increasing market penetration.

• Dick Keiber of Largo, Fla. described how he works with builders and remodelers who are unable to meet production schedules.

"Bailing out larger companies that can't fulfill certain contracts has turned into a very lucrative business for me," says Keiber. "These opportunities keep cropping up because when subcontractors can't perform, the general contractor is out on a limb—about to face a lawsuit and a lot of bad publicity."

• James Kirk of J&J Construction Co., Portland, Ore., suggested that foremen be given incentives (either cash or gifts) to obtain a letter of recommendation from each customer.

"If mechanics know that they will be asking for a recommendation, they'll be on their best behavior all through the job," said Kirk. "And this polite and helpful attitude is what pro-

duces a really enthusiastic letter plus lots of referrals to friends and neighbors."

• Don Read of Lane Construction Co., Eugene, Ore., described how he doubled and then redoubled his volume by using 30-second TV spots on Thursday nights.

"Thursday, during prime time, is the only night that works for us," says Read, "because couples often go out on Friday and Saturday nights, but they like to plan remodeling jobs over the weekend. So we jog their minds Thursday night, and we find we receive most of our calls Monday morning."

**Advertising.** Read's statement gave rise to a debate over what advertising costs should be. A consensus developed that in small cities it was possible to get by with spending 2% of gross volume on advertising because the rates are low and the market can be covered with one or two media. Cost per lead in small cities averages \$3 to \$8.

Major cities surrounded by numerous suburbs require more media to achieve market penetration, so advertising costs are likely to range from 10% to 15% of total volume. Average cost per lead varies from \$10 to \$18. The industry average is about \$13.

Murray Gross of Busy Beaver Remodelers, Vernon, Pa., said that in a large marketing area phone solicitation is the cheapest lead getter as a percentage of sales (except for referrals), but it is only effective with multi-media advertising—radio, TV, newspapers, local magazines, etc. "No one method is a panacea," said Gross, "because there must be a reinforcing effect that only

comes from a total advertising mix."

Some other advice:

• Do place a display advertisement in the Yellow Pages because prospects usually remember a slogan or name but rarely a telephone number.

• Don't advertise on TV sports shows. Commercial often interrupt the action and this turns viewers against the advertisers.

• Do include neighborhood children in TV commercials. They can be shown on the sidewalk as the camera zooms in on the house being remodeled.

"We found that showing neighborhood children greatly expands the viewing audience," says Read. "The kids talk it up and parents and children look forward to seeing the commercial aired."

• Be especially sensitive to the advertising and public relations potential of remodeling a prominent person's house. A low profit or even a small loss on a job in the home of a well-known socialite will be compensated for by increased referral business.

• Don't show completed jobs on television. It's preferable to show work in progress on a typical home because then prospects identify with the job and relate it to their own needs.

This statement produced some disagreement. Several remodelers recommended before and after views of a job site while others favored views of before, during, and after the job plus favorable on-camera comments from the customer.

**Commercial opportunity.** Albert Justice, a property manager from Clearwater, Fla. and former president of the Institute of Real Estate Management, told remodelers of increasing opportunities in commercial and multifamily renovation. "IREM members who manage tens of millions of dollars worth of properties each spend an average of \$718,000 a year on remodeling and renovation," said Justice. "And 58% are continuously improving their properties. So a real opportunity lies in seeking out our members—called Certified Property Managers—in local areas so that you can work for them on a regular basis."

—M.J.R.

## Remodelers begin merger talks

The National Remodelers Assn. (NRA) and the National Home Improvement Council (NHIC) have established a joint committee to discuss merging the two trade associations.

NRA is composed of 4,400 contractors and a few non-voting associate members, while NHIC is made up of 1,700 contractors, lenders and wholesalers in 30 chapters plus 40 national members—manufacturers, trade associations and

publications.

"Right now, each group is finding out how much the other is willing to compromise," says John Hammon, NHIC executive vice president.

"We're optimistic that we can resolve our differences," says Joseph Nahay, NRA's executive director. "After all, we have common goals and programs so we should unify our efforts instead of constantly duplicating them."



# Which house costs less to heat?



## This one with aluminum siding?

When you put ShakerTown Panels up, heating costs go down. That's because almost 25% of a home's heat loss is through the walls. And ShakerTown Panels insulate better than almost any other sidewall material.

Take a look at ShakerTown Panels' R value (the higher the number, the better the insulator): It's 1.13. That's better than aluminum siding (R .70), a 4" thick brick veneer (R .44), wood lap siding (R .78), and most other conventional siding materials.

## Or this one with ShakerTown Panels?

Why do ShakerTown Panels insulate so well? Because each 8-foot long panel is made from #1 Certigrade Western Red Cedar shakes and shingles permanently bonded to a wood backing. So you get the superior cellular insulation of cedar along with the extra protection of a plywood veneer.

Find out more about how ShakerTown Panels keep labor costs, callbacks and heating costs down. Write for our free insulation brochure.



## ShakerTown® Panels

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CIRCLE 41 ON READER SERVICE CARD



## Mini-warehouse syndication: cash return instead of tax shelter

If you're looking for tax shelter, look elsewhere. All we have to offer are hard dollars—cash flow and capital appreciation.

That's the gist of the offering circular for a \$3-million public fund being raised in California to build and manage mini-warehouses.

It's another blind-pool syndication, using the old vehicle of a limited partnership of small investors at \$500 a unit; minimum investment is \$2,000.

But instead of bringing together more high-tax-bracket investors to milk the writeoff potential of over-financed, under-producing apartment projects, this syndication gives the public a chance to cash in on the profit potential of the fast-rising mini-warehouse industry.

The fund is being raised by the giant of the industry, Public Storage Inc. of Pasadena, Calif. Started four years ago by a veteran homebuilder, PSI has built and now manages 48 mini-warehouses with more than 2.5 million sq. ft. of space.

"We're not only the biggest in the mini-warehouse business," says Vice President Wayne Hughes, "we're number two in the entire public storage business." (Number one is Bekins Moving and Storage.)

*PSI's promise of cash-on-cash returns to investors is backed up in the syndication circular by four guarantees:*

- PSI will not borrow money from lenders to build mini-warehouses for the public syndication. Land and construction will be paid for entirely with cash from the investment fund. Thus free of debt service, PSI's new warehouses will start producing positive cash flow at about 30% occupancy instead of the normal 70%. In a good location, 30% occupancy is attainable within 60 days after project completion.

- Syndicated projects will be retained and operated for the public investors' account until 100% of their original investment has been returned to them. Only after that will any of the projects be sold or refinanced, whereupon the proceeds will be distributed to the partners and not reinvested. PSI also promises not to sell the projects until after at least four years of operation.

- Cash flow will be split 92% to the limited partners and 8% to PSI, the general partner, until the limited partners get back all of their original investment. After that the ratio will be reduced to 75%-25%.

- Construction costs are guaranteed not to exceed 85% of a project's appraised value on an "as-if-completed" basis. If they do, PSI will absorb the cost overrun. PSI also guarantees to have new projects in operating condition within 120 days after acquiring the unimproved land.

*Significant tax advantages are lacking in PSI's syndication for three reasons:*

- A large share of the investors' money, 23%, will be used to buy land, which is not depreciable for income-tax purposes. The balance of the fund will go for construction (61%); reserves (5%); and underwriting fees and offering expenses (11%).

- Only straight-line depreciation will be taken on the warehouses, even though accelerated depreciation would be permitted, because the investment objective is capital appreciation.

- Fund assets won't be leveraged by financing, so investors can't take advantage of prepaid interest or other tax-shelter devices.

variety of small and large businesses. Storage spaces in its warehouses range from 25 to 800 sq. ft. The precise mix of space sizes for a given market is determined by demographic surveys and a formula that PSI considers a trade secret.

*Prime location.* "We buy the best industrial land we can find," says Hughes, "and 99% of it is highly visible from main roads and expressways." Tall illuminated signs are strategically located on the sites and the metal doors of the individual spaces are painted bright orange.

*On-site management.* Resident managers live in PSI's warehouse complexes just as they would in an apartment project. Tenants have direct access to their spaces and use their own locks, so managers devote much of their time to renting, maintenance and security. Managers' living quarters are built into the complexes, which are fenced and protected by guard dogs and electronic burglar alarms after hours. PSI manages its own complexes plus some for other developers. Rents are collected in a central billing department and projects are monitored by field supervisors. PSI's fee for managing the syndicated projects will be 6% of gross rental income.

is a high-turnover business. Most tenants are on month-to-month rental agreements and stay less than 12 months.

PSI's president is homebuilder Kenneth Volk. He was vice president of Vol McLain Communities Inc. for 18 years, then owner of Volk Developments until founding PSI in 1972. Before teaming up with Volk, Hughes had been in the real estate investment business.

Despite the good cash-flow potential, PSI's financial statements have been slow to reflect profits. The company had a year-end loss of \$883,000 in 1974. And an unaudited statement for the first nine months of 1975 shows a positive but slim net worth of \$157,000. However, more than half of the company's sales, representing some \$5 million in gross profit, were not reflected in the last statement because they were yet unrecorded. Reason: PSI had sold all of its warehouses to date with joint-venture or management agreements, or as sale-leasebacks. It delays the recording of sales for a year or more while it manages the complex under a lease or guaranteed cash-flow agreement.

How successful PSI will be attracting small investors to mini-warehouses so it can build



Highly visible location, next to freeway in Sunnyvale, Calif., typifies PSI's mini-warehouse sites.

PSI says mini-warehouses are good income producers because monthly rents are comparable to apartment rents—from 17¢ to 35¢ a sq. ft. depending on space size—but operating costs are much lower.

*To maximize that profit potential, PSI emphasizes these basics:*

*A broad tenant mix.* Contrary to general assumptions, mini-warehouses' sole customers are not apartment and condominium dwellers. PSI also serves a

*Continuous advertising.* Unlike other mini-warehouse operators, PSI has enough projects in some of its markets to support television commercials. "TV is our most effective form of advertising," says Hughes, "and it gives us an advantage over everyone else." Even though PSI's overall occupancy average is 92% and most new projects attain that in the first nine months of operation, the company can't slack off on advertising because mini-warehousing

without loans remains to be seen. After running one ad for the public offering in *The Wall Street Journal's* Pacific Coast Edition in January, the syndication underwriter received 50 inquiries and by the end of February had raised the partnership's first quarter-million dollars. PSI doesn't have to raise the full \$3 million. A minimum \$1,112,000 will make the partnership viable and PSI has the rest of this year to raise it.

—H.C.W.



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CIRCLE 43 ON READER SERVICE CARD







## Stay out of the Great Security Race: It's an expensive trap for the unwary apartment owner

Not long ago we witnessed the Great Amenities Race. Apartment developers tried to outdo each other in the number and kind of recreational features they supplied. From simple swimming pools, the list grew to include tennis courts, clubhouses, saunas, exercise rooms, indoor pools, whirlpool baths, jogging paths, sailboats and canoes. Apartment recreation packages began rivaling those of the finest private clubs.

The amenities race ended in a dead heat. And now apartment developers and owners have switched to a different game: security.

**Promises.** A quick reading of apartment ads in most cities illustrates the point. One advertises 24-hour security. Another claims regular security patrols. A third touts armed uniformed guards. Still another boasts of electronic surveillance with television monitors and magnetic identification cards.

Owners now are trying to capitalize on human fears by promising maximum protection for the life, limb and property of apartment tenants.

There's good reason to be concerned about security. According to a Gallup Poll:

- One of every five suburban residents surveyed had been the victim of burglary, vandalism, mugging, robbery or car theft in a year's time.

- One out of six Americans thinks security is a major problem in his own home. Homeowners are expected to be spending \$400 million on security systems by 1980, the equivalent of \$1 spent on protection for every \$4 of property stolen.

No wonder apartment owners think they're on to something big when they promise security.

But that promise should not be made lightly or without a clear knowledge of the potential consequences. Your tenants certainly won't take it lightly, nor will the public or the court.

By promoting security, you're raising fears in the minds of tenants. You're making tenants think about security when they might otherwise not be unduly concerned about it. You may even cause tenants to think that your security protection is not what it should be, and encourage them to go looking for something better.

Hotels generally do a superb job of providing security. Try something funny in a hotel lobby and watch how quickly the house detectives materialize. But hotels never promote security. They know that the mention of security is disturbing to guests, so they

go at it quietly. Apartment owners would be smart to do likewise.

**Asking for trouble.** When you promote security you not only raise people's fears, but you assume a liability that you normally would not be exposed to. If a tenant is robbed, injured or killed, you are blamed because you didn't provide the security that you specifically promised.

No matter how good your security system is, the injured party can always claim that you could have done more. You could have doubled or tripled the guards, trained them better or put in more surveillance. Court cases are pending now, and others have been settled, in which this principle decided the issue in the tenant's favor (*see below*).

### CASES IN POINT

*Samson v. Saginaw Professional Bldg., Inc.*, 224 N.W. 2d 843 (Mich. 1975)

*Johnston v. Harris*, 387 Mich. 569, 198 N.W.2d 409 (1972)

*Kline v. 1500 Massachusetts Avenue Apt. Corp.*, 439 F.2d 477 (D.C. Cir. 1970) 43 A.L.R.3d 311 (1970) [Annotation: "Landlord's Obligation to Protect Tenant Against Criminal Activities of Third Persons"]

*Neering v. Illinois Central R.R.*, 383 Ill. 366, 50 N.E.2d 497 (1943)

*Goldberg v. Housing Authority*, 38 N.J. 578, 186 A.2d 291 (1962)

*Trice v. Chicago Housing Authority*, 14 Ill.App.3d 97, 302 N.E.2d 207 (1973)

*Steloh v. Cottage 83*, 52 Ill.App.2d 168, 201 N.E.2d 672 (1964)

The truth is that no apartment complex can be made 100% secure.

**'Don't do it.'** So if you haven't already entered the Great Security Race, don't do it.

- Don't put in any systems that promise security.

- Don't mention security at all in your advertising or literature.

- Don't imply that you are assuming responsibility for security.

Avoid any security measure that requires a person other than the tenant to control it. That means:

- Don't hire guard services and security patrols.

- Don't install electronic systems that are monitored by someone other than the tenants.

- If you have a gatekeeper or doorman, make sure he's not dressed like a guard and don't give him a gun.

- Don't use canine patrols.

- Don't give an apartment rent-free to a policeman in exchange for his serving as a part-time guard during his off-duty hours.

What you *can* do is provide tenants with security devices *they* can use, like deadbolts, locks and apartment-to-lobby intercom and television systems that allow tenants to screen callers.

Owners and managers may ask, doesn't the landlord have a legal obligation to provide security? If he has, we're not aware of it. A current bill to establish the National Landlord and Tenant Commission (HR 969) attempts to make security a landlord's responsibility, but this isn't law yet.

Most crimes in apartments occur because tenants are careless. They hold lobby doors open for strangers, fail to screen callers before releasing electronic door locks and propping open exit doors for their convenience.

You can warn tenants against such practices. But don't hand out security advice under your own name, because you may be implying liability. Ask your police department for literature on security, and pass that out to your tenants. The police play the major role in any security situation.

**A No-No word.** Besides avoiding systems that imply security, you should also prevent any mentions of security in advertising sales literature or leasing agents' sales pitches. Not only should the word "security" be avoided, but so should descriptions of any feature that implies security. If you deal with an advertising agency, make sure they comply with these precautions.

You're fortunate if you've stayed out of the Great Security Race.

If you're already in it, you have problems you'll have to live with. You can't risk pulling out, because if an incident occurs in the future, someone may claim that you're reneging on your past promises of security. On the other hand, if you maintain the status quo you still run the risk of not having provided enough security.

Your only recourse is to increase your liability insurance. For a 240-unit complex, increasing liability coverage from \$1,000,000 to \$3,000,000 would cost about \$800 more per year. That's not bad, but if tenants start a rush of security suits, rates could skyrocket just as they have for medical malpractice insurance.

It's an uneasy situation to be in. And it could have been avoided if apartment owners had refused to play on tenant fears and focused instead on the positive aspects of their complexes. Hindsight is a great teacher. So if you haven't entered the Great Security Race, take heed: Stay out of it.



# OUR NEW COOKTOPS HEAT UP YOUR SALES.



TGT24



TGT25



TGT36



TGT45

Customers naturally warm to Thermador's Thermaglas™ cooktops, with patented conduction grill system on the grill units. Each of them has the kinds of features modern homemakers are looking for, and an uncluttered look designed to complement any kitchen.

As an example, feast your eyes on Model TGT45, above. It's some kind of cooktop, with a Teflon-coated griddle that trades places with a barbecue grill. The cover, when closed, serves as a warming surface. Like all Thermaglas

cooktops, its elements have infinite heat controls, from a slow simmer to a rolling boil. An "on" light tells when an element is operating. Each cooking surface is defined by a handsome sunburst design. Any kind of flat bottom cookware can be used on the very accommodating Thermaglas surface. Construction is seamless, with stainless steel mounting rim.

Thermaglas cooktops have something else going for them...the Thermador name. Generations of architects, builders, and discriminating

consumers have chosen Thermador because it represents the highest standards in design, materials, and craftsmanship.

From the top, our unique foursome:  
TGT24 Griddle 'n Grill.

TGT25 Combination cooktop/Griddle 'n Grill. One regular and one large element.

TGT36 Five element cooktop. Two large and three regular elements.

TGT45 Combination cooktop and Griddle 'n Grill. Two large and two regular elements.

## Thermador

For complete warranty details on these or other Thermador products, see your Dealer or write  
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Eastern Zone Office, 615 Sherwood Parkway, Suite 6-A, Mountainside, New Jersey 07092 • (201) 233-5432.





## Fuel saving construction.

Andersen Windows are built to save on heating and cooling bills. With a wood core (one of nature's best insulators), double-pane insulating glass and a snug-fitting design.

## Cuts costly call-backs.

Buyers won't complain about sticking or binding. Because, when installed properly, Perma-Shield Windows fit snugly, yet operate with ease.

## Silent salesman.

Surveys show home buyers are more aware of Andersen® Windowwalls® than any other window brand. So this label adds sales appeal to your homes.

## Long life, low upkeep.

Rigid vinyl sheath on frame doesn't chip, flake, peel or blister. Doesn't rust, pit or corrode. Sash is protected by a long-lasting, low maintenance polyurea finish. Interior wood surfaces can be stained or painted to match any decor.

## Resists handling problems.

Exterior frame surfaces resist damage during installation. Don't require touch-up painting. Dirt wipes clean with a damp cloth. A beautiful way to save time and money.

For more information about Perma-Shield® Narroline® Double-Hung Windows, call your Andersen Dealer or Distributor. He's in the Yellow Pages under "Windows." Or use the reader service card in this publication.

**Andersen® Windowwalls®**  
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# The beautiful way to save time, save money, save fuel.

## No storm window bother.

Double-pane insulating glass offers a major part of the fuel-saving benefits of single-glazing with storm windows and only half the glass cleaning chores. Convenience your buyers are sure to like.

## Snug-fitting design.

Perma-Shield Narroline Windows are two times more weathertight than industry air-infiltration standards. To help seal out drafts and dust, and to help save on heating and cooling bills.

## Easy installation.

Perma-Shield Narroline Windows come completely assembled. All you do is nail pre-punched side flanges into window openings. Flanges eliminate the need for separate flashing.

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## You won't make workout deals by proclaiming your expertise but by following some simple rules

January's *Money Scene* column brought more letters and phone calls than this writer has received in years on a single topic. That column advocated that troubled real estate lenders quit playing for an inflation bailout and try instead for a perspiration bailout involving the efforts of seasoned real estate entrepreneurs.

The letters have sparked this column. And two very special letters spoke volumes about the state of workouts and the ballyhooed real estate recovery.

The first came from the former senior officer of a life insurance company who is devoting his retirement to consulting:

"The life companies are showing substantially more willingness to face up to their problems than the banks are. Whether the banks really think they are going to get bailed out by inflation . . . or whether they just do not know yet what their problems are, I cannot guess.

"I have been trying for 15 months to get a multi-bank group to take action to complete an apartment project and have had no results. The bankers' solution is, 'Let's sell our \$20-million position and the unfinished building to anybody who will pay us \$10 million cash.' There is as much chance that somebody will step up with \$10 million for this as there is that I will be the next man on the moon."

**'Same foolish mistakes.'** The second letter came from the chief workout executive for a major REIT:

"What's so ironic is that many of the banks and trusts do not realize that this real estate is merely going through a laundering process by taking it away from the 'bad buys' and trying to put it in the hands of the 'good buys.' So far, from what I have seen . . . the good guys are not getting the real estate. The effect of all this is that the banks and REITs doing workouts are remaking the same foolish mistakes with inexperienced developers and workout artists, based on unrealistic projections. It's unbelievable but many of the workout deals are nothing more than a repeat of the loan made two or three years ago. The second wave of foreclosures on workouts will destroy any chance this real estate had of surviving."

**Frustration.** Both letters sum up the widespread frustration over a general inability of real estate men to come to grips with specific problem-property opportunities. In this

setting it's fashionable to criticize the troubled lenders—bankers and REIT men—for myopia or worse. But this approach really begs the question without solving anything. Much better for outsiders wanting to get in on the problem-property action to follow a few simple rules, gleaned from numerous talks with real estate men who've been there and often succeeded in cutting a deal with a lender.

**Specifics.** A workout expert must make specific proposals about specific properties.

Every REIT and bank manager is inundated by unsolicited mail from workout specialists, consultants, engineers and prospective investors. Nearly all of it winds up in wastebaskets.

So you've got to catch this busy lender's attention—fast. The best and perhaps only way is to make a specific proposal about a specific property. Some simple presentation hints are worth noting.

- Don't insult the lender by dwelling on words like problems or distress. Emphasize your interest in aiding the lender with tough or slow-moving properties. The semantics are vital because they set the tone for all negotiations.

- Understand that the lender's man with whom you are making contact works inside an institutional framework—he has supervisors and loan committees and examiners and lawyers and auditors to satisfy. Try to make him your ombudsman inside this bureaucracy; you'll need him.

- Offer some cash if the deal merits it. Cash is the magic word that gets lender attention quicker than any other. If you don't have cash, try talking to local real estate law firms or accountants known for representing large investors seeking tax benefits. There are so many different ways these firms can find to put cash into a worthy deal that no one should have to be embarrassed on this score.

- Don't give the impression you're out to steal something; most successful proposals give the lender a crack at some share of profits if you, the entrepreneur, succeed in turning a property around. Many are nothing more than joint ventures in the guise of purchases or leasebacks. Your chances are better if your proposal helps solve the lender's problem—getting some or all of his money back—as well as giving you a shot at some good profit.

**A success story.** Here's a case in point: a savvy real estate man recently took over an office building that was only 5% occupied after four years on the market—two by the original developer, two by the lender after foreclosure. The lender had \$3.6 million in a building that was worth no more than \$2 million as it stood. The real estate man structured a deal that gave the lender a proceeds from ultimate sale of the building over \$3.8 million, thus providing \$200,000 for lease-up.

The real estate man was to get varying percentages of sale proceeds over \$3.8 million, the scale giving him 90% of proceeds over \$4.2 million. Through a sophisticated leasing program that relied upon an intensive marketing survey, the building was brought to full occupancy in nine months—at premium rents. The building is being sold now for \$4.6 million—thus returning a good profit to the entrepreneur for his "perspiration."

**Professional help.** The workout expert must get the best professional help and pay it well. He needs good lawyers, accountants, tax men, mortgage bankers and leasing men to locate likely properties and develop a proposal with cachet. I'm constantly amazed at the number of real estate men who expect to get this type of help "on spec."

The workout specialist is working with distinctly non-standard products by definition. The payoff may be highly uncertain and years in the future. The kind of talent you need won't work on wild goose chases.

**Finding the properties.** Finding jobs with construction halted in your area shouldn't be too difficult because of their visibility. Getting construction going again may require lengthy negotiations, especially if several lenders are involved.

Locating the "invisible" problems—properties already built and operating poorly—can be done several ways. Law and accounting firms are good places to start. Or you might get the public reports of companies you think own prospects.

One final word: don't be discouraged if a lender gives you a cold shoulder. One of the most successful workout experts hits a many lenders as quickly as he can; if nothing turns up, he's off to the next address. He figures there's so much business out there that he can't take the time to educate a lender.



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Our solid vinyl siding moves homes easier because it gives buyers the security of knowing that their investment is protected against premature aging and the elements. It never needs paint. It can't rot, split, or burn like wood. And it can't corrode, rust, attract lightning or

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You can promise a family that their Bird siding should be as lovely twenty years from now with minimum care as it is on the day they move into their home. And the money they save on maintenance will go a long way in making other home improvements through the years. Bird offers more color choices in solid vinyl, a broad line of low-maintenance ornamental shutters, as well as a complete line of premium asphalt roofing shingles. Look into them for your next job. It's a wonderful way to make the homes you build or remodel sell faster and endure.

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Please also include facts on: ☐ Solid vinyl gutters  
☐ Ornamental plastic shutters ☐ Bird asphalt roofing

"House & Home-April 1976"

CIRCLE 49 ON READER SERVICE CARD







## Got an out-dated model complex? You can give it a just-opened look without spending a lot of money

If your project's been open a year or more, chances are you're looking for new ways to generate buyer excitement—particularly if you've got a backlog of unsold houses. Yet you probably don't want to spend a lot of up-front money to do it.

Promotional activities like price discounts, free upgrades, etc. can help. But the core of any drive to generate traffic and sales should be a concentrated effort to revitalize your model complex.

Note that I say revitalize, not redecorate. Just as I oppose project name changes or pure giveaways as a means of overhauling a project's image, so do I object to huge cash outlays for an entirely new model look. It's not necessary because there are a lot of things you and/or your interior designer can do to create fresh and re-energized interiors without spending a lot of money. You can, in fact, actually change a model's basic design theme with little more than paint, fabrics and accessories. Here's how.

**New life for living rooms.** This is the place to start your change. Suppose your original model has an eclectic theme. Living-room walls are white, the furniture is traditional and wall treatments and accessories are contemporary. You can give this room an airy, house-and-garden look by repainting the walls yellow or green, adding an interesting picture grouping and reupholstering the chairs with yellow and green fabrics, preferably patterned. The same fabric can be employed as a valance over an existing wall of white drapes. And if the dining room is nearby, matching fabric can also be used to re-cover cushions on the dining-room chairs. This change will be dramatic—and not costly since you haven't touched the carpeting, draperies or much of the other furniture (coffee tables, end tables, etc.).

Suppose the original living room has a cold look. You can add warmth inexpensively by running a plate rail along the walls near the ceiling and using it to display collectibles, antiques, etc. A plate-rail display puts accessories out of reach of prospects touring the model and gives a room a brand-new look.

Some other suggestions for revitalizing a living room: Panel one wall, using a rough, natural wood like Ponderosa pine, or try crisscrossing a wall with wooden stiles (1x2s painted or stained) placed over a patterned wallpaper (coordinated with the

upholstery fabric) or over paint whose color matches the carpeting.

Letting sunshine in is a good way to brighten up a dark room. Replace draperies with a Roman shade or a transparent curtain with tiebacks. But watch a model that's bathed in sunlight. If furniture, carpet or throw rugs have faded, change them; it's essential so the room looks fresh and new.

Another inexpensive change—this time without altering your basic theme: Switch tables. Today, glass-topped tables, as well as wood, are available in traditional, contemporary and country French designs. Or refinish existing furniture to match a new color scheme.

**New life for kitchens.** A major psychological objective of your up-date program should be to convince prospects they'll be proud new owners. Here's where the kitchen comes in. Women, as we've said many times, immediately gravitate toward the kitchen in a model home. The kitchen brings out a woman's creative feelings while reinforcing her role as homemaker. Nowadays, men also appreciate an inviting kitchen because more and more of them are sharing cooking chores with their wives.

An easy way to brighten up the kitchen is by switching the wallpaper and accessories. Traditional floral print wallpaper can be replaced by a striking geometric print. The result: a shift in design theme from traditional to contemporary.

To strengthen the modern look, replace accessories like mixing bowls, an egg beater and cake mixes with the "fixings" for a late-night supper. Display martinis and omelettes on the countertop—or at least show an omelette cookbook.

**New life for master bedrooms.** There's been a drastic change in decorating master bedrooms in the past year. So perhaps you should consider redoing this important room. Fur bedspreads and outrageous expanses of mirror, once used to connote sexiness, are passé. They're not believable and can be offensive. (The first rule of decorating is don't offend.)

A far more persuasive approach is a bedroom with a country English theme—one that stresses warmth and comfort through texture, patterns and intimate pieces of furniture like a loveseat and coffee table grouped in a conversation corner.

**New life for other rooms.** Secondary bed-

rooms and dens are good areas to work on when you revitalize your models—particularly if you've found that your market isn't quite what you expected it to be when you first opened your project.

For example, if your prospects are older than you had anticipated, convert the child's bedroom in one model into a combination day room/sewing room and bedroom for guests or children away at school. Add a single bed with a coverlet and throw pillow takes on the look of a functional day bed. Add a rocking chair, knitting basket, sewing machine and mannequin; then cover the wall with paper that matches the coverlet and you've created a sparkling sewing area.

On the other hand, if your age group is younger than expected, take the guest room and add accessories like cheerleader pom-poms, pennants or football gear to communicate a teen theme. You might get these accessories from a nearby school.

To enhance the overall appeal of a den or study you could add built-ins. Instead of using a freestanding desk, try removing a closet door; then build in a desk and add some bookshelves above. Panel the closet interior or the entire room to project a casual atmosphere. If your market is professional people, you could display financial publications, trade magazines, etc. Hobby-themed rooms also attract attention from professionals. You might concentrate on photography or stamp collecting.

Another way to put new life into the decor of a secondary room is to capitalize on the current interest in plants. One suggestion: Feature the hanging basket look. An awkward corner can be turned into an eye-catching nook with a potted plant that's hung from the ceiling with a leather strap or macrame plant holder.

Or you can create a ceramic workshop in a secondary room by accessorizing with a small potter's wheel, clay, metal tools and a few containers filled with figurines in various stages of completion. And don't forget storage shelving.

To sum up, interior design trends are constantly changing. And today's new look of softness and personalization is being featured by the many home service magazines your prospects read. A model home that fails to keep pace designwise with the new trend only dates your project and drains its sales appeal.





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When you install Sears refrigerators, ranges, dishwashers, disposers, compactors, washers, dryers, and air conditioning, you're giving people more than quality appliances; you're also giving them a dependable, single source for service.

**Approximately 20,000 service technicians.** All of them have been hired and trained to work on Sears appliances. One call can bring service technicians for both Mrs. Smith's dishwasher and Mrs. Jones' air conditioning. In fact, sometimes it will be the same man. You have simpler scheduling and fewer bills.

**"Warehouses on wheels."** Our 15,000 service trucks are stocked daily by parts specialists who know the service schedule and the parts most likely to be needed. Rarely does a Sears serviceman have to "run back to the shop for a part."

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### Here are 10 Good Reasons to Consider Sears:

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### OK I'll consider **Sears** Contract Sales

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# Legacy<sup>®</sup>



**A Touch of Wonderland  
for the Basic Home**



## Tight Money Breeds Tough Customers

Selling homes is no tea party these days. Americans take a hard...cost conscious...look at every detail of the houses they consider. But that doesn't mean the basic home has to be as plain as a rabbit hole.



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## All of Which Means Legacy Stands Alone



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walnut-tone

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For the names of quality door manufacturers using Legacy write: Masonite Corporation, 29 North Wacker Drive, Chicago, Illinois 60606.

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**MASONITE**  
CORPORATION



## The Davis Difference.

**The Fleetline 20+4's articulation and instant forward/reverse turn tight spots into wide open spaces!**

**Even with one hand behind you, the Davis Mono-Stick makes maneuvering no contest!**

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### REITS and workouts

H&H: You are the first to note in print, as far as I know, that the workout artists are the REIT people who created all of the problems in the first place [*The Money Scene* and Editorial, H&H, Jan.].

BRUCE P. HAYDEN  
Hayden Associates, Inc.  
New York City

### More perspiration

H&H: My compliments on your article entitled: "Lenders now courting on an inflation bailout should play for perspiration bailout instead" [H&H, Jan.]. The situation you describe are exactly those we have encountered time and time again, not only from the REITs, but from banks and S&Ls.

One point you seemed to overlook is that when inflation finally does catch up with prices, the projects will be three to five years old, and their features, appliances, architecture, etc. will probably be obsolete.

And worse yet, these projects will be competing against newly built developments with major marketing advantages. For example, the emotional bias in favor of a brand new product versus one a few years old and "previously distressed" is overwhelming!

The lenders are going to suffer regardless. So how do we make them realize that now is the only time to make their move?

It will certainly be a rude awakening if the accounting principle board makes the REITs' attendant financial institutions declare the interest losses on the current "non-earning loans."

They don't want to face up to the problem, but in the end they will be grateful if they are somehow forced to take action now.

PHILIP E. YASSKY  
Sabre Realty  
North Hollywood, California

### CORRECTIONS

Cover credits in the February issue failed to note that the design is based on a site plan by Cassway/Albert & Associates, architects and landscape architects, of Philadelphia.



March's *Legal Scene*, written by Lenard L. Wolfe and Douglas C. Linn, mistakenly appeared with photographs of Stephen J. Cabot and Robert J. Simmons, authors of the column in February. See above for pictures of the real Wolfe and Linn.



*Editorial***Energy and homebuilding: Hooray for common sense**

Soon after the energy crisis hit two years ago, the high cost of heating (and cooling too) began to disqualify a lot of marginal homebuyers and discourage many more. A number of things started to happen in the housing industry as a result, and unfortunately, not all of them were good.

For example, there was suddenly a flurry of activity around solar heating. A number of companies—some reputable, some out-and-out hustlers—came out with solar heating systems for homes. But when it came to actually installing such systems, the initial price usually proved unfeasibly high. Result: Solar heating, which in fact is very promising as a supplementary source of heating energy, is rapidly getting a black eye which may impede its sensible development.

Another example: HUD, which often seems to feel unhappy if it isn't spending public money on exotic and headline-producing causes, has embarked on what it calls a residential demonstration program for solar heating and cooling. Working with the Energy Research and Development Administration, HUD says it will subsidize builders to the extent that up to 2,000 homes can try out new systems. The cost will ultimately run into the millions, and many experts feel that as it stands now, the program will produce little if anything of value.

Shades of Operation Breakthrough.

Happily, there's another side to the picture. The guy who bears the ultimate responsibility for doing something about the high cost of energy—the builder—has not lost his cool. Quietly, without a lot of fanfare and without spending a lot of money, he is starting to take the sensible approach: more insulation, better sealing. And he's selling this approach aggressively and successfully to the homebuyer.

We think this is so important that we have made it the lead article in this issue of HOUSE & HOME.

There's also some reason for optimism from the manufacturing side of the industry. Heat pumps, which have long had the potential for highly efficient heating and cooling, have been improved, and manufacturers are pushing them hard, as you'll see on page 88 of this issue. Self-interest, of course, but at least it's enlightened self-interest. And the same applies to the manufacturers of insulation and other energy-conserving products who are stressing ways to cut energy costs with simple, currently available methods and materials.

Housing could use a lot more of this kind of common-sense approach.

—M.C.H. JR.



# SAVING ENERGY

## How builders are doing it... and selling it

The news is that they are actually doing it, not just experimentally but on a production basis. A year ago, energy saving in housing was mostly talk; today a growing number of builders—some of them among the biggest and best-known in the country—are offering energy-conserving packages. They're using materials and techniques that are immediately available to any builder anywhere. And perhaps most important, they're finding ready acceptance in the marketplace. Merchandising programs that stress energy savings, even at a somewhat higher price, have proven surprisingly effective, especially in colder areas of the country.

In preparing this report, HOUSE & HOME talked to a wide range of builders—from high-volume producers to small custom builders. We asked them what kind of energy-saving packages they were offering, what features they considered most important, and finally, how they were merchandising these features. Their answers make up the pages that follow.

—JUNE R. VOLLMAN

## Here's what leading builders are offering in their energy-saving packages

### RYAN HOMES

PITTSBURGH, PA.

"From an energy-saving standpoint, the way a house is built is just as important as the materials that go into it," says Charles W. Prine Jr., senior vice president of giant Ryan Homes, which currently is operating in 17 market areas.

So a key part of the Ryan's new energy-house program is close supervision of workmanship. The company made a study and discovered that a lot of energy is wasted because materials aren't installed properly or because air infiltrates the house through cracks and crevices.

"Our study showed that merely upgrading specs doesn't automatically guarantee an energy-efficient house," says Prine. "For example, if a builder leaves a hole in his

sheathing, there's going to be air infiltration and heat loss. Or if insulation is crimped during installation, its insulating quality is going to be reduced."

Ryan is trying to eliminate such problems in two ways:

First, by stressing what might be termed "secondary insulation," such as using sealant all around its prebuilt wall panels and caulking around windows.

Second, by monitoring construction in all of its subdivisions with an infrared camera [H&H, Apr. '75] which graphically shows areas of heat loss.

How can a company like Ryan Homes—which usually has seven or eight active subdivisions in each of its 17 market areas—be sure its energy-saving instructions are being followed?

"The same way we control every aspect

of our operations," says Prine. "We tell our local managers that this is our policy and we'll be monitoring it." The monitoring is done by a team of inspectors from the company's product-development department.

Ryan's energy-saving program also includes a series of indoctrination courses for its local supervisors and subs to make sure they understand the program.

"We include a slide presentation that shows exactly how we want things done," says Prine. "And we don't just say, here's how we want it done, we say, do it."

### FITCH CREATIONS

CARRBORO, N.C.

R. B. Fitch doesn't think it's enough merely to build energy efficiency into the 50 or 60 houses his company puts up each year.

"You've got to show people how to live in their houses properly, because buyers have more effect on energy consumption than anything we can build into the house," he says.

So a key element of Fitch's energy-saving house program is an education campaign that includes lessons on how to read a meter, how much energy various appliances consume, etc.

The other part of the program is to make sure his houses are as "thermally efficient as possible." And like Ryan Homes, Fitch believes that licking the problem of air infiltration is paramount. So his crews have orders to:

- Caulk around windows and doors.
- Caulk between floor system and wall plate.
- Insulate and caulk around pipes and wiring after heating, plumbing and electrical work is roughed in by subs.

Fitch also makes sure all passages and openings between unfinished attic and conditioned spaces are closed or sealed. Part of this process is the installation of a special attic access door, which the builder is designed to replace the usual plywood scuttle hole cover. The door is prehung, weathertight, stripped on the back with polystyrene foam insulation, and costs about \$18 to build a shop. "An ordinary plywood cover usually warps and allows air to infiltrate," says Fitch.

Also to cut air infiltration, Fitch fits every fireplace in all of his houses with a removable front cover made of sheet metal. Total cost: \$7.

Finally, Fitch has studied siting techniques that help cut the amount of energy a house uses.

"Wherever possible, we orient our houses so the windows face south to get the bene-



the winter sun," he says. "And sometimes we change window locations for the same reason."

What about the hot summer sun? Fitch is considering installing polystyrene foam gutters on the inside of south-facing windows.

## BETTS BUILT HOMES

### WORTHINGTON, OHIO

Heavy insulation, double glazing and heat pumps are the core of the money-saving energy savers being built by Betts Built Homes. The company builds between 40 and 50 homes a year, and the houses are proving so energy efficient, says President Joseph B. Betts, that heating and cooling costs are ten less than the combined gas/electric bills for much smaller homes in the same area.

Betts' all-electric houses include:

- 3½" of glass fiber insulation in exterior walls.
- A 1" blanket of polystyrene foam over exterior walls, including foundation walls.
- Ceiling insulation of 8"-thick, high-density blown cellulose, plus 6" of glass fiber. This provides an R-30 factor, which Betts says is 50% above the minimum required by the building code.
- Double-glazed windows.
- Storm sash on basement windows.

"We're constantly being visited by homeowners who've heard about our energy-saving program," says Betts. "And we expect to find more and more interest as the cost of heat continues to go up in our area."

## DAN HAWLEY COMPANIES

### SOUTH FLORIDA

Instead of building all of its houses as energy savers, this company is offering its energy package as an option.

The experiment is now under way at a single-family project in North Lauderdale. For \$1,350 over the base prices of its homes—\$26,995 to \$29,995—buyers can order what the company calls its Solar Energy Savings Pak. The SESP package consists of a solar water heater, heavier-than-standard insulation, special roof turbines and European-style roll-down shutters.

Hawley (which last year was the largest user of government financing programs in South Florida—492 FHA/VA loans) decided to offer the package after FHA alerted the company to energy conservation features being promoted by the Federal Energy Administration.

"We worked very closely with FHA," says

director of sales Paul S. Kramer. "They told us that, conservatively, homeowners could save \$40 a month net if they bought our energy-saving package. That means prospects don't have to earn as much to qualify."

First returns seem to indicate that most buyers are willing to spend the extra money for the SESP package. Of 48 sales made by the company during February (the first month SESP was available), 74% included the package plus another energy-saving option—a high-efficiency air-conditioning unit which costs an additional \$1,200.

The company's main problem with the package, says Kramer, is buyer education.

"People don't know how solar energy can be used practically, and they ask why they can't get the house heated and cooled with solar power."

## PETER J. BONK REALTY

### SAGINAW, MICH.

Peter Bonk is a semi-custom builder who last year learned that the market is ready to pay higher prices for energy-efficient housing.

The faltering economy hit Bonk's operation drastically in 1974; he built only four houses that year. Last June Bonk previewed what he calls an "energy-controlled-living home." About 250 people turned out to see it the day it opened—a sign, says Bonk, that consumers are beginning to understand the importance of conserving energy.

"Normally, the market wouldn't be thinking about saving energy when the weather is warm," Bonk says.

The energy-saving house revitalized Bonk's operation, and by the end of last year he had more than tripled its 1974 output. Now, he says, he has more business than he can handle.

Bonk put about \$700 worth of extras in his first energy saver, which, he says, cut the utility bill by about 45%. The extras included beefed-up insulation, storm windows and the added cost of a more efficient furnace.

Now, Bonk says, he's come up with an even more energy-efficient house—one which he and the owner (an engineer) have calculated can cut the fuel bill of a similar conventionally built 2,700-sq.-ft. house by 60%. Here are some of its key features, which Bonk says can be used in any style new house:

- Polystyrene foam sheathing from the footings to the eaves (in place of conventional sheathing), which Bonk says "seals the house like an envelope."

- Sidewall insulation of 3½" blown-in cellulose instead of 3½" glass fiber "to

achieve a higher R-factor."

- Solid glass blocks instead of conventional basement windows.

- A forced-air gas furnace located outside the house which, according to Bonk, the manufacturer claims will save 19% of the fuel bill because it does not use warm air from inside the house for combustion.

- A glass door in front of the fireplace.

- Lower ceiling heights—7'6" instead of the standard 8'.

"So far the highest heating bill for this house—including the water heater and gas dryer—has been \$41 for the month of December," Bonk says.

## IRVIN A. BLIETZ ORG.

### CHICAGO

Wood Creek Courts is a 74-unit luxury project (prices start at just under \$100,000) in Lincolnshire, Ill. When it opened in 1973, marketing emphasis was on environmental quality; now it's on energy conservation.

"We've always built an exceptionally well-insulated house," says Bruce S. Blietz, president of the company. "But now we've decided to take additional steps because ours is a sophisticated market and it's very aware of today's energy problems."

Here's what's included in the Wood Creek Courts energy-saving package:

- Polystyrene foam insulation instead of conventional fiberboard sheathing on the outside walls; the foam will extend below grade to the outside of the foundation.

- 3½" high-density glass fiber blanket insulation in exterior walls.

- 12½" of attic insulation.

- Insulating glass in windows and doors.

The company expects these higher energy-saving standards to cut energy consumption in the houses by 25% to 30%.

"We've been told by some engineers that we could reduce usage even more by cutting the size of our heating and cooling equipment," says Blietz. "But we're not going to experiment with this until we're absolutely sure it won't affect comfort levels."

## WOOD BROS.

### DENVER, COLO.

For three years Wood Bros., which sold about 800 single-family houses last year, has been experimenting with energy-saving houses—ever since the company's marketing area was hit by natural gas allocations.

"We realized that eventually we might be forced to go all-electric," says senior vice president and regional manager Robert Carnicello. "So we decided to be ready for that

TO NEXT PAGE



day by learning all we could about saving energy in our current production houses."

The first step was to beef up insulation by putting 3½" in the walls and 10" in the ceilings, and to install double glazing. Next came the addition of an electrically controlled thermostat that automatically turns heat down at night.

"With natural gas, that saved roughly 30% to 35% in fuel costs," says Carnicello.

The company began marketing the energy-saving package, which also included a humidifier, late in 1973. The increased insulation and new equipment added around \$700 to \$1,000 to the price of the company's houses, depending on the size. "But," says Carnicello, "buyers really went for the package even though we never claimed they'd get that money back in a certain number of years, because we didn't know. They buy it because they've learned the value of insulation."

Carnicello says that this year, builders in the Denver metropolitan area are still able to get gas allocations in most cases.

"But we don't know what's ahead for next year," he says. "So we're planning to increase the energy efficiency of our houses even more."

The company also builds houses with electric heating. Their energy-saving package has been upgraded to include:

- 12" of ceiling insulation—an R-40 factor.
- Blown-in sidewall insulation—an R-19 factor.
- 6" of floor insulation over unheated areas like basements or crawl spaces—an R-19 factor.

One of the primary problems with electric heat, says Carnicello, is that some of the first all-electric builders "ruined it for everybody by putting electric forced-air furnaces in houses that weren't properly insulated."

"Families who bought these houses got enormous utility bills and, of course, passed the word along to their friends."

"Fortunately, we've established a reputation for energy-saving construction with our three-year experimental program. So we've got good buyer credibility."

# SAVING ENERGY

## Here's how builders are turning it into a strong merchandising appeal

### FITCH CREATIONS:

List all the energy-saving features—no matter how minor

R. B. Fitch believes that a house's energy efficiency depends as much on how the owner lives in it as on how well the house is built. And since the North Carolina builder gets a lot of customers from referrals, it's important that each buyer get top value from Fitch's built-in energy-saving features.

So one of his merchandising aids is an attractive two-color brochure that itemizes every one of those features. Nothing is omitted—not even the off-white interior paint which, the brochure advises, "reduces lighting requirements."

The brochure also reminds buyers that all

bathrooms have ceiling heaters so "you can heat for bathing purposes without heating the entire home."

Another of Fitch's sales aids is a two-page letter entitled "Random Thoughts About Your Heating and Air Conditioning Systems." Written in chatty terms, the letter talks about such things as cleaning and changing air filters, keeping out direct summer sunlight, but letting sunlight in during the winter, etc.

Fitch also uses a little hard sell—an energy cost chart comparing lower electricity usage in his energy houses to those of a conventionally built house.

Through research and the use of improved building procedures, the energy efficient shelter... a home on ice cube.

Admittedly the possibilities of total success are slim, but more efficient design, construction, and operation. The result will be contemporary housing as an entity with not the continuing use of our natural resources.

**1 HEATING AND AIR CONDITIONING**  
The heat pump delivers 2 to 3 times more equivalent heat.

**2 ALL EXTERIOR WALLS TO BE SHEATHED WITH INSULATION.** Insulates 100% of opaque sidewalls and roof.

**3 SIDE WALL INSULATION**

**4 CONCRETE FLOORS TO HAVE PERIMETER INSULATION**

**5 CRAWL SPACE FLOORS TO BE INSULATED**

**6 CEILING INSULATION**  
BLOWN OF 8" FIBERGLASS.

**7 AIR**

**8 ALL WINDOWS TO HAVE THERMAL BREAK AND OPERATING UNITS TO BE COMPLETE WITH STORM SASH.** reduces heat transfer and lowers condensation.

**9 CAULK AROUND ALL WINDOWS AND DOOR FRAMES.** reduces infiltration.

**10 FRONT DOOR TO BE OF SOLID CORE CONSTRUCTION AND FULLY WEATHERSTRIPPED** reduces infiltration and heat loss.

**11 COMBINATION WOOD STORM AND SCREEN DOOR INSTALLED ON ENTRANCE.** reduces heat loss and infiltration in winter and aids summer ventilation.

**12 DECK DOOR TO BE OF TEMPERED INSULATING GLASS.** reduces heat transmission.

**13 ALL SKYLIGHTS TO BE DOUBLE DOMED.** reduces heat loss. HEATER TO 120°

# ENERGY

## EFFICIENT FEATURES OF A FITCH COUNTRYHOUSE





## RYAN HOMES:

### Use cutaway displays of energy-saving construction features

It's hard to merchandise things like high-efficiency insulation, which buyers can't see.

So Ryan Homes has gone back to an old standby—hidden-value cutaway displays—to help merchandise its new energy-saving houses.

The displays serve two purposes: First, they give prospects a chance to examine the insulating materials and other built-in energy-saving features. And second, they give Ryan's sales staff a jumping off point for a major element of the company's merchandising—a flip-chart script, written in non-technical terms, that explains in detail every step of Ryan's energy-saving program. The idea: to help prospects understand why and how the slightly higher costs of energy-saving materials and construction techniques will pay for themselves in a very short time.

Some examples from this flip-chart script: "Our workmen place a special sealer on top of the foundation . . . to fill in uneven areas between the foundation block and the

wood plate that supports the floor system. . . . This cuts down air leaks and infiltration which cause energy loss."

"Our studies show that most heat loss in a house occurs through the ceiling because heat rises. We are making it a policy to provide insulation with a rating far higher than that normally required by local building codes or governmental agencies such as FHA. For example, in most areas the density rating of our insulation is 40% higher than requirements."

"In many older homes, you can feel a draft where electrical outlets are placed because the air finds its way through the holes left in the frame where electrical lines are run. We seal the holes around these wires with a putty-like material and seal the outlet box where the wire comes into the receptacle."

"Fiber glass is stuffed into cracks between the rough openings and frames around windows and doors."

"Any holes drilled for wires or pipes in exterior walls are carefully filled with sealant."

## DAN HAWLEY COMPANIES:

### Make energy saving a big deal in your opening day ads

Realizing that any announcement about energy conservation is big news these days, Dan Hawley Companies used about one-third of a full-page ad to announce the debut of its new energy-saving package.

And interestingly, although the company goofed in this opening ad and forgot to mention that the energy-saving package is an optional extra, buyers weren't turned off when they learned they'd have to shell out more money for the package. Some 74% of 48 sales the company made during February included the cost of energy saving extras: \$1,350 for the advertised Solarpak and \$1,200 for an optional high-efficiency air conditioner.

**Tam o' Shanter Years Ahead Again! ENERGY SOLARPAK®**

**FAMILY HOMES PAY WITH SOLAR ENERGY SAVINGS \$26,995 to \$29,995**

Look what we developed for most homes under \$30,000. We save you in 60 days. Now for the 1st 60-month year in the solar low price range, we are introducing the ALL NEW SOLAR ENERGY SAVINGS 75 MODEL. Another first in Florida.

**HERE'S THE FACTS ON THE WASHINGTON**  
2 Bedroom, 2 Bath and Carport — Only \$28,995

**HERE'S THE FACTS ON THE ADAMS**  
2 Bedroom, 2 Bath, Carport and Office — Only \$29,995

**HERE'S THE FACTS ON THE JEFFERSON**  
2 Bedroom, 2 Bath and Carport — Only \$29,995

**HERE'S THE FACTS ON THE MADISON**  
3 Bedroom, 2 Bath and Carport — Only \$29,995

**ALL ABOVE PRICES INCLUDE 75 MODEL ENERGY SAVINGS PACKAGE**

**Tam o' Shanter Forest**

1000 N. W. 10th Ave.  
Fort Lauderdale, FL 33304  
Phone: (305) 461-1000  
Open House Day: Sat.



## BETTS BUILT HOMES:

### Prove energy saving with actual utility bills

Some builders use estimated fuel costs to merchandise their energy-saving houses. Betts Built Homes goes one step farther and proves that its houses save fuel. Facsimiles of utility bills—received by an owner of one of the company's two-story, 2,200-sq.-ft. houses—are given to every prospective buyer. The bills cover the total energy operating costs for the house over a one-year period—from November, 1974 to November, 1975. And to make sure prospects understand the full impact of the bills, Betts hands out an explanatory chart that breaks the costs down by month, number of days' usage, kwh, etc.

Betts uses other merchandising ideas to

promote its energy savers. For example:

- A chart showing annual dollar fuel saving attributable to the sheathing and foundation insulation system in its houses.
- An illustrated flyer describing each element of its energy package.
- A newsletter, sent to prospects, which explains the company's energy-saving concepts.
- Manufacturer's literature that describes how the company's insulation system works.

And to make sure buyers won't forget that every one of the company's houses is an energy saver, floor-plan and rendering sheets for each of its models are clearly labeled.

**THE PIONEER ENERGY SAVER**

4 Bedrooms • 2½ Baths  
• Family Room • Dining Room

**B** THE MARK OF EXCELLENCE

for homes built with lasting quality  
**THE PIONEER** Design # 1 Custom features for consideration  
Complete home including all standard features \$42,900.00  
Lot # 721 \* 130' \* 130' \$1,000.00  
Total Home Price \$43,900.00

**YOU CAN SAVE \$85 TO \$235 A YEAR\* ON YOUR HEATING AND AIR CONDITIONING COSTS BECAUSE OF THE ENERGY-SAVING TOTALWALL INSULATION SYSTEM IN THIS HOUSE.**

**THE TOTALWALL INSULATION SYSTEM**  
This is the Totalwall insulation system. It is the way sideways of other insulation systems. It is designed for maximum comfort, efficiency and energy savings.

**CITY OF WESTERVILLE, OHIO**  
31 SOUTH 14TH ST. WESTERVILLE, OHIO 43081  
MAY 1975  
ACCOUNT NO. 0271802  
MAY 1975 0271802

## IRVIN A. BLIETZ ORG.:

### Post energy saving signs on every model home

The Chicago builder wants to be sure customers know right from the start that houses in the newest section of its Wood Creek Courts subdivision are energy efficient. So the first thing buyers see as they walk up to a house is a large sign describing the company's new insulation system. And each double-paned window is also marked as an energy saver.



## WOOD BROS.:

### Explain each element of the energy-saving package

Wood Bros. merchandises its houses on the basis of three customer-benefit programs: an energy-saver package, a ten-year buy-protection plan and a guaranteed trade program. And the energy package gets number one billing in the promotional material—proof of how important the company considers it.

The Denver builder has learned that the best way to get prospects to understand the benefits of the energy package is to show how each element affects the comfort of the house in summer and winter and thus help lower energy costs.

## We've made it easier and more economical for you to own a new home.

Take a careful look at our 3 customer-benefit programs. They're designed to save you money and worry as an owner of a Wood Bros. home. And feel free to ask questions. Our counselors will be glad to help.

### 1. Our Energy Saver Package

The Energy Saver Package is our program designed to save you an average 25% in home fuel consumption. It has proved so successful that we've made it available in every new Wood Bros. home.

**Here's how it works:**  
The Package brings together 4 thoroughly tested and documented techniques for conserving heating fuel and for making your home more comfortable in both winter and summer.

Home stays warmer in cold weather—and saves you approximately 8% on fuel consumption in the process. And you reap the benefits of a cozy home in the summer.

**Heatshield:**  
Tests show that most people are comfortable at lower temperatures, which means less energy consumption. The Heatshield we install with the Package makes the perfect adjustment by reducing the "dead air" space between the two sheets of glass. This "air" is a high, efficient energy saver.

Home stays cooler in the Energy Saver Package—efficiency means 25% fuel consumption reduction.

**Day-night thermostat:**  
Tests conducted by the U.S. Department of Standards and Energy with us show that setting the thermostat in your home down 4 degrees at night can save approximately 15% in fuel consumption. The Climate-control we install with the Package makes the perfect adjustment by reducing the "dead air" space between the two sheets of glass. This "air" is a high, efficient energy saver.







# SAVING ENERGY

## Insulation can make the big difference, but only if it's installed right

And the key to getting it installed right is making sure your crews and/or subs understand exactly what you're trying to accomplish. So says builder Rex Rogers, a Marion, Ark. contractor who built 30 houses as part of the much-publicized Arkansas energy-saving-house test program last year. [H&H, Oct. '75].

"When energy was cheap and plentiful, most builders encouraged their insulation contractors to 'get it in fast,'" says Rogers. "Now the emphasis should be on quality work—not speed."

"With today's high heating and cooling costs, you've got to get full value for every dollar you spend on insulation."

How do you get that full value? Primarily by insisting that your crews or subs follow installation procedures like those shown on these pages. They're selected from Owens-Corning Fiberglas' presentation, "Insulation Do's and Don'ts," which the company prepared for its branch salesmen to show to builders, insulation contractors and code officials.

### UNHEATED CRAWL SPACES

Batt insulation should never be pushed in so far that it's compressed against the subfloor; this will reduce its insulating efficiency. To make sure the insulation stays in place, snap in stiff wires—longer than the width between the joists—about every 16".



### HEATED CRAWL SPACES



Here, perimeter insulation is installed parallel to the joists. After stapling the batt end to the sill along the band joist, wedge the insulation lengthwise between the plate and the subflooring.



To insulate between ends of the joists, cut a length of batt to fit in the configuration in the spaces. Then staple it to the subflooring and at the sides of the joist.

### WALLS



When using faced insulation in an area where there is blocking, push a section of the insulation behind the blocking and staple the insulation to the top plate and the bottom of the nailer. Then insulate the balance of the space by butting another batt to the piece behind the blocking.



In stud spaces containing wiring or outlets, boxes, split the insulation, forcing half behind the wires and box. Then install the front half of the insulation in the conventional manner, making sure the piece removed to accommodate the box is cut for tight fit.



In attic knee walls, staple three bands of 8 wide polyethylene to the back of the stud to help prevent insulation from being pushed back too far.



## CEILINGS



When using a double layer of batts to insulate the attic (*above*), push the top batt between the chords first. Use the bottom batt to push the top one into place and staple it at the ends and sides. Make sure the top batts are level and butt tightly. (Note: to increase insulation efficiency in the attic area, build a plywood frame around the scuttle hole and place insulation—the same thickness as used in the attic—over the scuttle-hole cover board.)

In attics with angled ceilings (*right*), install insulation at the bend first so no joints occur at the bend where they could leave a large opening.



## DOFFITS



An important area to insulate—yet one that is often overlooked—is the soffit under a cantilevered floor. To insulate that space, install a cardboard sleeve and staple it in place.



After the cardboard sleeve is in place, force the insulation in, with vapor barrier face up. Make sure the insulation fully covers the top plate.

## WINDOWS AND DOORS



Cracks around windows and doors are a major source of air infiltration. These voids should be chinked with liberal amounts of insulation. If cracks are too small to permit chinking, fill them with heavy caulking.



# A new role for the old duplex

## (but don't call it that)

In its old role, the duplex was a "mom-and-pop" sort of deal where the buyer bought both units—one as his home and the other as an income-producing and tax-sheltering investment.

In its new role—as you'll see in the pages that follow—the duplex is a completely different animal. Instead of a two-unit building, it has become two single-family houses that just happen to have a common wall. And it is selling very successfully indeed in price ranges that mom and pop never dreamed of—which is why most builders refer to it by such names as "cluster homes," "attached homes," "zero-lot-line homes," and the like, but never, never as "duplex."

There are obvious advantages to pairing single-family houses this way. The single-family image can be kept; density can be increased slightly with no increase in crowding; zoning officials seem to consider the (duplex) such a small step toward multifamily that objections are seldom raised.

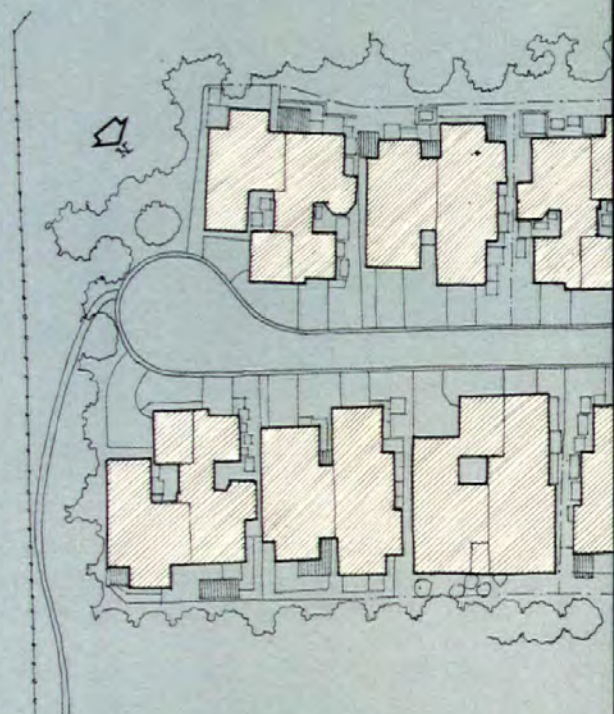
Most important, homebuyers appear to have no inherent resistance to (duplexes) as long as the units are in themselves well planned, well designed and well sited.

*This is well illustrated by the two (duplex) projects shown at right and on the next four pages.*

## 1 Broadmoor Park...

... is a 235-unit, first-home project being developed in Orange, Calif., by Broadmoor Home Sales since November: 38 units at prices that start at \$70,000.

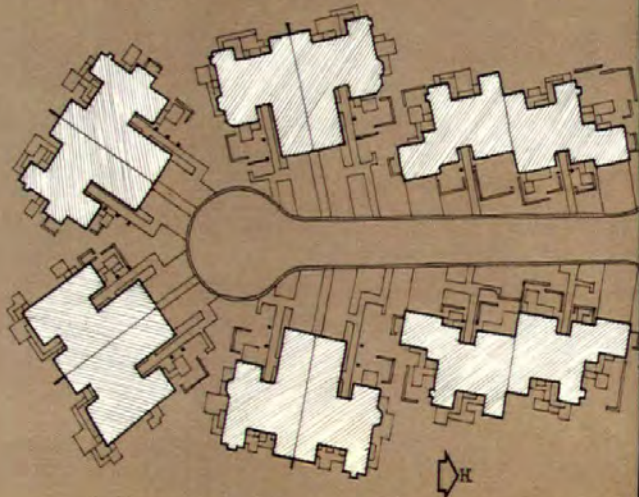
*For details, turn to page 70.*



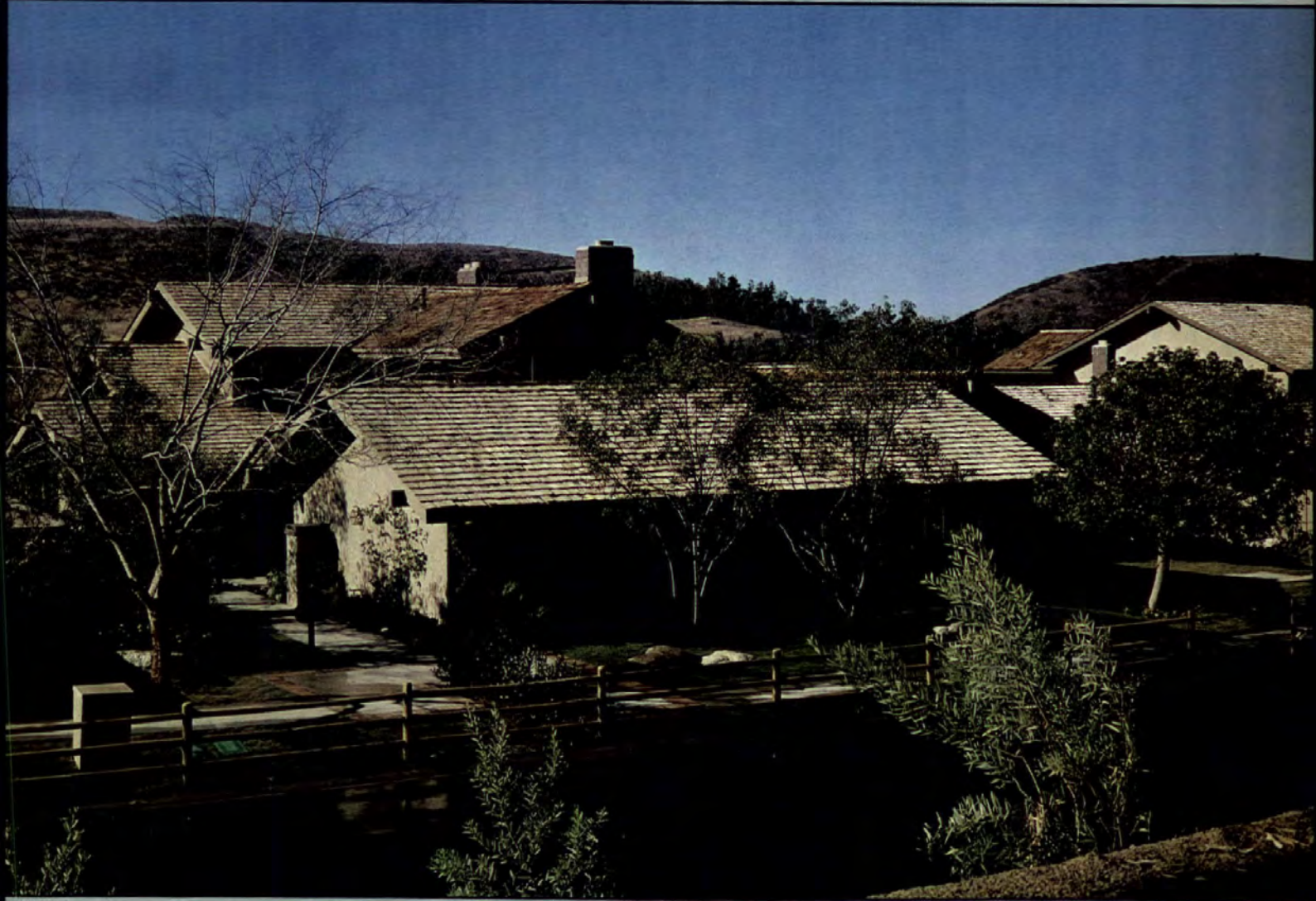
## 2 The Springs...

... is an 862-unit resort project being developed in Rancho Mirage, Calif., by Trojan Property Inc. Sales since November: 70 homes at prices that start at \$98,000.

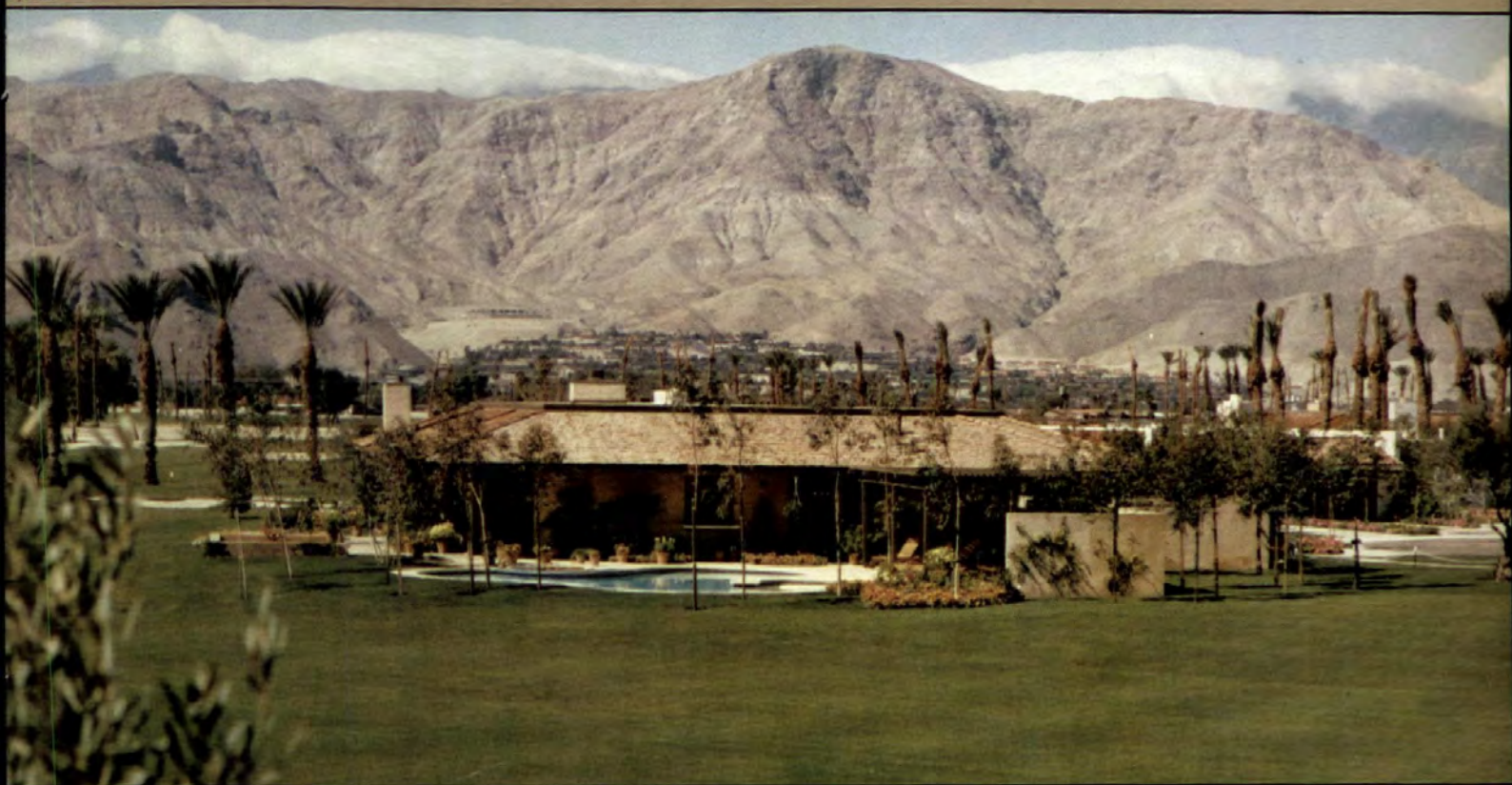
*For details, turn to page 72.*







DAVID ROSS



JONES

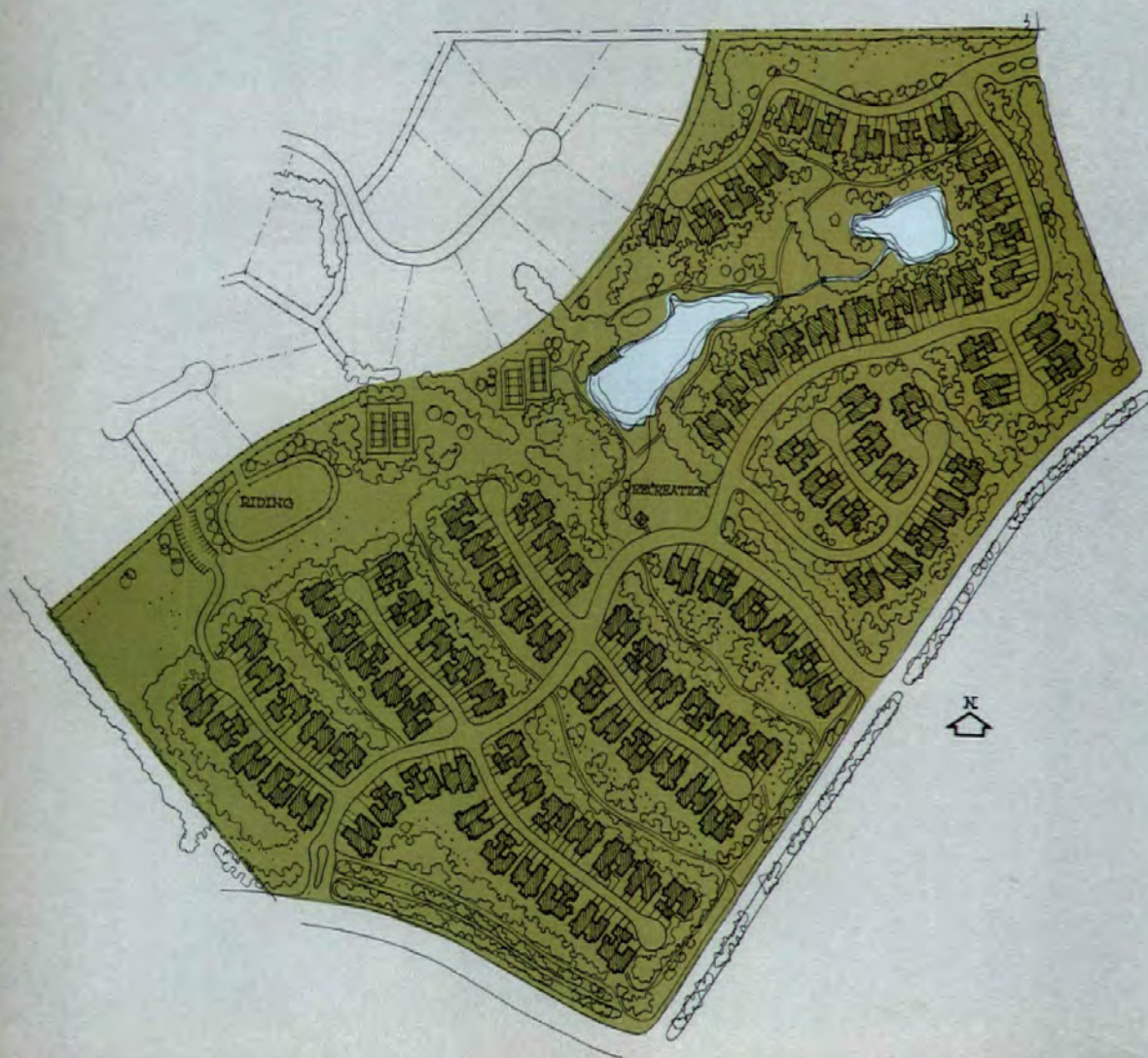


PHOTOS: DAVID BOSS



Patio area (above) is screened from greenbelt by a low fence. Project is not a condo—lots are owned in fee simple.

Site plan (below) shows lakes, common green areas and riding trails that take up 26 of Broadmoor Park's 75 acres.



## 1 These (duplexes) solved a zoning problem

When Broadmoor Homes asked for approval to build zero-lot-line homes on Broadmoor Park's 75 acres, planning officials said yes—provided one-third of the site was set aside as open space.

"The project was feasible only if we could build 235 units," says Dick Smith, president of Broadmoor. "And the only way to do that was to back the houses up to each other in pairs. That way we were able to put two units in an 80' x 120' area—more density than a conventional zero-lot-line project would be permitted—as a trade-off for the open space." The trade-off also included narrow streets (26' rather than 40') and no sidewalks or curbs.

Smith calls the units "zero-lot-line attached garden homes" when pressed for a label, but says buyers have shown no concern whatever over the common-wall plan.

"We didn't anticipate resistance," he says, "because we've used the scheme before and it went well." That was in 1974 when Broadmoor marketed 150 paired units and pre-sold the rest all at prices up to \$60,000. Prices at Broadmoor Park range from \$69,900 to \$80,000, with premiums of up to \$15,000 for lots overlooking the project's lakes.

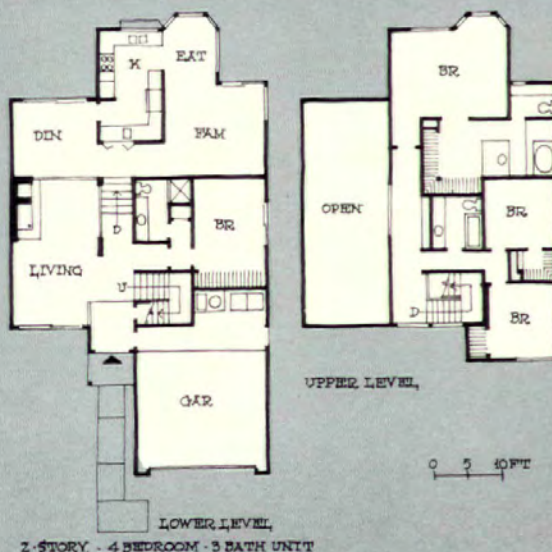
Both the unit design and site plan were done by the architecture firm of Morris & Lohbach of Newport Beach, Calif.





Typical living areas (above) have more indoor-outdoor privacy than do most conventional single-family homes. Owners belong to a homeowners' association which in turn owns and maintains common areas, riding facilities, etc. Monthly fee of \$62 also includes cable TV.

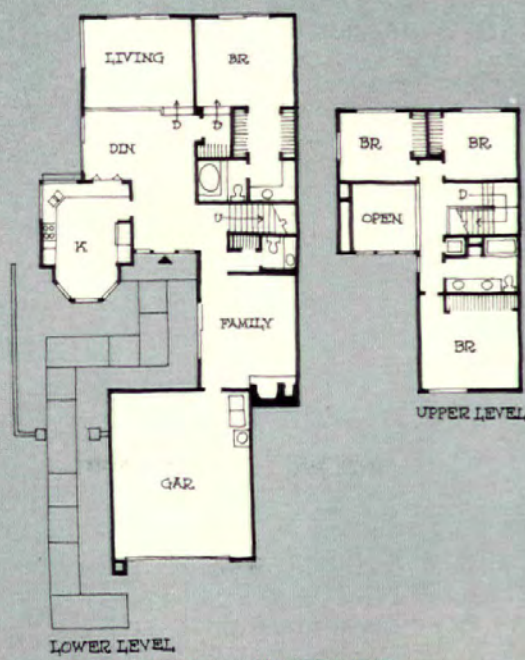
Floor plans (below and right) of Broadmoor Park's four models have three and four bedrooms, indicating that the project is aimed at a family market. Common walls are heavily soundproofed. Two-story models permit four bedrooms within narrow lot lines.



3-BEDROOM - 2 BATH UNIT



3-BEDROOM - 2 BATH UNIT







PHOTOS: RAY JONES

## 2 These (duplexes) add open space to a luxury resort

They're part of the 106-unit first phase of The Springs, a golf-oriented resort community on 375 acres near Palm Springs that will eventually comprise 860 units. And they should dispel any notion that the duplex idea *per se* has a negative, low-cost image. The homes start at \$98,000, average price is \$119,000, top-of-the-line models are priced at \$136,500, and view premiums can tack as much as \$20,000 onto that.

The chief benefit from pairing units is outdoor space. Exclusive of the golf course, density at The Springs is nearly four units per acre, yet each home has ample green space behind it, and there is also a swimming pool and a therapy pool for each 10 units.

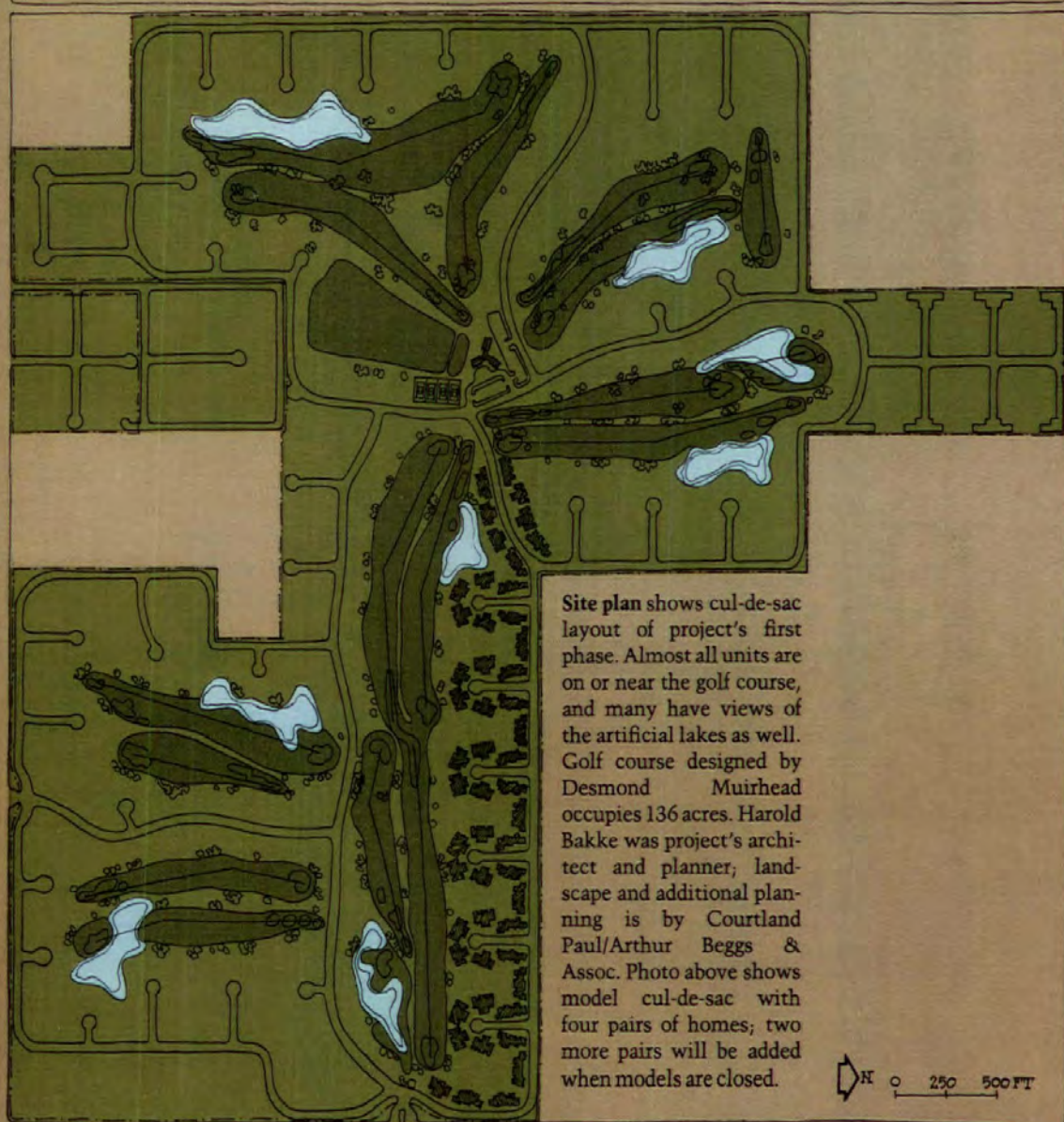
The merchandising program at The Springs ignores the fact that the homes are attached, calling them simply "private residences with condo-style living."

According to Bernard Crawford, project manager of The Springs, buyers in this price range will accept two-house attachments, but no more.

"Up to maybe \$75,000, you can get away with three and fourplexes," says Crawford. "But beyond that people won't tolerate more than one common wall."

Crawford sees a market for the zero-lot-line duplex concept as well as the present cul-de-sac layout.

"We like the Broadmoor Park idea," he says, "and we're planning something like it for future phases."



Site plan shows cul-de-sac layout of project's first phase. Almost all units are on or near the golf course, and many have views of the artificial lakes as well. Golf course designed by Desmond Muirhead occupies 136 acres. Harold Bakke was project's architect and planner; landscape and additional planning is by Courtland Paul/Arthur Beggs & Assoc. Photo above shows model cul-de-sac with four pairs of homes; two more pairs will be added when models are closed.





Outdoor living area made possible by attaching units is shown above; at right, kitchen windows open to a view of the golf course. Four of the seven floor plans are shown. Units are sold in fee simple, and buyers join a homeowner's association. Monthly fee is \$150; it includes all roof and exterior maintenance, plus a security system that offers 24-hour coverage. All houses are wired to a computer system with four responses: fire, intrusion, panic (e.g. someone choking) and preprogrammed medical (e.g., "Mr. S. is a heart patient; call Dr. M. at Eisenhower Medical Center.")



2-BEDROOM - 2 BATH UNIT

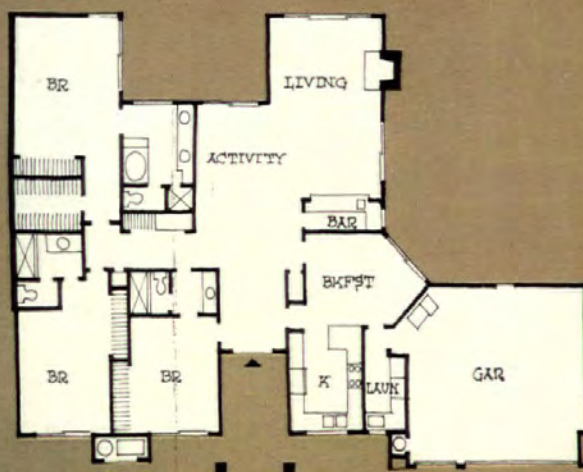
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3 BEDROOM - 3 BATH UNIT



4 BEDROOM - 4 BATH UNIT



3 BEDROOM - 3 BATH UNIT



# Working out

Bosa Nova, a 257-unit complex on 16 acres in DeKalb County outside of Atlanta, looked as below before the workout got under way. The black line on the buildings shows the high-water mark of a continual flooding problem.

At right is Bosa Nova today: refurbished, relandscaped and renting briskly.



Lancaster Pines (*above*), a 280-unit complex on 23 acres and six miles further out of town than Bosa Nova, looked like this before it was renovated. Units were badly vandalized and water runoff had wiped out most of the ground cover.

At right is Lancaster Pines today: an attractive community on rolling terrain, filling up fast.





# of a dual disaster



In the Spring of 1975, a Massachusetts-based REIT found itself the reluctant owner-by-foreclosure of the two Atlanta rental projects pictured at far left. The sites were washed out, units were vandalized, and occupancy was below 30%. One company had already tried to rescue the projects and failed.

The photos immediately at left were taken less than six months later. Both projects were completely renovated at a cost of less than \$2,000 per unit, and occupancy had passed the 50% mark and was climbing at the rate of a unit per day at each project.

Three things underlie this astonishing turnaround: a well-conceived and well-executed marketing program, a tightfisted and well controlled renovation program and the *sine qua non*—a willingness on the part of both the REIT and the workout company to cut a realistic deal.

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## Structuring the deal: A pragmatic approach on both sides

The lender, State Mutual Investors of Worcester, Mass., wanted to salvage at least the book value from Bosa Nova and Lancaster Pines, and to make sure they didn't come home to SMI again.

The workout company, Roberts-Ornstein Co. of Newton, Mass., wanted to buy the projects at a price that would permit a long-term profit, and at least a break-even operating situation in the meantime.

To understand the deal that resolved these two aims, it's helpful to look at the history of Bosa Nova and Lancaster Pines.

In 1971, when the two projects were funded, SMI loaned

the original developer \$3.6 million for Bosa Nova (later upped by \$250,000 because of cost overruns) and just under \$3.4 million for Lancaster Pines. These loans represented roughly 75% of the appraised value of the projects.

But as so often happened during the boom years of the early 70's, the appraisals were much too optimistic. Atlanta's growth rate slowed, the rental market became badly overbuilt, and rents couldn't be raised to the anticipated levels. The projects never got beyond about 70% occupancy and the builder

TO NEXT PAGE



bowed out, taking with him a number of appliances and fixtures, which were moved to another project. Another company was brought in to turn things around; it put in no money, milked the projects a bit, and was invited to leave.

At this point—April, 1975—SMI foreclosed on both Bosa Nova and Lancaster Pines. Occupancy had plummeted, maintenance of the buildings and grounds had become almost non-existent, and evidence of shoddy construction was popping up all over the place. SMI wrote down the projects on its books—Bosa Nova to \$2.7 million and Lancaster Pines to \$1.8 million—and started looking for someone who could work them out.

It was SMI's seven lending banks that came up with a workout company. All were Boston area banks, and they recommended a new Boston area firm,

Roberts-Ornstein Co. The two principals—Myron C. Roberts and Richard Ornstein—were well known in the area as apartment builders and investors, and bank executives felt they had both the expertise and the financial security to do the job.

Roberts and Ornstein went to Atlanta, studied the projects closely, and came back with a proposal. After negotiations, this deal emerged:

Roberts-Ornstein would buy both projects at capitalized value, \$3 million for Bosa Nova and \$2.1 million for Lancaster Pines. Both prices were slightly over SMI's write-down values and included renovation budgets of \$450,000 for Bosa Nova and \$400,000 for Lancaster Pines. SMI would take back five-year mortgages on both projects.

The deal was closed, and last June Ornstein took up temporary residence in Atlanta and went to work.

## Renovating the project: Tight budgets and tight control

Ornstein had enough confidence in his fix-up budgets to keep his contingency funds very low—\$16,800 per project plus a few sub-contingencies in special categories.

"We watched everything like a hawk," he says. "We set up a joint venture situation with a local management and construction firm, Tempo Management. We picked our subs very carefully, found a really good young construction super, and I practically lived on site for the five months it took to finish."

In the end, both jobs came in under budget—\$79,000 under at Bosa Nova and \$56,000 at Lancaster Pines—despite a number of unforeseeable structural surprises that emerged after renovations began. These savings were plowed back into items that would help marketing—landscaping, playground equipment, tennis courts, etc.

These were the major problem areas at Bosa Nova:

**Main trunk sewer line.** It was laid improperly—sections even ran uphill, and there were sewage backups that made 24 of the lower-level units uninhabitable.

"The county was about ready to shut down part of the project as a health hazard," says Ornstein. "The carpeting was so saturated with overflow that mushrooms were growing out of it, and there was fungus all over the bottom areas of the sheetrock." The solution was to dig up the line and re-lay it.

"We found that earth settlement had bowed the line," says Ornstein. "We got lucky here. We had budgeted \$32,000 for the job because we had no idea where the trouble would be, and we found it after only \$4,000 worth of work."

**Grading.** "It was so badly done," says Ornstein, "that the runoff from heavy rains flowed under the patio doors, and there was a foot and a half of water in about 48 units after one particu-



Richard Ornstein (left) and Myron Roberts headed workout company.

larly intense storm in July. Nobody could live in them, and they were left open and badly vandalized."

The solution was equivalent to major surgery. An engineer and a landscape architect were brought in, and the entire site was reshot, regraded and swaled, sodded, seeded and planted.

Total cost: \$44,000. "That hurt," says Ornstein, "because we hadn't figured on anything so extensive. We only budgeted \$15,000 for the job. What we saved on the sewer trunk we paid out here."

**Foundation waterproofing.** There wasn't any on seven of the project's 18 buildings, nor were there any footer drains.

"We had to excavate around the foundation walls, gunk them, put in drains and tie in the downspouts," says Ornstein. "It cost about \$40,000. About a month after we finished we had the heaviest rain the area had had in 30 years, and there wasn't a leak anywhere."

**Foundations.** Under two of the buildings, settlement was so bad that new footers had to be put in. Cost was included in the foundation waterproofing contract.

**Exterior stucco.** This turned out to be another unpleasant surprise. "Apparently," says Ornstein, "the stucco contractor for the first phase of the project had gone bankrupt, and he cut a lot of corners to try and save himself. We knew there were a lot of cracks to be patched, but then we found that the lath under them was rotten." The result: a lot of cutting out and relathing and recaulking in addition to patching. And ten buildings had to be completely

repainted to cover the work.

"There was \$22,000 unbudgeted stucco work," says Ornstein. "It was the main reason that while we had allotted \$29,000 for all stucco, plaster and drywall, we wound up spending \$62,000."

**Electrical.** Almost all the units were improperly wired, some of them to a ludicrous degree. "In one case," says Ornstein, "you'd throw a switch in one apartment and the air conditioning would go on in the unit next door. In other cases some of the main building circuits were tied in within individual apartments. So you had to go in someone's unit to shut those circuits off, and there was always the chance that a tenant would inadvertently shut off the whole building."

Further, in most buildings the wiring wasn't carried up to the attic level. So while there were ventilator fan hoods installed on the roofs, many weren't wired up.

"In fact," says Ornstein, "some of them weren't even connected through the roof. They were just nailed on like ornaments."

Repairs came to between \$16,000 and \$18,000, roughly on budget since most of the problems had been identified early.

**Air conditioning.** Many units didn't work and \$12,000 was allotted for repair in the budget.

"But as it turned out," says Ornstein, "the units were still under warranty, and the manufacturer either repaired or replaced a lot of compressors." Result: Only \$4,000 was actually spent.

**Cabinets.** The original builder had bought specials that couldn't be matched by the time that renovation began. So in badly vandalized units, Ornstein cannibalized the kitchen to make complete jobs out of the old cabinets, then made new cabinets for 16 kitchens. Cost: \$15,000, vs a budget of \$25,000.

"We found a really good cabinet man," says Ornstein, "and he made the difference."

**Clubhouse.** "If we had developed Bosa Nova from scratch



ys Ornstein, "we would never  
ve built such a huge building.  
has 7,000 sq. ft. and cost the  
iginal builder about a quarter  
a million dollars. But it was  
ere so we used it. And to use  
we had to fix it up.

"The air-conditioning system  
as out of commission, the roof  
aked because the original  
ilder had left out a lot of flash-  
g, and most of the carpeting  
as ripped up. There had been  
open bar for parties, and the  
hole building was pretty well  
nged up and vandalized."

To fix up all this, Ornstein  
udgeted, and spent, \$34,000—  
0,000 for repairs and \$26,000  
r finishing and refurnishing  
e interior.

Miscellaneous problems in-  
uded items like these:

*Sidewalks* around the club-  
ouse had been laid in the wrong  
aces; they had to be ripped up  
d relaid according to plan.

*Plans* of underground water  
d power lines were inaccur-  
te. "As a result," says Orn-  
ein, "we kept breaking the  
es when we excavated. We  
ad to replot everything."

*Sewer lines* lacked cleanouts  
many instances. "We in-  
alled them wherever neces-  
ry," says Ornstein, "and now  
ey're clearly marked."

*Appliances* were incomplete.  
The original builder took a lot  
them out to use in another  
project," says Ornstein, "and  
thers had been vandalized.  
bout 50 units needed new ap-  
iances, and we budgeted more  
an \$50,000."

As it turned out, half of this  
as never spent. Ornstein hired  
good local mechanic who  
paired many of the units, can-  
balized others, and wound up  
aving more than \$25,000.

*Carpets* were in bad shape,  
specially in the first-floor units  
hat had been flooded regularly,  
nd Ornstein budgeted close to  
75,000 for replacement. But by  
ping over the damaged areas  
arefully, culling out good  
eces and stitching them to-  
gether, \$15,000 was saved.

TO NEXT PAGE

**Before-renovation condi-**  
**tion** of the two apartment  
projects is graphically shown  
here. Poor runoff conditions  
(1) at Lancaster Pines broke  
up roads and gutters, dam-  
aged ground cover. Perimeter  
fence (2) at Bosa Nova was  
damaged, destroying both se-  
curity and privacy. Many  
units at Lancaster Pines were  
so badly vandalized as to be  
uninhabitable (3), and there  
was virtually no maintenance  
around lived-in units (4). Poor  
foundation waterproofing ne-  
cessitated extensive repairs at  
Bosa Nova (5), and flooding  
regularly turned Lancaster  
Pines into a mud flat (6).





Lancaster Pines followed more or less the same fix-up script, and the construction and supervisory teams were exactly the same as those at Bosa Nova.

"The structural situations weren't as bad as at Bosa Nova," says Ornstein, "but there was more vandalism in the units themselves, so our replacement costs were higher." Examples:

*Crawl spaces*, which were under about half the buildings, were full of refuse.

"We budgeted about \$8,000 to clean them out, install more registers, and termite-proof them," says Ornstein. "But we were able to do the job with general labor, so we only spent \$3,000. That was the good news."

There was also bad news. When the original plumbing

contractor ran in his drain lines, he cut right through a number of support columns rather than go around them. The buildings had settled and had to be jacked up and resupported which ate up the previous savings.

*Grading costs* were \$70,000—double the original budget—chiefly because a very bad runoff situation on the site had wiped out all the grass. "Also," says Ornstein, "we decided to eliminate an unnecessary parking court and landscape it instead."

Another bizarre grading problem: "In one of the two laundry buildings," says Ornstein, "the drains from the ten machines didn't lead anywhere; they just went out through the foundation and stopped. The effluent gradually washed out and undermined the adjacent road."

## Creating the marketing plan: Capitalizing on what couldn't be changed

At both Bosa Nova and Lancaster Pines, the most prominent unchangeable feature is the size of the units. They are big: The two- and three-bedroom units (which make up the bulk of both projects) range from 1,176 to 1,944 sq. ft.

"This indicated that we should be reaching for a family market," says Ornstein. "And at Bosa Nova there were other strong reasons for going in this direction. We were directly across the street from one of the best schools in DeKalb County. And we had the clubhouse."

The renovated club now includes an impressive list of family amenities: a kitchen, four baths, a fully equipped gym, a game room with pool and card tables, two lounge areas with fireplaces, a teen room with dance floor and juke box, a general meeting room and a fully equipped bar and lounge for private parties. Outside, there are two swimming pools, one for adults and one for children. (Later on, the project's management and leasing offices will move into the clubhouse.)

Since children were to be an important factor, both Bosa Nova and Lancaster Pines were equipped with two playgrounds—one for younger children and one for older. "They're well separated," says Ornstein, "so the older kids don't have a chance to bother the younger ones."

Finally, each project has a pair of tennis courts; one of them is night-lighted at Lancaster Pines, both at Bosa Nova.

Apartments in both projects are unusually well equipped. At Bosa Nova the package includes ranges, frost-free refrigerators, disposers, washers and dryers and trash compactors; the Lancaster Pines package is similar except that compactors are not included, and washers and dryers are provided in community laundry rooms.

Rents at Bosa Nova range from \$235 for one-bedroom units (there are only a few and they rented out early) to \$260 for two-bedrooms and, at the top, \$320 for three-bedroom townhouse units with 1,944 sq. ft. (these also rented out early).

Rents include all utilities. At Lancaster Pines, the mix is similar; rents, which don't include utilities, are roughly \$10 less per unit.

"We've rewired for individual

meters at Bosa Nova," says Ornstein, "but the market still is hard enough to change over. When we're full we'll switch over, and, at the same time, drop the rents a little."

## Renting up: An extra-strength merchandising program

"We were competing in a soft rental market area," says Ornstein, "and we had to overcome a terrible prior image at both projects. So we came in with a program designed to make the strongest possible impact immediately." These were its key elements:

*A healthy merchandising budget.* "We had our lender set up this budget separately from everything else," says Ornstein. "It included \$10,000 for each job for model apartments (we actually managed to spend only half of this because we found a major furniture manufacturer and leasing company that provided the furniture), and \$25,000 per project to cover advertising and promotion for 18 months."

"The original builder went off with the security-deposit money, so we set aside funds to reimburse tenants who left after we took over. We probably didn't have to do it, but we felt it would help establish our image."

*A canvassing program.* Ornstein hired a young woman whose sole job is liaison work with major businesses in the area to bring in transferees.

*Strong attention to leasing and management personnel.* Leasing agents are on both salary and commission, and Ornstein also takes every opportunity to train and motivate them and the management people. Examples: He sent his entire management staff to a HOUSE & HOME seminar on apartment management and brought in a top sales consultant, Richard Russell, to spend a day showing renting and closing techniques.

"We made some marketing

mistakes too," says Ornstein, "which anyone else working on a rental project should be aware of." The most significant ones:

*Renting up during fixing-up.* "This was a waste of time," says Ornstein. "It didn't bring any one in. Next time we'll hold off major rent-up promotions until the renovation is at least 80% finished."

*Not getting old tenants out fast enough.* "The projects have gone so far downhill that most of the tenants left were very undesirable, to put it mildly. We let them stay for a while because the lender wanted at least some cash flow while we were rebuilding. But resident quality is vital to a turnaround; you need to get good, solid citizens in as fast as possible, and get the bad stuff out as fast as possible. We should have done it immediately."

*Starting on-site promotion too early.* "We had a radio promotion campaign run from the clubhouse in Bosa Nova," says Ornstein, "and it pulled nearly 700 people out on one Saturday. The trouble was, the grading wasn't finished and the site was a sea of mud. We spent \$5,000 and got only a few rentals out of it."

*Keeping a weak resident manager too long.* "She wasn't the kind of person who could enforce the rules and procedures strongly enough," says Ornstein. "That's critical, especially in a workout situation where you're trying to create a new image. You have to convince prospects that no matter what happened in the past, now you're going to enforce all the rules fairly and with no exceptions." —M.C.H.





1



2

Renovations at the two projects included new water-proofing and perimeter drainage at Bosa Nova (1), extensive relandscaping at Lancaster Pines (2). The completed projects have a brand new look, as shown in the photos of the entrances to Bosa Nova (3) and Lancaster Pines (4). The clubhouse at Bosa Nova (5) with its extensive recreation facilities has been completely renovated. Parking areas at Bosa Nova (6) are heavily planted to soften the effect of paving, and new landscaping at Lancaster Pines (7) gives the project a freshness that belies its former mud-flat image.



3



4



5



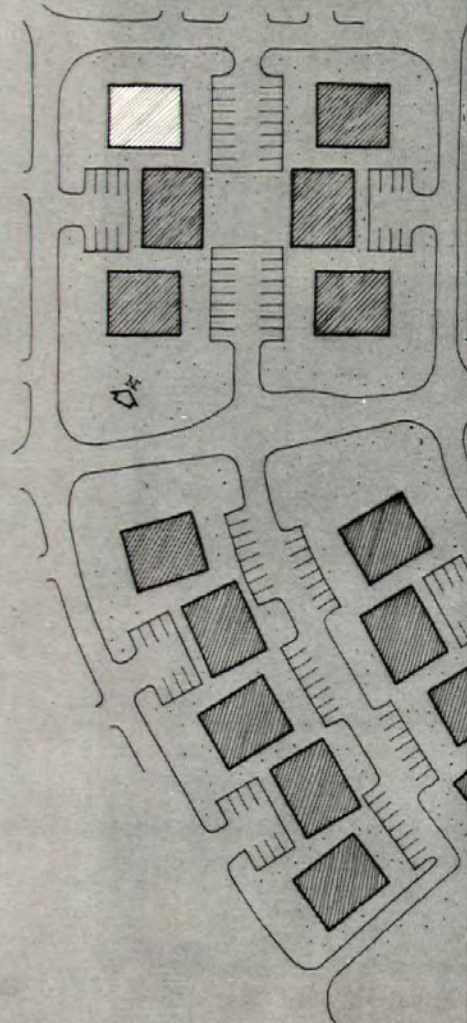
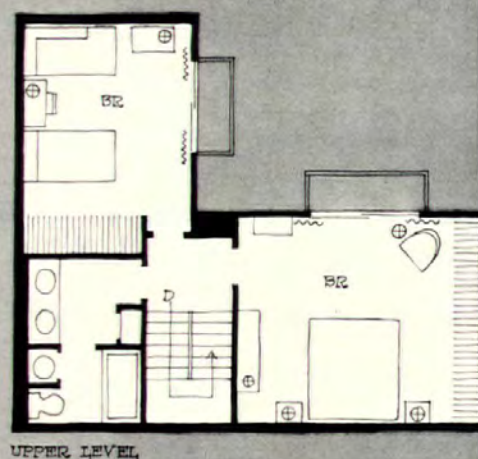
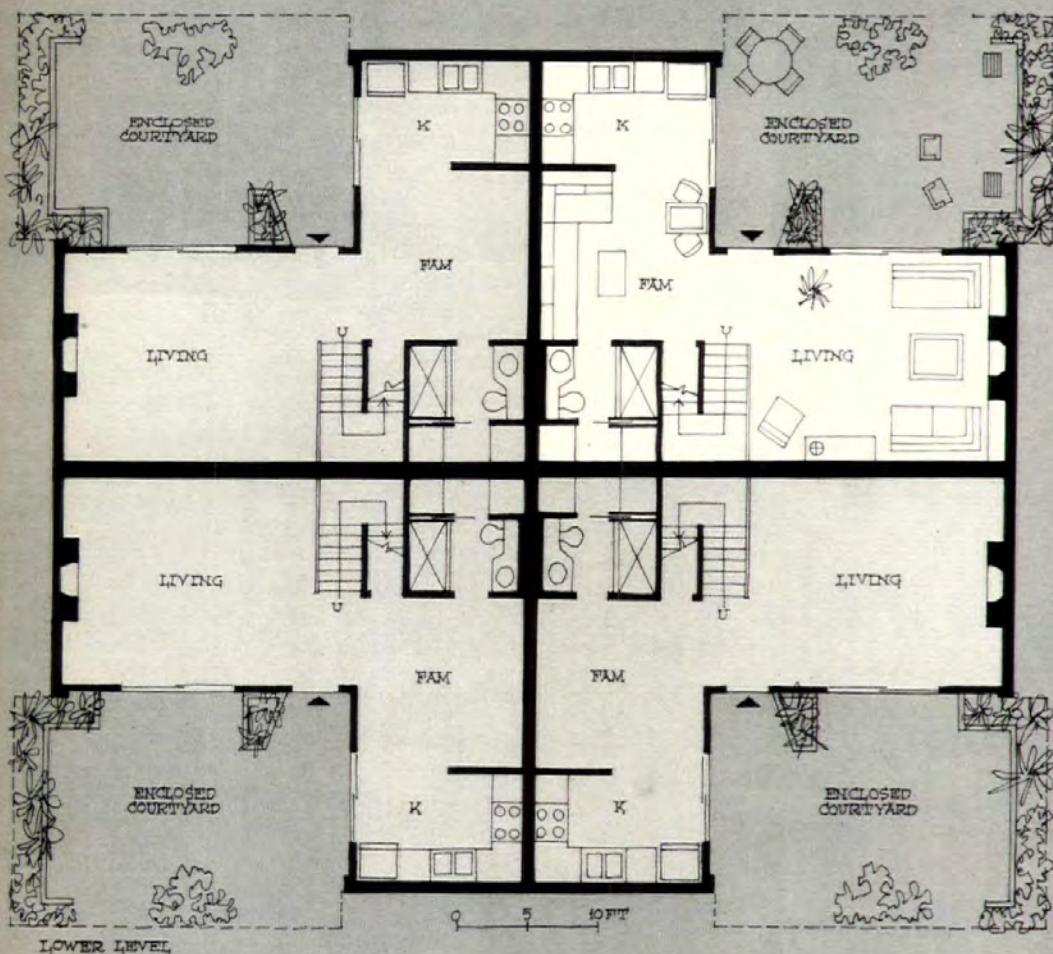
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7



H&H STAFF



**Pinwheel building plan** is made up of four L-shaped units, each opening to a fenced-in entry court. Almost-soundproof structure—it's poured-in-place concrete—has 6" walls, 5" floors and roof. Walls are faced with multi-hued Mexican brick, mansard roof with red cedar shingles. Plan of part of the 28-acre site (right) shows how every other building is offset so neighbors can't see into each other's windows. Though zoned for 18 units an acre, the site is being built out at 8.5 units. Soil around each building is mounded, in part to block views of parking areas (parking ratio is two spaces per unit).





# New fourplex design chalks up a speedy sellout

It was so speedy, in fact, that "sell" is hardly the right word. For the most part, builder Otto "Buzz" DiVosta simply took orders at his Sandalwood project in Palm Beach Gardens, Fla. He wrote 192 contracts in ten days and, after acquiring more land, added another 44 in two days.

What lies behind DiVosta's success? Part of the answer shows up in the deceptively simple plan at left: a pinwheel made up of four L-shaped units.

The key to the plan is each unit's outdoor area—a 15'x23' entry court screened from neighbors and the street by a 6 ft.-high fence.

This arrangement works well on two counts:

1. It offers a degree of privacy not normally found in fourplexes or, for that matter, in any housing at Sandalwood's density (8.5 units per acre). The two walls facing each entry court have sliding glass doors, but end walls facing the street and other buildings are windowless.

2. It visually enlarges the fourplex units, which are roughly the size (1,200 sq. ft.) of a typical low-end single-family house. Living space flows from each unit's interior to its courtyard, which, in effect, becomes an outdoor living room.

But, DiVosta points out, there are three other reasons for Sandalwood's rapid sellout:

*A market void.* Until Sandalwood opened, people shopping for housing in Palm Beach Gardens had only two choices: a single-family home at \$40,000 or more or a \$300-a-month apartment. Most of them had to settle for rental units.

DiVosta's fourplexes were priced from \$28,900 to \$31,900,

depending on land costs. Most units finally went to contract at \$29,900. With 10%-down financing, monthly mortgage and maintenance payments total \$275—less than most buyers had been paying in rent.

*Fee-simple ownership.* If there's any state where condominiums are in disfavor with homebuyers, it is Florida. To avoid the condo stigma, DiVosta went to fee-simple deeds with common ownership of the surrounding land.

*A quality image.* Despite their low prices, the Sandalwood fourplexes include many features that prospects associate with more expensive housing. Specifically:

Exterior items like red cedar mansard roofs, Mexican brick facades, cypress courtyard fencing and courtyard landscaping.

Interior items like thermostatically controlled gas fireplaces, 17-cu.-ft. refrigerators with automatic ice makers, compartmented baths with double sinks and tub-to-ceiling ceramic tile, fire/smoke detection systems and cable TV wiring.

What's more, Sandalwood offers a feature that appeals particularly to former apartment dwellers: Noise control is superior because the walls, floors and ceilings are poured concrete.

So how did DiVosta and his partner, Cliff Berg, keep the average unit price under \$30,000?

Partly by including no recreational facilities. Partly by giving buyers no choices except flooring colors. And partly through construction economies.

Construction costs are held down in three ways:

1. A concrete forming system

produces a building shell that costs 30% to 40% less than a concrete-block shell. The system [see p. 83], new to the U.S. but two decades old in Europe, forms a shell in four days.

"I've invested more than \$100,000 in the forms," DiVosta says. "But the system still paid for itself, and I'll use the same forms in future projects."

2. An on-site shop cuts labor costs by an average of 25% on plumbing, electrical work and some millwork. The shop is used not only by DiVosta's carpenters but also by his electrical and plumbing subs. The carpenters rough-fabricate staircases; plumbers cut pipe and attach fittings; and electricians cut conduit and attach gem boxes.

3. One-year fixed-price contracts were negotiated for a variety of materials and labor.

Three special factors also helped DiVosta keep his average price under \$30,000.

First, he saved more than \$600,000 in interest by using his own funds for construction.

Second, he bought the bulk of his land for \$25,000 to \$35,000 an acre compared with a typical local price of \$50,000. Most of the site was sold to DiVosta by Community Federal S&L of Riviera Beach, which provides Sandalwood's mortgages.

Third, DiVosta is willing to accept what he calls a modest profit (he would not divulge a figure).

"Most builders wouldn't be satisfied with my profit margin," he says. But a lot of builders are interested in what he's doing. Community Federal says it has had "at least 50 proposals" for carbon copies of Sandalwood.

—M. J. ROBINSON

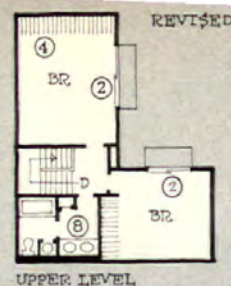
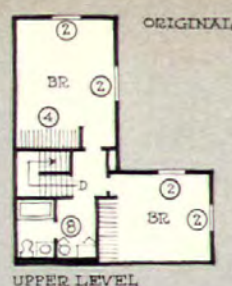
For more on DiVosta's fourplexes, turn the page



## How the original L-plan was refined and improved

Builder DiVosta and interior designer and planner Gene Dreyfus (The Childs/Dreyfus Group, Chicago) worked out these changes: 1) added a fenced entry court, 2) replaced two windows on two walls with a sliding glass door on one wall in each of the two bedrooms, 3) replaced all other windows with glass sliders, 4) moved and enlarged the master bedroom closet, 5) re-

moved a wall to open up the stairway and visually enlarge the living room, 6) added a fireplace, 7) replaced the dining room with a larger family/dining area, 8) compartmented and enlarged the upstairs bath by using 35 sq. ft. of wasted space, 9) switched the washer and dryer location to make their noise less noticeable.



## Model interiors were designed for broad appeal

And for a good reason: Prospects (and buyers) included singles, empty nesters, families with one child and what designer Dreyfus calls "pill couples." Dreyfus decorated one model and the first floor of another for about \$23,000. At right and below: living rooms, where light colors capitalize on sunlight streaming through glass doors. At far right: kitchen and family areas. In one, Sales Manager Bob Sylvester set up his office: "When a customer's eyes wander, she can't help being impressed by the appliances and cabinets—the same ones we put in our \$100,000 condos."







UPPER LEVEL



LOWER LEVEL



PHOTOS: THE CHILDS/DREYFUS GROUP

## How a fourplex shell is formed in four days

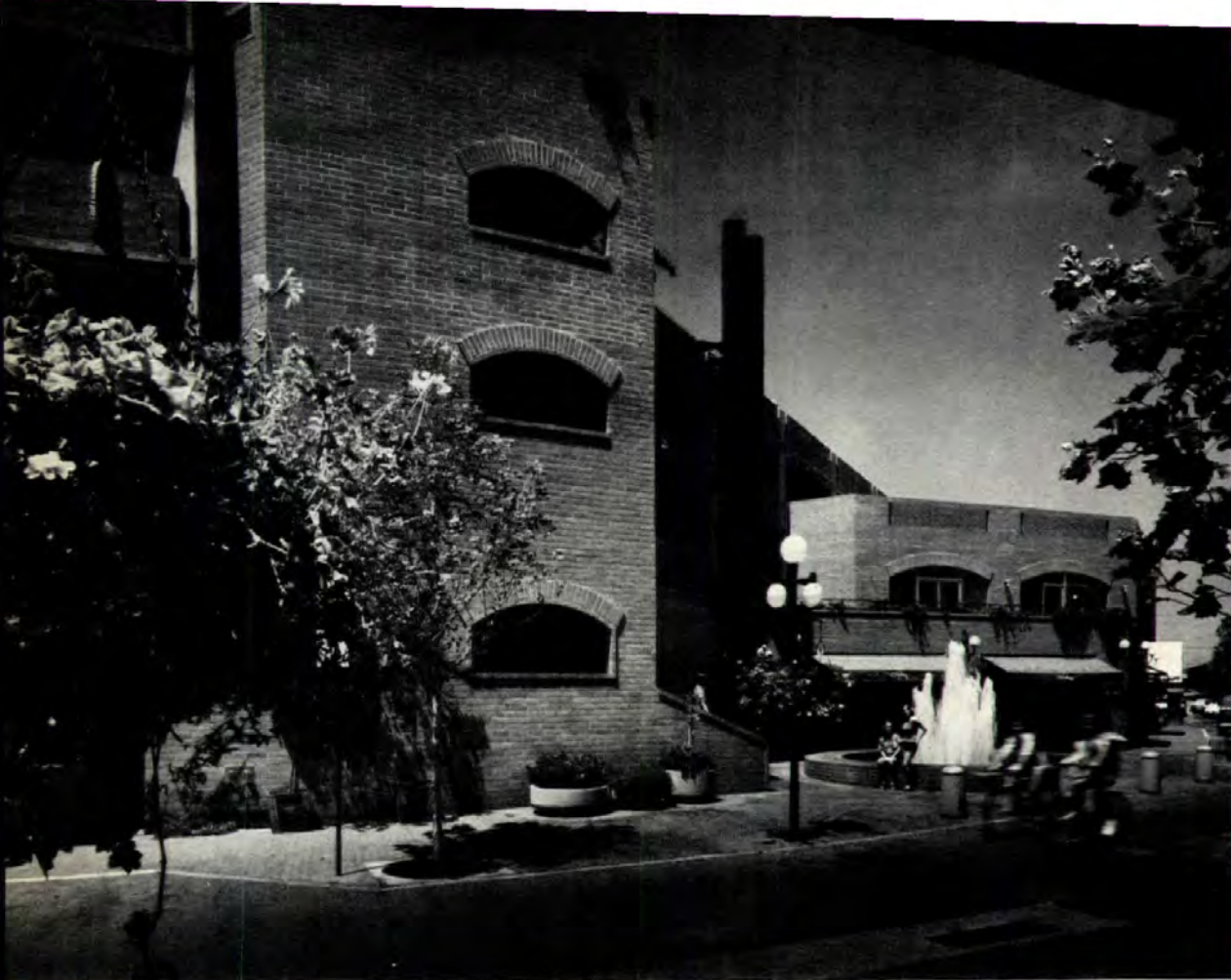
DiVosta (above) uses the French Outinord concrete-forming system to complete one fourplex shell in four pours. The first pour forms the first-story walls and ceiling of two units; the second pour does the same for the other two units; third and fourth pours repeat the process for the second story. Photos below show foundation forms and

plumbing stacks before slab is poured (1), poured first story with some forms still in place (2), first story after forms have been stripped (3), application of mansard roof to complete shell (4). After each pour, concrete is cured for ten hours at 160°F. The open ends of each fourplex unit are closed in with Mexican brick (see photo, p. 80).

PHOTOS: H&H STAFF

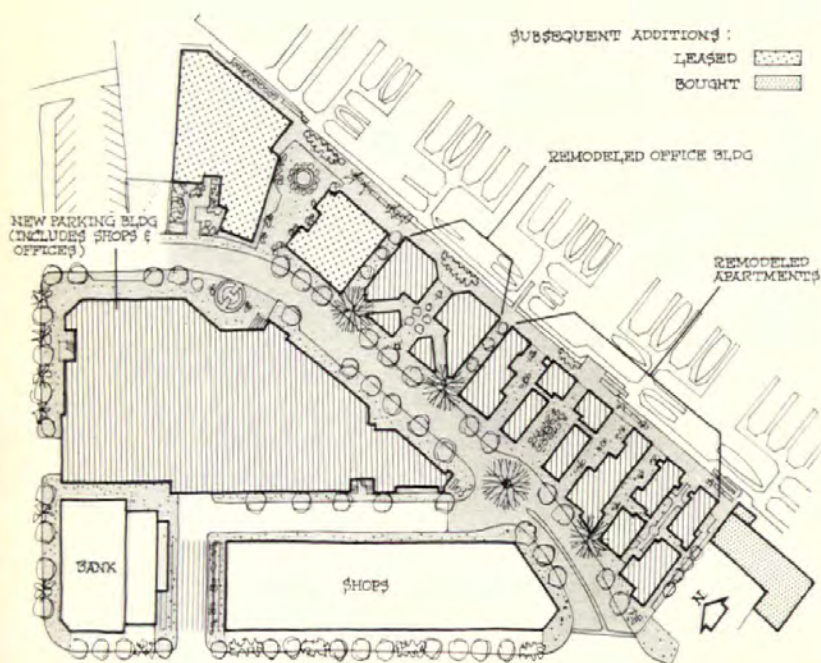






## CONVERSION

# An \$8-million shopping mall from a row of old apartments



But developer Don Koll hadn't planned it that way. His original scheme was to keep running the buildings as rental properties for a while, then tear them down and build condos on the waterfront site. Here's what happened:

Don Koll Co. bought seven 1950s-vintage, wood-frame buildings from a single owner in Newport Beach, Calif., in 1972. Six were two- and three-story garden apartments with tucked-under parking; the seventh was a two-story office building with a small parking lot out front. All had private boat docks and were next to the bridge connecting Newport Beach with the mainland. To be sure of adequate future parking, Koll also bought an open parking lot across the street.

Then came the national rent freeze, rising local condo competition and the passage of California's tough Proposition 20, which imposed drastic restrictions on waterfront development and reduced allowable condo densities to unprofitable levels.

Koll switched gears. The site was already zoned commercial (the apartments actually were nonconforming). So, with the help of Newport Beach architect Bissell/August Associates, Koll

CONTINUED



Brick-paved mall has landscaped island (large photo) near one end and fountain plaza (smaller photo) near the other. Former apartment buildings (right, large photo) now house shops and offices. Across the street, new parking building (smaller photo) includes more office and store space. Developer planted mature trees, installed clock, street lights and hanging plants.





## Transition: from remodeling to shopping-center development

Don Koll started out in the building business as a residential remodeler; one of his first customers was movie actor John Wayne.

But for the past 12 years his company has specialized in multi-tenant industrial and commercial projects built for its own account and for other developers. To date Don Koll Co. has built 12 million sq. ft. of industrial and commercial shells, half of which it owns and man-

ages. Last year's volume: \$50 million.

Operations have been limited to West Coast cities. Investment capital has come from joint-venture partners, principally Aetna Life & Casualty, National Life of Tennessee, Connecticut General Life and Wells Fargo Realty Advisors.

Shopping centers are a recent departure for Koll. Besides Lido Village, the company has developed centers in San Diego.





**Bridges and overhead beams** (above), plus awnings (not shown) that slide along beams on wires, tie remodeled buildings together.

**Boardwalk** (above) between new shops and marina replaced walled patios of old apartments. At right: mariners' view of project.

converted the property to a block-long shopping mall (called Lido Village) in four basic steps:

1. A new five-story parking garage, taking full advantage of the city's 35' maximum building height, was built in the parking lot. Besides spaces for 400 cars, the building includes 25,000 sq. ft. of new shop and office space on the first and second levels.

2. Curbs were removed from the public streets so that street and walkways could be regraded to one level and repaved entirely with red brick. The effect of the brick-lined mall so impressed the Orange County Chapter of the American Institute of Architects that it gave Bissell/August a 1975 First Honor Award for the project.

3. The old buildings were remodeled and tied together visually with bridges, trellises, awnings, brick and rustic-wood trim and compatible paint colors.

4. A commercial marina was built on the waterfront behind the buildings. The apartments' walled patios were replaced with a continuous public boardwalk, providing access to boat docks and to shops, restaurants and offices that face the water. The existing docks were rebuilt and extended farther into the water to expand their capacity.

All remodeling of the 40,000 sq. ft. of leasable space in the old buildings was done at the tenants' expense and to their specifications. Prospective tenants were referred to Bissell/August for consultation on how to tailor the raw space to their needs.

"We showed them which walls had to be removed and which could stay," explains George Bissell, "and we spelled out our standards for fenestration, awnings, signs and the like."

Bissell/August drew the tenants' elevations, then sent them to an interior designer for inside work. Ground-floor shops fit

handily into the apartment buildings' parking stalls. Upper-level shops and offices needed the addition of outdoor stairways. Space for two new store buildings was found in the small parking lot in front of the old office building.

Opening the upper levels to office tenants was a compromise, according to Tim Strader, Koll's senior vice president. "We prefer retail tenants throughout, but until the center matures, retail tenants are reluctant to take upper-level spaces for fear of insufficient traffic."

Some of the larger retail tenants are an antique shop with 2,800 sq. ft., a gourmet food market and a men's store, both with 2,600 sq. ft. The tenant mix includes women's fashion shops of up to 1,200 sq. ft., and a number of jewelry stores. Basic monthly rents are the same for shops and offices: \$1 a sq. ft. for ground-floor space, 85¢ for upper floors. Leasing and man-

agement were contracted to local brokerage division of Coldwell Banker Co.

Right now, Koll wants additional restaurants as tenants. "We should have allowed for more in our design," says Strader. "They're major drawing cards and help keep shoppers around."

Lido Village now includes 3,000-sq.-ft. sandwich and pizza restaurant with a large outdoor dining area overlooking the water. A second restaurant, to be open 24 hours a day, was signed up recently. And to bring more restaurant space into the complex, Koll has expanded in two ways: first, by acquiring the lease on an adjacent 13,000-sq.-ft. restaurant (which Koll now operates); second, by purchasing an adjacent five-story office building in which an entire upper floor has been earmarked for a future restaurant. A 1,000-sq.-ft. building containing small shops has also been incorporated into the complex.





"The original venture just grew," says Strader. "After we started construction in 1973, neighboring property owners began offering us buildings and leases. So our initial 65,000 sq. ft. of leasable space has now grown to more than 100,000."

The potential annual rent roll, allowing for 5% vacancies, is almost \$1.3 million. It comes from five sources: shops, 44%; offices, 24%; marina, 12%; separate restaurant, 10%; parking, 10%.

The break-even level, assuming a 75% loan at current rates, is 85% occupancy. Still operated on interim financing, Lido Village has reached 75% occupancy. Most of the vacancies are in the upper levels, particularly in the parking garage. Office tenants, the most likely candidates for those spaces, are scarce because surrounding Orange County has an oversupply of vacant offices.

Nevertheless, Strader expects to reach 95% occupancy this

year. And then Koll, which raised capital for the conversion by reselling the old buildings to the original owner and leasing them back, will shop for a permanent mortgage and seek a buyer for the complex.

To promote foot traffic, Koll hosts art festivals, auto shows and an annual boat show that attracts over 10,000 people; five major yacht brokers are tenants in the complex. Regularly scheduled bus tours bring in residents of a nearby Leisure World retirement community. And a hotel, newly opened nearby, will add its share of visitors as its clientele builds.

"This is an ideal location for a specialty center," says Strader. "We're the first shopping you come to as you enter the island. And we're surrounded by older boutiques, stores, offices and restaurants." He estimates that 70% of Lido Village shoppers are residents of Newport Beach and the rest tourists.

—H. CLARKE WELLS

## The numbers: How they look for Lido Village

### PHYSICAL VALUATION

<b>Basic cost of buildings (102,880 sq. ft.) and land</b>	<b>\$5,975,000</b>
<b>First occupancy costs:</b>	
Lease commissions	\$ 95,000
Loan fees	61,000
Net fill-up costs (18 months)	1,046,500
Other miscellaneous costs	30,000
	<u>1,232,500</u>
<b>Total cost of project</b>	<b>\$7,207,500</b>

### ECONOMIC VALUATION

<b>Gross annual rent</b>	
Shops	\$ 587,000
Offices	316,000
Separate restaurant	140,000
Marina	156,000
Parking	<u>130,000</u>
	\$1,329,000
<b>Less 5% vacancy in shops and offices</b>	<u>45,150</u>
<b>Effective gross income</b>	<b>\$1,283,850</b>
<b>Net annual operating expenses</b>	<u>230,000</u>
<b>Net income before ground rent</b>	<b>\$1,053,850</b>
<b>Ground rent</b>	<u>250,000</u>
<b>Net income after ground rent</b>	<b>\$ 803,850</b>
<b>Capitalized or economic value (at 10%)</b>	<b>\$8,038,500</b>

### PROJECT EVALUATION SUMMARY

<b>Economic value of project</b>	<b>\$8,039,000</b>
<b>Net cost of project</b>	<u>7,208,000</u>
<b>Potential created equity</b>	<b>\$ 831,000</b>
<b>Potential profit</b>	<u>\$ 831,000</u>
	\$7,208,000
	11.5%

### DEVELOPER'S RETURN ON EQUITY

<b>Economic valuation</b>	<b>\$8,039,000</b>
<b>75% of economic valuation</b>	<u>6,030,000</u>
<b>Total cost</b>	<b>\$7,208,000</b>
<b>Loan amount (75% of economic valuation)</b>	<u>6,030,000</u>
<b>Required equity</b>	<b>\$1,178,000</b>
<b>Net income</b>	<b>\$ 803,850</b>
<b>Debt service</b> $\$6,030,000 \times 10.91(10\% - 25 \text{ yrs.})$	<u>657,873</u>
<b>Net income after debt service</b>	<b>\$ 145,977</b>
<b>Return on developer's equity</b>	
	<u>\$ 145,977</u>
	\$1,178,000
	12.4%

<b>Capitalized value of project after financing</b>	
	$\$145,977 \div 9.5\%$
	<u>1,537,000</u>
	Plus mortgage loan
	<u>6,030,000</u>
<b>Total value of project after financing</b>	<b>\$7,567,000</b>

### SUMMARY

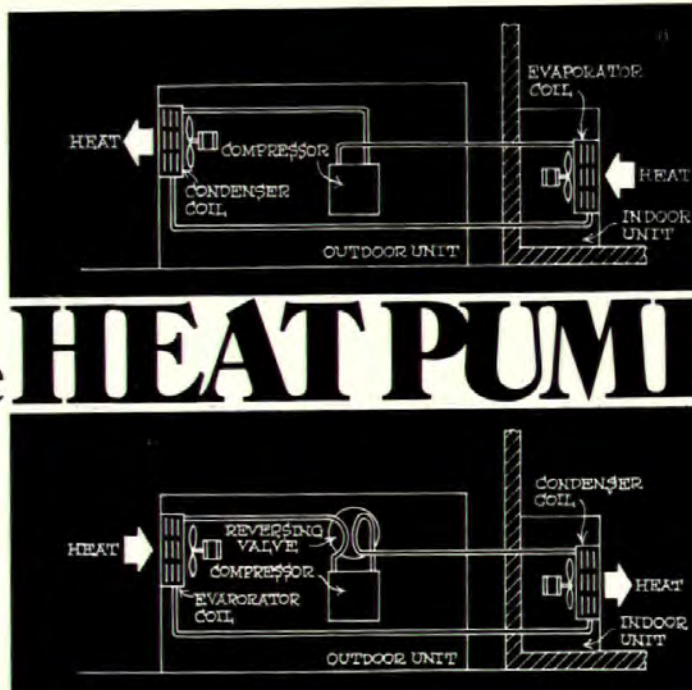
<b>Actual cost of project</b>	<b>\$7,208,000</b>
<b>Economic value of project on a "free and clear" basis</b>	<b>\$8,039,000</b>
<b>Economic value of project after long-term financing</b>	<b>\$7,567,000</b>



With oil and electricity costs still climbing  
And natural gas often unavailable . . .

## It's time to take a fresh look at the

# HEAT PUMP



Commercially introduced but quickly shelved about 25 years ago, the electric heat pump may now be a practical answer to heating and cooling cost problems. In some areas, in fact, it looks like the only game in town.

In 1973 heat pumps accounted for a little over 4% of the unitary climate-control systems sold in this country. By 1975 that figure had doubled to close to 9%. And now experts are predicting that heat pumps will eventually claim 40% to 50% of the market.

Why the sudden surge?

Necessity. With rising utility costs forcing potential homebuyers out of the market, builders are seeking more economical climate-control systems. A case in point is Poretzky & Starr of Chevy Chase, Md., builders of single-family homes and townhouses in the Washington area, which has been hit hard with gas moratoriums. "Electric resistance and oil heat were getting such a bad press in the Baltimore-Washington vicinity that we couldn't touch them," says Jack Starr. "So we had no choice. Heat pumps were our only option."

Rosen-Michaels, upstate New York builders of single-family and townhouses, had the same problem. General manager Joe Derkowsky says, "When they

shut off the gas hookups in the Albany area in March of 1975, we didn't have many alternatives . . ."

Actually, the heat pump is an attractive last resort. It produces two units of heat for every unit of energy consumed. And even when energy used and lost in generating and transmitting electricity is taken into account, the heat pump operates at an overall efficiency of 60%, compared to 35% for oil heat and 40% for gas.

Initial installation costs run \$400 to \$500 higher than for other heating and cooling systems, and these are being passed on to buyers. But operational cost savings result in an average pay-back period of from 3½ to 5 years for both heating and cooling and 7 to 10 years for heating only.

Real savings vary according to region, utility rates and the Energy Efficiency Ratio (EER) of the particular system. Recently Westinghouse ran tests in three cities comparing the fuel costs for heat pumps and gas heat. Results: annual savings of \$40 in Pittsburgh, \$47 in Minneapolis and \$47 in Atlanta.

So why did heat pumps gather dust for so long? There are two reasons: First, their main virtue was energy efficiency, and a quarter of a century ago no one was concerned with energy. Sec-

ond, they were unreliable.

The principle behind the heat pump has always been sound—it operates the same way as an air conditioner, moving heat from one place to another (*see above*). But the original engineering was weak.

Heat pumps broke down frequently, particularly in colder climates. Compressor motors failed under stress. Refrigerants damaged and clogged the mechanisms. Lubrication fluids broke down. Reversing valves were inefficient. And subcon-

tractors just did not know how to install the systems.

Most of these problems have been solved in the second- and third-generation heat pumps of the market today. Compressors have been completely redesigned, lubricants and refrigerants reformulated, valves reengineered and technicians trained to understand the complexities of installing the balanced air-handling system. Most heat pumps now have built-in supplementary heating systems for emergency use. I

### In case you didn't know, here's how it works

A heat pump is just that—a device that pumps heat from one place to another.

On its cooling cycle, it works like an air conditioner, collecting heat from inside the house and pumping it to an outdoor coil where it is dissipated.

On the heating cycle, the process is reversed: Heat is collected by the outdoor coil, pumped indoors and distributed.

The idea of collecting heat from outdoors in mid-winter may seem odd. But the fact is there is heat in everything unless it happens to be at absolute zero (-460° F). Furthermore, heat always moves from a

warmer object or area to a colder one. The heat pump circulates refrigerant through the outdoor coil. And since this refrigerant is even colder than the winter air, it picks up heat from the air.

There are, however, practical limits to the temperature of outdoor air from which the heat pump can extract heat. To get enough heat from air at very low temperatures would require unfeasibly large and costly outdoor coils. So an auxiliary system—usually electric resistance heat—is usually built into the heat pump to supplement its operation on very cold days. In moderate climates, supplementary heat is not necessary.

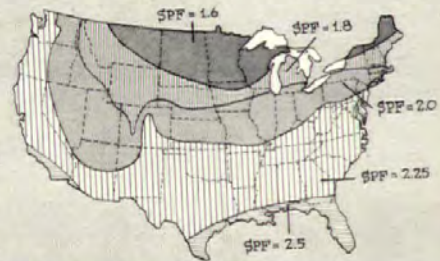


## Will heat pumps cut fuel costs in your housing? Here's how to find out

- Enter the present fuel rate in your area (cost per kilowatt hour, gallon or thousand cubic feet). See a sample fuel bill. \_\_\_\_\_ A
- In the appropriate column on the fuel comparison chart, find the corresponding cost per million Btu's. Circle it and enter it here. \_\_\_\_\_ B
- Enter the local electric rate per kilowatt hour. \_\_\_\_\_ C
- Find your approximate location on the map and enter the seasonal performance factor (SPF) for that area. \_\_\_\_\_ D
- Enter cost per million Btu's with a heat pump. Read down the SPF column that corresponds to your area. Circle local electrical rate entered in Step C. Enter cost per million Btu's which corresponds to local electrical rate found in your SPF column. \_\_\_\_\_ E
- Divide cost per million Btu's with a heat pump (E) by cost per million Btu's with the conventional heating system (B). \_\_\_\_\_ F
- Enter the present annual heating cost in your area (if necessary, estimate). \_\_\_\_\_ G
- To determine your potential annual heat pump heating cost, multiply (F) times your present annual heating cost (G). \_\_\_\_\_ H
- To determine your annual savings, subtract potential annual heat pump heating cost (H) from your present annual heating cost (G). \_\_\_\_\_ I

$$\text{Coefficient of Performance (C.O.P.)} = \frac{\text{heat delivery}}{\text{energy supplied}}$$

$$\text{Seasonal Performance Factor (SPF)} = \text{average C.O.P. throughout the heating season}$$



FUEL COMPARISON CHART

ELECTRICITY ¢/KWHR	OIL ¢/GAL	NATURAL GAS \$/MCF	HEAT PUMP SPF FROM MAP					COST PER MILLION BTUS IN DOLLARS
			SPF 1.6 ¢/KWHR	SPF 1.8 ¢/KWHR	SPF 2.0 ¢/KWHR	SPF 2.25 ¢/KWHR	SPF 2.5 ¢/KWHR	
.38	10.0	0.77	0.60	0.68	0.75	0.84	0.94	1.10
.45	12.0	0.92	0.72	0.81	0.90	1.01	1.13	1.32
.53	14.0	1.08	0.84	0.95	1.05	1.18	1.31	1.54
.60	16.0	1.23	0.96	1.08	1.20	1.35	1.50	1.76
.68	18.0	1.39	1.08	1.22	1.35	1.52	1.69	1.98
.75	20.0	1.54	1.20	1.35	1.50	1.69	1.88	2.20
.83	22.0	1.69	1.32	1.49	1.65	1.86	2.06	2.42
.90	24.0	1.85	1.44	1.62	1.80	2.03	2.25	2.64
.98	26.0	2.00	1.56	1.76	1.95	2.19	2.44	2.86
1.05	28.0	2.16	1.68	1.89	2.10	2.36	2.63	3.08
1.13	30.0	2.31	1.80	2.03	2.25	2.53	2.81	3.30
1.20	32.0	2.46	1.92	2.16	2.40	2.70	3.00	3.52
1.28	34.0	2.62	2.04	2.30	2.55	2.87	3.19	3.74
1.35	36.0	2.77	2.16	2.43	2.70	3.04	3.38	3.96
1.43	38.0	2.93	2.28	2.57	2.85	3.21	3.56	4.18
1.50	40.0	3.08	2.40	2.70	3.00	3.38	3.75	4.40
1.58	42.0	3.23	2.52	2.84	3.15	3.54	3.94	4.62
1.65	44.0	3.39	2.64	2.97	3.30	3.71	4.13	4.84
1.73	46.0	3.54	2.76	3.11	3.45	3.88	4.31	5.06
1.80	48.0	3.70	2.88	3.24	3.60	4.05	4.50	5.28
1.88	50.0	3.85	3.00	3.38	3.75	4.22	4.69	5.50
1.95	52.0	4.00	3.12	3.51	3.90	4.39	4.88	5.72
2.03	54.0	4.16	3.24	3.65	4.05	4.56	5.06	5.94
2.10	56.0	4.31	3.36	3.78	4.20	4.73	5.25	6.16
2.18	58.0	4.47	3.48	3.92	4.35	4.89	5.44	6.38
2.25	60.0	4.62	3.60	4.05	4.50	5.06	5.63	6.60
2.33	62.0	4.77	3.72	4.19	4.65	5.23	5.81	6.82
2.40	64.0	4.93	3.84	4.32	4.80	5.40	6.00	7.04
2.48	66.0	5.08	3.96	4.46	4.95	5.57	6.19	7.26
2.55	68.0	5.24	4.08	4.59	5.10	5.74	6.38	7.48
2.63	70.0	5.39	4.20	4.73	5.25	5.91	6.56	7.70
2.70	72.0	5.54	4.32	4.86	5.40	6.08	6.76	7.92
2.78	74.0	5.70	4.44	5.00	5.56	6.24	6.94	8.14
2.86	76.0	5.86	4.56	5.14	5.70	6.42	7.12	8.36
2.92	78.0	6.00	4.68	5.26	5.86	6.58	7.32	8.58
3.00	80.0	6.16	4.80	5.40	6.00	6.76	7.50	8.80
3.08	82.0	6.32	4.92	5.54	6.16	6.92	7.68	9.02
3.16	84.0	6.46	5.04	5.68	6.30	7.08	7.88	9.24
3.22	86.0	6.62	5.16	5.80	6.46	7.26	8.06	9.46
3.30	88.0	6.78	5.28	5.94	6.60	7.42	8.26	9.68
3.38	90.0	6.94	5.40	6.08	6.76	7.60	8.44	9.90
3.46	92.0	7.08	5.52	6.22	6.90	7.76	8.62	10.16
3.52	94.0	7.24	5.64	6.34	7.06	7.94	8.82	10.34
3.60	96.0	7.40	5.76	6.48	7.20	8.10	9.00	10.56
3.68	98.0	7.54	5.88	6.62	7.36	8.26	9.18	10.78
3.76	100.0	7.70	6.00	6.76	7.50	8.44	9.38	11.00

LEGEND: SPF — Seasonal Performance Factor KWHR—Kilowatt Hour GAL—Gallon MCF—1000 Cubic Feet (Volume)

Chart is a modification of one available from Carrier Corp., Syracuse, N.Y.

Some cases even basic operating methods have been improved.

So now builders are ready to accept the heat pump as a practical heating/cooling method. But what about the public?

Builder Starr says buyers will accept this "new" heat source. Our prospects needed little or no education. Some of them knew more about them than we did," he says.

In one of Starr's "affordable" home developments, the heat pump was offered as an option. It outsold luxury trade-ups such as fireplaces and carports and has since become standard.

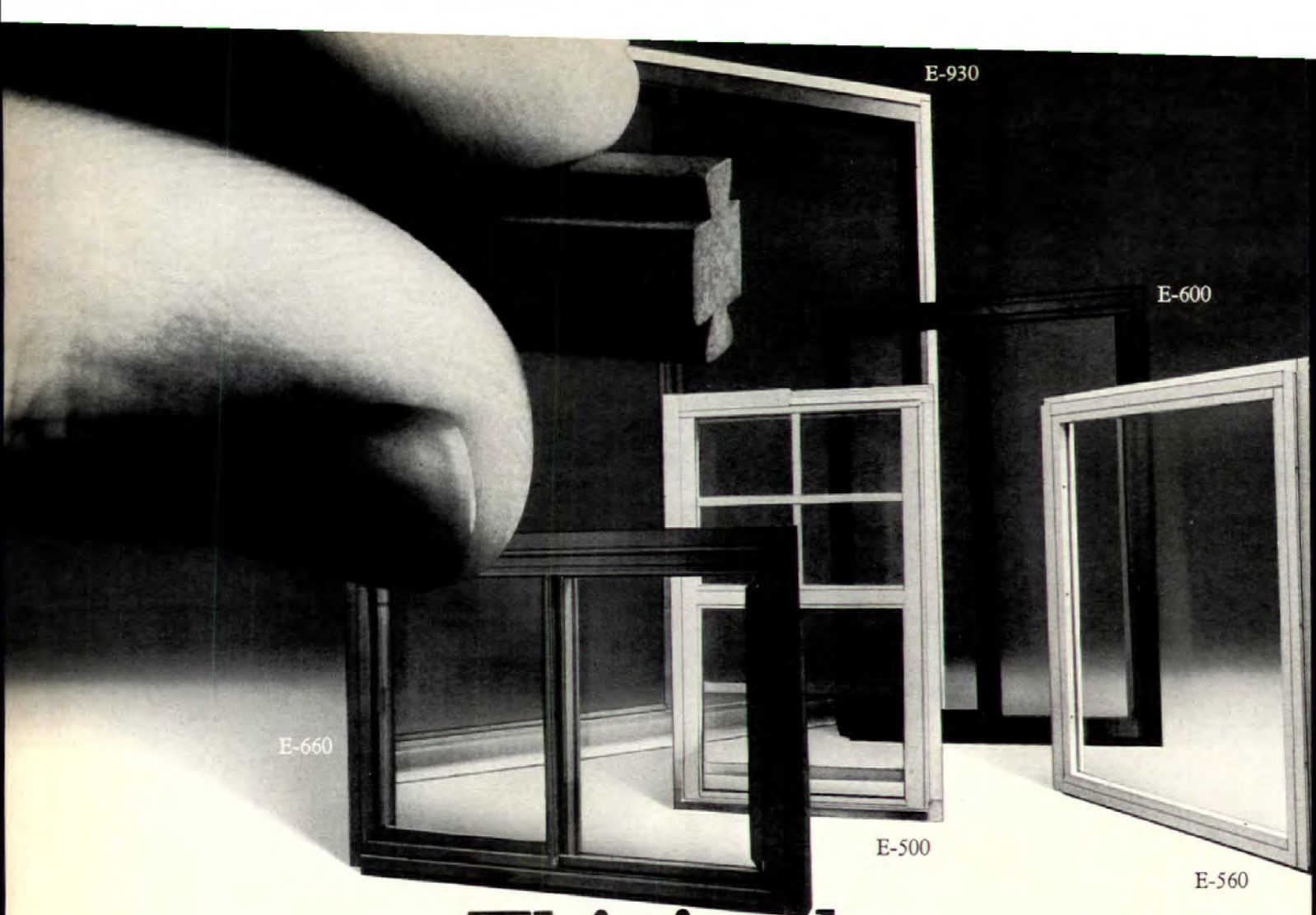
Prospects at Rosen-Michaels' projects were not so well-informed, so the builder had more of a marketing task. He got help from his heat pump manufacturer (Carrier), his heating contractor and the local utility. They jointly sponsored educational seminars on heat pumps for the builder's sales force.

Some people still question the reliability of heat pumps in cold climates and are reluctant to use them. But in Albany Rosen-Michaels found that all of its heat pump houses sold, while four of the original gas-heated units didn't move—even with a price break.

"If we could get gas again tomorrow," says Derkowsky, "I'm not so sure we'd switch back."

—ELISE PLATT





# This is why no other aluminum windows save energy like ours.

Capitol Thermal Break windows have an energy-saving design feature not available in any other window line. The thermal break (above) is a special vinyl foam insulating material, jointly developed by Capitol and its parent company, the Ethyl Corporation. And this forms a single thermal break in the unitizing frame only.

Combine this design with the big 2½-in. air space, and the result is one of the *lowest* air infiltration rates in the industry, many times tighter than current AAMA standards, as shown in test reports.

In turn, dollar for dollar, that makes for an over-all thermal factor rating that's better than

any other aluminum windows you can buy today. And it makes for virtually zero frame condensation too.

Facts that won't be lost on your prospects these days!

## Now, a complete line of these energy-saving windows.

Capitol has just expanded its line of thermal-break windows, so that now you can offer these exclusive energy-saving benefits on any sort of job you have. Whether it's residential, institutional, or light commercial.

What's more, we have them in the sizes and colors you want. They're easy to install (full fin). And they meet *all* governmental and association requirements.

There's even a thermal-break patio door to complete your energy-saving package.

## More for your money.

Whatever your needs for windows and doors, Capitol gives you quality, performance and sales-winning features.

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difference, and we'd welcome the chance to prove it to you. First step—write for prices and test reports. Capitol Products Corp., Mechanicsburg, Pa. 17055. Or phone W. Fremont, V.P. Sales, (717) 766-7661.

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assures an air-tight joint  
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on frame provides quick,  
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**Full Thermal Break**  
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without complicated addition to overall  
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**Electrostatic Paint Process**  
in white or bronze assures long-lasting  
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**Closed Corners**  
at top and bottom of frame act to further  
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For the full story on quality and dependability, phone your GE central air conditioning dealer. He's listed in the Yellow Pages under "Air Conditioning Equipment and Systems."

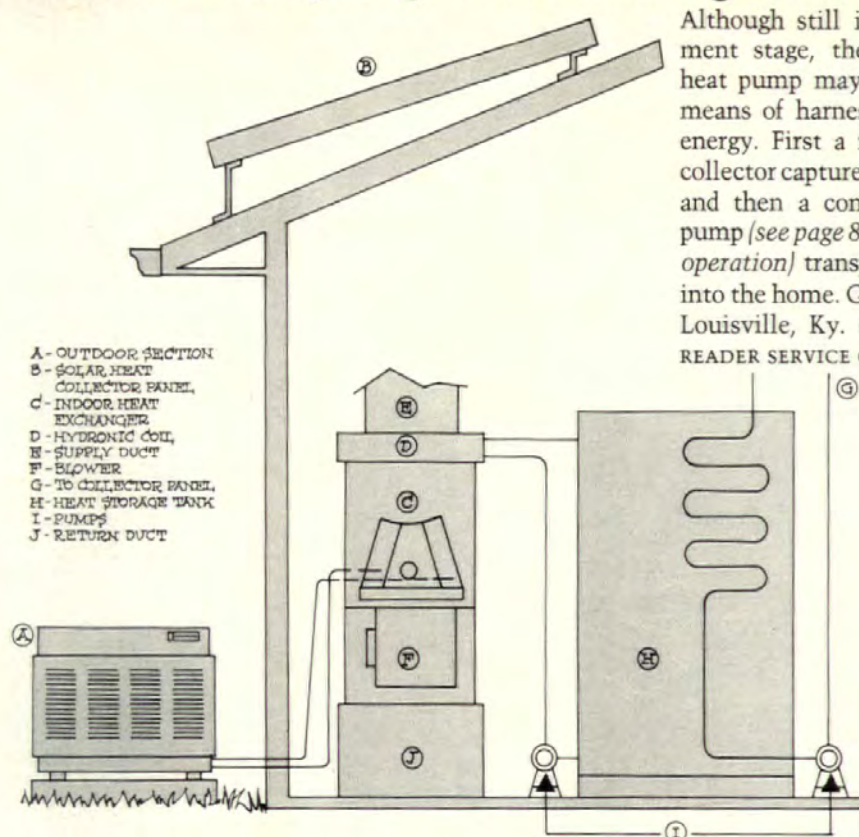
**The General Electric Weathertron®...  
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- 8 Kitchens
- 0 Flooring
- 2 Flooring
- 3 Flooring
- 4 Lighting
- 1 Lighting
- 2 Tools & equipment
- 5 Tools & equipment
- 6 Tools & equipment
- 8 Coatings & adhesives
- 0 Coatings & adhesives

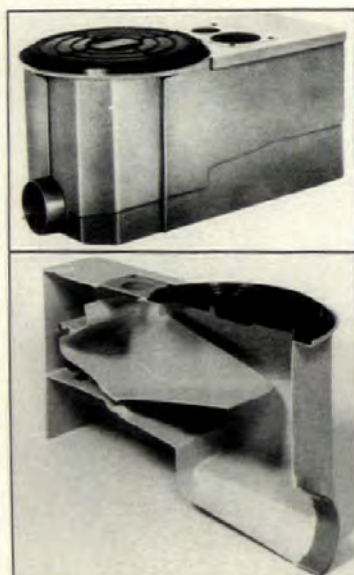
## Solar-assisted heat pump: The next logical step



Although still in the development stage, the solar-assisted heat pump may be a practical means of harnessing the sun's energy. First a fluid-type solar collector captures the sun's heat and then a conventional heat pump [see page 88 for heat pump operation] transports that heat into the home. General Electric, Louisville, Ky. CIRCLE 275 ON READER SERVICE CARD

## Water-saving toilet utilizes grey water

A foam-flush toilet system using household grey (lightly contaminated) water to carry the waste has been developed in Japan. Not yet commercially available in the U.S., the system is based on a balance mechanism, the "Swinger". A corrosion-proof plastic tank, installed below ground, stores the waste until there is sufficient grey water (2½ gals) to tip the "Swinger" and transport the waste into the sewer lines. The chemical foam used to clear the toilet requires only one cup of water per flush and is generated by a small air pump. Nepon, New York City. CIRCLE 276 ON READER SERVICE CARD







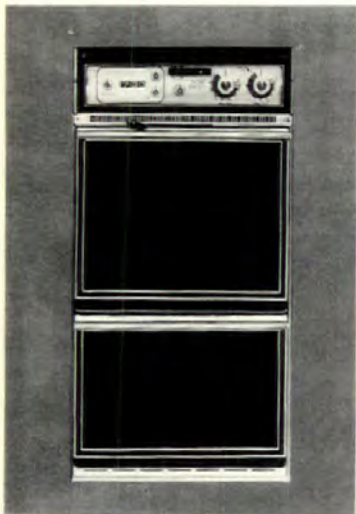
Traditionally styled cabinetry, "Heritage," is available in distressed walnut (shown) or antique white finishes. Line includes 33 easy-to-assemble "Unifront" units in varying sizes. "Heritage," with the look of fine furniture, can be used in any room of the house. Belwood, Ackerman, Miss. CIRCLE 200 ON READER SERVICE CARD

Modular cabinetry line, "Athens Oak," features an easy-to-maintain Formica® finish on all vertical surfaces. The simulated woodgrain cabinets with Mediterranean styling come in a wide range of sizes and models. Keller, Deland, Fla. CIRCLE 201 ON READER SERVICE CARD



Compact laundry pair consists of an automatic washer and a nonvented dryer. Top-loading washer can be used as a portable or built in. Dryer, which can be wall-mounted as shown, offers normal, fluff and permanent press cycles. A special rack permits stacking. General Electric, Louisville, Ky. CIRCLE 203 ON READER SERVICE CARD

Traditionally styled cabinet line, "Lexington," has a sleek, uncluttered design. Offered in a wide range of modular sizes, the warm honey-toned cabinets have solid-core doors with self-closing hinges. Connors, Forest Products, Wausau, Wis. CIRCLE 204 ON READER SERVICE CARD



Built-in double wall oven has an easy-to-read digital clock and a one-hour timer. Offered in gas or electric models in a choice of colors, unit has glass doors in clear, woodtone or black. Magic Chef, Cleveland, Tenn. CIRCLE 202 ON READER SERVICE CARD





**In 1975, Jenn-Air Electric Range sales were 46.8%\* ahead of the industry. Doesn't that tell you something about what women want in their kitchens?**



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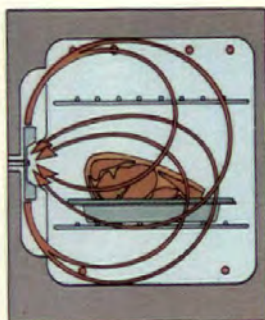
Features like the revolutionary Jenn-Air Convection/Radiant Oven. Just by flicking a switch, our full-size conventional oven and broiler becomes a Convection Oven that cooks food the way Continental chefs do—in a whirling stream of power driven air. It cooks food faster and at a lower temperature than conventional ovens. And it's got an accelerated oven cleaning cycle.

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**Micromatic® range** cooks with microwaves, with conventional electric heat or with a combination of the two. The fully automatic unit has a smooth-surface cooktop. Litton, Minneapolis, Minn. CIRCLE 205 ON READER SERVICE CARD

**Side-by-side refrigerator/freezer** features chilled water dispenser and automatic ice service bin on the exterior of the freezer door. No-frost unit is a power saver. Hotpoint, Louisville, Ky. CIRCLE 206 ON READER SERVICE CARD



**"Thrustpower II" range hoods** offered in a wide range of sizes can be used in wall-mount, island, pass-through and peninsula installations. A choice of finishes is available. Thermador, Los Angeles. CIRCLE 209 ON READER SERVICE CARD



**Single-lever kitchen faucet "Aquarian II,"** has a restyled handle for increased strength. A lubrication-impregnated O-ring provides smooth spout operation. American Standard, New Brunswick, N.J. CIRCLE 208 ON READER SERVICE CARD

**GlamourTop, postformed countertop** with a high-pressure laminate surface, is available in a wide range of colors and patterns. It is stain and scratch resistant. Plastic Clad, Birmingham, Ala. CIRCLE 210 ON READER SERVICE CARD



**Traditionally styled "Hatteras" cabinetry** made of selected hardwoods is competitively priced. Line features hardwood frames, veneered-panel door fronts, self-closing hinges and adjustable shelves. IXL, Westinghouse, Elizabeth City, N.C. CIRCLE 207 ON READER SERVICE CARD



**"Sunrise" cabinetry** with traditional rustic styling has door and drawer fronts of easy-to-maintain, stain-, scratch- and scuff-resistant Formica®. Cabinets come in a wide range of sizes and styles. Kemper, Tappan, Richmond, Ind. CIRCLE 211 ON READER SERVICE CARD



# Tell your remodeling customers: It pays to stay with gas.



## Gas appliances use less energy, cost less to operate.

**Huge remodeling/replacement market.** 33 million families heat with gas. 29 million families heat water with gas. 32 million families cook with gas. 9 million families dry clothes with gas. A lot of them will be remodeling this year and replacing their gas equipment. Here are some facts you should know about gas:

**Gas is the efficient energy.** People replacing their old gas equipment with new gas equipment don't add to the energy problem. Studies by the U.S. Government's Council on Environmental Quality show that gas appliances use considerably less of America's energy resources than other comparable types of appliances. And they cost less than half as much to operate.

**Gas will keep coming.** The Federal Power Commission has specified that the natural gas industry's first priority must be to keep on supplying homes that now have gas. So your customers for home additions and other remodeling can expect to have continued gas service.

**How to have satisfied clients.** Recommend that your customers stay with gas. They already know about the convenience and dependability of natural gas. They'll thank you for pointing out its efficiency and economy. Now more than ever, it pays to stay with gas.

**Use gas wisely. It's clean energy  
for today and tomorrow.**







**Printed carpet, "Sunflower,"** has a contemporary floral pattern. Offered in five colorways in 12' widths, the jute-backed carpet retails for about \$8.95 a sq. yd. Ozite, Libertyville, Ill. CIRCLE 231 ON READER SERVICE CARD



**Printed Saxony plush carpet, "Heirloom Collection,"** is inspired by the "Caswell Rug," an historic American handicraft. Carpet of Anso nylon features interpretations of 12 of the original embroidered designs. Wellco, Calhoun, Ga. CIRCLE 227 ON READER SERVICE CARD



**No-wax sheet vinyl flooring, "Colonial Sampler,"** features an Early American quilt pattern. The "Solarian" floor with a Mirabond wear surface, comes in a choice of five colors. Armstrong, Lancaster, Pa. CIRCLE 228 ON READER SERVICE CARD

**Thickly cushioned sheet vinyl, "Santana,"** has an inlaid tile effect. Part of the Citation collection of GAFSTAR, Brite-Bond flooring has a furable high-gloss wear surface. GAF, New York City. CIRCLE 229 ON READER SERVICE CARD

**No-wax cushioned vinyl flooring, "Court Stone,"** has the look of hand-set textured slate. Available in five natural shades, the flooring comes in 9' and 12' widths. Congoleum, Kearny, N.J. CIRCLE 230 ON READER SERVICE CARD



**"Specialty Hardwood Flooring,"** a medium-priced parquet line, is finished with a three-step primer-sealer-hot melt wax procedure. "Singapore Teak" shown is one of five patterns available. Wood Mosaic, Louisville, Ky. CIRCLE 232 ON READER SERVICE CARD





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You don't see windows as beautiful as this every day. When you do, chances are they came from Marvin. We work hard to make it easy to achieve the spectacular results. Our Stack & Strip units come in 28 basic awnings and 5 view units. Marvin will set up the complete window at the factory or ship the individual units boxed for on-site arrangement. We routinely provide special frame sizes, special jamb widths, trapezoids and triangles, cathedral glazing, and just about anything else needed for special, spectacular windows. These are also some of the tightest windows ever designed.

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Windows**

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**Level loop carpet, "North Point,"** is highly resistant to abrasion and crushing. Constructed of solution-dyed Herculon, carpet has a low static propensity. Jute or foam secondary backings are offered. Burke, San Jose, Calif. CIRCLE 234 ON READER SERVICE CARD



**Multicolored vinyl asbestos tiles, "Annondale,"** have an intriguing textured scroll design. Measuring 12"x12"x $\frac{1}{16}$ ", tiles come with regular or self-adhering backs. Seven color combinations are offered. Kentile, Brooklyn, N.Y. CIRCLE 235 ON READER SERVICE CARD



**Plush carpet, "Sentimental,"** has a soft look. "Trevira Star" polyester pile stands up to heavy traffic without matting. Offered in 21 solid colors, the floorcovering retails for about \$10.95 a sq. yd. Philadelphia Carpet, Cartersville, Ga. CIRCLE 236 ON READER SERVICE CARD



**Bold print level loop carpet** has a pattern reminiscent of American Indian designs. The anti-static, soil-hiding kitchen floorcovering is part of the "Footlights" collection. It carries a factually descriptive label. Sears Roebuck, Chicago. CIRCLE 238 ON READER SERVICE CARD



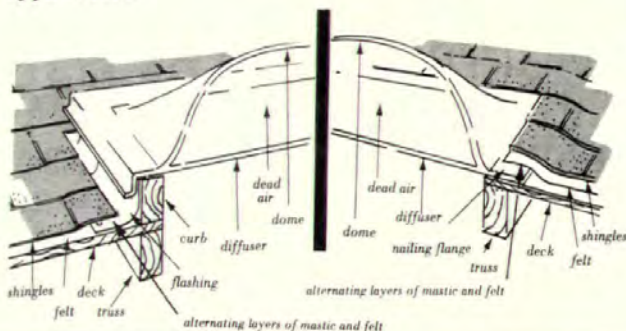
**Durabond® carpet installation kit** designed for cushion-back or i door/outdoor carpeting, includes double-faced vinyl tape, seam sealer, a seam knife, chalk, chalk line, cutting guide and instructions. U. Gypsum, Chicago. CIRCLE 237 ON READER SERVICE CARD

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Natural stone tiles, "Alta Quartzite," are used to dress up a patio. The material, which absorbs almost no water, is immune to cracking due to freezing and thawing. Grey-green tiles are resistant to mildew. Gran-Quartz, Tucker, Ga. CIRCLE 239 ON READER SERVICE CARD



No-wax vinyl asbestos tiles have self-adhering backs. "Del Fino" pattern blends the Mediterranean octagon and key motifs. Measuring 12"-square, decorative tiles come in six subtle colorations. Amtico, Trenton, N.J. CIRCLE 240 ON READER SERVICE CARD



Simulated bricks with an authentic mottled appearance provide an Early American or old world look. Made with real brick particles and polyester, 1/4"-thick bricks are durable, long wearing and easy to maintain. Plastronic, West Yarmouth, Mass. CIRCLE 242 ON READER SERVICE CARD.

Non-skid floor and stair treads, "Safe-Strip," are for indoor or outdoor use. Composed of diamond-hard mineral granules bonded to heavy cloth, treads are backed with a pressure-sensitive adhesive. Martex, Irvington, N.J. CIRCLE 241 ON READER SERVICE CARD



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East Coast home; Architect: James Walker, Boston, Mass.; Cabot's Stains throughout

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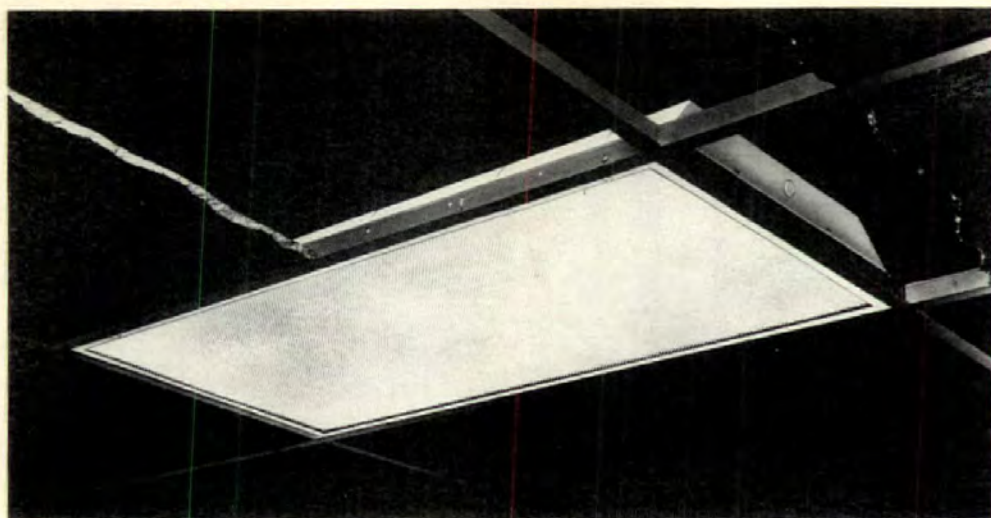
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CIRCLE 103 ON READER SERVICE CARD

H&H APRIL 1976 103



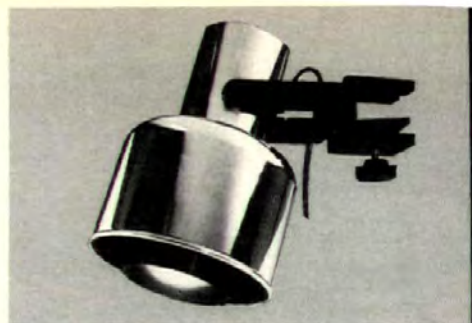


**Ultra-thin 3½" recessed troffer, "HEFT"** (above), requires less plenum space than conventional units. Fixture, which houses two or four "F40" fluorescent lamps, is 2' wide and 4' long. Rigid body is die-formed of ribbed and embossed heavy gauge sheet metal. Keene, Union, N.J. CIRCLE 212 ON READER SERVICE CARD

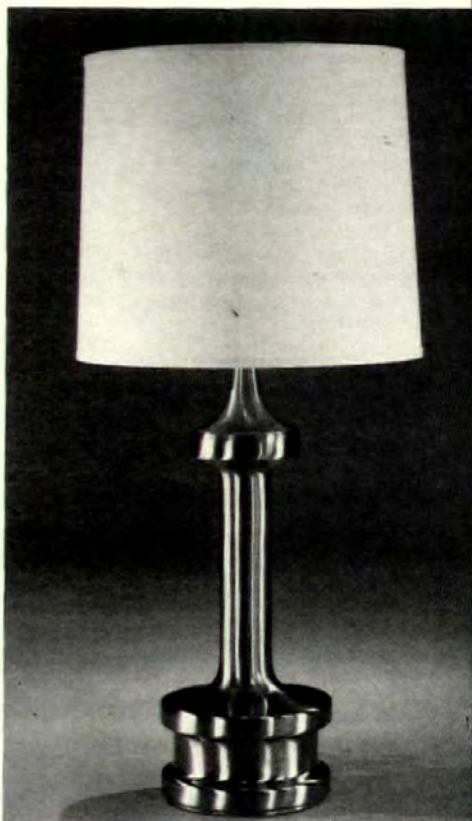


**Traditionally styled chandelier, "Heritage"** (left), features wormy stripped pine center column and die-cast arms with porcelain look. Floral insets and foilage motif are handpainted. Chandelier with nine globe lights is 30" wide with an overall length of 46½". NuTone, Scovill, Cincinnati, Ohio. CIRCLE 213 ON READER SERVICE CARD

**Lighting system, "Trianglo,"** includes floor, wall, ceiling and table models. Geometric fixtures are constructed of perforated color-baked metal sheeting with all exposed edges trimmed in black rubber. Basic shade is an 18" triangle; floor lamps are 64" and 84" high. Koch + Lowy, Long Island City, N.Y. CIRCLE 214 ON READER SERVICE CARD



**Directional lighting line, "Fabian Series"** (above) consists of portable wall- and ceiling-mount units. Fixtures available in white, chrome or brass metal finishes have reflectors that intensify illumination. Two and three-light units are offered. Inlite, Berkeley, Calif. CIRCLE 215 ON READER SERVICE CARD

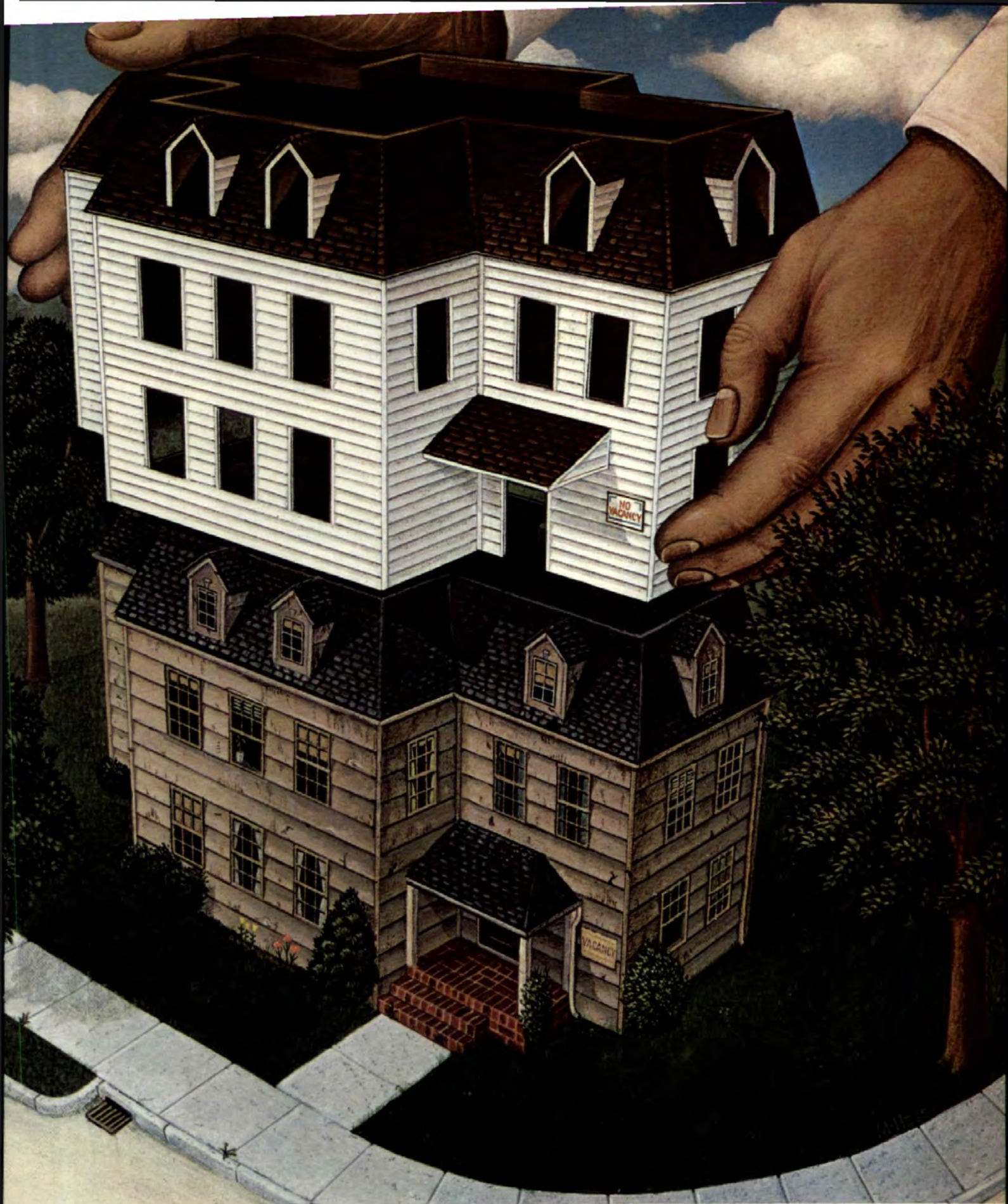


**Cast metal table lamp** with three-way socket stands 26" high and comes with a 12"x13"x11" parchment shade. Models are available in three metal finishes, eight colors and combinations of rosewood and polished chrome or walnut and Swedish brass. Laurel Lamp, Newark, N.J. CIRCLE 216 ON READER SERVICE CARD

**Ceiling fixture, "The Classic"** (below), is constructed of handlead solid brass with clear or smoke acrylic panels. Unit measures 7" high and 23" wide and accommodates four G25 bulbs up to 60w each. Open bottom simplifies bulb replacement. Georgian Art, Lawrenceville, Ga. CIRCLE 217 ON READER SERVICE CARD







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## Roofing and Siding



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# And then some.

**2. You get a salesman who thinks like you do.** Your local Hotpoint builder representative knows your business. And your market. He'll not only help you choose appliances, he'll put his experience and that of our contract sales operation to work for you to make sure things go smoothly, from initial planning right up to final installation.



**3. You get a delivery system geared to meet your schedule.** Hotpoint's wholly owned distribution organization includes a network of local warehouses, backed with strategically placed regional warehouses. The result: fast, dependable response to your orders, large or small.

**4. You get design experts to help with your plans.** Our Certified Kitchen Designers can recommend plans that may save you money while improving the functional design. We can provide a complete Kitchen Planning Package including blueprints, color scheme, and a full-color perspective rendering of your layout. And its cost is surprisingly low.



**5. You get service that's a selling point, not a sore point.** It's called Customer Care® Service—a network of factory service centers in over 350 cities plus thousands of franchised service people across America. It helps build buyer and tenant confidence and can take service problems off your shoulders.

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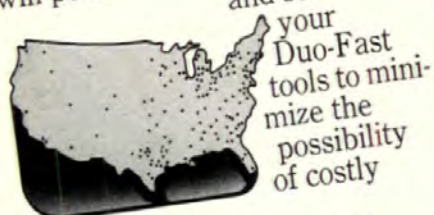


# The company that gives you everything in nailers, staplers, and tackers, also gives you the service to keep them working.

In a period when everyone wants your fastener business, compare Duo-Fast with the alternatives.

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Coil-fed pneumatic nailers drive 1 1/4" through 2 1/2" nails in coils of 300.

Smooth, ring, and screw-shank nails meet your construction needs... framing and

underlayment through roof decking and siding. Aluminum, Golden Galvanized, and special hard nails are also available.

Duo-Fast's brad and finish nailers can greatly speed and simplify your face nailing

requirements. Brads 1/2" through 1 1/4", and finish nails 1 1/2" through 2" can be driven flush or countersunk. Colored nail heads are available to match wall paneling.



In many applications, Duo-Fast's pneumatic staple nailers have proven their versatility. Six models drive 16-gauge galvanized staples in 1/2" through 2" lengths. One model drives 1" crown-width staples which have

proven ideal for asphalt shingling.

Duo-Fast also has a complete line of light, medium and heavy-duty pneumatic staple tackers, and electric tackers for use in a wide variety of timesaving applications. Soffit work, furring, paneling, insulation, ceiling tile, metal lathing, carpet underlayment, and many others all go faster and better with Duo-Fast.

And not to be overlooked are Duo-Fast's manual staple tackers. Hammer tackers can greatly speed your insulation and building paper jobs. Gun tackers are ideal for screen wire applications.

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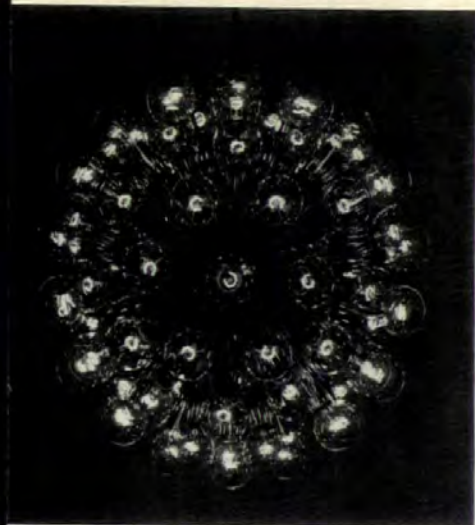
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## DUO-FAST





Contemporary chandelier, "Model S 91/30," is constructed of polished chrome and features 91 lights. Unit is 30" in diameter and uses 10w or 15w round globe lights or 15w showcase bulbs. Overall length is 61". A polished brass model is also available. TSAO, New Canaan, Conn. CIRCLE 218 ON READER SERVICE CARD

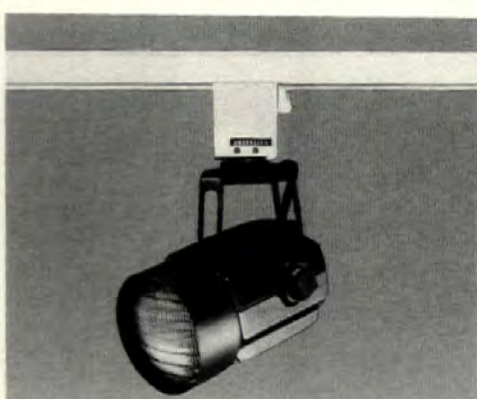
Three-light chain-hung fixture can be used in a breakfast area or informal dining room. Part of the "Spring Flower Group," unit has an overall length of 37" and a diameter of 26½". Colors available include blue, yellow and green with white accent. American Lantern, El Monte, Calif. CIRCLE 219 ON READER SERVICE CARD



Country-style ceramic-base lamp features hand-decorated traditional designs on taupe green stoneware. Shade on 28" lamp is available in blue denim (shown) or textured fabric. Line also includes a lamp shaped like a two-handled milk jug. Haeger, Highland Park, Ill. CIRCLE 220 ON READER SERVICE CARD

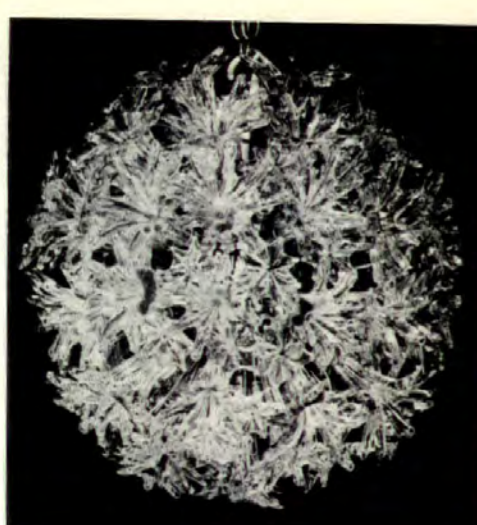
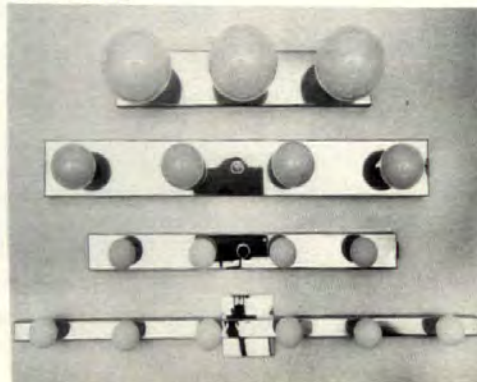


Table lamp with urn-shaped base (above) is pewter-finished steel with polished brass details. Unit stands 31½" high and comes with black opaque paper shade. Base is carved wood and all fixtures are solid brass. Fabric shade is also offered. Norman Perry, New York City. CIRCLE 221 ON READER SERVICE CARD



Lighting system, "StarTrack" (above), has three-circuit track and 12v "StarSpot" lights. System can be surface-mounted, recessed or stem-mounted, and each circuit can be used independently or in combination. The "StarSpot" uses 25w or 50w "PAR 36" lamp. Swivelier, Nanuet, N.Y. CIRCLE 222 ON READER SERVICE CARD

Strip lighting (below) can be used in wall and ceiling installations or around a vanity. Polished chrome, brass or gloss white strips have matching flush fixtures. Globe bulbs come in clear or white. Brackets in three lengths are 1", 2" or 4" wide. Melolite, Mineola, N.Y. CIRCLE 223 ON READER SERVICE CARD



Chandelier imported from Italy, "Esprit," features handblown glass trumpets and stars. Yellow or amethyst spots can be added or glass can be left clear. Frame and stem are chromeplated metal. Chandelier is 24" in diameter and also comes in a half-sphere. Venini, New York City. CIRCLE 224 ON READER SERVICE CARD



Five-light chandelier (above) is part of the "Chadd's Ford" line. The fixture is white enamel with red trim of Pennsylvania Dutch designs. Ceiling lights, a wall bracket and two styles of pendants are also available. Line includes pewter and brass models. Virden, Cleveland, Ohio. CIRCLE 225 ON READER SERVICE CARD

Table lamp designed by Milo Baughman (below) features a ceramic base with a horizontal ribbed pattern. Unit, which accommodates a three-way bulb, comes with choice of pleated or unpleated beige linen or white parchment shade. Height is 30". George Kovacs, New York City. CIRCLE 226 ON READER SERVICE CARD







**High-volume scraper, "JD762,"** is a versatile machine with two-axle design. Powered by a 175 hp diesel engine, vehicle has a power shift transmission and a top travel speed of 28 mph. Roll-over protective structure is a standard feature. John Deere, Moline, Ill. CIRCLE 252 ON READER SERVICE CARD

**Compact utility loader (below)** performs a variety of construction jobs under the tightest operating conditions. The easy-to-maneuver vehicle features hydrostatic drive, a 70° turning radius and a patented reacher-riser boom. Sperry-New Holland, New Holland, Pa. CIRCLE 253 ON READER SERVICE CARD



**Adhesive gun (right)** provides a fast, clean, easy way to install carpet and cove bases. The trigger-actuated gun produces an even flow of adhesive beads. Unit is equipped with a three-hole, 4" nozzle. Burke, San Jose, Calif. CIRCLE 255 ON READER SERVICE CARD



**Line of heavy-duty circular saw (left)** includes the 6 1/2", 7 1/4" and 8 1/4" versions shown and 7 1/4" and 8 1/4" extra-heavy-duty models. All feature double insulation, safety lock off switches to prevent accidental starts and a telescoping blade guard. Rockwell, Pittsburgh, Pa. CIRCLE 256 ON READER SERVICE CARD

**Weight calculator (right)** is one of a set of four which gives the weight of almost any type of metal piece. Included in the set are castings and forgings, steelwork, plate and sheet and coiled strip calculators. Hunter, Bridgewater, N.J. CIRCLE 257 ON READER SERVICE CARD



**Tractor/loader/backhoe, "Model 550,"** is available with a gasoline or diesel three-cylinder engine. Vehicle has a breakout force of 8000 lbs and a full-height lift capacity of 4700 lbs. Ford Tractor, Troy, Mich. CIRCLE 254 ON READER SERVICE CARD



**Compact "Uni-Loader Model 1845"** features hydrostatic four-wheel drive. Engineered for high-production loading and material handling, unit has the ability to spin-turn in its own length. J. I. Case, Racine, Wisc. CIRCLE 258 ON READER SERVICE CARD



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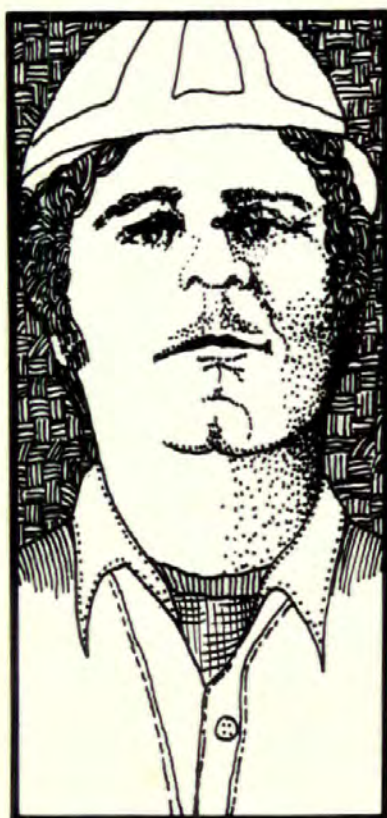


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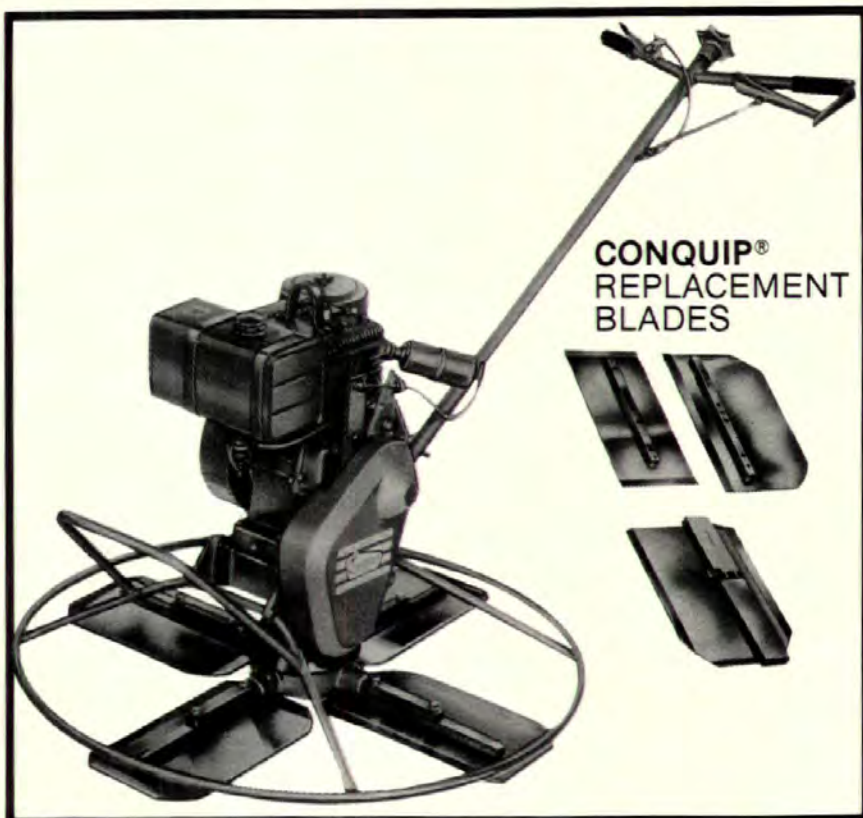


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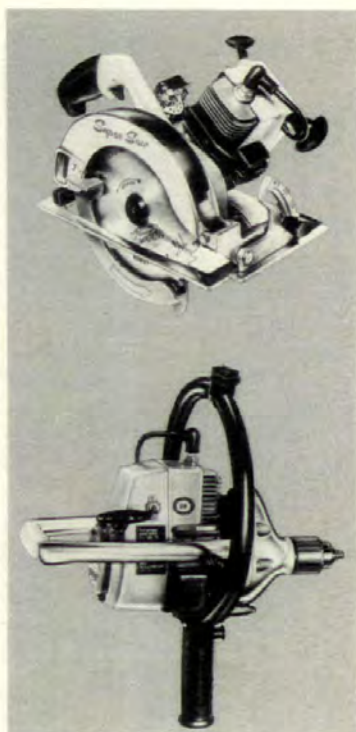




front-discharge truck mixer, "Van-guard," with a 9-11 cu. yd. capacity combines the operating advantages of forward placement and the performance efficiency of a rear-discharge drum configuration. Unit features Gyro-Drive®. T. L. Smith, Marion, Ohio. CIRCLE 263 ON READER SERVICE CARD

Gasoline-powered tools (right) are engineered to replace electrical models. A circular "Super Saw" and a variable speed "Piston Drill" are available. Both are said to be extremely accurate. Piston Powered Products, Tempe, Ariz. CIRCLE 264 ON READER SERVICE CARD

All-purpose work center and vise, Workmate™, weighs less than 33 lbs and can be easily set up in minutes. Adjustable legs provide two convenient heights. Full-length vise will hold 10" wide material. Black & Decker, Towson, Md. CIRCLE 265 ON READER SERVICE CARD



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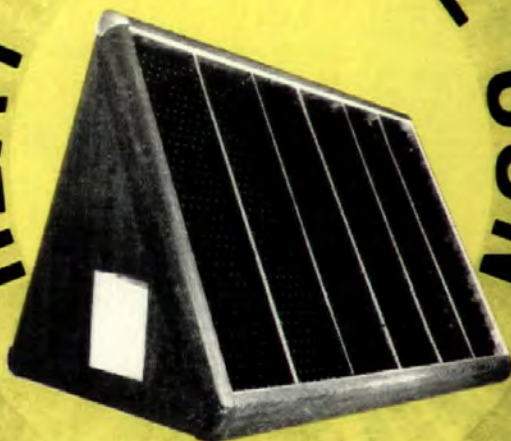


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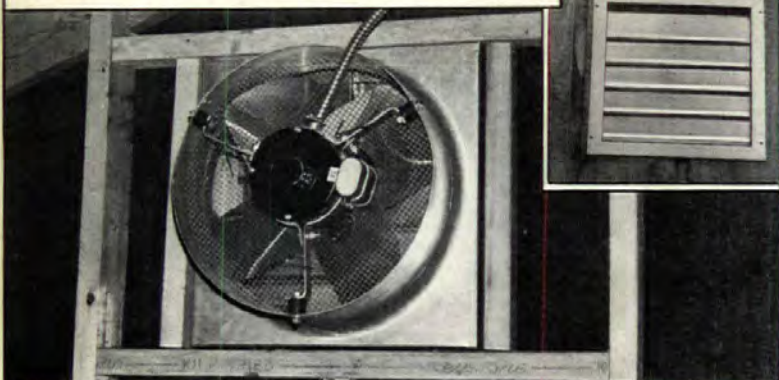
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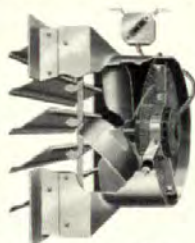


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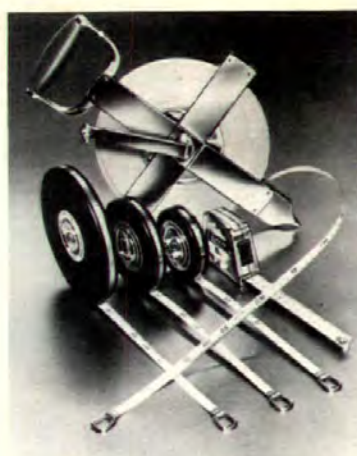


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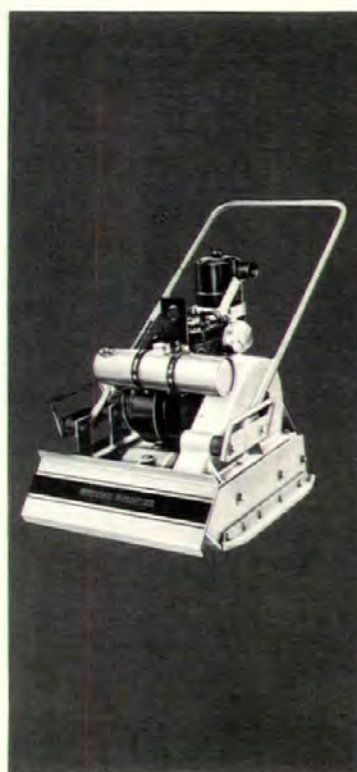


CIRCLE 60 ON READER SERVICE CARD



Steel metric measuring tapes are available in a range of lengths. Shown are four case tapes measuring from 5 to 50 meters and a 100-meter tape on an easy-to-manuever four-arm reel. Calibrations are easy to read. Lufkin, Apex, N. C. CIRCLE 25 ON READER SERVICE CARD

Scissor-lift platform is self-propelled and supports 1000 lbs. Offered with a 19' or 13' lift height, units are battery operated with automatic chargers. Platforms have electrical outlets for tools. Patent Scaffolding Co., Ft. Lee, N.J. CIRCLE 260 ON READER SERVICE CARD



Lightweight surveying instrument "Leveller," can be easily used by one person. Elevation differences are recorded on two calibrated standards linked by a flexible plastic hose filled with water or other fluid. Forrgley, Los Angeles. CIRCLE 262 ON READER SERVICE CARD

Vibratory tamper, "GP-500k" (left) generates 5200 lbs of centrifugal force and is capable of handling 20" of granular material at forward speeds of 100 fpm. Unit has a 24"x24" plate and a reversible handle. MBW, Slinger, Wis. CIRCLE 261 ON READER SERVICE CARD

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Silicone rubber sealer with paste-like consistency can be used to seal overhead areas as shown. Material is moisture, shock and chemical resistant and won't crack, crumble or shrink. Dow Corning, Midland, Mich. CIRCLE 243 ON READER SERVICE CARD



Spackling paste patches cracks and holes in plaster and wood. Easy to apply paste containing vinyl plastic can be painted over as soon as it is dry, and painting is recommended for exterior applications. BONSAL Lilesville, N.C. CIRCLE 244 ON READER SERVICE CARD



Drywall stud adhesive (left) may be used to attach gypsum wallboard to wood or metal studs. Adhesive bridges irregularities and does not become brittle. Weldwood, City of Industry, Calif. CIRCLE 245 ON READER SERVICE CARD

Concrete-repair compound "Sonopatch" (below), offers fast ten-minute set. Durable, non-shrinking compound fills cavities in any type of concrete surface. Non-gypsum base contains no metals or corrosion-promoting agents. Con-Tech, Minneapolis. CIRCLE 246 ON READER SERVICE CARD





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Concrete form releasing agent, "Magic-Kote Quick-Dry," is fast-drying and creates no build-up on formwork. Agent also retards rusting of metal forms. Symons, Des Plaines, Ill. CIRCLE 247 ON READER SERVICE CARD

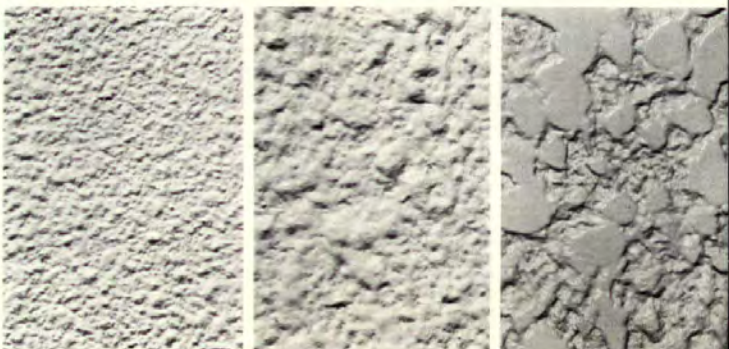
Latex-based sealer prevents moisture damage, water seepage and mildew. Easy-to-apply caulk stays white and can be used around tubs, sinks and showers. Wilhold, San Fe Springs, Calif. CIRCLE 250 ON READER SERVICE CARD



Non-asbestos joint compound (left) is part of line developed to meet several requirements. Ready-mixed topping compound, spray texture products and joint compounds in powder form are also offered. Gold Bond, Buffalo, N.Y. CIRCLE 251 ON READER SERVICE CARD

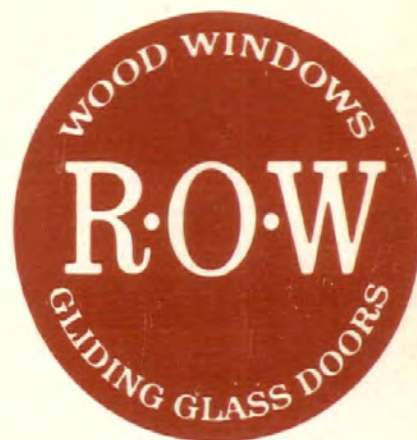
Drywall-finishing products now available without asbestos include ready-mixed joint compound shown at right. Asbestos-free drying-type powder compound is also among products which were field tested for a year. U.S. Gypsum, Chicago. CIRCLE 248 ON READER SERVICE CARD

Epoxy surface coating is sprayed on, then rolled or troweled to achieve a variety of textures (below). Water-based coating in choice of colors forms permanent, non-flammable surface with hard, tile-like finish. Bonnvener, Los Angeles. CIRCLE 249 ON READER SERVICE CARD





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## LITERATURE

### Storm water management: It's time for a new approach

Don't follow the common practice of carrying off excess rainfall as quickly as possible. Conserve it on the site.

So says a new manual (*Residential Storm Water Management: Objectives, Principles and Design Considerations*) published jointly by the Urban Land Institute, the American Society of Civil Engineers and the National Association of Home Builders. It explains how this practice has increased flooding downstream and decreased ground water supplies.

As an alternative the authors suggest retaining and absorbing more storm water on site. They stress that storm water is part of an area's total water resources, and so the quantity of water leaving a site and the speed at which it moves should remain much the same whether a site is developed or not.

Conserving water through on-site storage may cause short-term inconveniences, but in the long run it can even save money. Maximizing the storage potential of natural elements of the drainage area—lakes, ponds, large depressions—can reduce in-place costs of a storm water system. In addition, when incorporated into recreational amenities, such natural water storage enhances

the value of a project.

Planning that capitalizes on such existing resources instead of replacing or ignoring them, which the manual calls "natural engineering," reduces the extent of man-made elements necessary—or desirable.

For example, it is often unnecessary to rely entirely on underground pipe for a residential storm drain system if there are open channels or streams on the site. Some developers have enclosed small streams in conduits. According to the authors, this is a waste of money and can cause floods by concentrating the flow downstream.

The manual discusses in detail how to remove runoff and what to consider in laying out every stage of a storm water system, from storage to streets and curbs to installation of underground pipe. In fact, it can be used as a textbook by anyone wishing to implement a resource-conserving system.

It can also be used to help convince officials to change policies that favor traditional—and harmful—methods of managing storm water.

Copies are available from ULI, 1200 18th St. N.W., Washington, D.C. 20036. Cost is \$4.50 to members, \$7.50 to non-members.

## Heating/cooling products described

Electric heating products for residential, commercial and industrial use are cataloged in 48 full-color pages. An illustrated index and selection guide lists each product, giving primary use, wattage and Btu/hr. Full catalog entries provide additional information, such as optional accessories and specs. Baseboard heaters, fan-forced heaters, convectors, air circulators and thermostats are included. Emerson-Chromalox, St. Louis. CIRCLE 300 ON READER SERVICE CARD

Residential gas and oil furnaces are presented in a series of three brochures. The first discusses an oil heating system. Such features as an atomizing burner and an aerodynamic heat exchanger are pictured and explained. Sketches offer installation suggestions. The second brochure describes a compact gas furnace that can be installed in a crawlspace, attic or utility room. Its construction is outlined in text and shown in a cut-away drawing. The third shows an up-flow gas furnace with heat exchanger. Illustrated text tells how unit works and how safety controls prevent gas seepage. All three brochures discuss optional total comfort systems. Lennox, Marshalltown, Iowa. CIRCLE 301 ON READER SERVICE CARD

Electric baseboard heater designed for quick installation is described in six pages. Bulletin contains installation instructions, electrical specifications and wiring diagrams. A complete list of accessories—thermostats, switches, raceway enclosures and relay sections—is also included. I-T-E Imperial, Spring House, Pa. CIRCLE 302 ON READER SERVICE CARD

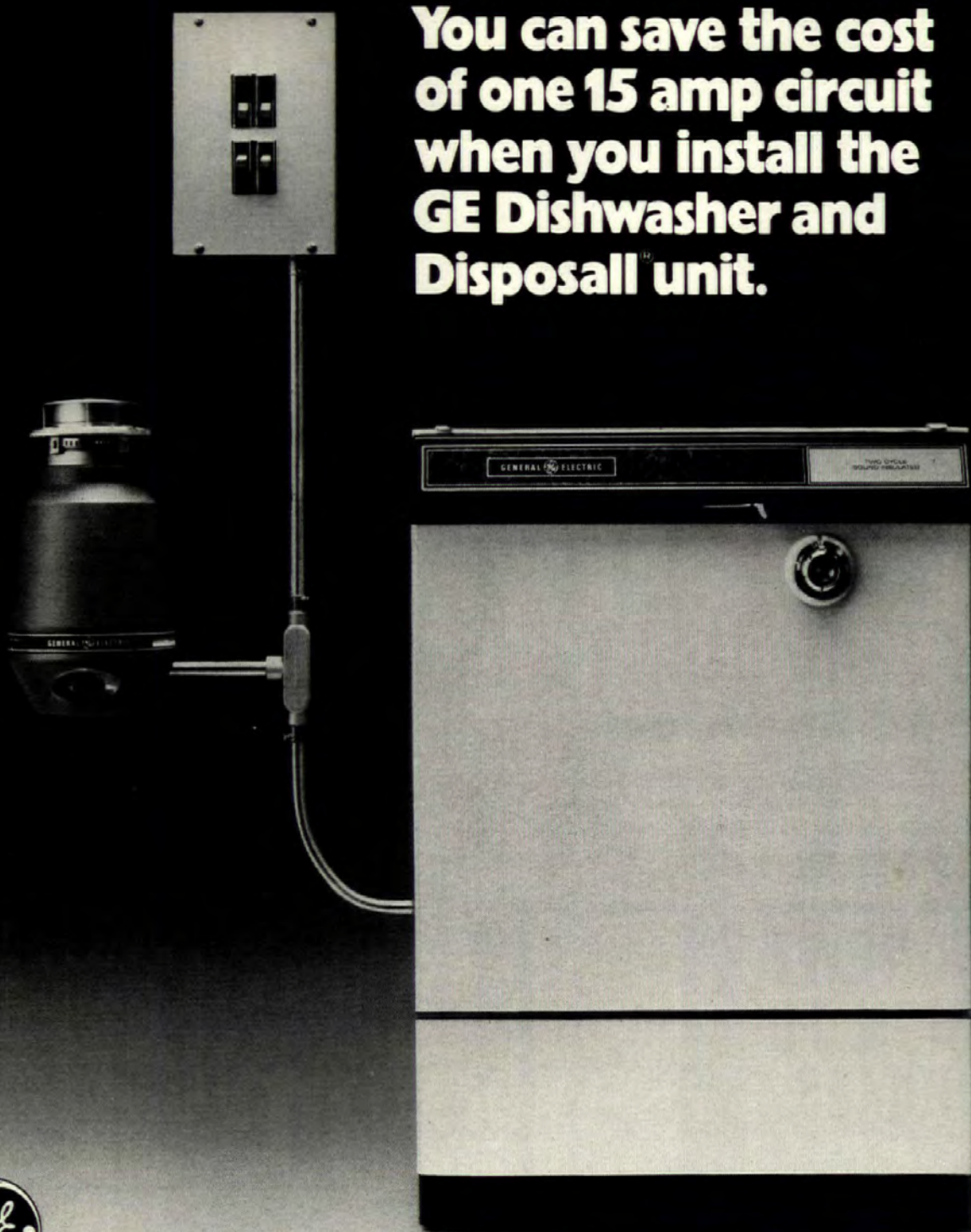
Automatic power attic ventilator information is given in an eight-page brochure. Text that tells how ventilators help keep building cool is accompanied by an explanatory diagram and a graph that compares summer attic temperatures with and without ventilator. Roof-mounted models and a cupola unit are explained. Sketches of roof designs show where ventilators can be installed, and optional humidistat that removes excess moisture is described. Specs are included. Kool-O-Matic, Niles, Mich. CIRCLE 303 ON READER SERVICE CARD

Cast iron boiler for residential or light commercial applications is described in four pages. Flyer offers illustrated explanations of design features and of an optional tankless water heater. Ratings, engineering data and dimensional drawings are included. Weil-McLain, Michigan City, Ind. CIRCLE 304 ON READER SERVICE CARD





**You can save the cost  
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when you install the  
GE Dishwasher and  
Disposall<sup>®</sup> unit.**



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Just one more way General

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For more information, write: SANURIL Systems, Diamond Shamrock/Electrode Corporation, P.O. Box 229, Chardon, Ohio 44024.

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## Classified Advertising

The market-place for the housing and light construction industry

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# House & Home presents Dave Stone's new book on how to turn wavering prospects into confident homebuyers



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His mastery of selling strategy, selling tactics and selling lines derives from perceptive insight on what really happens when salesman and prospect meet. In plain, simple language, Dave Stone describes the nature of these reflex reactions and how to cope with them successfully.



As an outstanding professional in face-to-face selling, Dave Stone knows exactly what it takes to turn wavering prospects into confident buyers.

In his new book on HOW TO SELL NEW HOMES AND CONDOMINIUMS, Dave distills over thirty years of rich and varied selling experience as salesman, sales manager, sales trainer and sales consultant.

Dave Stone digs deep below the surface to give you a clear picture of how buyers and sellers react to each other. He shows both as factors in the human equation that tip the scale—and the sale—in one direction or the other.

HOW TO SELL NEW HOMES AND CONDOMINIUMS is a basic book about *people*—the people who *buy* homes from the people who *sell* homes. It brings to sight all the hidden worries, fears and hopes that motivate buyers and sellers alike. It shows how these powerful emotions bounce back-and-forth between buyer and seller. And it reveals how the salesman's own attitudes, moods and expectations become part of his own selling problem.

With style and wit, Dave Stone describes the thinking, planning and understanding behind successful strategy, selling tactics and selling lines that make the sale.

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- How to isolate selection and material exhibits
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- Subdivision Control System for materials

## SALES TACTICS THAT WORK

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- Townhouse vs Condominium
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HH-4/76

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- How decisions are made: the balancing act
- Obstacles to decision-making
- 6 things that worry homebuyers
- 25 common objections and what they mean
- 19 buying signals and how to read them
- Buyer options as competitive factors
- Buyer Profile Guide to closing action
- Buyer's Household Inventory List
- Checklist for the buyer's big move

## PROFILE OF THE SUCCESSFUL SALESMAN

- The art of quick qualifying
- How to control your effect on others
- How to feature the buyer's perceived values
- 9 elements of siting you should know
- 14 types of construction knowledge you need
- How to schedule the 600-minute salesday
- Daily Work Plan for effective selling
- Sales Procedure Checklist
- Flowline of selling points for presentations
- 13 ways to enrich your prospect list
- 15 good thank-you gifts for buyers



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- I Industrial Construction File (yellow)
- L Light Construction File (yellow)
- D Interior Design File (black)





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There are two big differences in Nord bifolds. The kind of wood we use. And how much we use.

Only Western hemlock goes into our doors. It has a close, even grain that's ideal for stain, or any finish. More important, it's inherently stronger than woods such as pine. So our hemlock doors are just naturally stronger than common pine bifolds.

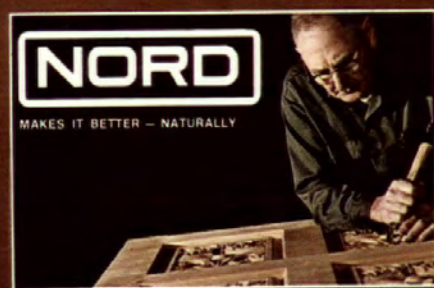
Secondly, we've added an extra quarter-inch to our doors. Instead of 1 1/8" thick like most other bifolds, Nord bifolds measure 1 3/8" thick.

What does it all mean? In terms of basic bending strength, Nord 1 3/8" Western hemlock doors are 91.63% stronger than 1 1/8" Western pine. (As computed by the Western Wood Products Association.)

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For full-color literature on the complete Nord bifold line, write "bifolds" on your letterhead and mail it to E.A. Nord Company, Everett, WA 98206.

*Photograph shows 39 Nord bifolds compared to 39 pine bifolds.*



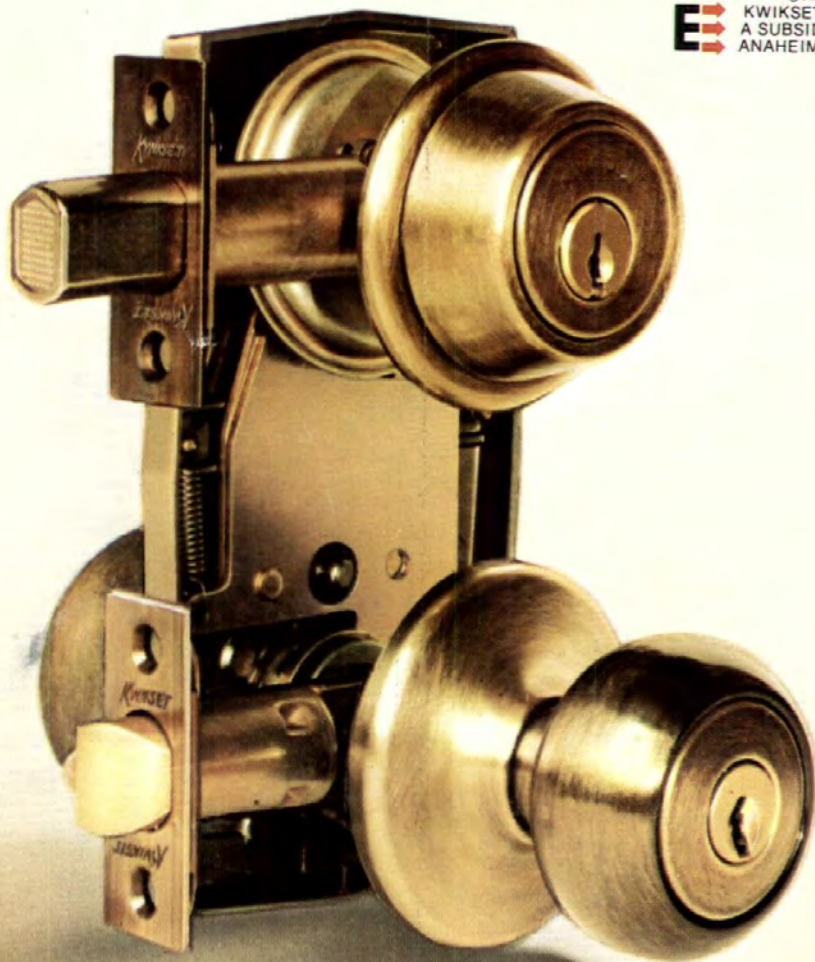


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**Because, right now,  
little things mean a lot.**

Okay, so a lock that costs maybe three times as much as a regular entry lockset is not exactly a little thing. But if you're building quality homes or apartments, you should consider Kwikset's Protecto-Lok because it's three locks in one. It's an entry lockset with deadlatch. It's a police-tested, extra-security deadlock with 1" deadbolt. And it has a special mechanism that permits opening of both locks from the inside with a single turn of the knob. In case of fire, this Protecto-Lok feature could literally be a life-saver. If you're building quality, put in a quality lock. It's a little thing that could mean a lot.

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