April 1976

House & Home

Graw-Hill's magazine of housing and light construction □□□ $2 per copy

8620 IST173 NWABO APR77
AMERICAN INSTITUTE ARCHITECTS
LIBRARY
1735 NEW YORK AV/NW
WASHINGTON DC
20006

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

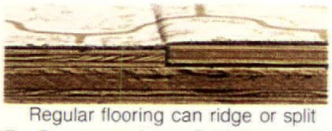
"Tredway™'s installed cost is very close to vinyl-asbestos tile. And we haven't had a single callback on any Armstrong Tredway floor."

An interview with
Rochester builder,
Art Titus of Ryan Homes

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

"With vinyl-asbestos tile, you need a two-layer subfloor. But with Tredway, you don't use any underlayment. Because of its built-in elasticity, you can install it directly over a T & G plywood subfloor and eliminate the plywood underlayment. So Tredway becomes totally competitive in cost to the combination of underlayment and tile.

"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?

"Our customers were quick to realize the advantages of a Tredway floor. They've lived through tile floors. They know the problems you can have with them. They also like the idea of a cushioned vinyl material that's tough, highly scuff-resistant and offers cleaning advantages over vinyl-asbestos tile. They've seen the TV commercials, the ads. They know the better things, like a Tredway floor, that are available on the market. Tredway is a very salable item, and we've had excellent results with the product."

Thanks, Art. We couldn't have said it any better.

You didn't mention that Tredway is also the only floor Armstrong recommends over particleboard, so we will. What about you? Why not give Tredway a try. You can select from four knockout Tredway patterns, in colors designed for today's interiors.

Tredway from Armstrong. Compared to tile installed over wood subfloors, you get far more floor for your flooring dollar.

Call your Armstrong flooring contractor today, while your next house is going up, and get all the facts about Tredway. Or drop a note to: Armstrong, 304 Sixth St., Lancaster, Pa. 17604.

FROM THE INDOOR WORLD® OF

Armstrong

NuTone Vanitories

for people who demand quality at any price range

NuTone

has a vanitory to fit the price range of any home you build or remodel

NuTone Vanitories have the quality built-in. They combine the look of fine furniture with super construction and durability. From the top of the line **Normandie** to the truly economical **Kensington,** all stiles and joints are hot-glued, *not* stapled. The sides are ½" thick and match the fronts in both color and grain. Hinges are self-closing and fully adjustable.

With NuTone you never have to sacrifice quality for economy. And, your distributor should have ample stock for prompt delivery.

When money is no object...

Normandie, with its intrinsic elegance and sculpted look of hand carved furniture, brings the old world warmth of "country french" into the bath.

Montreal, classic white, graced with gold, its exquisite detailing brings a uniquely regal concept to traditional design.

...and when money is.

Saratoga is the embodiment of simplicity. In creamy white or warm walnut, it gives the bath an air of fresh, yet traditional charm.

Kensington; boldly beautiful with its clean, contemporary lines, is the natural choice for the carefree "now" lifestyle.

Furnish the bath...close the sale.

NuTone is your single source for the completely furnished bath. In addition to our quality vanitories, we have the largest selection of decorator bath cabinets you'll find anywhere. Plus, a full line of accent mirrors, complementary lighting, ventilating fans, auxiliary heaters and NuTone's famous Hall Mack line of decorative accessories.

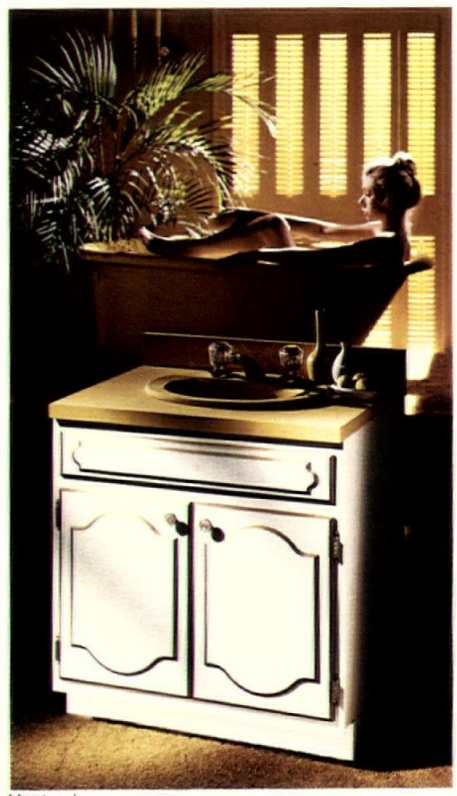
See all these imaginative bathroom ideas and more at your nearby NuTone Distributor. For his name **DIAL FREE 800/543-8687** in the continental U.S. except in Ohio, call 800/582-2030.

NuTone Housing Products

Scovill

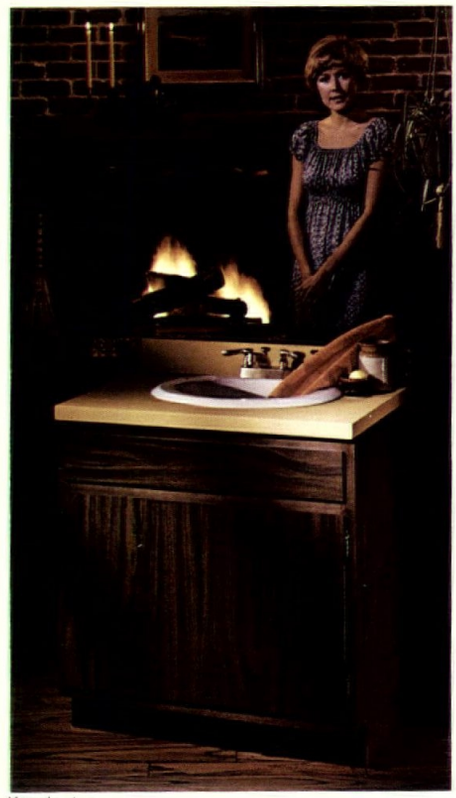
Madison and Red Bank Roads, Cincinnati, Ohio 45227
Dept. HH-4. Form 2984, Printed in U.S.A.

Normandie



Montreal

Saratoga



Kensington

DITOR
ohn F. Goldsmith

ANAGING EDITOR
Iaxwell C. Huntoon Jr.

ENIOR EDITORS
dwin W. Rochon
I. Clarke Wells, Western Editorial Office

SSOCIATE EDITORS
Iatalie Gerardi
lise Platt
Iichael J. Robinson
Iarold Seneker
ine R. Vollman

RT STAFF
oseph Davis, *director*
Cristine Hafner Wong, *assistant*
an V. White, *consultant*
Dyck Fledderus, *illustration*

DITORIAL ASSISTANTS
arbara Behrens Gers
Constance S. Russell
Iary Sarlo

OARD OF CONTRIBUTORS
enneth D. Campbell
arole Eichen
lfred Gobar
dward N. Kelley
obert Mylod
ohn Rahenkamp
enard L. Wolffe

ONSULTING ECONOMIST
eorge A. Christie

ICGRAW-HILL WORLD NEWS
alph Schulz, *director*
0 domestic and
nternational news bureaus

DVERTISING SALES MANAGER
ohn S. Renouard

USINESS MANAGER
ito De Stefano

ARKETING SERVICES MANAGER
Ienry G. Hardwick

IRCULATION MANAGER
oseph D. Holbrook

UBLISHER
lake Hughes

ABP ABC MPA

Iouse and Home, April 1976, Vol. 49, No. 4, Published monthly by McGraw-Hill Inc. Founder: James H. McGraw (1860-1948). Subscription rates, U.S. and possessions, Canada and Mexico . . . for individuals within circulation specifications, $14 per year; for others, $24 per year. All other countries, $36 per year. Single copy, if available, $2. The publisher reserves the right to accept or reject any subscription. Please allow four to twelve weeks for shipment.

Executive, Editorial, Circulation, and Advertising offices: McGraw-Hill, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 997-4872. Second class postage paid at New York, N.Y. and at additional mailing offices. Published at 1221 Avenue of the Americas, New York, N.Y. 10020. Title® in U.S. Patent Office. Copyright© 1976 by McGraw-Hill Inc. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without consent of copyright owner.

Officers of McGraw-Hill Publications Company: Gordon L. Jones, president; Paul F. McPherson, executive vice president; J. Elton Tuohig, executive vice president, administration; David J. McGrath, group publisher—vice president; senior vice presidents: Ralph Blackburn, circulation; John B. Hoglund, controller; David G. Jensen, manufacturing; James E. Boddorf, planning & development; Ralph R. Schulz, editorial.

Officers of the Corporation: Shelton Fisher, chairman of the board; Harold W. McGraw Jr., president and chief executive officer; Robert N. Landes, senior vice president and secretary; Ralph J. Webb, treasurer.

This issue of House & Home is published in national and separate editions.

Postmaster: Please send form 3579 to Fulfillment Manager, House & Home, P.O. Box 430, Hightstown, N.J. 08520.

House & Home

McGraw-Hill's magazine of housing and light construction

Volume 49 Number 4/April 1976

FEATURES

59 Energy and homebuilding: Hooray for common sense—Editorial
60 Saving energy: How builders are doing it . . . and selling it
60 Here's what leading builders offer in their energy-saving packages
62 Here's how leading builders sell their energy-saving packages
66 Insulation can make the big difference, but only if it's handled right
68 A new role for the old duplex (but don't call it that)
74 Working out of a dual disaster
80 New fourplex design chalks up a speedy sellout
84 An $8-million shopping mall from a row of old apartments
88 It's time to take a fresh look at the heat pump

NEWS

5 The savings and loans get everything their own way in Washington
8 Washington and Wall Street join to rescue state housing agencies
8 Builder Bill Levitt sets up a new shop
13 Private warranty plans spring up in competition with HOW
13 First Mortgage Investors staves off bankruptcy
16 New market survey predicts a stronger housing revival
16 Apartment developer L. B. Nelson buying an eastern homebuilder
18 Kaufman & Broad makes big Chicago comeback with back-to-basics strategy
18 Supreme Court refuses to upset Petaluma's curbs on building
20 Japan discovers the 2x4—and U.S. lumber mills discover a market
24 Chicago company offers a "shopping service" to rate builders' salesmen
28 Battered mobile home industry sees better year a-comin'
32 Builders on the move: Promotions and appointments in the industry
32 Deltona taking over Cavanagh's projects on Florida West Coast
40 Aggressive remodelers seek a bigger slice of the housing dollar
42 Mini-warehouse syndication: cash return instead of tax shelter

DEPARTMENTS

34 Housing stocks prices
44 The apartment scene
Stay out of the Great Security Race: It's an expensive trap
48 The money scene
Following some simple rules helps you make workout deals
50 The merchandising scene
Give an outdated model complex a just-opened look
54 Letters
91 Readers service card
95 New Products
Water-saving toilet and solar-assisted heat pump are featured
122 Literature
Storm water management manual is featured
124 Classified
126 Advertisers index

Cover/Design: Jan White
Photographer: Sid Carson

Take it from Dave Lennox . . .

THIS NIFTY WEATHER MACHINE IS YOUR ANSWER TO

ASHRAE 90-75 ENERGY GUIDELINES.

The new Lennox DSS1 system lets you design your own single zone HVAC package to surpass ASHRAE 90-75 energy guidelines. The DSS1 offers extraordinary flexibility... efficient operation and service... exceptional energy savings... and consequent cost savings.

Here are a few of the many DSS1 options that give you the right size, right energy, right cost for your application:

- 26 to 45 tons cooling; up to 950,000 Btuh heating.
- Two-speed, first stage compressor saves energy.
- Heat recovery package (allows recovery of heat from refrigeration in supermarkets and restaurants; controls humidity without losing heat).
- Power Saver™ package (allows use of outdoor air for cooling).
- Power Saver II™ (allows recovery of heat from lighting).
- Latent Load Discriminator™ (increases partial-load EER up to 30%).
- Heat pump options available soon.
- Solid state, energy-saving control system.

Get the facts.

For complete information, see your Lennox Territory Manager. Or write: Lennox Industries Inc., 665 South 12th Avenue, Marshalltown, Iowa 50158.

LENNOX "Attaboy, Dave!"

AIR CONDITIONING • HEATING

Nifty problem-solving ideas from Lennox.

CIRCLE 4 ON READER SERVICE CARD

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

ongress marched right up to e brink of a decision to elimiate the savings and loan inistry's favorite protective deice—deposit yield ceilings, sually referred to as Regulation —and then marched back.

It chose instead to lock the eilings in place by statute until 981.

Further, it now looks as if the eilings will be safe indefinitely nless the marketplace proves at Regulation Q can no longer revent deposits from running ut of mortgage-lending thrift stitutions.

The big winner is the savingsnd-loan industry. Not only are &Ls gathering up all kinds of ew powers on Capitol Hill; ey are escaping the burden of aving to push an annual extenon of the Q ceilings through ongress every year. That chore ad been getting a bit difficult, hat with allegations in Conress that the ceilings provide r an outright rip-off of the mall saver.

The hold-down. The ceilings mit the amount of interest that anks and thrifts may pay on deosits of small denominations. he ceilings, S&Ls insist, are erefore a necessary shelter for rifts from deposit raids by anks.

In the Senate the lobbyists for e thrift industry had won their ght in December, when the pper chamber approved the Fiancial Institutions Act (FIA). riginally intended to end Reglation Q, the act, in its muchmended final version, was lavsh in giving new powers to rifts and was so muted in its ossibility of dropping Q that e latter seemed quite safe.

The fire-eater. On the House ide, the Banking Committee's hairman Henry Reuss (D., Vis.) had breathed fire against egulation Q in November. His Discussion Principles" for fiancial institution reform flatly tated that "in no event" would Q be allowed to continue eyond a transistion period of ve years, and they had added:

"There should be no promise f a final review before the ceilngs are eliminated."

Could Reuss have sold that iewpoint to his House colleagues it might have become aw, for he and the Ford adminisration 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 dialgoue 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

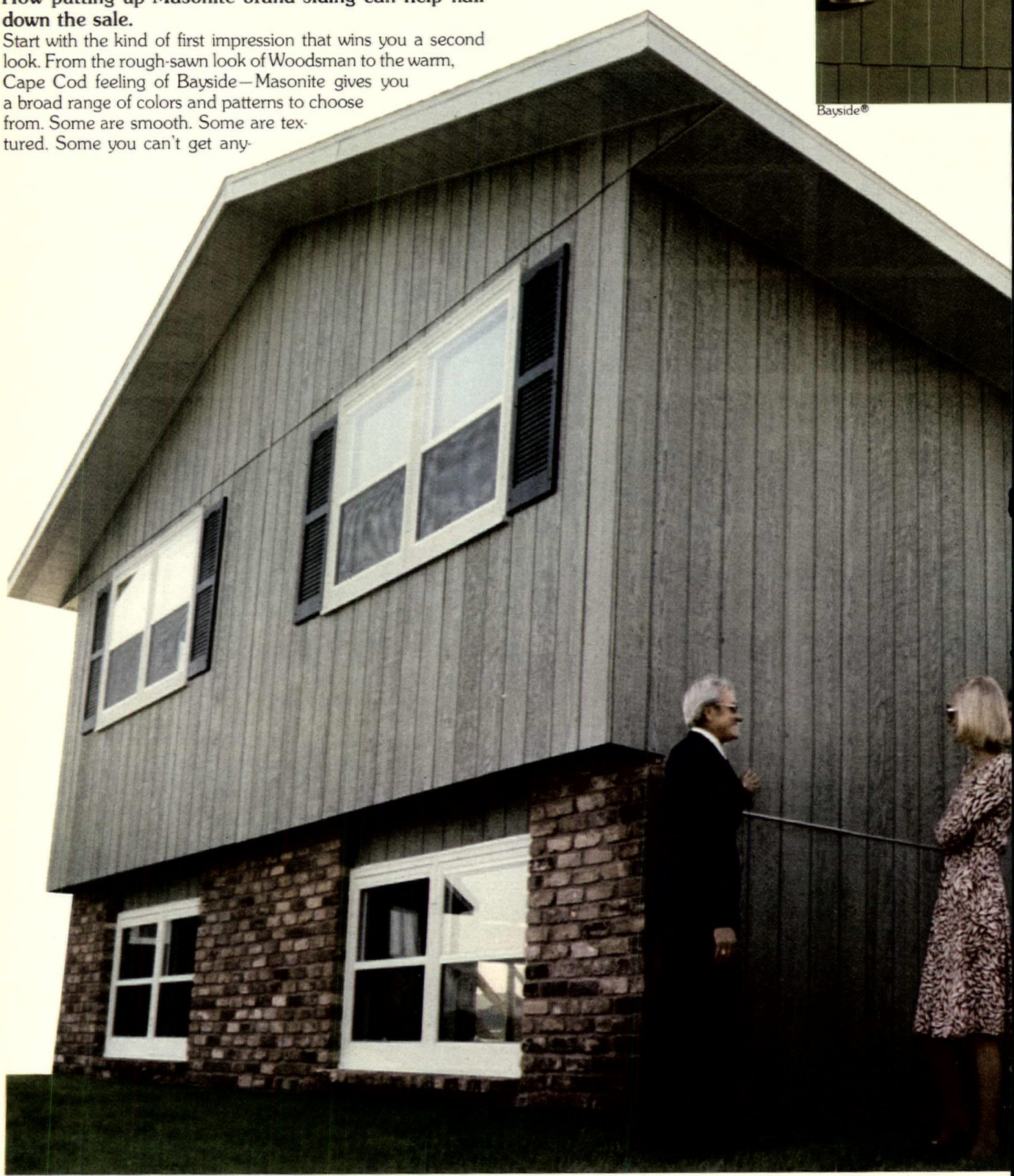
Masonite® siding–selling with it

The rich look and low installed cost of Masonite brand siding can make your homes easier to sell—and harder to compete with. It gives your salesmen something to talk about—and your customers something to think about—every step of the way from curbside to closing.

How putting up Masonite brand siding can help nail down the sale.

Start with the kind of first impression that wins you a second look. From the rough-sawn look of Woodsman to the warm, Cape Cod feeling of Bayside—Masonite gives you a broad range of colors and patterns to choose from. Some are smooth. Some are textured. Some you can't get anywhere else. And some would cost too much if you used the real thing. But with all of them at your disposal, you can capture precisely the architectural effect you're after.

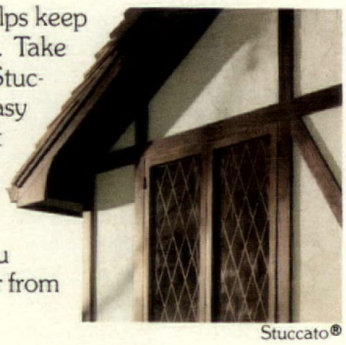
Bayside®



lot easier than selling against it.

Masonite brand siding helps keep ur cost competitive, too. Take e skip-troweled look of Stucto. It goes up quick and easy in 4′ by 8′ panels. And it on't take a crew of spel installers.

Prefinished panels are nother way to save you me. And keep the weather from setting your schedule.



Stuccato®

he way we make ding helps you ake the sale.

he dent-resistance of asonite brand hardoard siding is tough compete with. Ladrs won't leave an imression on a Masonitesided home. Nor will ailstones. Unlike metal siding, Masonite brand siding doesn't have to be grounded. And it won't interfere with TV reception.

Colorlok®

Selling an energy-efficient home? Like wood, Masonite brand hardboard is a good thermal insulator. It adds to the insulation of your walls to help with climate control winter and summer.

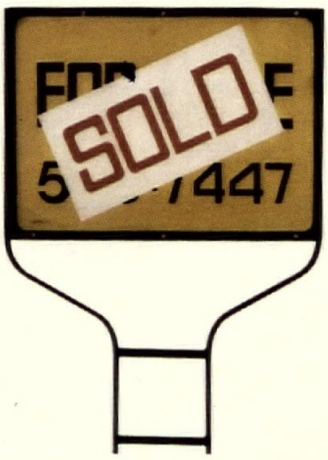
Masonite brand siding provides a sound barrier that's worth talking about. It locks out the rattle of a driving rain. And it won't creak or crackle with temperature changes.

Beauty that lasts can make a home a better investment. And Masonite brand siding is tough enough to keep its good looks through all kinds of weather. There's no grain that can "check." No knots that can bleed. No metal to corrode. And no cold-weather brittleness to beware of.

Cover your homes with selling advantages.

Cover your homes with Masonite brand siding. More and more builders do. Because selling a home with Masonite brand siding is a lot easier than selling against one.

Get the whole story on our hard-selling sidings from your Masonite distributor. Or write us direct. Write: Exterior Siding Division, Department HH–4, Masonite Corporation, 29 North Wacker Drive, Chicago, Illinois 60606.



When you ask for Masonite siding, make sure you get the Masonite brand.

MASONITE CORPORATION

Masonite, Bayside, Colorlok and Stuccato are registered trademarks of Masonite Corporation.

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

'Said it couldn't be done'
Bay State's White

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 had 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 original 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

Insulation is cheaper than oil

Skyrocketing prices for oil, natural gas, and electricity have turned the business of building houses into a whole new ball game.

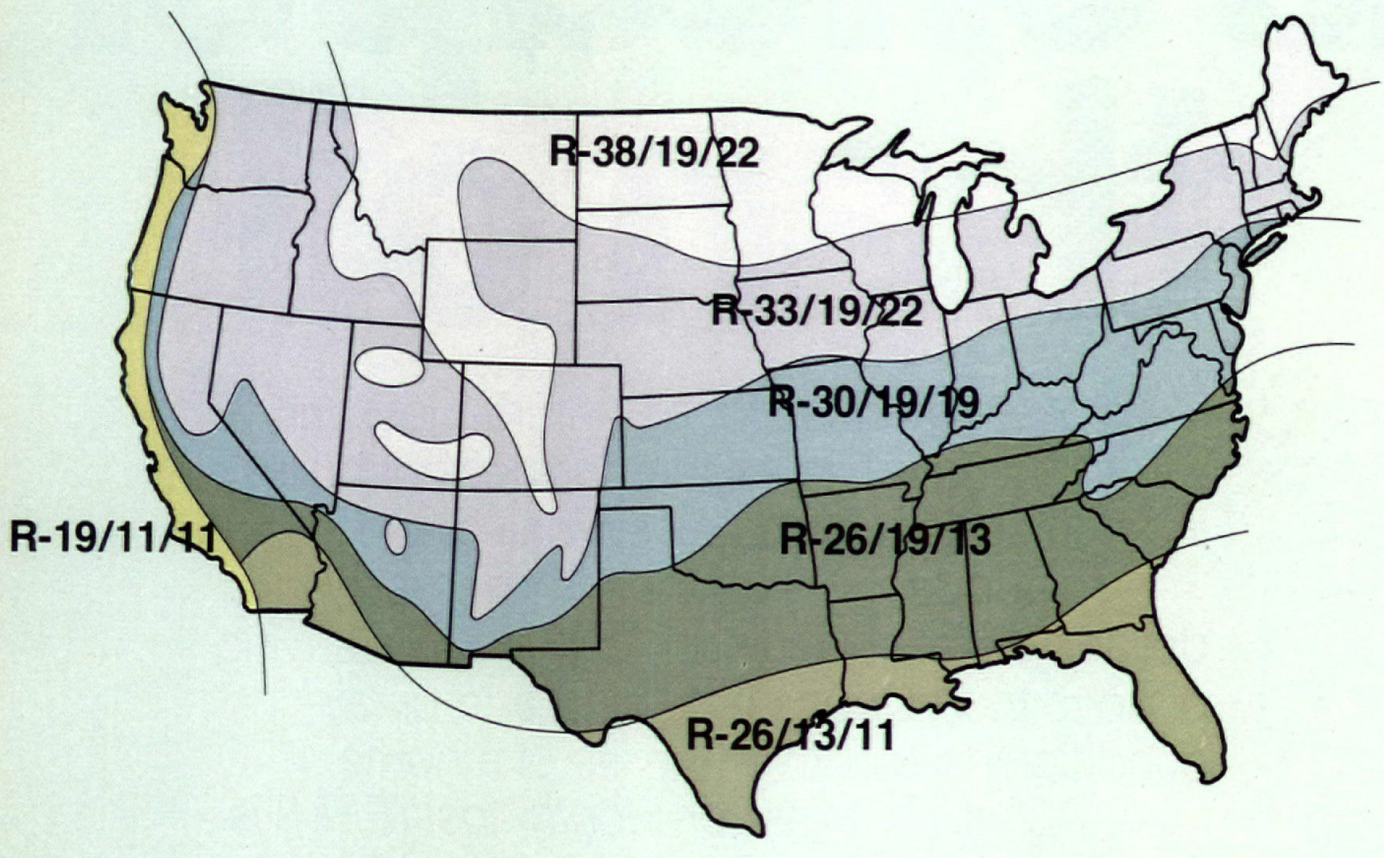
Suddenly, an extra few hundred dollars' worth of insulation can mean a saving of up to *thousands* on heating and on air-conditioning bills over the life of a home.

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

Turn the page for Owens-Corning's rundown of totally new, economical levels of insulation recommended for the era of high-cost energy. New recommendations based on the fact that insulation is cheaper than oil!

Insulation is
Today's home buye
you to

Here are the new economical levels of insulation recommended by Owens-Corning for six U.S. climatic zones



New economical R values:
Ceilings/Walls/Floors

How did Owens-Corning arrive at these numbers?

Very carefully. Months of computer analysis were cranked into it—from degree days and cooling hours in 71 U.S. cities to insulation costs, present energy costs, projected energy costs, and investment criteria.

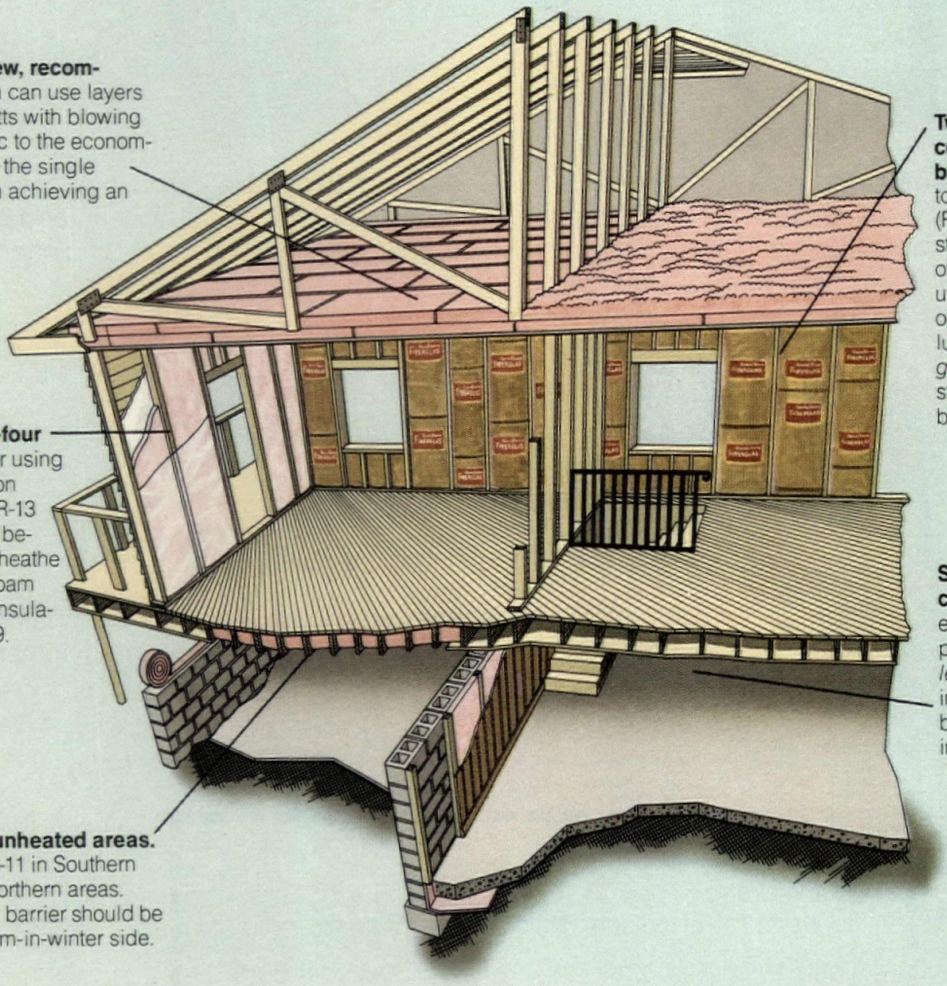
The result? Recommendations which represent a balance between the cost of any additional insulation and the value of the energy saved. *Guidelines* to the *most economical* amount of insulation for ceilings, walls and floors in each area.

The new standards recommended above are averages for each heating/cooling zone, expressed in "R's"—the Resistanc 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

heaper than oil.
nows it, and he expects
now it, too!

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



sulate ceilings to new, recom-ended R-values. You can use layers batts, or combine batts with blowing ol. Insulating the attic to the econom-al R level is probably the single st important factor in achieving an ergy-saving home.

oper R with two-by-four uds, too. If you prefer using o-by-four studs, 16″ on nter, you can install R-13 l-wall batt insulation be-een the studs, then sheathe e exterior with rigid foam ard. This increases insula-n value to about R-19.

nsulate floors over unheated areas. stall a minimum of R-11 in Southern nes, up to R-22 in Northern areas. here required, vapor barrier should be laced 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.

iberglas* building insulation in a orthern city like Minneapolis to bout 8″ (R-26) for most outhern states.

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

How to hold costs down. The iagram above gives a few valuable tips on how to build energy-tight homes without driving costs through the roof.

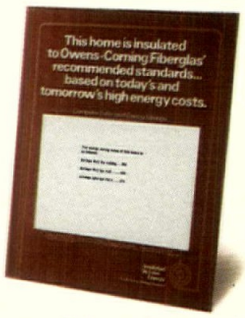
These ideas are tried and proven by builders of super-insulated houses. Houses that cost little more than conventional dwellings, and are slashing heating and air-conditioning bills.

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

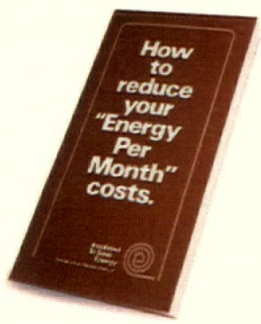
Builders must respond just as quickly and dramatically to the realities of EPM—the homeowner's Energy-Per-Month costs for heating and cooling—as Detroit has to the realities of MPG.

CIRCLE 11 ON READER SERVICE CARD

Ready now! Free Owens-Corning sales aids to help you turn energy-saving houses into sales dollars fast.

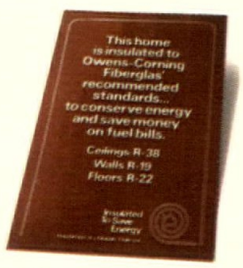


Model Home Sign. Spotlights you as a responsible builder of an energy-conserving home. Shows estimated energy savings *on your home* vs. a conventionally insulated home.



Consumer Brochure. Explains to your home buyers how insulation will reduce their Energy-Per-Month costs, and offers other energy-conserving hints.

Thermostat Hangtag. Assures prospects you've installed the recommended amount of Owens-Corning Fiberglas insulation—to save them fuel and money year after year.



Permanent Home Plaque. A continuing reminder that your well-insulated homes offer lasting value!

Mr. A. W. Meeks
Owens-Corning Fiberglas Corporation
Fiberglas Tower, Toledo, Ohio 43659

Right! My buyers care about Energy-Per-Month costs. Give me more information!

Name_____

Address_____

City_____ State_____ Zip_____

*Reg. TM. O-C.F.

Owens-Corning is Fiberglas

OWENS/CORNING FIBERGLAS TRADEMARK®

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."

Extrequity. Covington Brothers in Fullerton, Calif. has also been offering a warranty program of its own. It is called Extrequity [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.

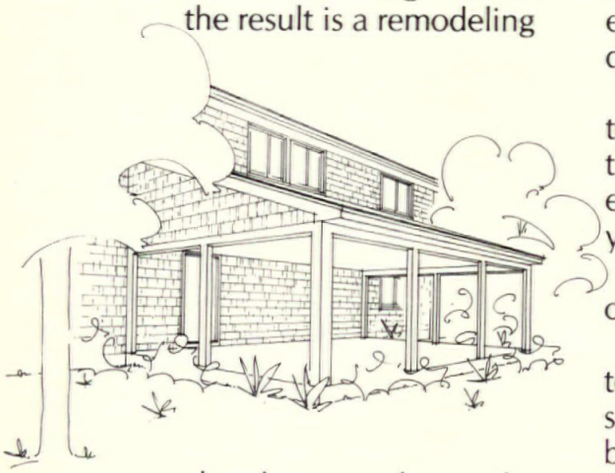
Watchful waiting. The four savings banks, though they appeared to be mollified, did not seem to have been lulled. They have warned FMI that if the agreements aren't executed in a "timely" fashion, they will move to reinstate their petition.

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.

PPG ANNOUNCES A PORCH ENCLOSURE THAT DOESN'T BECOME AN ENCLOSED PORCH.

It becomes a beautiful, practical—and, for you, very profitable—Garden Solarium.

We commissioned the architectural firm of Herman York & Raymond Schenke to design it. And the result is a remodeling



plan that may change the way you think about porch enclosures.

For one thing, this plan can make it easier for you to sell an upgraded job. And easier to do the job once you've sold it.

The main reason is the glass.

Since a Garden Solarium means a lot of sun, the plans call for a lot of glass. And the glass comes in standard 6-foot patio doors, so it's easy to install.

The size of the glass doors is constant. The only real variables are the other wall elements behind the fireplace and adjoining the house. Thus the plans are easy to adapt to different dimensions.

And besides being easy to install and easy to adapt, the patio doors are also easy to get—right from your local supplier.

The glass has a lot to offer your customers, too.

It's PPG Herculite® K tempered safety glass. It's safer than ordinary glass because if it breaks, it crumbles into small pieces that reduce the chance of serious personal injury.

Another thing your customers will like is that the plans call for Twindow® double-glazed patio doors. This helps reduce heat loss and cold drafts so they can enjoy the room all year round in total comfort.

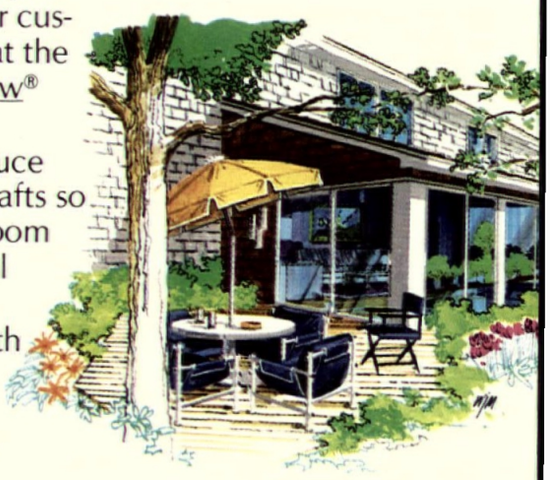
In the summer, with sliding screens, your customers can enjoy both cool breezes and easy access to the beautiful sun deck.

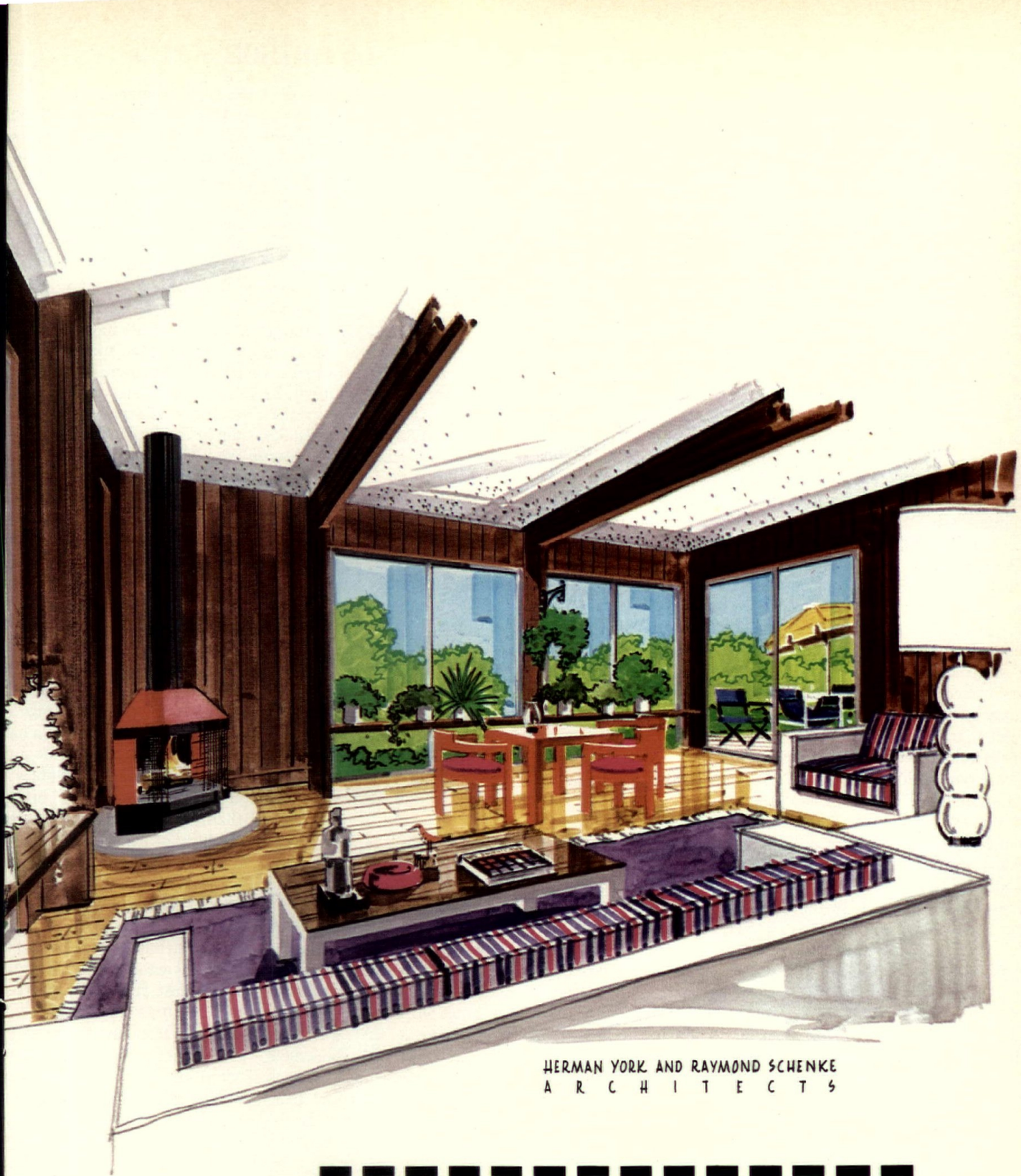
This Garden Solarium is indeed something special. And you can tell by now that it's far superior to an ordinary enclosed porch.

We think your customers will agree. And we've prepared a complete plans brochure to help you show them what this Garden Solarium is all about.

So write us for our free full-color plans brochure, and find out more about this beautiful Garden Solarium.

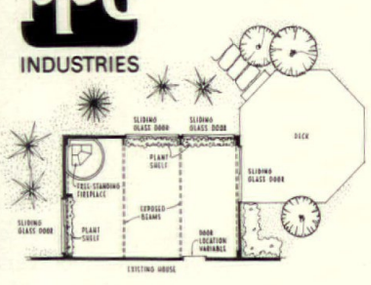
PPG:
a Concern for the Future





HERMAN YORK AND RAYMOND SCHENKE
A R C H I T E C T S

PPG
INDUSTRIES



PPG Industries, Inc.
One Gateway Center, Pittsburgh, Pa. 15222

Please send me the free full-color plans brochure so I can show my prospects how the PPG Garden Solarium adapts to their homes.

Name_____

Company_____

Address_____

City_____

State_____ Zip_____

HH-146

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 ¾% in many local markets (to an average of 8½% 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 ads. "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 distribution 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 1¼- to 1½-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 1½ to 2. Nelson is offering either 1½ 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.

We know more about the siding business than anyone else. Our sales tools prove it.

Mastic Corporation has been a leader in the siding business for 44 years. And because siding is our only business, we've learned a lot about what you need to make the sale.

It starts with a good product, and Mastic has several of them, including aluminum, steel and mineral-surface siding. And the leader in the *vinyl* siding business, Contour T-lok® solid vinyl siding made from Duranyl®. And we've just added two brand-new colors to the Contour T-lok line to give you an even better selection.

But in addition to a good product, you need effective sales aids to help you get the order. So we've put together the most comprehensive program of promotional material and sales tools our dealers have ever had . . . a national advertising and public relations program that will open doors. Local promotional material, including radio and television commercials that will help you conduct your own advertising campaign. Better closing tools, including a new in-home presentation book that will make it easier than ever to answer your prospects' questions about siding for the house. A referral program. Inserts and direct mail. New literature. And plenty of other hard-working tools that will make your job easier and help you make more money.

If this sounds like the kind of help you could use, we'd like to talk with you. Send the coupon or call 800/348-2861 or 219/288-4621. Ask for the Money Man.

HH-476

Mastic Corporation
131 S. Taylor Street
South Bend, Indiana 46601

Please tell me more about what you can do for me.

Name

Company

Address

City State Zip

- ☐ Architect
- ☐ Contractor/ Developer
- ☐ Distributor
- ☐ Dealer

Plant locations at South Bend, Indiana; Elizabeth, New Jersey; Chicago, Illinois and London, Ontario.

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.

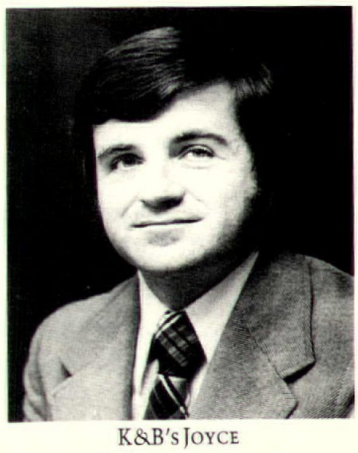
"They made quality control almost a fetish," Nelson said. "They went all out in designating numbers of people who had no responsibility other than quality control."

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 circumstances, 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.



K&B's Joyce
'We have overcome'

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 represente in all areas of the Chicago mar ket," said Joyce. "We want to be We are optimistic about 1976 We want to be ready to take ad vantage of a market that coul turn out to be a good one. If i doesn't materialize, we'll be sat isfied to get our sales in smalle numbers from each of the devel opments."

Joyce believes, however, tha the market could show a majo upswing later this year. Despit rumblings in Washington an concern over variable interes rates for S&Ls, Joyce says mort gage money is more readil available now than it has bee for months. He predicts tha mortgage money will loosen fu ther as savings continue to se records in the S&Ls.

Federal policy. "The decreas we see coming in the conven tional mortgage rate will b combined with a winding dow of the federal programs inst tuted to breathe life into th housing industry," said Joyce.

"You know that this industr and the country in genera must—and I believe will—lear not to rely on the artificiall supported 7¾% rate. It has bee available only because of subsi dies, and if my predictions ar correct, those subsidies are at a 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 dis trict judge in Cincinnati rule for the first time that redlinin a neighborhood for racial rea sons is illegal under the Civ Rights Act of 1968.

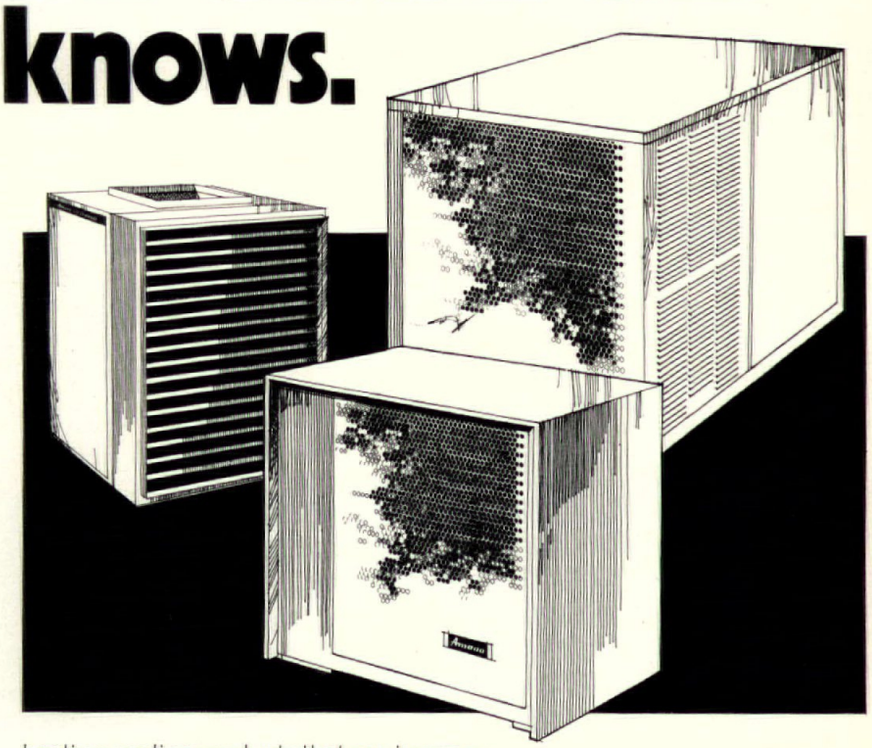
The act, Judge David Porte observed, makes it illegal to re fuse to sell or rent "or deny dwelling" because of race.

The defendant, Oakley Build ing and Loan Co., was accused o refusing a mortgage to a whit couple, Mr. and Mrs. Robert L Laufman, for a house in the ra cially mixed North Avondal section of Cincinnati becaus the area was redlined. A motio by Oakley claiming that redlin ing was not yet outlawed b Congress drew the judge's 2 page opinion; the case itself wa not decided.

Who knows how to build reliable heat pumps that can save your customers 26% to 61%* in heating costs?

Amana®

knows.



With almost 20 years' experience under its belt, Amana knows how to build dependable heat pumps. Reliability which can mean fewer call backs and greater profits for you. With Amana you can take advantage of our special sales, application and service training program that will make you a heat pump expert, too.

Choose from a complete line of package and remote heat pump systems including universal indoor sections with supplemental heat factory installed to fit any climate. Package units have space allowed in the unit for easy addition of strip heaters.

Each Amana heat pump has Amana's proven reliable time and temperature activated defrost control, rugged Powerpact compressor, and Amana-built coils that meet rigid performance standards.

Every Amana heat pump is factory assembled and run-tested for quick installation. You and your customers can count on dependable, carefree operation.

At Amana we think you should know what we know about quality energy saving heating-cooling products that can increase your sales and profits.

*Compared to a conventional electric furnace over an entire heating season. Based on design conditions and Seasonal Performance Factors for these cities: Minneapolis, MN.—26.58% Savings; Kansas City, MO.—44.13%; Philadelphia, PA.—48.72%; Atlanta, GA.—55.56%, Tampa, FL.—61.09%; San Francisco, CA.—61.39%. Savings will vary with climate and weather conditions.

Look to Amana today for the energy saving ideas of tomorrow.

Amana®
COOLING • HEATING

AMANA REFRIGERATION, INC., AMANA, IOWA 52203 • SUBSIDIARY OF RAYTHEON COMPANY

IF YOU'D LIKE MORE INFORMATION ON AMANA ENERGY SAVERS, WRITE DEPT. C-163, AMANA, IOWA 52203

CIRCLE 19 ON READER SERVICE CARD

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

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.

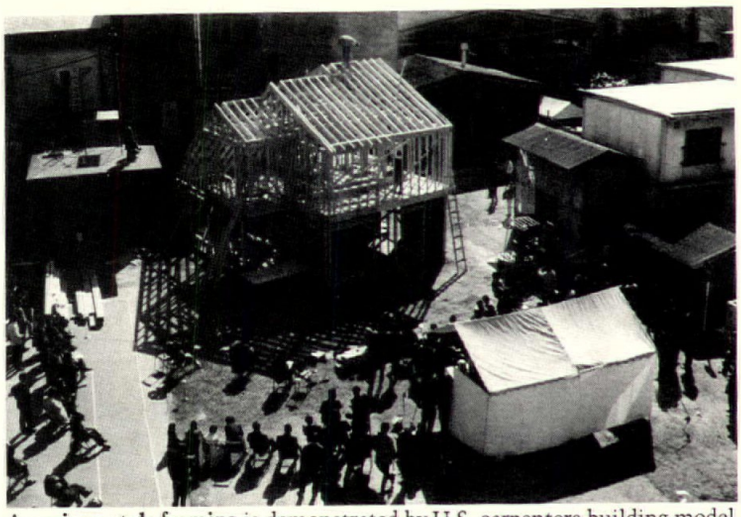
Both the United States and Canada are now promoting the exportation of dimension lumber to Japan. Most of the lumber is expected to be supplied from the Pacific Northwest states and western Canada. The Western Wood Products Assn. (WWPA), Portland, Ore. estimates that the U.S. share of the market might 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 average house is in labor (as against 15.5% in the U.S.). At the same time, land prices have skyrocketed.



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

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, tataki-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 carpe ters and is developing a 2x town in the Tokyo area. Nissh Iwai started speculation sal last April and plans to build se eral hundred houses. Oth builders have similar projec scheduled. A development ne Osaka will combine traditiona platform-frame and prefa ricated houses. With all the a tivity in this field by local buil ers, there is unlikely to be place in the market for dev lopers from the U.S. or els where.

Trading companies like Mi sui and Kanematsu-Gosho a realigning their organizations handle the expected large-vo ume imports of 2x4s.

Scramble for trade. Matsuba said Canada, particularly Britis Columbia through the Forest I dustries Council of British C lumbia, has been more acti than the U.S. in promoting 2x sales.

However, a large U.S. deleg tion visited Japan last fall on trade mission sponsored by th Pacific Northwest Region Commission. The group i cluded Governors Robert W Straub of Oregon and Daniel Evans of Washington, Lieute ant Governor John V. Evans Idaho and representatives of th lumber and plywood industrie

This spring, under sponso ship of PNRC, 12 to 15 Japane government officials and hou ing leaders will be brought Seattle for a Japanese-America wood symposium.

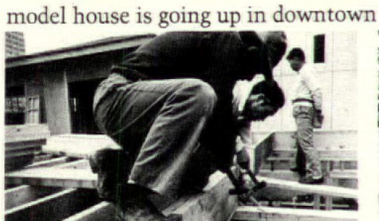
Robert Hunt, WWPA direct of marketing services, said, "W will conduct seminars, take th Japanese through mills and building sites, and stress th value of our quality control they will accept products grade here without further grading.

Obstacles. Several trade ba riers must be ironed out befo lumber export can proce smoothly, according to Hun The Japanese have slightly di ferent grading specification and require reinspection and l beling after the lumber arriv in Japan, adding extra cos which eventually have bee passed on to the homebuyer.

Most exports to Japan ha been Douglas fir and hemlock

—Jenness Keen
McGraw-Hill World New
San Francis

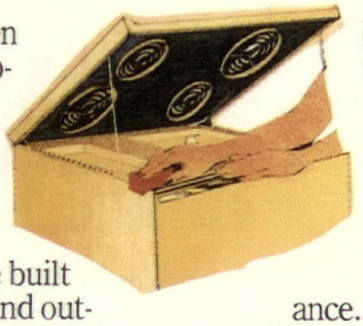
Tilt-up panel is assembled in American manner by Japanese carpenters. This model house is going up in downtown area so crowds can take a look.



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

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

Compare Caloric and discover why other ranges don't compare.



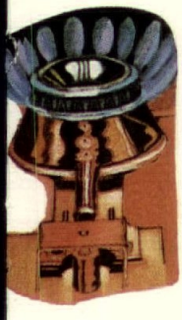
A beautiful kitchen can do wonders in helping to sell a house. Especially when the range makes a woman hold her breath in admiration.

Caloric ranges are built to do just that. Inside and outside they're the most beautiful ranges in America. The most complete line of gas and electric ranges: self-cleaning, continuous-cleaning and standard porcelain—and the new smooth-top electric models.

They're all designed for the most beautiful styling today. With modern wood-grain back panels. Elegant black glass oven doors. Easy-to-reach controls (but out of the reach of kids). And much more.

Your customers won't find any other range that offers all the features *and* quality they'll find in a Caloric, gas or electric.

Gas ranges with no pilot lights.



Caloric gas ranges have an automatic pilotless ignition. They use 30% less gas than ordinary gas ranges.

The Ultra-Ray Infra-Red gas broiler uses 30% less gas, too—and gives meat a delicious char-broiled flavor.

Caloric electric ranges have No-Drip edges around the cooking surface to keep spills off the sides and floor. And easy-slide utensil storage drawers. Hi-speed snap out units and many other features women look for in an electric.

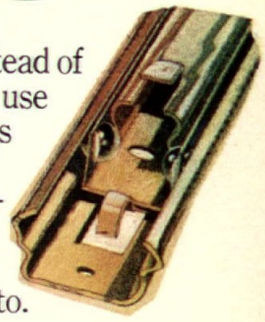
Gas or electric, Caloric ranges have the easy-to-clean Tilt-Top cooking surface. Just lift it up and wipe the pan clean.

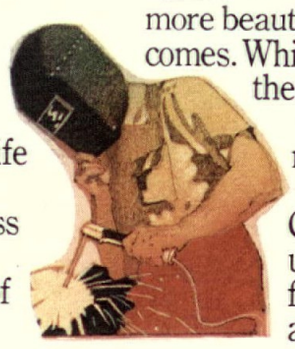
Quality is not skin deep.

Quality includes reliability, craftsmanship and perfromance. And they have to be built in right from the start. So we use only the finest cold-rolled steel.

We spot-weld the gas range chassis into a single tough unit. Then cover it with two coats of porcelainized enamel to add longer, rust-free life to a range.

And we use stainless steel and other rust-resistant, corrosion-proof metals on the exteriors and interiors, instead of chrome. We even use steel ball-bearings instead of stick-prone plastic gliders so drawers will open when they're supposed to.





Gas or electric, Calorics are great salesmen.

As people keep looking harder at what they pay for, the more beautiful a Caloric becomes. Which helps you make the sale you're after.

So call your nearest Caloric representative and let Caloric's 85-year reputation as America's finest range become a salesman for you.

LIMITED WARRANTY TO CONSUMER ★ Good Housekeeping PROMISES REPLACEMENT OR REFUND IF DEFECTIVE

Inside and outside, America's most beautiful ranges.

CALORIC®

Caloric Corporation, Topton, Pa. 19562

A Raytheon Company

CIRCLE 21 ON READER SERVICE CARD

Introducing the exterior insulation and finish system Zonolite® Thermoclad.™

Thermoclad is an integrated insulation and finish applied to the outside of the building, for architecturally sound reasons:

☐ More efficient HVAC performance – because the structural wall is inside the insulation envelope, the building is maintained at a more stable temperature, reducing peaks in system operation.

☐ Full range of insulating values – down to 0.08.

☐ Less thermal stress – since expansion and contraction of the structure is reduced, building life is prolonged.

☐ More usable inside floor space – insulating the outside frees up space on the inside for increased area and income.

☐ Economical – competitively priced when compared with conventional wall designs.

The System

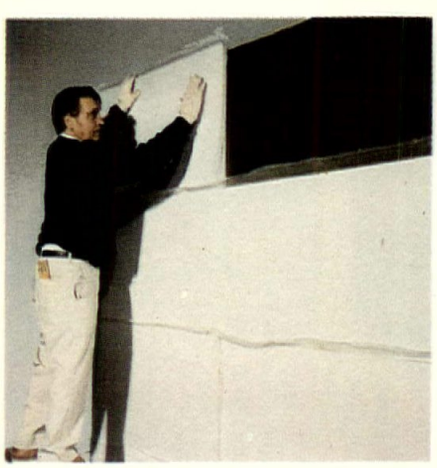
The Zonolite Thermoclad system consists of: (1) an insulation board laminated with a glass fiber mesh to provide strength and crack-resistance; (2) an adhesive to affix the board to the underlying surface; (3) a prime coat for strength and crack resistance; and (4) a pleasing architectural finish coat.

For New or Existing Work

Thermoclad is ideally suited fo both new projects and renovation Because the application is performed outside the building, disruption and unsightliness inside are eliminated.

Thermoclad makes sense functionally, aesthetically and economically. For further information contact your Zonolite sale office or send for brochure TC-1A Construction Products Division, W. R. Grace & Co., 62 Whittemore Avenue, Cambridge, Massachusetts 02140.

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.

CIRCLE 23 ON READER SERVICE CARD

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 detailed 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 Havlik, 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 Havlik, "and it was surprising the 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.

"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 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.

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.

"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's 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

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

We found it didn't cost much more to use the best cabinets in our kitchens...

and it really makes a difference to our clientele."

Robert E. Grant and George W. Beverly, Jr.
Beverly-Grant, Inc., Asheville, N. C.

"When you're selling $50–75,000 condominiums with large rooms, big balconies and beautiful kitchens, it doesn't pay to use cheap cabinets. People who are accustomed to fine surroundings know quality when they see it. And they know if you've skimped

"That's why we checked out a lot of cabinet manufacturers and actually got samples. We thought the Scheirich cabinet was the best looking and the best made of them all. These Kingswood Oakmont cabinets even have hand-finished doors.

"And one of the nicest things about dealing with Scheirich is the on-time delivery. When they gave us a date, we got our cabinets by that date."

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

SCHEIRICH CABINETRY

FINE FURNITURE FOR THE KITCHEN AND BATH

CIRCLE 31 ON READER SERVICE CARD

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, Poloron 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 administration 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., 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 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 Acceptance Corp. He is **George R Hansen,** who comes from Com mercial 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

HOOKER/BARNES' WILSON
Steps into an expansion

MACCO'S MACLEOD
The industry loses a giant

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.

MAKE YOUR BATHROOMS SELLING FEATURES WITH ELJER FASHION COLORS

All included in Eljer's new 32-page decorator/design guide, "Eljer Fashions Your Bath With Color."

Ask your plumbing contractor or write Eljer.

Specify Eljer Fashion Colors...use a professionally created Eljer Fashion Color Scheme...your customers will appreciate it.

ELJER PLUMBINGWARE
Wallace Murray Corporation
Dept. HH, 3 Gateway Center
Pittsburgh, Pa. 15222

*Not illustrated

ELJER

WallaceMurray

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.

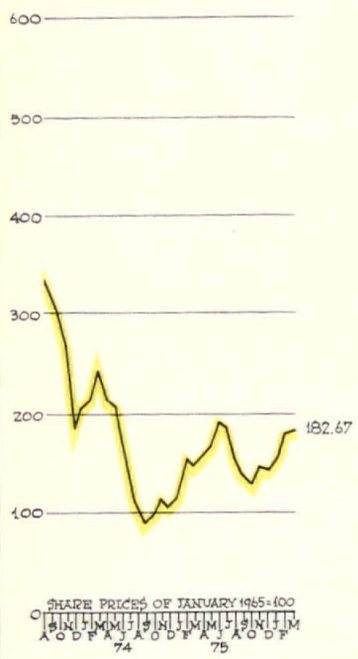
The building sector's strong gains were offset by a steep decline among the savings and loan stocks and a lackluster performance by the mortgage issues.

Housing issues have outgained 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
BUILDING COMPANIES			
AVCO Comm. Devel.—d	PC	5/8	.....
American Cont. Homes	OT	13/8	+ 1/4
American Urban Corp.	OT	1/2	.....
Bramalea Con. (Can.)	TR	63/8	+ 3/4
Campanelli Ind. (New American Ind.)	OT	2 1/4	+ 1 1/2
Capital Divers (Can.)—d	OT	1/4	.....
•Centex Corp.	NY	11 3/4	+ 1 7/8
Cenvill Communities	AM	7 5/8	+ 2 1/8
Cheezem Dev. Corp.	OT	1	+ 1/2
Christiana Cos.	AM	2 1/2	+ 5/8
Cons. Bldg. (Can.)	TR	2.51	+ .31
Dev. Corp. Amer.	AM	5	+ 1/8
Edwards Indus.	OT	4	+ 1 3/8
FPA Corp.—d	AM	4 1/4	+ 1 1/8
Carl Freeman Assoc.	OT	2 3/8	+ 1 1/8
Frouge Corp.—d	OT	5	+ 1/2
General Builders—d	AM	1 3/8	+ 1/4
Hoffman Rosner Corp.—d	OT	1 7/8	.....
Homewood Corp.	OT	5 1/2	– 1/4
Hunt Building Corp.	OT	2 3/8	+ 5/8
•Kaufman & Broad	NY	8 3/8	+ 1/8
Key Co.	AM	2 7/8	+ 3/8
Leisure Technology—d	AM	2	.....
Lennar Corp.	NY	5 7/8	.....
McCarthy Co.—d	PC	1 1/4	+ 1/4
McKeon Const.	AM	2 5/8	+ 5/8
H. Miller & Sons	AM	8 1/2	+ 1/2
Mitchell Energy & Dev.	AM	21 1/8	– 1 1/2
Oriole Homes Corp.	AM	6 1/8	– 1 1/2
Presidential Realty	AM	3 3/8	+ 1
Presley Development	AM	12 1/2	+ 2 1/2
Pulte Home Corp.	AM	3 1/2	+ 3/8
Robino-Ladd Co. —d.	AM	1	.....
Rossmoor Corp.	AM	3 5/8	+ 3/4
•Ryan Homes	AM	23 1/2	– 1
Ryland Group	OT	17	+ 1 1/2
•Shapell Industries	NY	14 3/8	+ 1/4
Standard Pacific	AM	6 1/4	+ 1/4
Universal House & Dev.—d.	PC	1/2	+ .188
•U.S. Home Corp.	NY	7 5/8	+ 1 1/4
Washington Homes	OT	3 1/2	+ 1/4
Del E. Webb	NY	5 3/8	+ 1/2
Westchester Corp.—d.	OT	1/8	+ 1/16
SAVINGS & LOAN ASSNS.			
American Fin. Corp.	OT	7 3/8	+ 1 3/8
Calif. Fin.	NY	6 1/8	+ 3/8
•Far West Fin.	NY	6 5/8	– 1/8
Fin. Corp. Santa Barb.	AM	11 3/8	– 1/4
•Fin. Fed.	NY	11 1/2	– 1 1/4
•First Charter Fin.	NY	14 1/8	– 2 1/2
First Lincoln Fin.	OT	3	– 1/4
First S&L Shares	AM	7 3/4	– 3/4
First Surety	OT	4 1/4	+ 1/8
First West Fin.	OT	1 5/8	+ 3/8
Gibraltar Fin.	NY	12 7/8	– 1 1/8
Golden West Fin.	NY	15	– 1
•Great West Fin.	NY	16	– 1 3/8
Hawthorne Fin.	OT	11 3/4	+ 1/2
•Imperial Corp.	NY	12 5/8	– 1 5/8
Transohio Fin. (Union Fin.)	NY	10	.....
United Fin. Cal.	NY	8 1/4	+ 1/4
Wesco Fin.	NY	13	– 1 3/4
MORTGAGING			
•Charter Co.	NY	5 1/4	+ 1
CMI Investment Corp.	NY	12 1/2	+ 1 1/8
•Colwell	AM	6 1/8	+ 7/8
Cont. Illinois Realty	NY	2 3/8	.....
•Fed. Nat. Mtg. Assn.	NY	15 3/8	– 3/8
Fin. Resources Gp. (Globe Mortgage)	OT	7/8	+ 1/8
•Lomas & Net. Fin.	NY	8 3/4	+ 1
•MGIC Inv. Corp.	NY	15 1/4	.....
Palomar Fin.	AM	2 1/8	+ 1/8
United Guaranty Corp. (formerly FMIC Corp.)	NY	11 1/2	+ 1
Western Pac. Fin. Corp. (formerly So. Cal. Mort. & Loan Corp.)	OT	3	– 1/4
REAL ESTATE INV. TRUSTS			
Alison Mtg.—d.	NY	2 1/4	.....
American Century	AM	2 3/8	+ 3/4
API Trust (formerly Arlen Prop. Inv.)	OT	3 3/4	– 1/4
Atico Mtg.	NY	3 3/8	+ 1 1/8
Baird & Warner	OT	7 1/8	+ 5/8
Bank America Rlty.	OT	7	– 3/4
Barnes Mtg. Inv.	OT	3 3/4	.....
Barnett Mtg. Tr.—d	NY	2	+ 1 3/4
Beneficial Standards Mtg.	AM	3 5/8	+ 1 5/8
BT Mort. Investors	NY	3 7/8	+ 1 3/8
Cameron Brown	NY	3 1/8	+ 1
Capitol Mortgage SBI	NY	2 3/8	+ 1
Chase Manhattan	NY	3 3/4	– 1/8
CI Mortgage Group	NY	1 7/8	+ 5/8
Citizens Mtg.—d	AM	1 3/4	.....
Citizens & So. Rlty.—d	NY	4 7/8	+ 2 5/8
Cleve. Trust Rlty. Inv.	OT	2 3/4	.....
Colwell Mtg. Trust	AM	3 1/8	+ 1
Conn. General	NY	17	– 3/4
Cousins Mtg. & Eq. Inv.	NY	2 3/4	+ 1
Diversified Mtg. Inv.	NY	2	+ 1/2
Equitable Life	NY	20 1/4	+ 1/8
Fidelco Growth Inv.	AM	5	+ 1 1/8
First Memphis Realty	OT	2 3/4	+ 3/4
First of Denver—d	AM	2 1/8	.....
First of Pennsylvania	NY	3	+ 3/8
Franklin Realty	AM	2 5/8	+ 1/4
Fraser Mtg.	OT	10 1/2	+ 1/2
Gould Investors—d	AM	3 5/8	+ 3/8
Great Amer. Mgmt. Inv. (Formerly Great Amer. Mtg. Inv.)	NY	1/2	+ 1/4
Guardian Mtg.	AM	2 7/8	+ 1
Gulf Mtg. & Realty	AM	3	+ 3/4
Hamilton Inv.	OT	1 5/8	.....
Heitman Mtg. Investors	AM	2 1/8	+ 5/8
Hubbard R. E. Inv.	NY	12 3/4	+ 1/2
ICM Realty	AM	8 5/8	– 1/8
Mass Mutual Mtg. & Rlty.	NY	11 1/8	+ 5/8
Mission Inv. Trust (formerly Palomar)	AM	1 1/2	+ 9/16
Mony Mtg. Inv.	NY	8 5/8	+ 3/8
Mortgage Trust of Amer.	NY	3 1/2	– 3/8
National Mortgage Fund—d	OT	3/8	.....
Nationwide R.E. Inv. (Galbreath Mtg. Inv.)	OT	5	+ 3/4
North Amer. Mtg. Inv.	NY	7 5/8	+ 1 3/8
Northwest Mutual Life Mtg. & Rlty.	NY	11 3/4	– 3/8
PNB Mtg. Rlty. Inv.	NY	6 5/8	+ 1/4
Penn. R. E. Inv. Tr.	AM	10 1/2	+ 1/4
Property Capital	AM	8 7/8	– 1 1/8
Realty Income Tr.	AM	6 3/4	– 1/4
Republic Mtg. Inv.	NY	2 1/2	+ 1 1/8
B. F. Saul R.E.I.T.	NY	3 1/4	– 1/4
Security Mtg. Inv.	AM	1 3/4	+ 1/4
Stadium Realty Tr.—d	OT	2 1/2	.....
State Mutual SBI	NY	2	+ 3/8
Sutro Mtg.	NY	5 3/8	+ 3/4
UMET Trust	NY	2	+ 1/2
United Realty Tr. (Larwin Realty & Mortgage Trust)	AM	5 3/4	+ 1/8
U.S. Realty Inv.	NY	3	+ 1
Wachovia Realty Inc.	NY	4 1/2	+ 1
Wells Fargo Mortgage	NY	7 1/8	– 1/4
LAND DEVELOPERS			
•AMREP Corp.	NY	2 3/4	+ 3/8
Arvida Corp.	OT	5 5/8	– 3/4
Crawford Corp.	OT	4	.....
•Deltona Corp.	NY	7 3/8	+ 2 1/2
Fairfield Communities	OT	5/8	.....
•Gen. Development	NY	6 5/8	+ 1 1/4
•Horizon Corp.	NY	3 3/8	+ 1 3/8
Landmark Land Co. (Gulf State Land)	AM	1 7/8	+ 3/8
Land Resources	OT	1 1/8	+ 1/8
Major Realty	OT	1 3/8	+ 3/8
•McCulloch Oil	AM	4 1/2	+ 3/8
Sea Pines Co.	OT	3/8	.....
MOBILE HOMES & MODULES			
•Champion Home Bldrs.	AM	5 3/4	+ 3/8
Conchemco	AM	10 7/8	– 5/8
De Rose Industries—d	AM	2 1/8	+ 1/2
•Fleetwood	NY	19 5/8	+ 3 1/8
•Golden West	AM	8 1/2	+ 5/8
Mobile Home Ind.	NY	4 7/8	+ 1/8
Monarch Inc.	OT	2 1/4	+ 1 1/4
•Redman Inc.	NY	4 1/8	+ 3/4
Rex Noreco	NY	1 3/8	+ 1/4
•Skyline	NY	20 1/2	+ 1
Town and Country	AM	2 3/4	– 1/4
Zimmer Homes	AM	7 3/4	+ 1 1/8
Brigadier Inc.	OT	1.12	– .63
Hodgson Houses—d	OT	1/2	– 1/8
Liberty Homes	OT	2 1/2	+ 1/4
Lindal Cedar Homes	OT	3 1/2	+ 3/4
Nationwide Homes	AM	22 5/8	+ 3 1/4
Shelter Resources	AM	3 5/8	+ 7/8
Swift Industries	OT	1/8	.....
DIVERSIFIED COMPANIES			
American Cyanamid	NY	25 3/8	– 1 7/8
Amer. Standard	NY	23 3/8	+ 1 3/8
Amterre Development	OT	7/8	+ 1/8
Arlen Realty & Develop.	NY	3 7/8	+ 1/4
AVCO Corp.	NY	9 1/8	+ 1 7/8
Bendix Corp.	NY	56 1/2	+ 6 3/4
Boise Cascade	NY	28 5/8	+ 1/8
Building & Land Tech.—d	OT	1/8	.....
CNA Financial (Larwin)	NY	8 1/8	– 1/4
Campeau Corp.	TR	5 5/8	+ 1/2
Castle & Cooke (Oceanic Prop.)	NY	15 1/2	– 1 1/8
Champion Int. Corp. (U.S. Plywood-Champion)	NY	24 5/8	+ 3/8
Citizens Financial	AM	1 3/8	+ 5/16
City Investing (Sterling Forest)	NY	10 3/4	+ 1 1/8
Cousins Properties	OT	2 7/8	+ 3/8
ERC Corp. (Midwestern Fin.)	OT	16 1/4	– 1/4
Evans Products	NY	7 3/4	+ 7/8
Ferro Corp.	NY	32 3/4	+ 5 3/4
First Gen. Resources—d	OT	5/8	+ 1/4
First Rlty. Inv. Corp.	AM	1 1/8	+ 5/8
Forest City Ent.—d	AM	5 5/8	+ 3/8
Flagg Industries	AM	2 1/4	+ 5/8
Frank Paxton Corp. (Builders Assistance Corp.)	OT	10 3/4	+ 3/4
Fuqua Corp.	NY	7 3/8	+ 1/2
Georgia Pacific	NY	49 7/8	– 1/8
Glassrock Products	AM	4 1/4	+ 1/4
Great Southwest Corp.	OT	3/8	+ 1/8
Gulf Oil (Gulf Reston)	NY	23	– 1 5/8
Gulfstream Land & Dev. (Bel-Aire Homes)	AM	6	+ 1 5/8
INA Corp. (M. J. Brock)	NY	37 5/8	– 1 3/8
Inland Steel (Scholz)	NY	49 1/2	+ 1 5/8
International Basic Econ.	OT	1 7/8	+ 1/2
International Paper	NY	74 3/8	+ 3 1/4
Inter. Tel. & Tel.	NY	28 3/8	+ 7/8
Leroy Corp.	OT	1/2	.....
Ludlow Corp.	NY	8	+ 3/8
Monogram Industries	NY	10 3/8	+ 2 1/2
Monumental Corp. (Jos. Meyerhoff Org.)	OT	12	+ 1/2
Mountain States Fin. Corp.	OT	4	+ 1/4
National Homes	NY	5 1/8	+ 1/2
National Kinney (Uris Bldg.)	AM	2 1/4	+ 1/8
NEI Corp.—d	OT	1/8	.....
Perini Corp.	AM	5 5/8	+ 3/8
Philip Morris (Mission Viejo Co.)	NY	54 3/8	– 2 7/8
Pope & Talbot	NY	21 3/4	+ 2 5/8
Republic Housing Corp.	AM	2 3/8	+ 1/2
Rouse Co.	OT	4 3/8	+ 1/2
Santa Anita Consol (Robt. H. Grant Corp.)	OT	6 3/4	+ 7/8
Tenneco Inc. (Tenneco Realty)	NY	26 3/4	– 1
Time Inc. (Temple Industries)	NY	63	– 3
Tishman Realty	OT	13	+ 1 3/8
Titan Group Inc.	OT	1 3/4	+ 1/2
UGI Corp.	NY	15 1/2	– 1/4
Weil-McLain	NY	10 1/8	+ 1 1/8
Westinghouse (Coral Ridge Prop.)	NY	17 1/8	+ 5/8
Weyerhaeuser (Weyer Real Est. Co.)	NY	43 3/4	– 1/8
Whittaker (Vector Corp.)	NY	4 5/8	+ 5/8
Wickes Corp.	NY	12 1/4	+ 1 1/4
SUPPLIERS			
Armstrong Cork	NY	31 1/4	+ 3 1/4
Automated Bldg. Com.—d	AM	3 3/4	.....
Bird & Son	OT	95	– 1
Black & Decker	NY	24 1/4	– 2 1/2
Carrier Corp.	NY	16 1/4	+ 1 1/4
Certain-teed	NY	19 5/8	+ 1 3/4
Crane	NY	74 1/4	+ 7 1/2
Dexter	NY	18 1/2	+ 2 1/2
Dover Corp.	NY	58 1/4	+ 2 5/8
Emerson Electric	NY	37 1/2	– 3/4
Emhart Corp.	NY	27 1/4	– 3/4
Fedders	NY	8	+ 2
Flintkote	NY	18 7/8	– 1/8
GAF Corp.	NY	14 7/8	+ 7/8
General Electric	NY	52 3/8	– 2 5/8
Goodrich	NY	26 1/4	– 1 5/8
Hercules	NY	37 1/2	+ 2 1/2
Hobart Manufacturing	NY	25 3/8	+ 3/8
Int. Harvester	NY	27 1/4	+ 3/8
Johns-Manville	NY	29 5/8	+ 3 1/2
Kaiser Aluminum	NY	32 1/2	+ 1
Keene Corp.	NY	6 5/8	+ 7/8
Leigh Products	AM	10 1/4	+ 3/4
Masco Corp.	NY	25 3/4	– 3 1/4
Masonite Corp.	NY	33	– 1
Maytag	NY	34	+ 1
National Gypsum	NY	14 3/4	+ 1
Norris Industries	NY	35 5/8	+ 3 1/2
Overhead Door	NY	9	+ 5/8
Owens Corning Fibrgl.	NY	52	– 2
Potlatch Corp.	NY	59 3/4	+ 1/2
PPG Industries	NY	46 1/4	+ 4 7/8
Reynolds Metals	NY	38 3/8	+ 5/8
Rohm & Haas	NY	75 3/4	+ 7 1/4
Ronson	NY	5 3/8	+ 1/4
Roper Corp.	NY	18 3/4	– 1/4
St. Regis Paper	NY	48 1/4	+ 5/8 3/4
Scovill Mfg.	NY	16	+ 2 3/8
Sherwin Williams	NY	40 3/4	+ 2 1/2
Skil Corp.	NY	11 1/2	+ 1 7/8
Slater Electric	OT	5 1/4	+ 1 1/4
Stanley Works	NY	25	+ 1
Tappan	NY	10 1/8	+ 1 1/2
Thomas Industries	NY	11 5/8	+ 1 1/2
Triangle Pacific	NY	10 7/8	+ 2 1/8
U.S. Gypsum	NY	21 1/2	+ 2
U.S. Steel	NY	79 1/2	– 3 3/4
Wallace Murray	NY	17	+ 2 1/8
Jim Walter	NY	40 1/2	– 1 3/4
Whirlpool Corp.	NY	32 1/4	+ 3

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

The Soft Kitchen:

t 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.

For more information, call or write to GAF Corporation, Floor Products, Dept. K28, Box 1121, Radio City Station, New York, New York 10019

GAF® GAFSTAR Sheet Vinyl Flooring

CIRCLE 35 ON READER SERVICE CARD

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.

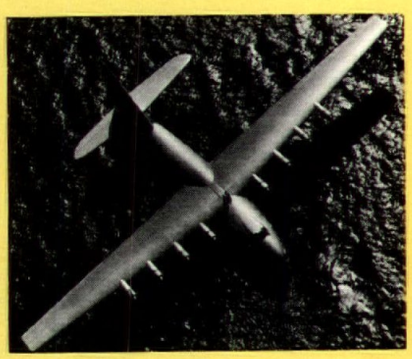
"The Spruce Goose," larger than a Boeing 747, climbed out of

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 it was discovery. Lessons that wo 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 1⅛-inch plywood is installed ov 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-
neered tongue and groove joint
eliminates the need for
king. Another big time-saver.
And the surface is so smooth
resilient tile, linoleum,
eting and hardwood flooring can
laced right over the plywood.
2.4.1 Single Floor. One of the
plywood moments.

8. THE COST CUTTER TS A PRETTY FACE.

This was the year that
ood—the tough, economical,
g, workable building material
me:
Textured plywood the
tiful, as well.
Textured plywood. It comes in
ifferent styles and textures. For
nds of apartments, townhouses,
es and commercial buildings.
Textured plywood is tough,
When properly nailed, it's a
-in shear wall. Resists wind
s and impact. And weathers
tifully.

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

69. PLYWOOD KES THE SQUEAKS D THE SQUAWKS T OF FLOORS.

A little squeak in a finished
has always been a big call-back
lem 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.

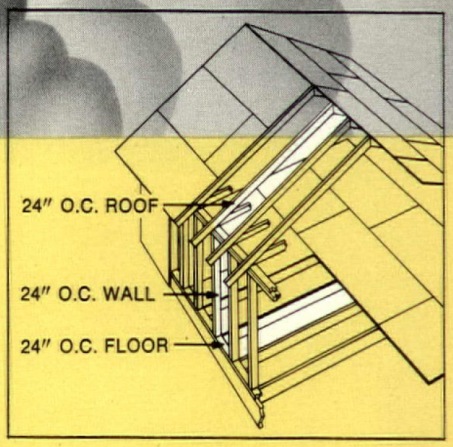
And it worked. Saved about $200 per house just like the NAHB Time and Methods study said it would.

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.

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.

THE BOLD LOOK OF KOHLER

For more great bathroom ideas, write Box KO, KOHLER CO., KOHLER, WIS. 53044. Kohler plumbing products available in Canada.

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 Brockelmeyer of Webster Groves, Mo., one of the 600 conventioneers, 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 Brockelmeyer'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 without 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 produces 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 advertisi mix."

Some other advice:

• Do place a display adve tisement in the Yellow Pages b cause prospects usually r member a slogan or name bu rarely a telephone number.

• Don't advertise on T sports shows. Commercial often interrupt the action an this turns viewers against th advertisers.

• Do include neighborhoo children in TV commercials They can be shown on the side walk as the camera zooms in o the house being remodeled.

"We found that showin neighborhood children greatl expands the viewing audience, says Read. "The kids talk it up and parents and children loo forward to seeing the comme cial aired."

• Be especially sensitive t the advertising and public rela tions potential of remodeling prominent person's house. low profit or even a small loss o a job in the home of a well known socialite will be com pensated for by increased refe ral business.

• Don't show completed job on television. It's preferable t show work in progress on a typi cal home because then pros pects identify with the job an relate it to their own needs.

This statement produce some disagreement. Several re modelers recommended befor and after views of a job sit while others favored views o before, during, and after the jo plus favorable on-camera com ments from the customer.

Commercial opportunity. Al bert Justice, a property manage from Clearwater, Fla. and former president of the Institut of Real Estate Management, tol remodelers of increasing oppor tunities in commercial and mul tifamily renovation. "IREM members who manage tens o millions of dollars worth o properties each spend an averag of $718,000 a year on remodel ing and renovation," said Jus tice. "And 58% are continu ously improving their proper ties. So a real opportunity lies i seeking out our members— called Certified Property Man agers—in local areas so that you can work for them on a regula 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.

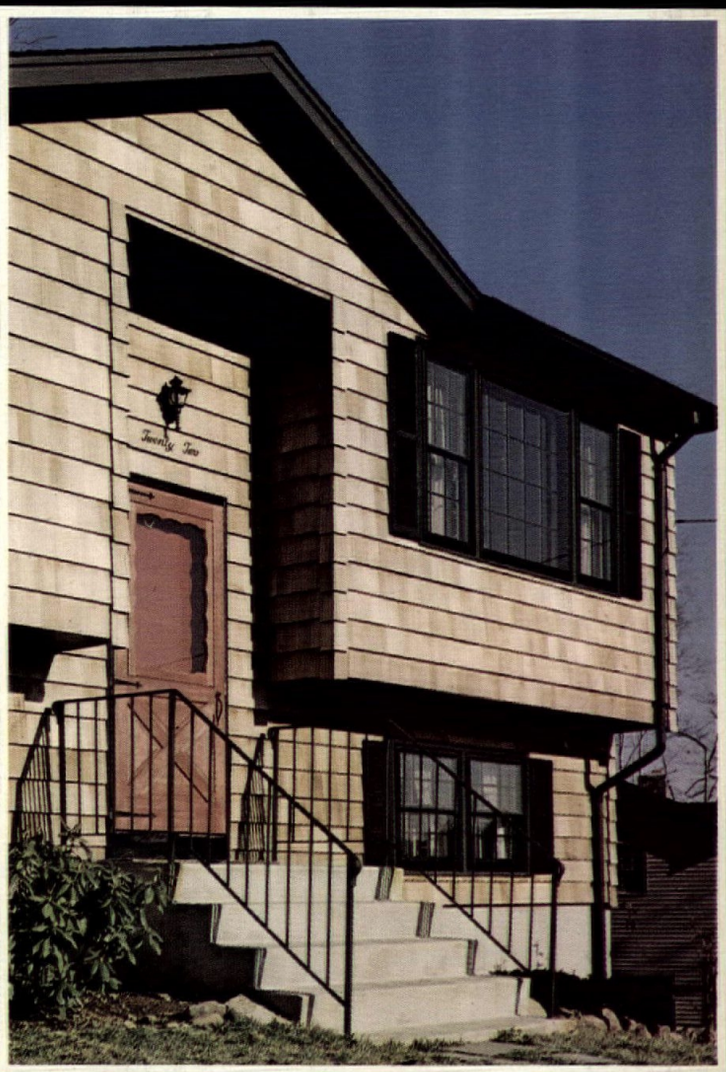
"We're optimistic that we can resolve our differences," says Joseph Nahay, NRA's executive director. "After all, we have common goals and programs so we should unify our efforts instead of constantly duplicating them."

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

Box 400W, Winlock, Washington 98596 (206) 785-3501

In Canada: Bestwood Industries, Ltd., Box 2042, Vancouver, B.C. V6B 3R6

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.

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 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.

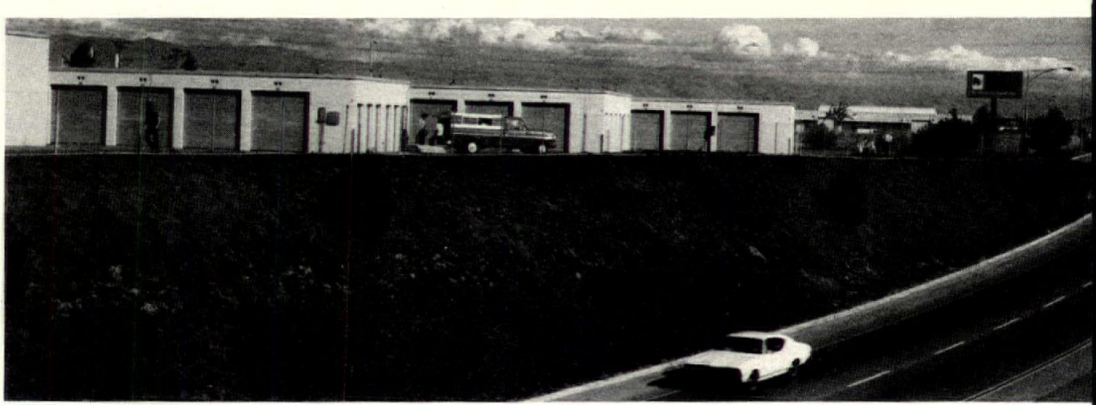
Continuous advertising. Unlike other mini-warehouse operators, PSI has enough projects in some of its markets to support television commercials. "TV is our most effective form of advertising," says Hughes, "and it gives us an advantage over everyone else." Even though PSI's overall occupancy average 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 is a high-turnover busine Most tenants are on month-month rental agreements a stay less than 12 months.

PSI's president is homebuilder Kenneth Volk He was vice president of Vol McLain Communities Inc. 18 years, then owner of Volk D velopments until founding P in 1972. Before teaming up wi Volk, Hughes had been in t real estate investment busine

Despite the good cash-flo potential, PSI's financial stat ments have been slow to refle profits. The company had yearend loss of $883,000 1974. And an unaudited stat ment for the first nine mont of 1975 shows a positive b slim net worth of $157,00 However, more than half of t company's sales, representi some $5 million in gross profi were not reflected in the la statement because they were yet unrecorded. Reason: PSI h sold all of its warehouses to da with joint-venture or manag ment agreements, or as sal leasebacks. It delays the recor ing of sales for a year or mo while it manages the compl under a lease or guarante cash-flow agreement.

How successful PSI will be attracting small investors mini-warehouses so it can bui without loans remains to b seen. After running one ad fo the public offering in *The Wa Street Journal's* Pacific Coas Edition in January, the syndica tion underwriter received 50 inquiries and by the end of Feb ruary had raised the partne ship's first quarter-million do lars. PSI doesn't have to raise th full $3 million. A minimur $1,112,000 will make the par nership viable and PSI has th rest of this year to raise it.

—H.C.W



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

WHEN YOU TURN TO BUILDING BASICS, TURN TO TEMPLE VALUE.

Temple plywood, for example, typifies the extra quality built into every Temple building product. Every panel of Temple plywood ever made has been a Group I panel—made from Southern yellow pine, with its extra strength and stiffness. And every panel has been made with exterior glue, to stand up better during construction delays.

Because Temple pioneered in the production of plywood from Southern yellow pine, we know both the advantages and limitations of this material. And we'll be happy to put our expertise and facilities to work with you in producing panels to your specific requirements.

For more facts, see your Temple dealer, or write for our colorful building products catalog.

TEMPLE INDUSTRIES

Diboll, Texas 75941

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)
Stelloh 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 wit security devices *they* can use, like deadbo locks and apartment-to-lobby intercom an television systems that allow tenants t screen callers.

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

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

You can warn tenants against such prac tices. But don't hand out security advic under your own name, because you may b implying liability. Ask your police depart ment for literature on security, and pass tha out to your tenants. The police play th major role in any security situation.

A No-No word. Besides avoiding system that imply security, you should also preven any mentions of security in advertising sales literature or leasing agents' sale pitches. Not only should the word "secu rity" be avoided, but so should description of any feature that implies security. If yo deal with an advertising agency, make sur they comply with these precautions.

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

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

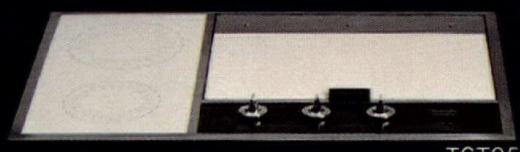
Your only recourse is to increase your lia bility insurance. For a 240-unit complex, in creasing liability coverage from $1,000,000 to $3,000,000 would cost about $800 more per year. That's not bad, but if tenants start a rush of security suits, rates could sky rocket just as they have for medical mal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

EDWARD N. KELLEY, CPM, PROPERTY MANAGEMENT CONSULTANTS, OAK BROOK, ILL.

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

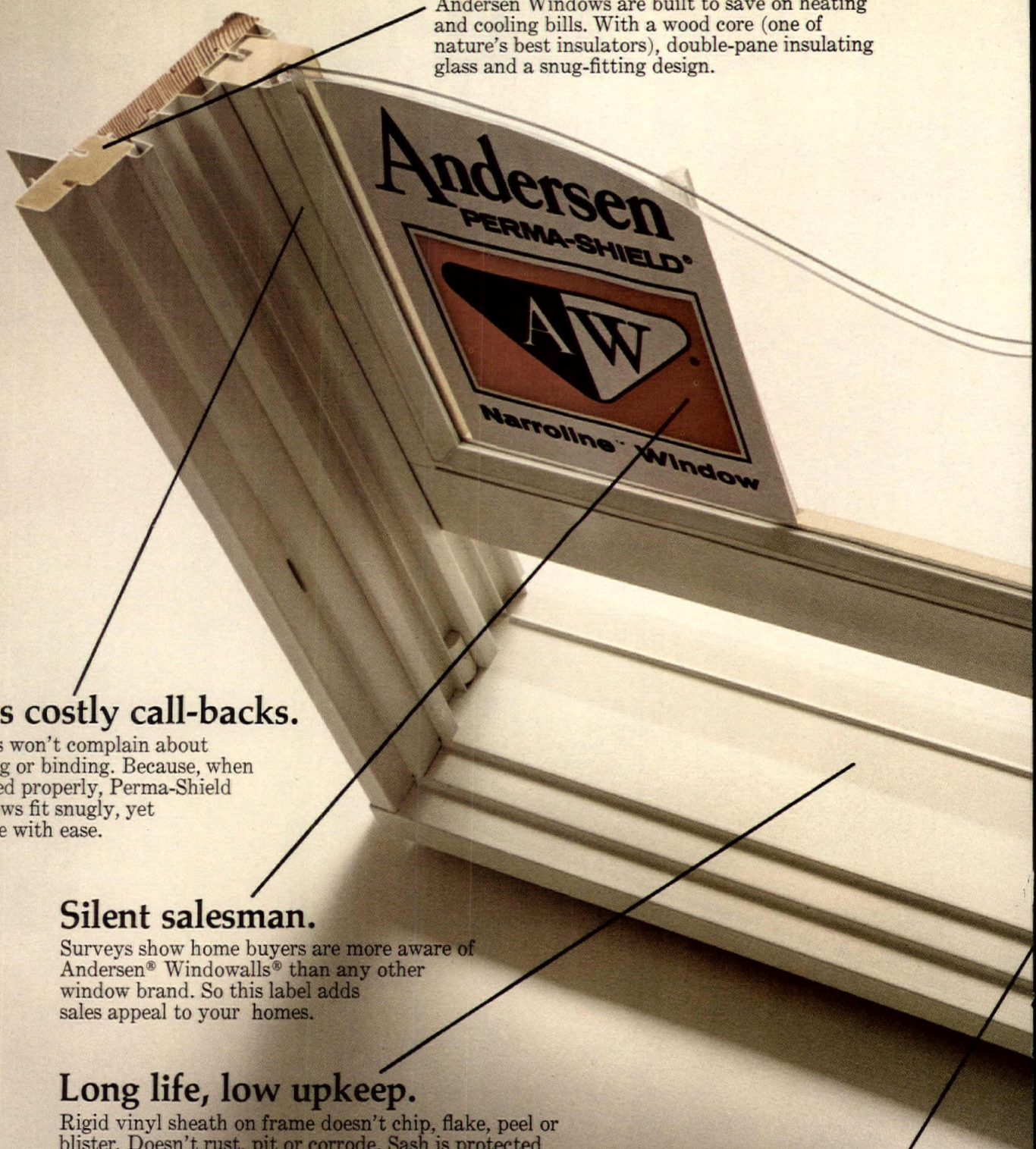
For complete warranty details on these or other Thermador products, see your Dealer or write
Thermador: 5119 District Blvd., Dept. S , Los Angeles, Ca. 90040
Eastern Zone Office, 615 Sherwood Parkway, Suite 6-A, Mountainside, New Jersey 07092 • (201) 233-5432.

THERMADOR / WASTE KING
NORRIS NI INDUSTRIES
DIVISION

CIRCLE 45 ON READER SERVICE CARD

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® Windowalls® 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® Windowalls®

ANDERSEN CORPORATION BAYPORT, MINNESOTA 55003

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.

6115A Copyright © Andersen Corp., Bayport, Minn. 1976

CIRCLE 47 ON READER SERVICE CARD

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: savvy real estate man recently took over a office building that was only 5% occupie after four years on the market—two by th original developer, two by the lender aft foreclosure. The lender had $3.6 million i a building that was worth no more than $2 million as it stood. The real estate ma structured a deal that gave the lender a proceeds from ultimate sale of the buildin over $3.8 million, thus providing $200,00 for lease-up.

The real estate man was to get varyin percentages of sale proceeds over $3.8 mi lion, the scale giving him 90% of proceed over $4.2 million. Through a sophisticate leasing program that relied upon an inten sive marketing survey, the building wa brought to full occupancy in nine months- at premium rents. The building is being sol now for $4.6 million—thus returning a goo profit to the entrepreneur for his "persp ration."

Professional help. The workout expe must get the best professional help and pa it well. He needs good lawyers, accountant tax men, mortgage bankers and leasing me to locate likely properties and develop a pro posal with cachet. I'm constantly amazed a the number of real estate men who expec to get this type of help "on spec."

The workout specialist is working wit distinctly non-standard products by defin tion. The payoff may be highly uncertai and years in the future. The kind of talen you need won't work on wild goose chases

Finding the properties. Finding jobs wit construction halted in your area shouldn be too difficult because of their visibilit Getting construction going again may re quire lengthy negotiations, especially if sev eral lenders are involved.

Locating the "invisible" problems- properties already built and operatin poorly—can be done several ways. Law an accounting firms are good places to start. C you might get the public reports of compa nies you think own prospects.

One final word: don't be discouraged if lender gives you a cold shoulder. One of th most successful workout experts hits a many lenders as quickly as he can; if noth ing turns up, he's off to the next address he figures there's so much business ou there that he can't take the time to educat a lender.

KENNETH D. CAMPBELL, AUDIT INVESTMENT RESEARCH INC., NEW YORK CITY.

Solid vinyl siding by Bird... helping you sell the Great American Dream.

A home of their own.

It's a dream your customers have worked hard for, and one of the biggest investments they'll make in a lifetime. Help them protect it, and increase your sales, with Bird solid vinyl siding.

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 spoil TV reception like metal.

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.

Bird & Son, inc.
E. Walpole, MA 02032

Please send me full information and samples on your low-maintenance Bird solid vinyl siding line.

Name_____

Address_____

City_____ County_____

State_____ Zip_____

Phone_____

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 bedrooms and dens are good areas to work o when you revitalize your models—particu larly if you've found that your market isn quite what you expected it to be when yo first opened your project.

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

On the other hand, if your age group younger than expected, take the guest roo and add accessories like cheerleader po poms, pennants or football gear to commu nicate a teen theme. You might get thes accessories from a nearby school.

To enhance the overall appeal of a den study you could add built-ins. Instead using a freestanding desk, try removing closet door; then build in a desk and ad some bookshelves above. Panel the clos interior or the entire room to project a casu atmosphere. If your market is professiona people, you could display financial publica tions, trade magazines, etc. Hobby-theme rooms also attract attention from profe sionals. You might concentrate on pho tography or stamp collecting.

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

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

To sum up, interior design trends are con stantly changing. And today's new look softness and personalization is being fea tured by the many home service magazine your prospects read. A model home that fail to keep pace designwise with the new trend only dates your project and drains its sale appeal.

CAROLE EICHEN, PRESIDENT, CAROLE EICHEN INTERIORS, FULLERTON, CALIF.

No more "call the dishwasher man" or "call the air conditioning man."

Just call Sears.

Make all your appliances Sears, and have a single source for service.

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."

The right people, the right training, the right parts, the right tools—all from a single source: another reason to consider Sears.

Here are 10 Good Reasons to Consider Sears:
1. Dependable service. **2.** Contract sales specialists. **3.** Product leadership. **4.** Value/price. **5.** Single source for appliances and many building products. **6.** Delivery to your schedule. **7.** Strong brand recognition. **8.** Product quality. **9.** Kitchen planning available. **10.** Ninety years of consumer satisfaction.

OK I'll consider Sears Contract Sales

☐ Send brochure ☐ Have Contract Specialist call
☐ Send address of nearest Contract Sales office

Name

Position

Firm

Address Phone

City State Zip

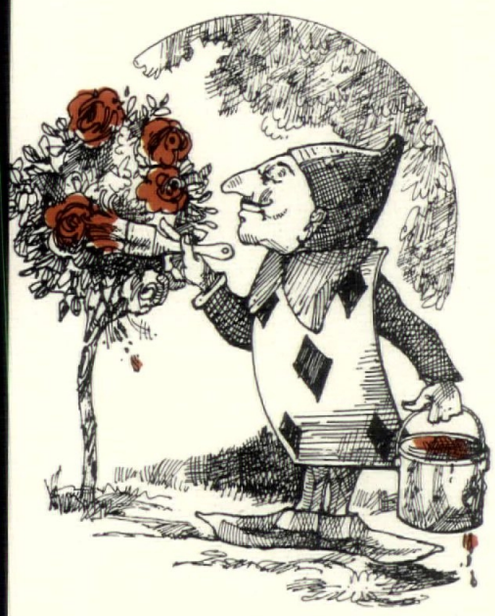
Dept. 733G, Sears, Roebuck and Co.,
Sears Tower, Chicago, Illinois 60684
39-HH-4/76 SERVICE

Legacy®

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.



A Little Beauty Goes a Long Way

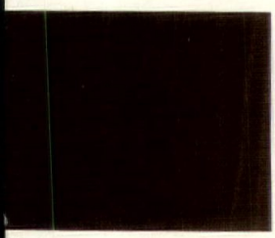
Salesmen probably tell you a dozen times a day that their items will make your homes sell like hot cakes. On and on, they paint their roses red. But just consider this: Legacy doors work for you in *every* room of the house. Its rich, deep-embossed grain on hardboard so delights the eyes and hands that few people can walk by one without running a hand over its surface. They'll remember the house with all the beautiful doors.

Of Course It Has to Last and Last

You'd be mad as a hatter if you chose doors that just looked good but couldn't take the abuse of day to day use. No worries; Legacy is tough. It's 50% again as dense as natural wood and is prefinished with a highly stain and mar resistant coating. Legacy looks good a long long time. Maybe forever.

All of Which Means Legacy Stands Alone

Oak-tone



Walnut-tone

It was true when we first introduced Legacy; it's still true today. Oak-tone or walnut-tone, Legacy's deep embossed grain is unmatched. Priced well below solid real wood doors and just a bit above lauan and unfinished birch, Legacy puts a touch of Wonderland into every room at a cost that will make both you and the home buyer smile like Cheshire cats.

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

MASONITE® CORPORATION

Masonite and Legacy are Registered Trademarks of 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!

There's no better way to take on your underground chores than with the compact, highly maneuverable Fleetline 20+4. It turns tight spots into wide open spaces to handle your trenching, plowing, backfilling and horizontal boring requirements. This 18 hp rubber-tired trencher has 4-wheel Hydra-Static drive for instant directional change and equal speeds in either direction.

It trenches from 4" wide, 64" deep to 12" wide, 30" deep at varying speeds to match soil conditions. The limited-slip differentials deliver equal torque to all wheels while hydraulic articulation provides a neat twist for ground-hugging traction! It handles even the toughest jobs, while you perform all functions from a single control center, where the Mono-Stick makes maneuvering no contest. See the Fleetline 20+4 at your Davis dealer, or call Davis Manufacturing toll free — 800/835-3016, and get the total scoop on The Davis Difference!

Davis Manufacturing
Division of J I Case
A Tenneco Company
P.O. Box 1801
Wichita, Kansas 67201

TENNECO

FL20-1-1275R

doing something about it.

DAVIS case

REITS and workouts

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

BRUCE P. HAYD
Hayden Associates, I
New York Ci

More perspiration

H&H: My compliments on your
ticle entitled: "Lenders now cou
ing on an inflation bailout shou
play for perspiration bailout i
stead" [H&H, Jan.]. The situatio
you describe are exactly those
have encountered time and ti
again, not only from the REITs, b
from banks and S&Ls.

One point you seemed to overlo
is that when inflation finally do
catch up with prices, the projec
will be three to five years old, a
their features, appliances, arch
tecture, etc. will probably be obs
lete.

And worse yet, these projects w
be competing against newly bu
developments with major marke
ing advantages. For example, t
emotional bias in favor of a bran
new product versus one a few yea
old and "previously distressed"
overwhelming!

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

It will certainly be a rude awake
ing if the accounting principl
board makes the REITs' attendant
nancial institutions declare the i
terest losses on the current "no
earning loans."

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

PHILIP E. YASSK
Sabre Real
North Hollywood, Cal

CORRECTIONS

Cover credits in the February issu
failed to note that the design is base
on a site plan by Cassway/Albert
Associates, architects and landscap
architects, of Philadelphia.

March's *Legal Scene,* written b
Lenard L. Wolffe and Douglas
Linn, mistakenly appeared wit
photographs of Stephen J. Cabot an
Robert J. Simmons, authors of th
column in February. See above fo
pictures of the real Wolffe and Linn.

CIRCLE 54 ON READER SERVICE CARD

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 o local managers that this is our policy a we'll be monitoring it." The monitoring done by a team of inspectors from the co pany's product-development department

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

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

FITCH CREATIONS
CARRBORO, N.C.

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

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

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

The other part of the program is to ma sure his houses are as "thermally efficie as possible." And like Ryan Homes, Fit believes that licking the problem of air in tration is paramount. So his crews ha orders to:

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

Fitch also makes sure all passages a openings between unfinished attic and co ditioned spaces are closed or sealed. Part this process is the installation of a spec attic access door, which the builder c signed to replace the usual plywood scutt hole cover. The door is prehung, weath stripped on the back with polystyrene foa insulation, and costs about $18 to build a shop. "An ordinary plywood cover usua warps and allows air to infiltrate," sa Fitch.

Also to cut air infiltration, Fitch fits eve fireplace in all of his houses with a remov ble front cover made of sheet metal. T cost: $7.

Finally, Fitch has studied siting tec niques that help cut the amount of ener a house uses.

"Wherever possible, we orient our hous 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 shutters 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 often 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 gas heat continues to go up in our area."

JOHN 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.
- 3⅝" 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

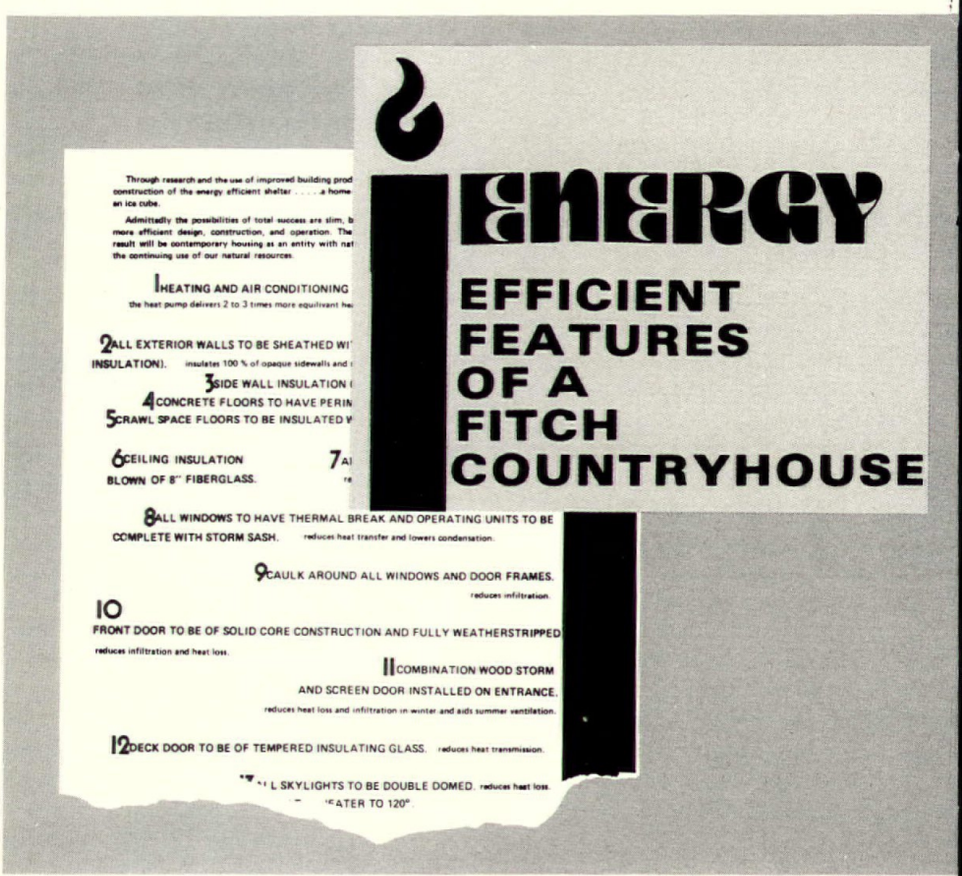
R. B. Fitch believes that a house's energy efficiency depends as much on how the owner lives in it as on how well the house is built. And since the North Carolina builder gets a lot of customers from referrals, it's important that each buyer get top value from Fitch's built-in energy-saving features.

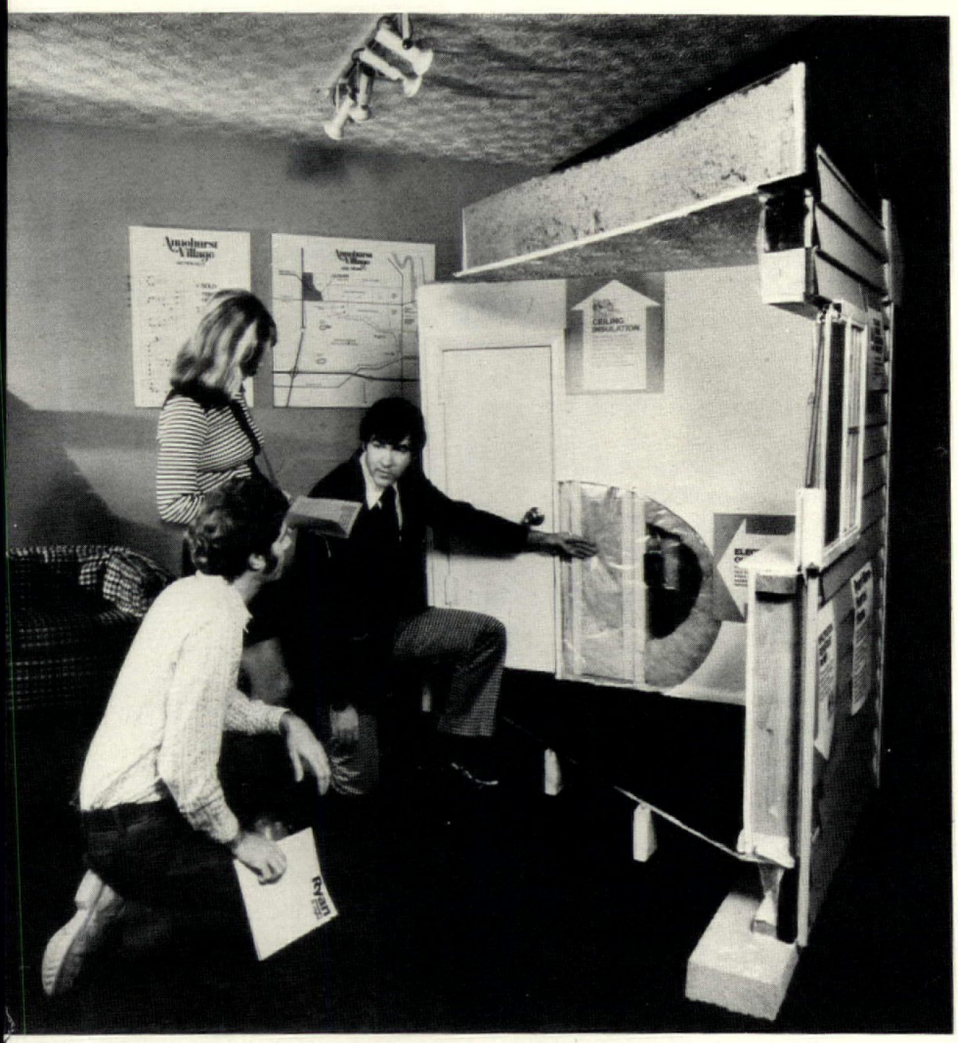
So one of his merchandising aids is an attractive two-color brochure that itemizes every one of those features. Nothing is omitted—not even the off-white interior paint which, the brochure advises, "reduces lighting requirements."

The brochure also reminds buyers that all bathrooms have ceiling heaters so "you c heat for bathing purposes without heati the entire home."

Another of Fitch's sales aids is a two-pa letter entitled "Random Thoughts Abo Your Heating and Air Conditioning Sy tems." Written in chatty terms, the lett talks about such things as cleaning a changing air filters, keeping out direct su mer sunlight, but letting sunlight in duri the winter, etc.

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





RYAN HOMES:

Use cutaway displays of energy-saving construction features

's hard to merchandise things like high-fficiency insulation, which buyers can't ee.

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

The displays serve two purposes: First, ney give prospects a chance to examine the nsulating materials and other built-in en-rgy-saving features. And second, they give yan's sales staff a jumping off point for a najor element of the company's merchan-ising—a flip-chart script, written in non-echnical terms, that explains in detail very step of Ryan's energy-saving program. The idea: to help prospects understand why nd how the slightly higher costs of energy-aving materials and construction tech-iques will pay for themselves in a very hort time.

Some examples from this flip-chart script:

"Our workmen place a special sealer on op of the foundation . . . to fill in uneven reas 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.

BETTS BUILT HOMES:

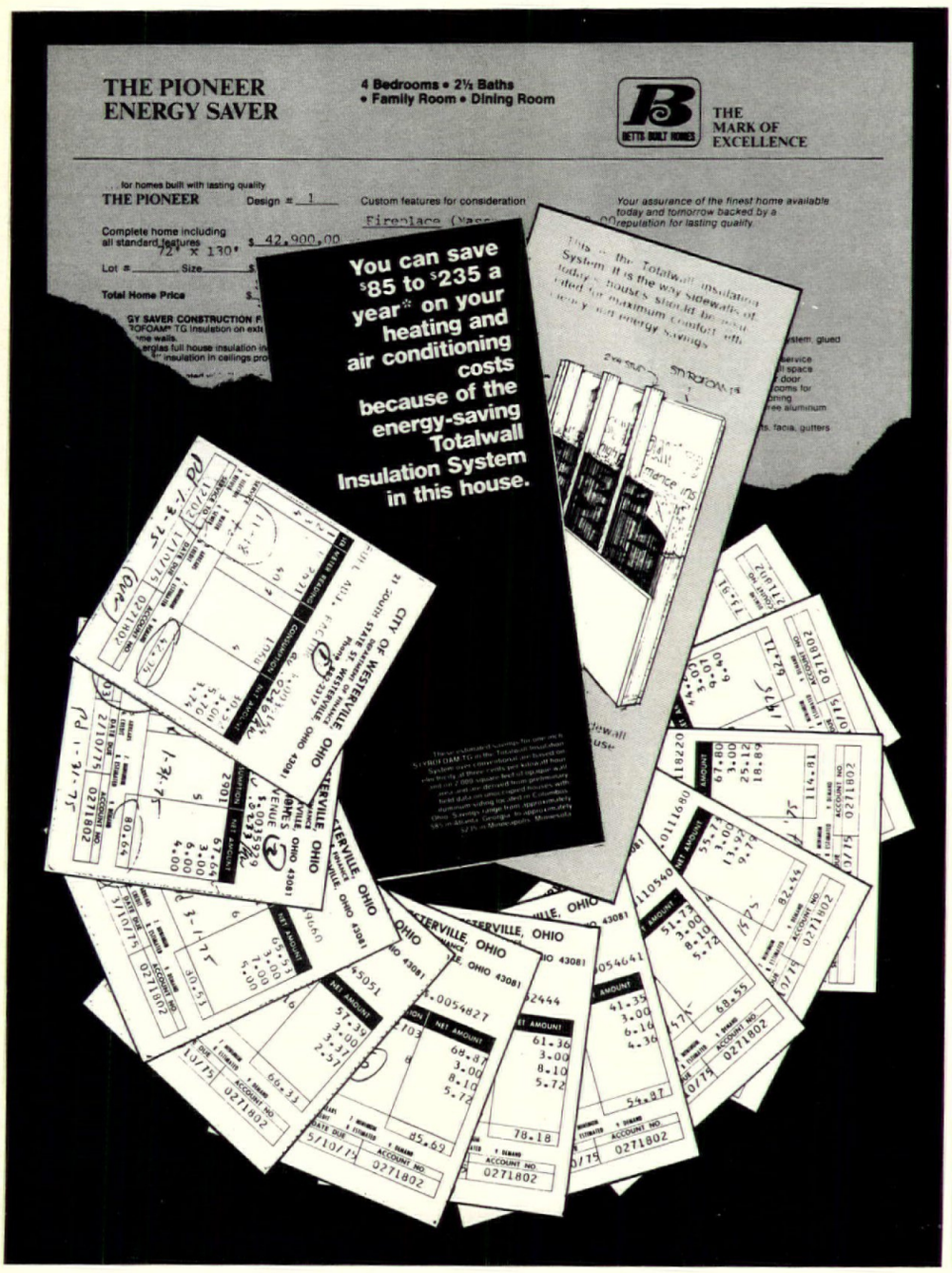
Prove energy saving with actual utility bills

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.



IRVIN A. BLIETZ ORG.:

Post energy saving signs on every model home

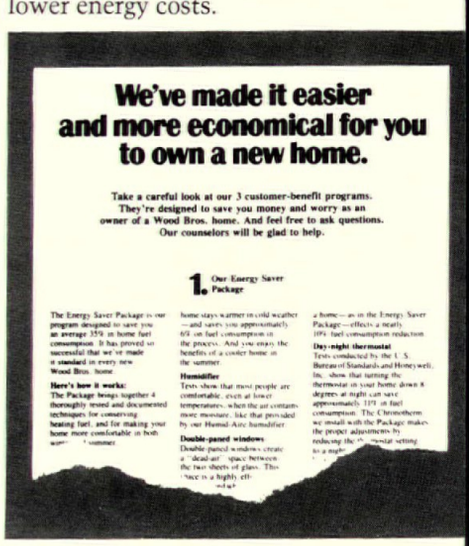
The Chicago builder wants to be sure cu tomers know right from the start th houses in the newest section of its Woo Creek Courts subdivision are energ efficient. So the first thing buyers see as the walk up to a house is a large sign describin the company's new insulation system. An each double-paned window is also marke as an energy saver.

WOOD BROS.:

Explain each element of the energy-saving package

Wood Bros. merchandises its houses on th basis of three customer-benefit program an energy-saver package, a ten-year buy protection plan and a guaranteed trade pr gram. And the energy package gets numb one billing in the promotional material- proof of how important the company co siders it.

The Denver builder has learned that th best way to get prospects to understand th benefits of the energy package is to sho how each element affects the comfort of 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 35% in home fuel consumption. It has proved so successful that we've made it standard 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

home stays warmer in cold weather —and saves you approximately 6% on fuel consumption in the process. And you enjoy the benefits of a cooler home in the summer.

Humidifier
Tests show that most people are comfortable, even at lower temperatures, when the air contains more moisture, like that provided by our Humid-Aire humidifier.

Double-paned windows
Double-paned windows create a "dead-air" space between the two sheets of glass. This

a home—as in the Energy Saver Package—effects a nearly 10% fuel consumption reduction.

Day-night thermostat
Tests conducted by the U. S. Bureau of Standards and Honeywell, Inc., show that turning the thermostat on your home down 8 degrees at night can save approximately 11% in fuel consumption. The Chronotherm we install with the Package makes the proper adjustments by reducing the

OB SCHMITT HOMES:

pell out in dollars
he saving from
nergy-efficient construction

ob Schmitt probably has more experience building and merchandising energy-saving houses than any other builder in the ountry. Forced to switch from gas to electric heating when his utility cut off gas ookups three years ago, the Berea, Ohio uilder revamped his specs, built a house sing heat pumps right next to a similar gas-eated house, then monitored the two for 13 onths to see how their energy costs would ompare.

The result of that test (and others made nce) was that with energy-efficient construction and using heat pumps, an electrically heated house can cost less to run than similar, conventionally built gas-heated ouse.

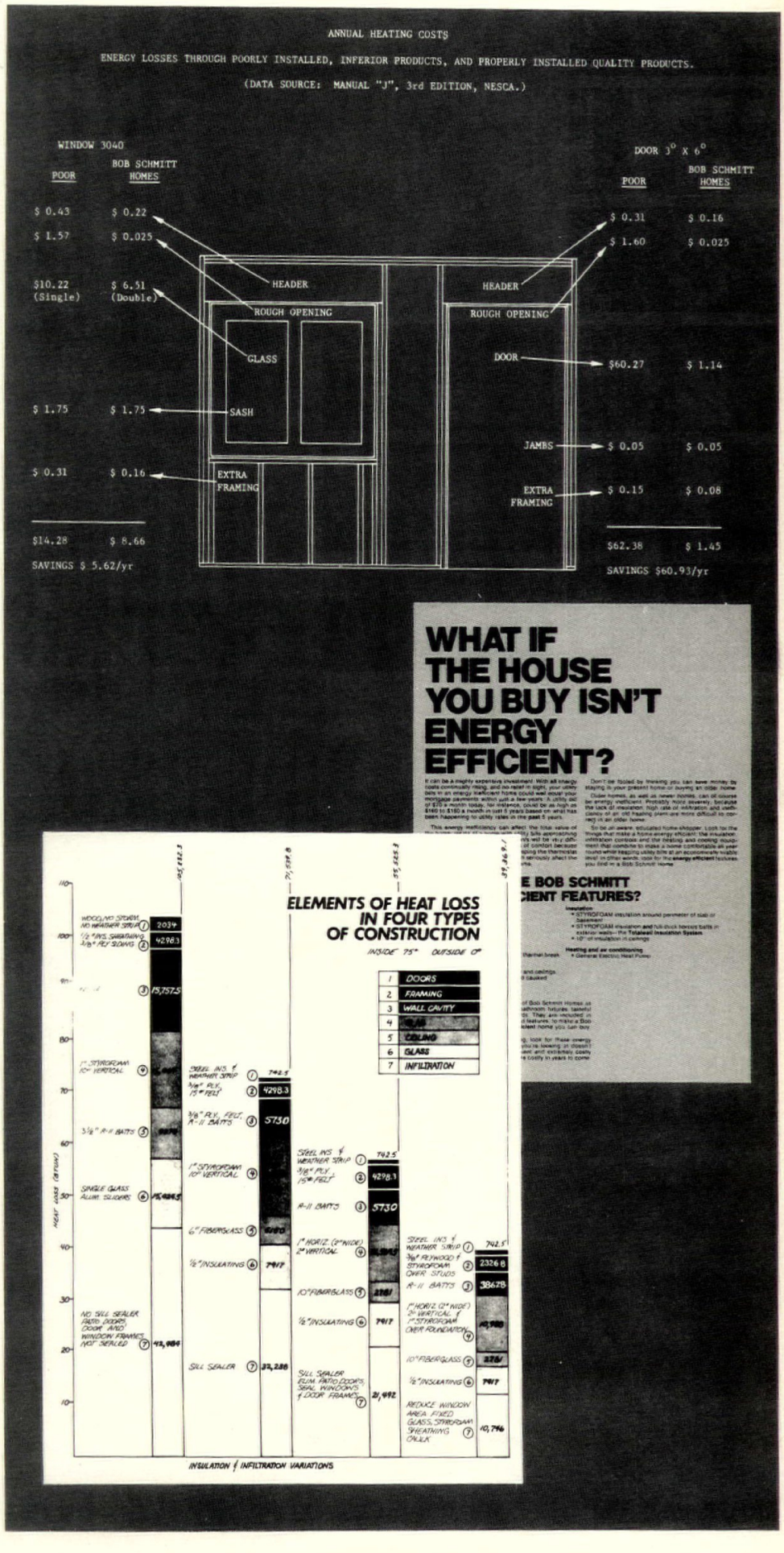
Schmitt uses these results in his merhandising. For example:

A framing drawing compares energy costs a house with poorly installed, inferior roducts to costs when properly installed, uality products are used.

A chart compares total energy consumption for a year in two identical houses ccupied by families of three—one house eated and cooled by heat pumps, the other eated by a gas furnace and cooled by a consensing unit and coil attached to the furace.

Schmitt's merchandising material also includes some "scare" material that shows hat it costs to heat a house that's not engy efficient, how energy efficiency can affect the resale value of the house and how ncomfortable such a house can be.

He also gives buyers section drawings howing how his houses are built and insuted for energy efficiency, an electric usage nalysis breaking down the amount of of engy in terms of kwh used in living and eeping areas in one of his heat-pump ouses over a nine-month period, and descriptions of heat loss in four types of conruction showing insulation and infiltraon variations.



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.

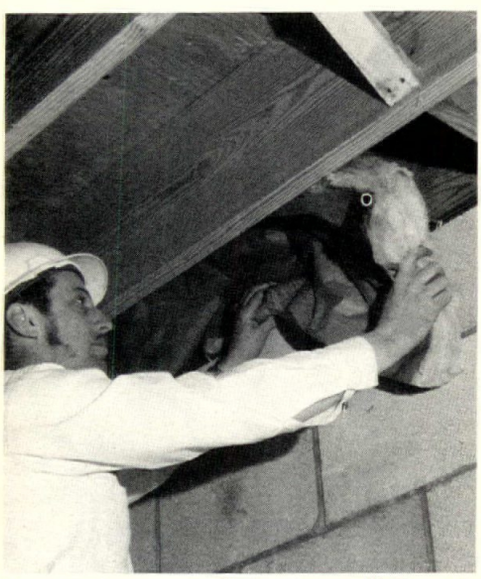
"With today's high heating and cooling costs, you've got to get full value for every dollar you spend on insulation."

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 are where there is blocking, push a section o the insulation behind the blocking an staple the insulation to the top plate and t the bottom of the nailer. Then insulate th balance of the space by butting another ba to the piece behind the blocking.

In stud spaces containing wiring or outl boxes, split the insulation, forcing half b hind the wires and box. Then install th front half of the insulation in the conve tional manner, making sure the piece r moved 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 bein pushed back too far.

EILINGS

hen using a double layer of batts to insu-
e the attic *(above)*, push the top batt be-
een the chords first. Use the bottom batt
push the top one into place and staple it
the ends and sides. Make sure the top
tts are level and butt tightly. (Note: to in-
ease insulation efficiency in the attic area,
ild a plywood frame around the scuttle
le and place insulation—the same
ickness as used in the attic—over the
uttle-hole cover board.)

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

OFFITS

n important area to insulate—yet one that
en is overlooked—is the soffit under a
ntilevered floor. To insulate that space,
t a cardboard sleeve and staple it in place.

After the cardboard sleeve is in place, force in the insulation, 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.

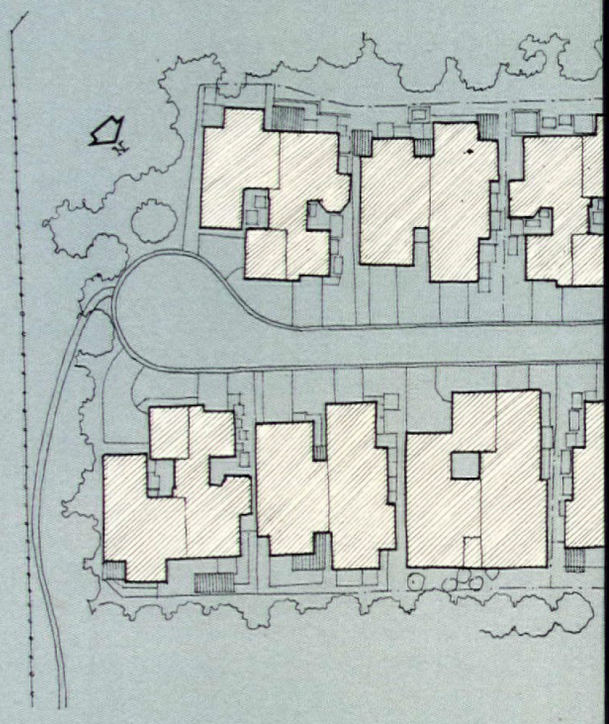
Most important, homebuyers appear to have no inherent resistance to (duplexes) as long as the units are in themselves well planned, well designed and well sited.

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 dev oped in Orange, Calif., by Broadmoor Hom Sales since November: 38 units at prices th start at $70,000.

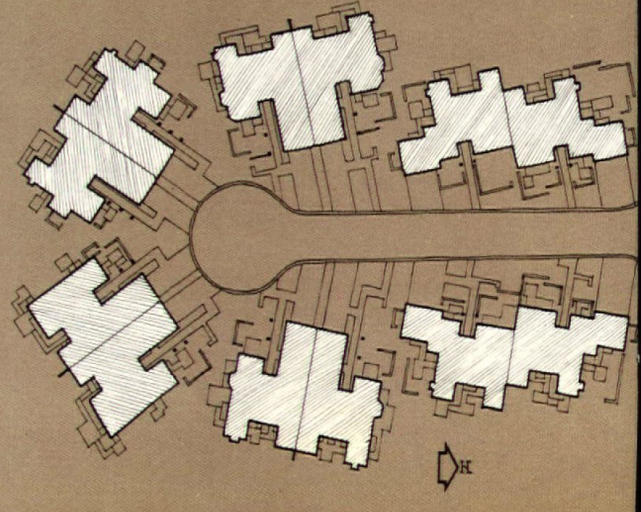
For details, turn to page 70.

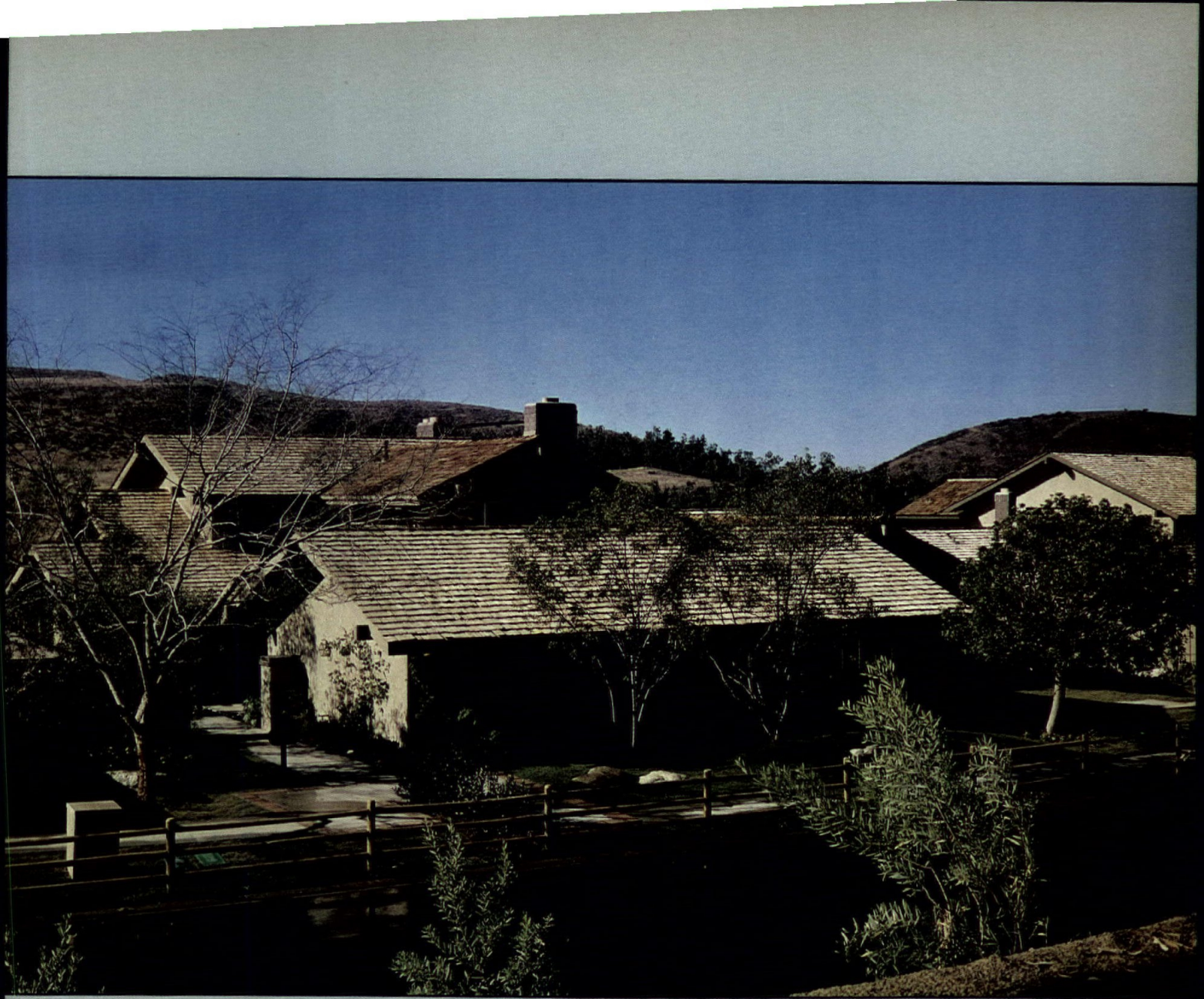


2 The Springs...

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

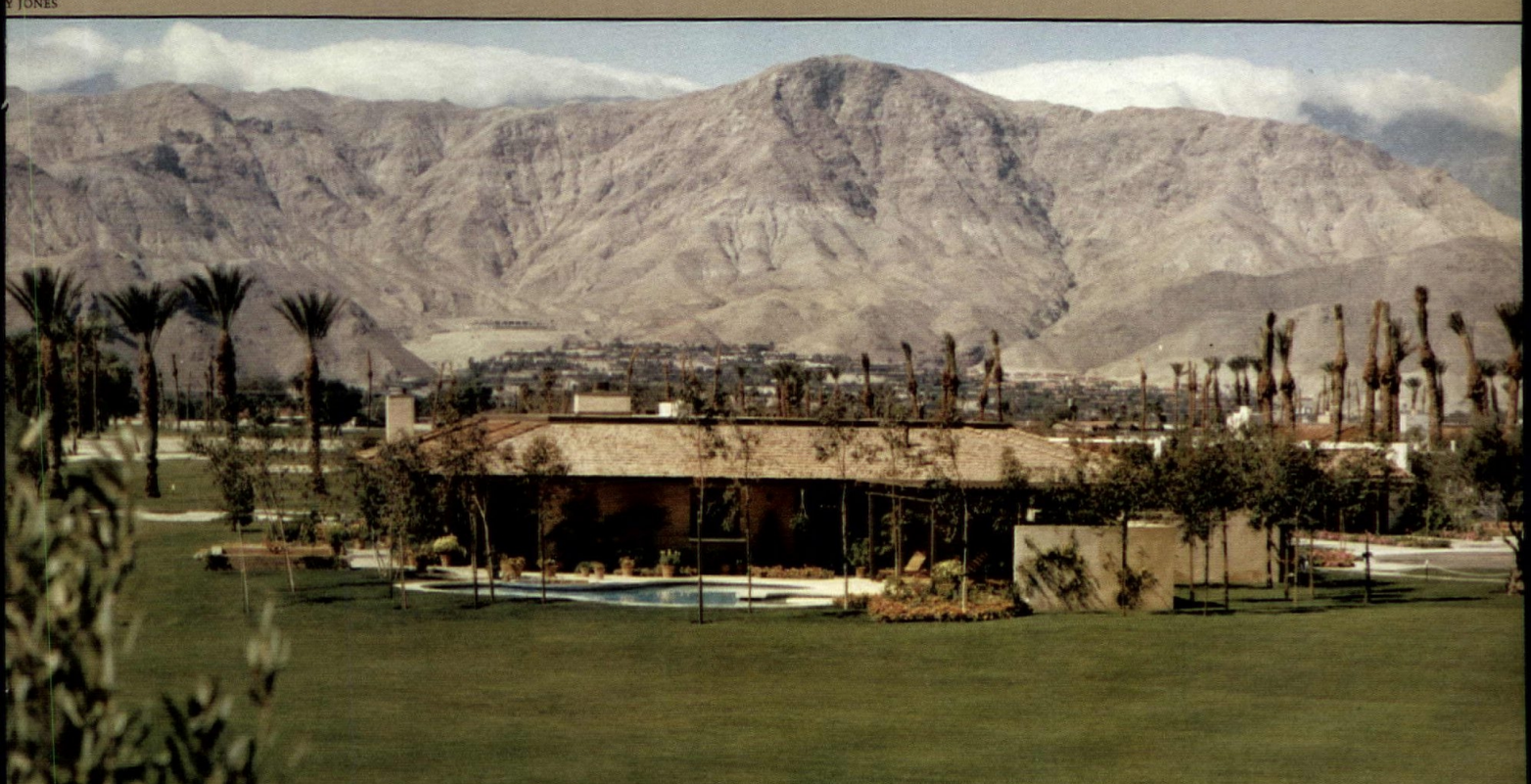
For details, turn to page 72.





VID ROSS

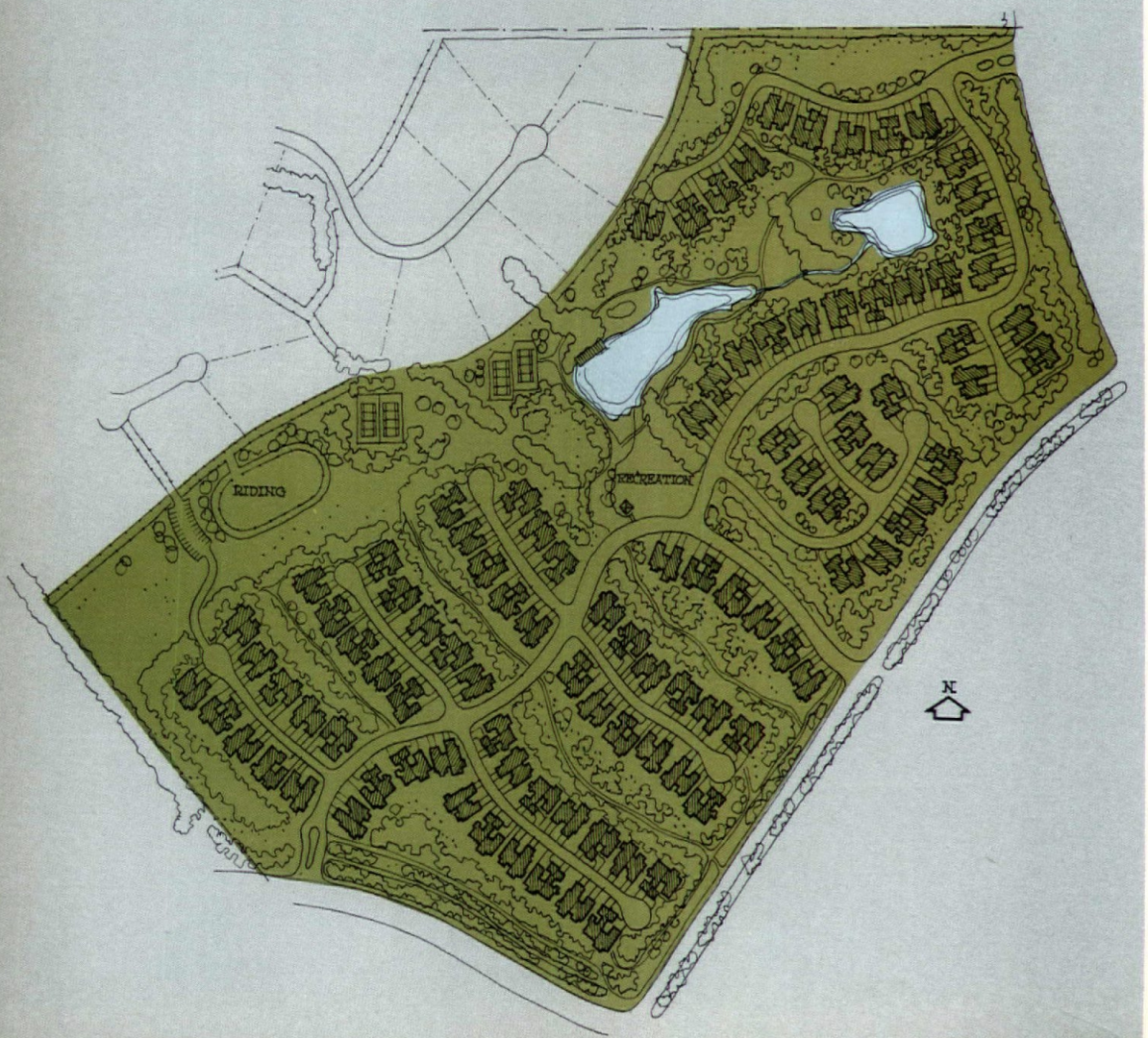
Y JONES



PHOTOS: DAVID ROSS

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 ask approval to build zero-lot-li homes on Broadmoor Park's acres, planning officials sa yes—provided one-third of t site was set aside as open spac

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

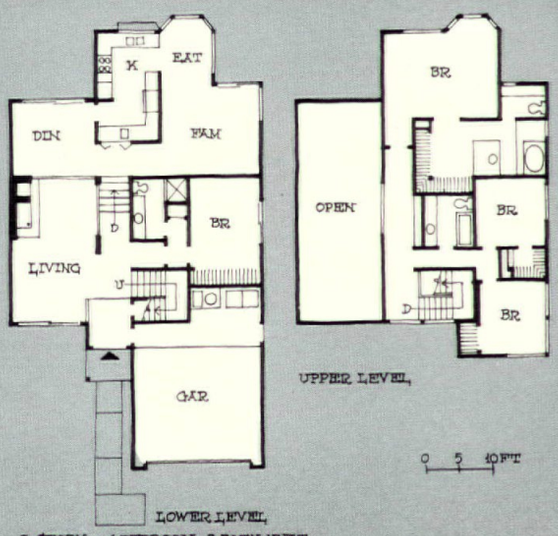
Smith calls the units "zer lot-line attached garden home when pressed for a label, b says buyers have shown no co cern whatever over the co mon-wall plan.

"We didn't anticipate resi tance," he says, "because we' used the scheme before and went well." That was in 197 when Broadmoor marketed 1 paired units and pre-sold the all at prices up to $60,000. Pric at Broadmoor Park range fro $69,900 to $80,000, with pr miums of up to $15,000 for lo overlooking the project's lake

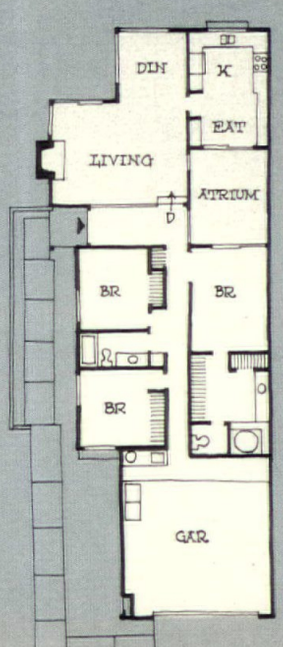
Both the unit design and si plan were done by the arch tecture firm of Morris & Loh bach of Newport Beach, Calif.

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.

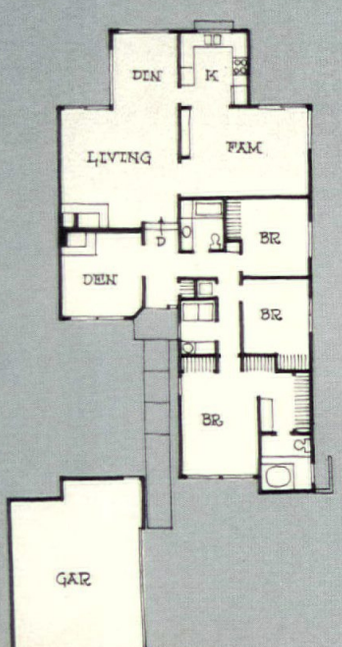
Floor plans *(below and right)* of Broadmoor Park's four models have three and four bedrooms, indicating that the project is aimed at a family market. Common walls are heavily soundproofed. Two-story models permit four bedrooms within narrow lot lines.



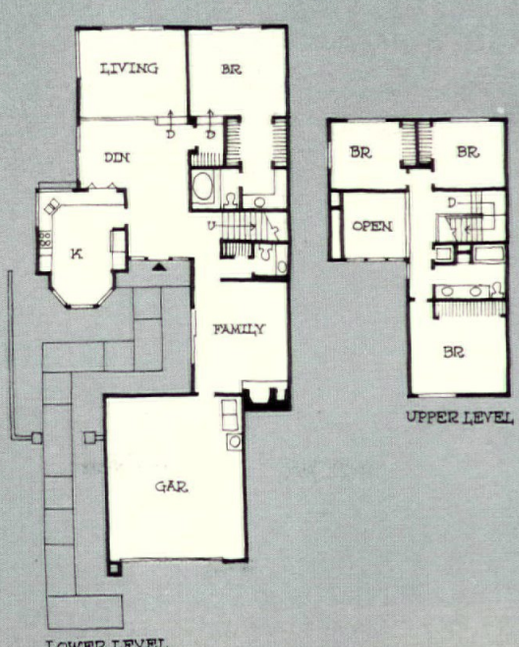
2-STORY - 4 BEDROOM - 3 BATH UNIT



3-BEDROOM - 2 BATH UNIT

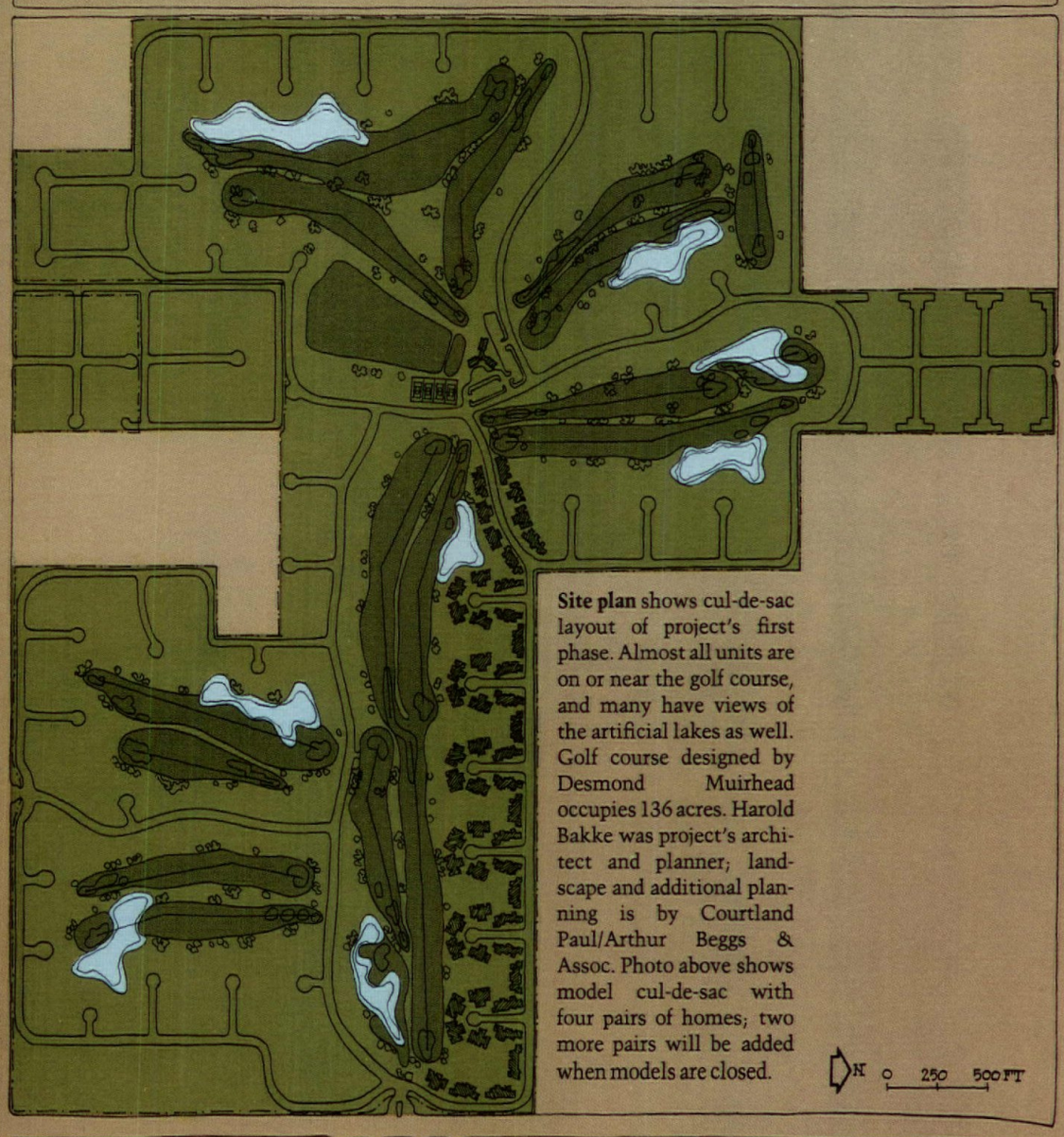


3-BEDROOM - 2 BATH UNIT



2 STORY - 4 BEDROOM - 2½ BATH UNIT

PHOTOS: RAY JONES



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.

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

They're part of the 106-unit fir phase of The Springs, a gol oriented resort community 375 acres near Palm Springs tha will eventually comprise 86 units. And they should disp any notion that the duplex ide *per se* has a negative, low-co image. The homes start at $98 000, average price is $119,00 top-of-the-line models a priced at $136,500, and vie premiums can tack as much a $20,000 onto that.

The chief benefit from pairin units is outdoor space. Exclu sive of the golf course, density The Springs is nearly four uni per acre, yet each home ha ample green space behind it, an there is also a swimming poo and a therapy pool for each 1 units.

The merchandising progra at The Springs ignores the fa that the homes are attache calling them simply "privat residences with condo-style li ing."

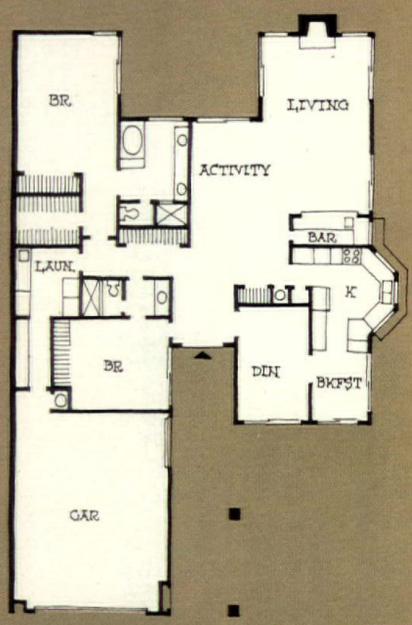
According to Bernard Craw ford, project manager of Th Springs, buyers in this pric range will accept two-house a tachments, but no more.

"Up to maybe $75,000, yo can get away with three an fourplexes," says Crawfor "But beyond that people won tolerate more than one commo wall."

Crawford sees a market f the zero-lot-line duplex concep as well as the present cul-de-sa layout.

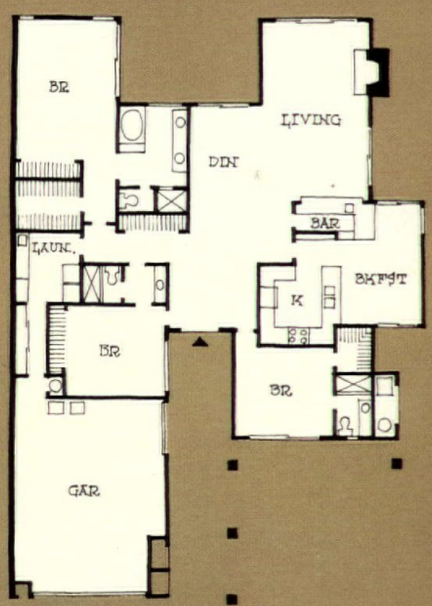
"We like the Broadmoor Par idea," he says, "and we're plan ning something like it for futur phases."

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.")

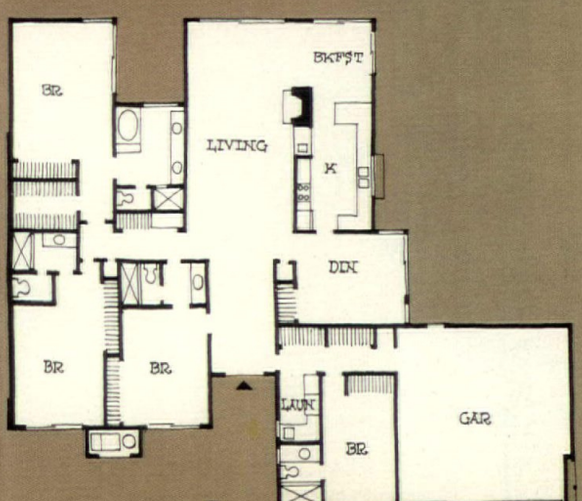


2-BEDROOM - 2 BATH UNIT

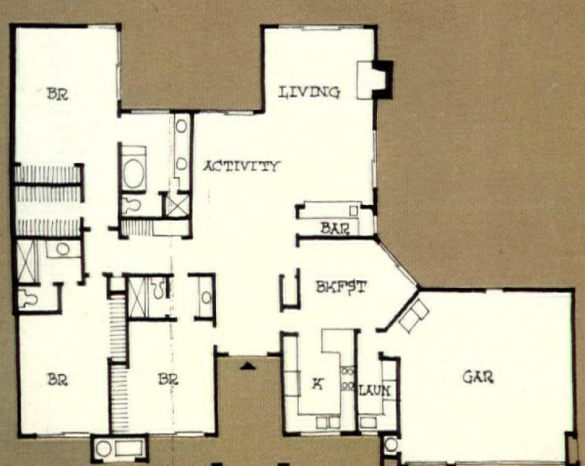
0 5 10 FT



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.

f 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.

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.

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

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 particularly 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 unbud eted stucco work," says Or stein. "It was the main reas that while we had allotted $2 000 for all stucco, plaster a drywall, we wound up spendi $62,000."

Electrical. Almost all t units were improperly wired some of them to a ludicrous d gree. "In one case," says Or stein, "you'd throw a switch one apartment and the air con tioning would go on in the u next door. In other cases some the main building circuits we tied in within individual apa ments. So you had to go in someone's unit to shut tho circuits off, and there w always the chance that a tena would inadvertently shut off t whole building."

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

"In fact," says Ornste "some of them weren't even c through the roof. They were j nailed on like ornaments."

Repairs came to betwe $16,000 and $18,000, roughly budget since most of the pro lems had been identified early

Air conditioning. Many uni didn't work and $12,000 was lotted for repair in the budget

"But as it turned out," sa Ornstein, "the units were st under warranty, and the man facturer either repaired or placed a lot of compressors." R sult: Only $4,000 was actual spent.

Cabinets. The origin builder had bought specials th couldn't be matched by the tin that renovation began. So badly vandalized units, Or stein cannibalized the kitche to make complete jobs out of t old cabinets, then made ne cabinets for 16 kitchens. Co $15,000, vs a budget of $25,00

"We found a really good cab net man," says Ornstein, "a he made the difference."

Clubhouse. "If we had deve oped 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 dgeted, and spent, $34,000—,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 inaccu-te. "As a result," says Orn-ein, "we kept breaking the nes when we excavated. We d 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 oject," says Ornstein, "and hers 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 ving more than $25,000.

Carpets were in bad shape, specially in the first-floor units at had been flooded regularly, nd Ornstein budgeted close to 75,000 for replacement. But by oing over the damaged areas refully, culling out good ieces and stitching them to-ether, $15,000 was saved.

TO NEXT PAGE

1

2

Before-renovation condition of the two apartment projects is graphically shown here. Poor runoff conditions **(1)** at Lancaster Pines broke up roads and gutters, damaged ground cover. Perimeter fence **(2)** at Bosa Nova was damaged, destroying both security 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 necessitated extensive repairs at Bosa Nova **(5)**, and flooding regularly turned Lancaster Pines into a mud flat **(6)**.

3

4

5

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 isn hard enough to change ove When we're full we'll switc over, and, at the same time, dr 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 Ornstei "which anyone else working o a rental project should be awa of." The most significant one

Renting up during fixing-u "This was a waste of time," sa Ornstein. "It didn't bring an one in. Next time we'll hold major rent-up promotions a expenditures until the renov tion is at least 80% finished."

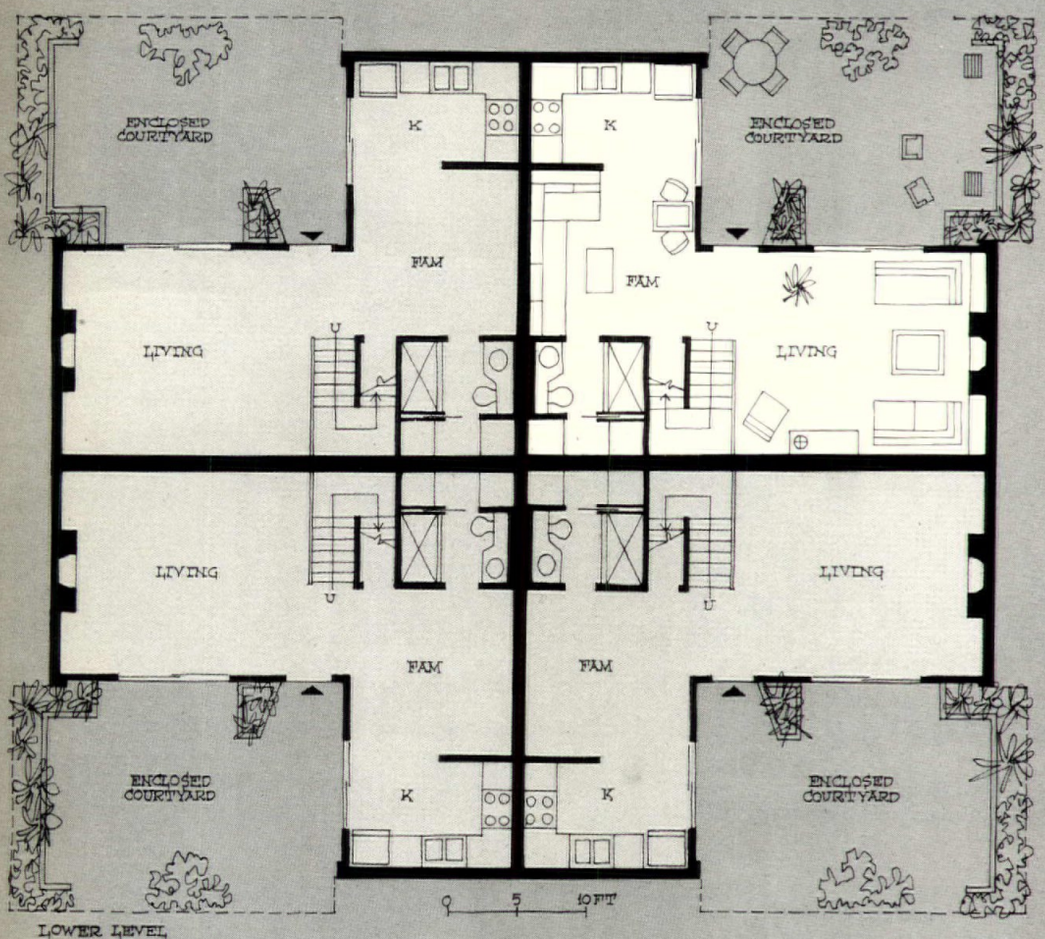
Not getting old tenants o fast enough. "The projects h gone so far downhill that mo of the tenants left were very u desirable, to put it mildly. W let them stay for a while becau the lender wanted at least so cash flow while we were r building. But resident quality vital to a turnaround; you ne to get good, solid citizens in fast as possible, and get the b stuff out as fast as possible. W should have done it immed ately."

Starting on-site promoti too early. "We had a radio pr motion campaign run from t clubhouse in Bosa Nova," sa Ornstein, "and it pulled near 700 people out on one Saturda The trouble was, the gradi wasn't finished and the site w a sea of mud. We spent $5,0 and got only a few rentals out it."

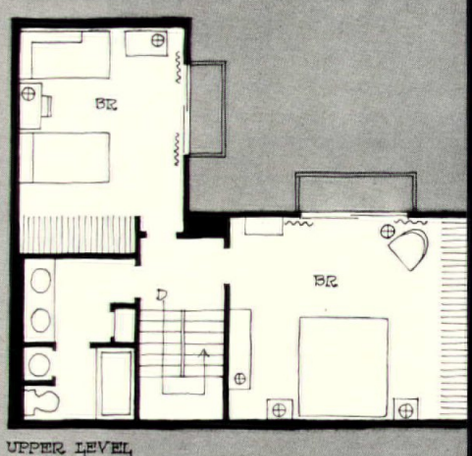
Keeping a weak reside manager too long. "She wasn the kind of person who could e force the rules and procedur strongly enough," says Or stein. "That's critical, esp cially in a workout situati where you're trying to create new image. You have to co vince prospects that no matt what happened in the past, no you're going to enforce all t rules fairly and with no exce tions." —M.C.

Renovations at the two projects included new waterproofing 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.

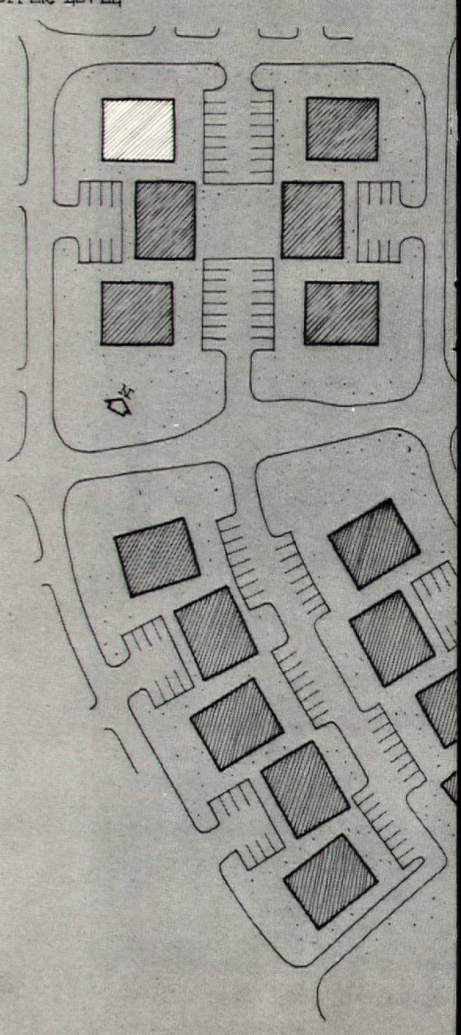
H&H STAFF



LOWER LEVEL



UPPER LEVEL



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).

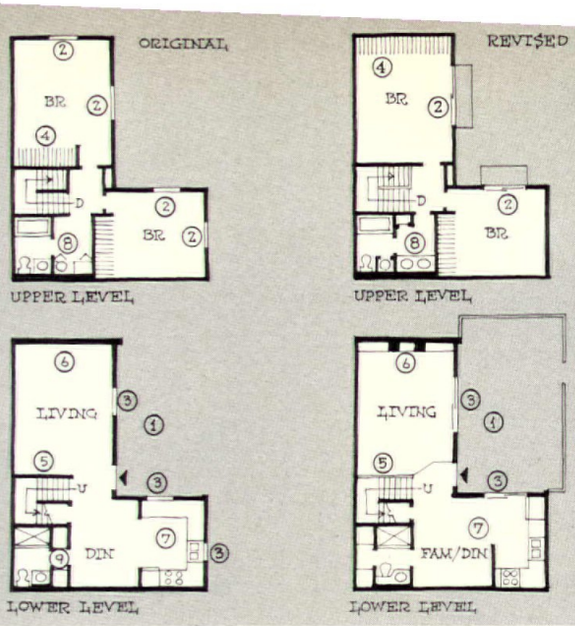
"Most builders wouldn't be satisfied with my profit margin," he says. But a lot of builders are interested in what he's doing. Community Federal says it has had "at least 50 proposals" for carbon copies of Sandalwood.

—M. J. Robinson

For more on DiVosta's fourplexes, turn the page

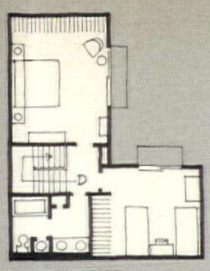
How the original L-plan was refined and improved

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) removed 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.

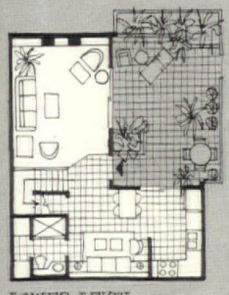


Model interiors were designed for broad appeal

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



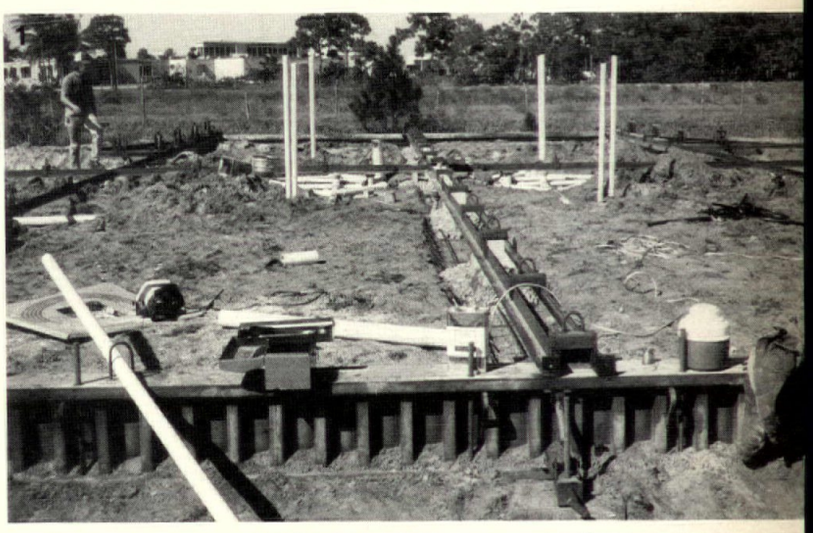
LOWER LEVEL

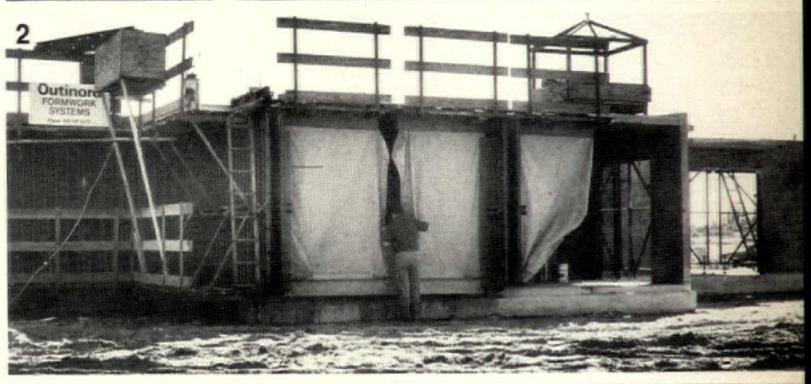
PHOTOS: THE CHILDS/DREYFUS GROUP

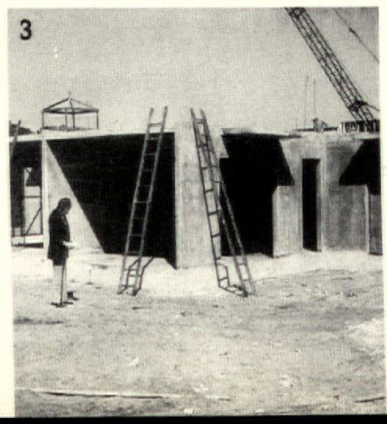
How a fourplex shell is formed in four days

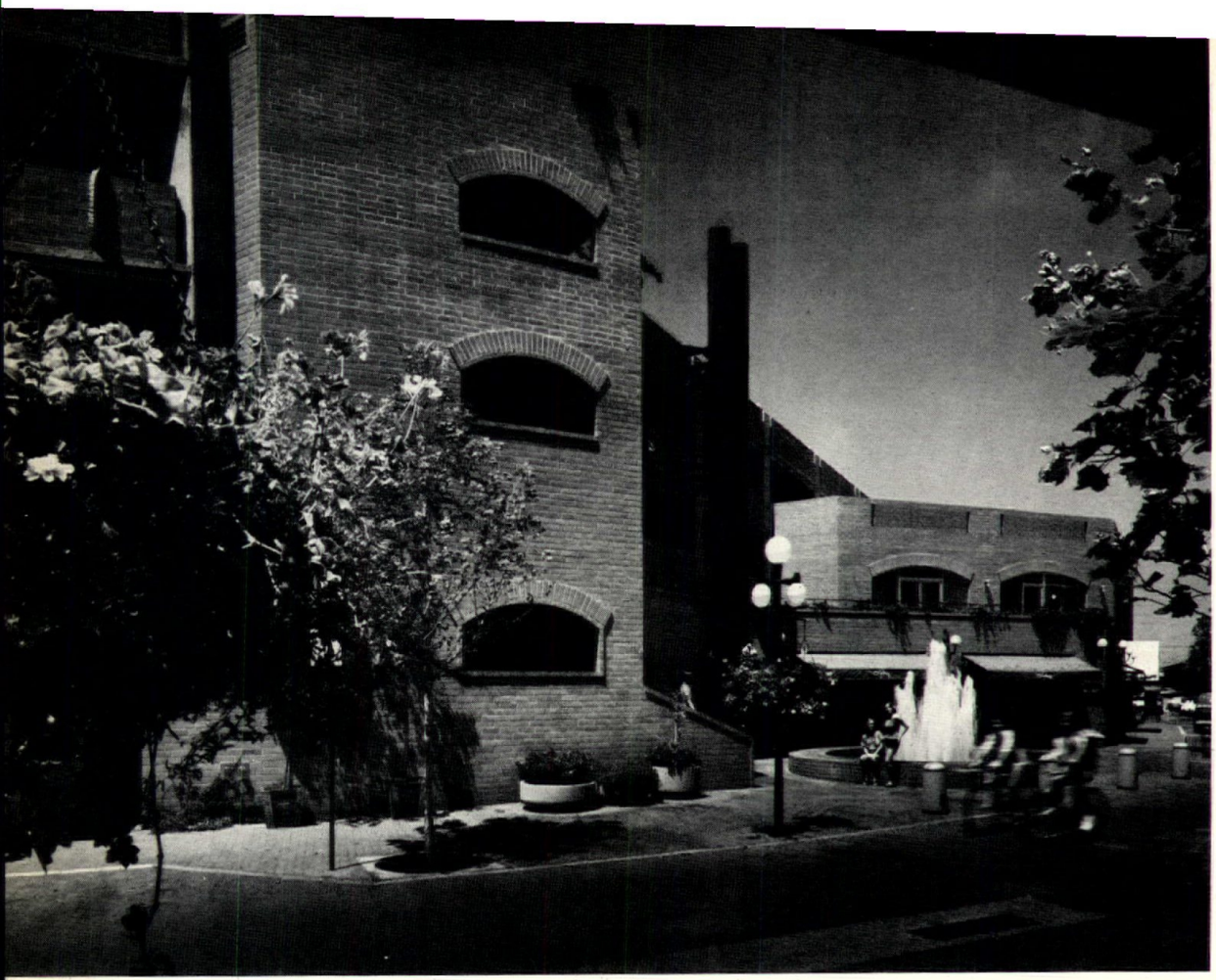
DiVosta *(above)* uses the French Outinord concrete-forming system to complete one fourplex shell in four pours. The first pour forms the first-story walls and ceiling of two units; the second pour does the same for the other two units; third and fourth pours repeat the process for the second story. 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



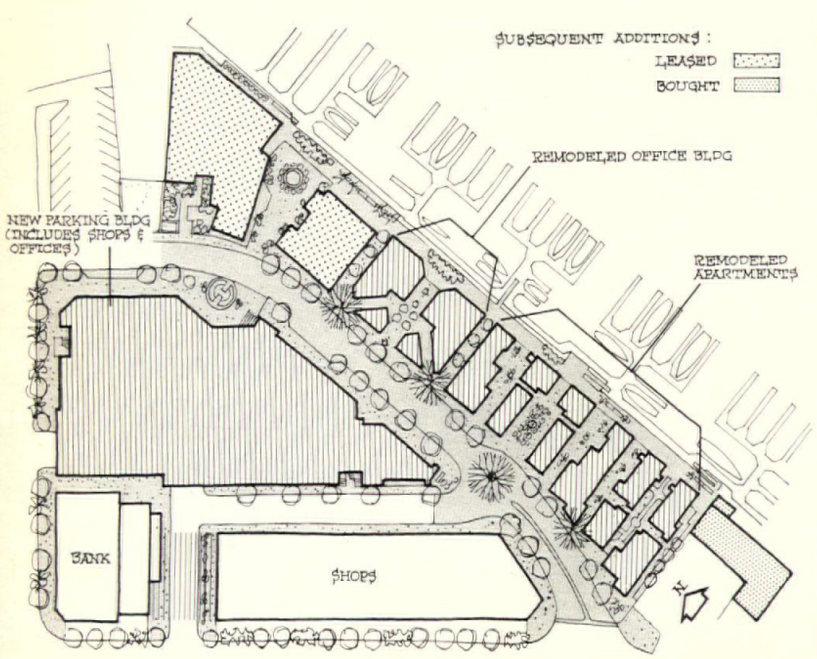






CONVERSION

An $8-million shopping mall from a row of old apartments



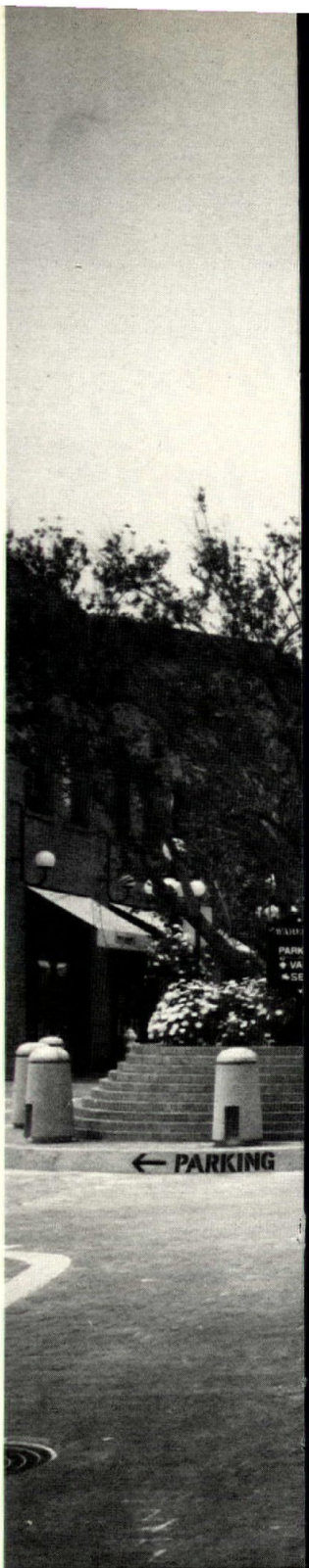
But developer Don Koll hadn't planned it that way. His original scheme was to keep running the buildings as rental properties for a while, then tear them down and build condos on the waterfront site. Here's what happened:

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 manages. 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 Geoge 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 management were contracted to local brokerage division of Colwell 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 a 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 ew," says Strader. "After we arted construction in 1973, eighboring property owners egan offering us buildings and nd leases. So our initial 65,000 q. ft. of leasable space has now own to more than 100,000."

The potential annual rent roll, llowing for 5% vacancies, is almost $1.3 million. It comes om five sources: shops, 44%; ffices, 24%; marina, 12%; separate restaurant, 10%; parking, 0%.

The break-even level, assuming a 75% loan at current rates, 85% occupancy. Still operated n interim financing, Lido Village has reached 75% occupancy. Most of the vacancies are n the upper levels, particularly n the parking garage. Office tenants, the most likely candidates or those spaces, are scarce because surrounding Orange County has an oversupply of vacant offices.

Nevertheless, Strader expects o 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

Basic cost of buildings (102,880 sq. ft.) and land		$5,975,000
First occupancy costs:		
Lease commissions	$ 95,000	
Loan fees	61,000	
Net fill-up costs (18 months)	1,046,500	
Other miscellaneous costs	30,000	
		1,232,500
Total cost of project		$7,207,500

ECONOMIC VALUATION

Gross annual rent		
Shops	$ 587,000	
Offices	316,000	
Separate restaurant	140,000	
Marina	156,000	
Parking	130,000	
		$1,329,000
Less 5% vacancy in shops and offices		45,150
Effective gross income		$1,283,850
Net annual operating expenses		230,000
Net income before ground rent		$1,053,850
Ground rent		250,000
Net income after ground rent		$ 803,850
Capitalized or economic value (at 10%)		$8,038,500

PROJECT EVALUATION SUMMARY

Economic value of project		$8,039,000
Net cost of project		7,208,000
Potential created equity		$ 831,000
Potential profit	$ 831,000	
	$7,208,000	11.5%

DEVELOPER'S RETURN ON EQUITY

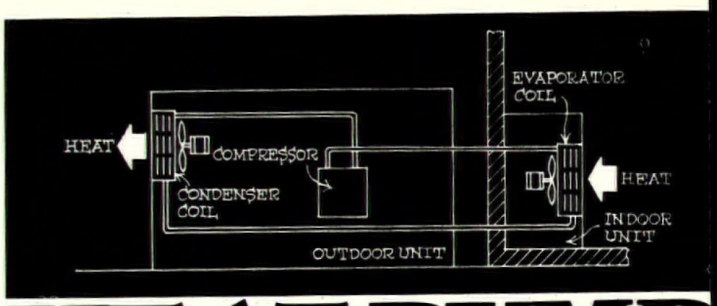
Economic valuation		$8,039,000
75% of economic valuation		6,030,000
Total cost		$7,208,000
Loan amount (75% of economic valuation)		6,030,000
Required equity		$1,178,000
Net income		$ 803,850
Debt service $6,030,000 × 10.91(10% – 25 yrs.)		657,873
Net income after debt service		$ 145,977
Return on developer's equity		
$ 145,977		12.4%
$1,178,000		
Capitalized value of project after financing		
$145,977 ÷ 9.5%		$1,537,000
Plus mortgage loan		6,030,000
Total value of project after financing		$7,567,000

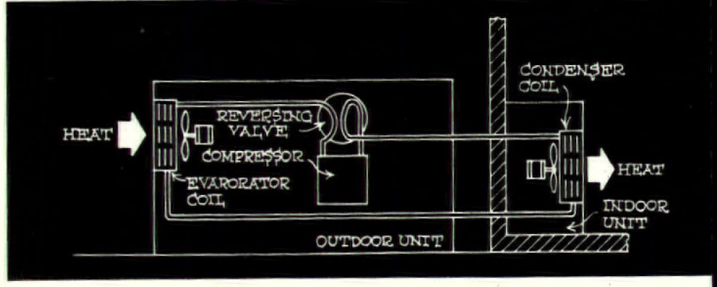
SUMMARY

Actual cost of project	$7,208,000
Economic value of project on a "free and clear" basis	$8,039,000
Economic value of project after long-term financing	$7,567,000

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 Poretsky & 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. Second, 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 subcontractors just did not know how to install the systems.

Most of these problems have been solved in the second- and third-generation heat pumps on the market today. Compressors have been completely redesigned, lubricants and refrigerants reformulated, valves re-engineered 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.

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.

ome cases even basic operating
nethods have been improved.
So now builders are ready to
ccept the heat pump as a practi-
al heating/cooling method. But
vhat about the public?
Builder Starr says buyers will
ccept this "new" heat source.
Our prospects needed little or
o education. Some of them
new more about them than we
id," he says.
In one of Starr's "affordable"
ome developments, the heat
ump was offered as an option.
outsold luxury trade-ups such
s fireplaces and carports and
as since become standard.
Prospects at Rosen-Michaels'
rojects were not so well-in-
ormed, so the builder had more
f a marketing task. He got help
rom his heat pump manufac-
urer (Carrier), his heating con-
ractor and the local utility.
They jointly sponsored educa-
ional seminars on heat pumps
or the builder's sales force.
Some people still question the
eliability of heat pumps in cold
limates and are reluctant to use
hem. But in Albany Rosen-
Michaels found that all of its
eat pump houses sold, while
our of the original gas-heated
nits didn't move—even with a
rice break.
"If we could get gas again to-
norrow," says Derkowsky,
I'm not so sure we'd switch
ack."

—ELISE PLATT

Will heat pumps cut fuel costs in your housing? Here's how to find out

A. Enter the present fuel rate in your area (cost per kilowatt hour, gallon or thousand cubic feet). See a sample fuel bill. _____A

B. In the appropriate column on the fuel comparison chart, find the corresponding cost per million Btu's. Circle it and enter it here. _____B

C. Enter the local electric rate per kilowatt hour. _____C

D. Find your approximate location on the map and enter the seasonal performance factor (SPF) for that area. _____D

E. 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

F. Divide cost per million Btu's with a heat pump (E) by cost per million Btu's with the conventional heating system (B). _____F

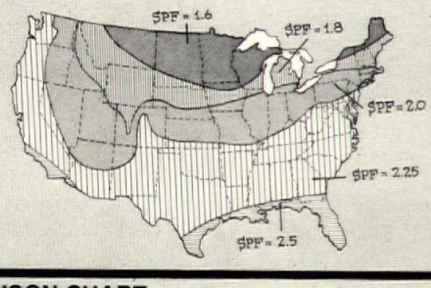
G. Enter the present annual heating cost in your area (if necessary, estimate). _____G

H. To determine your potential annual heat pump heating cost, multiply (F) times your present annual heating cost (G). _____H

I. To determine your annual savings, subtract potential annual heat pump heating cost (H) from your present annual heating cost (G). _____I

$$\text{Coefficient of Performance (C.O.P.)} = \frac{\text{heat delivery}}{\text{energy supplied}}$$

$$\text{Seasonal Performance Factor (SPF)} = \text{average C.O.P. throughout the heating season}$$

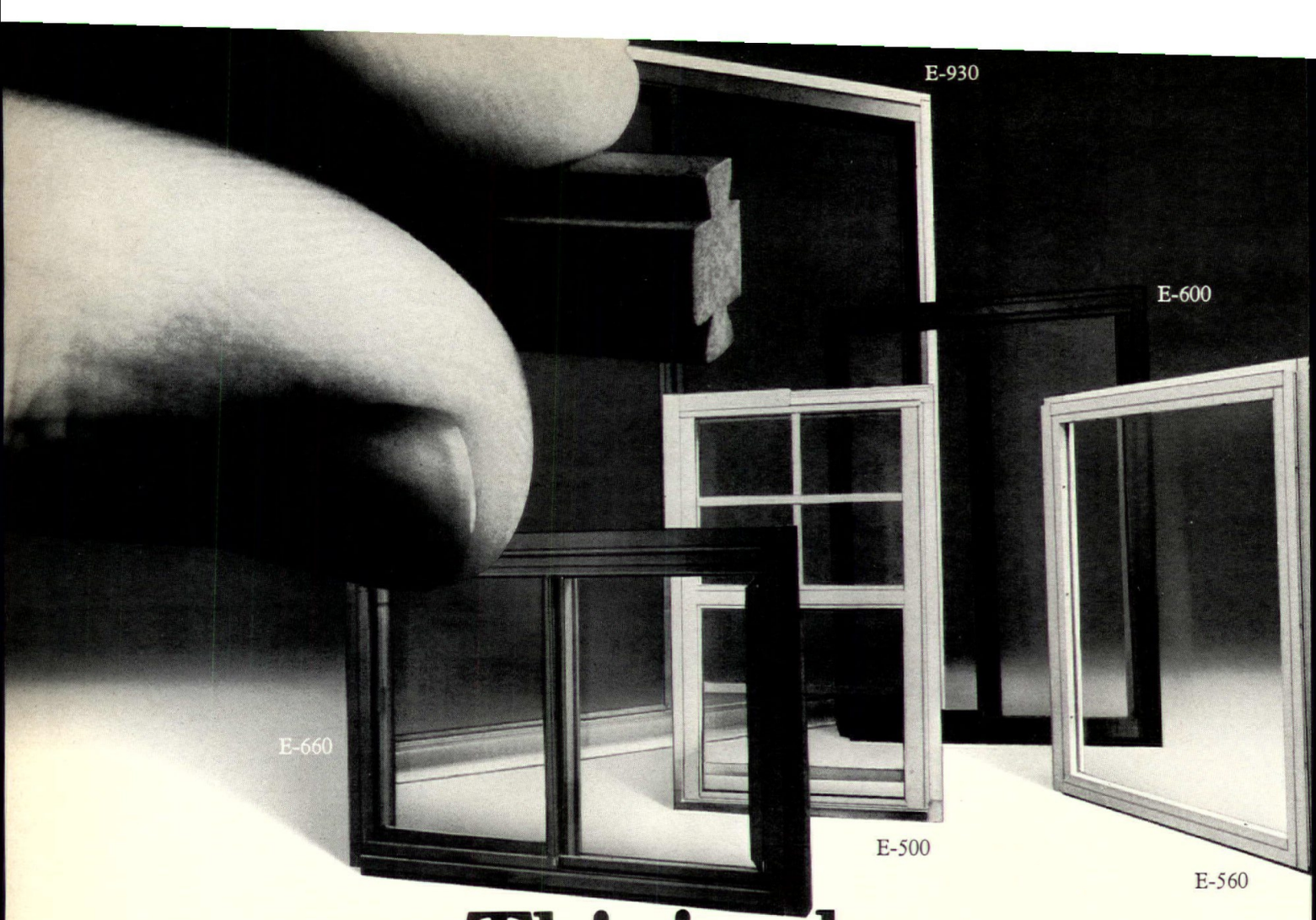


FUEL COMPARISON CHART

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.



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.

It's our advanced research and engineering that make the 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.

More windows. More window.

CAPITOL PRODUCTS
A subsidiary of Ethyl Corporation.

CIRCLE 90 ON READER SERVICE CARD

WINDOWSELL.

New Norandex thermal barrier window saves energy... cuts fuel costs... closes sales.

A nor-guard INSULATED PRODUCT

1" Nailing Fin
on frame provides quick, easy, secure installation.

Full Thermal Break
on all frame and sash members acts as a barrier against heat flow. The heating and cooling your customer pays for stays in... cold drafts and scorching summer temperatures stay out. Prevents interior condensation, too.

Removable Sash
is balanced to tilt in and can be removed from the inside. Finger latches are accessible for easy operation. Half-screens may be installed from the inside, too.

Cam Action Lock
assures an air-tight joint at meeting rail and sill.

Pile Weatherstripping
in sash features a fin running down the center to seal out air, water and dirt.

Special Mulling Feature
allows mulling at branch or job site without complicated addition to overall opening size.

5/8" Double-Pane Insulated Glass
helps prevent transmission of heat, cold air and noise. Can be reglazed in the field, from the inside. Between-the-glass muntins are available.

Electrostatic Paint Process
in white or bronze assures long-lasting good looks.

Closed Corners
at top and bottom of frame act to further prevent heat or cold transmission.

Please send complete information on the Norandex thermal barrier window. ☐
Tell me about the complete Norandex line of quality building products. ☐
Please have representative call. ☐

Name _____

Company _____

Address _____

City _____

State _____ Zip _____

Norandex provides a single reliable source for all your building needs. For complete information on the Norandex thermal barrier window and our complete line of fine building products, contact your nearest Norandex warehouse or fill in coupon and mail to:

Our reputation is building...

norandex
BUILDING MATERIALS
7120 KRICK ROAD/CLEVELAND, OH 44146

CIRCLE 93 ON READER SERVICE CARD

"The General Electric Weathertron® is America's No. 1 selling heat pump."

Rowan and Martin tell the GE Weathertron story on TV.

Builders specify the GE Weathertron® heat pump more than any other manufacturer's for many good reasons.

First is the Climatuff™ Compressor with its record of dependability in over a million and a half installations.

Spine Fin™ condenser coils eliminate many brazed connections where leaks can occur.

You can choose from 18 different Weathertron models—18,000 to 240,000 BTUH—for residential and commercial applications and from a complete line of other heating and cooling equipment.

You can offer your customers the GE National Service Contract on the residential heat pump.

All this from GE, the company that pioneered the heat pump back in 1935.

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®.. America's #1 Selling Heat Pump.

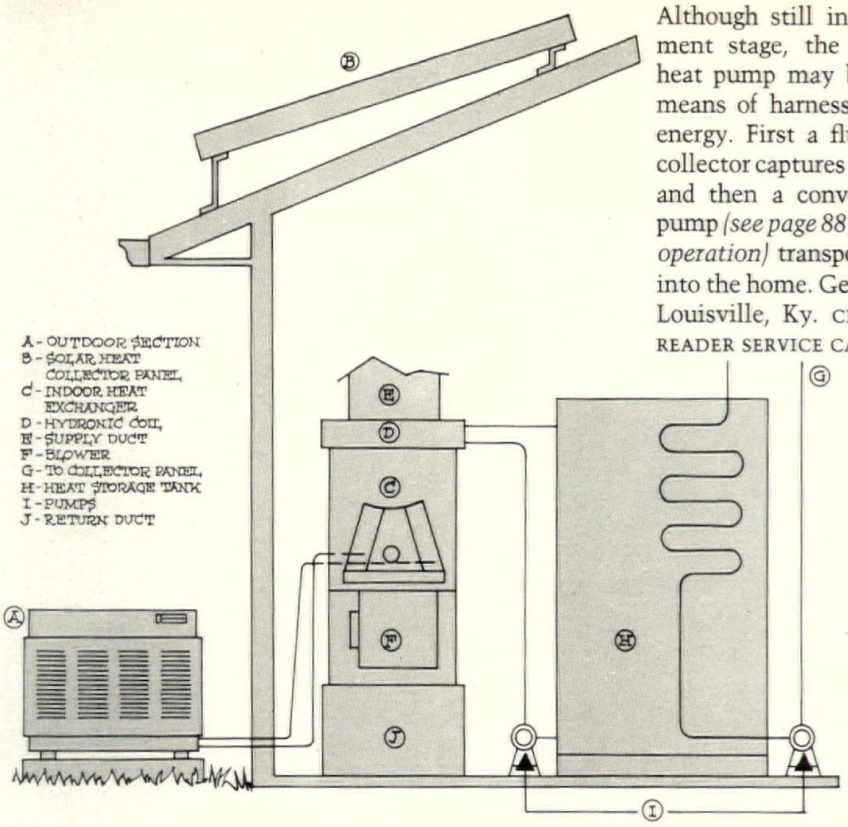
GENERAL ELECTRIC

CIRCLE 94 ON READER SERVICE CARD

PRODUCTS

6 Kitchens
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

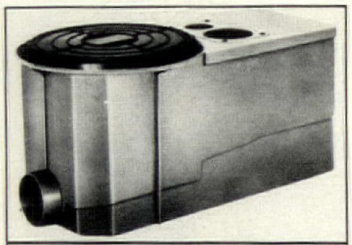
Solar-assisted heat pump: The next logical step

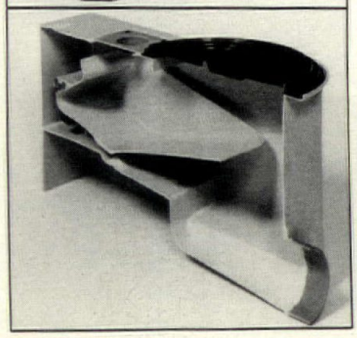


Although still in the development stage, the solar-assisted heat pump may be a practical means of harnessing the sun's energy. First a fluid-type solar collector captures the sun's heat and then a conventional heat pump *(see page 88 for heat pump operation)* transports that heat into the home. General 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



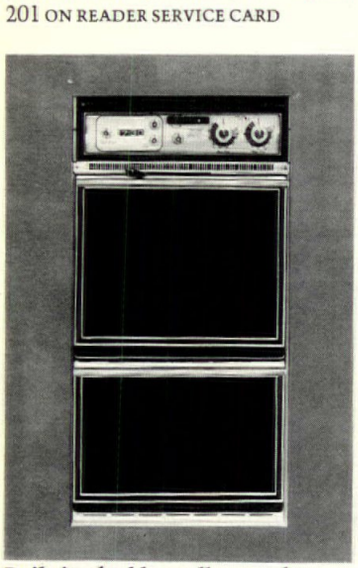


Traditionally styled cabinetry, "Heritage," is available in distressed walnut *(shown)* or antique white finishes. Line includes 33 easy-to-assemble "Unifront" units in varying sizes. "Heritage," with the look of fine furniture, can be used in any room of the house. Belwood, Ackerman, Miss. CIRCLE 200 ON READER SERVICE CARD

Compact laundry pair consists of a automatic washer and a nonvent dryer. Top-loading washer can used as a portable or built in. Dry which can be wall-mounted shown, offers normal, fluff and pe manent press cycles. A special ra permits stacking. General Electri Louisville, Ky. CIRCLE 203 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

Traditionally styled cabinet lin "Lexington," has a sleek, uncl tered design. Offered in a wide ran of modular sizes, the warm hone toned cabinets have solid-core doo with self-closing hinges. Conn Forest Products, Wausau, Wi CIRCLE 204 ON READER SERVICE CAR



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

n 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?

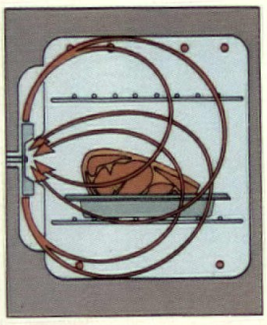
Now you can give every new home you design the added flexibility and selling features of this newest Jenn-Air Grill-Range.

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.

Another big Jenn-Air feature is hoodless surface ventilation. That means greater design flexibility for you and a cleaner, cooler kitchen for your customers.

And your prospective buyers get a choice of smooth-top or conventional cooktop elements and drop-in, built-in and free standing units. Plus, any or all of five cooktop convertible accessories. Grill, griddle, rotisserie, deep-fryer, and shish-kebabber.

So why not throw a Jenn-Air open house? We'll train a host or hostess to demonstrate the Jenn-Air Grill-Range to your weekend crowds. And if that sounds good, wait 'til you hear the rest of our "from the ground up" program. It'll help you draw up houseplans that'll make you sales.



For more information, send this coupon to Jenn-Air Corporation, 3035 Shadeland, Indianapolis, Indiana 46226.

NAME_____

TITLE_____

COMPANY NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____ PHONE_____

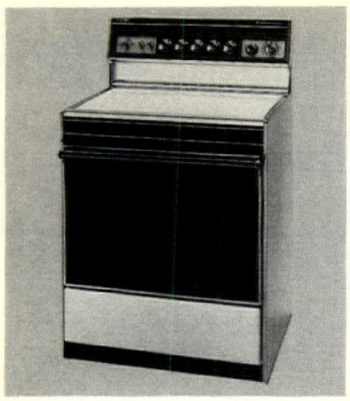
THE JENN-AIR GRILL-RANGE

A magnificent cooking instrument

Jenn-Air Corporation, 3035 Shadeland, Indianapolis, Indiana 46226

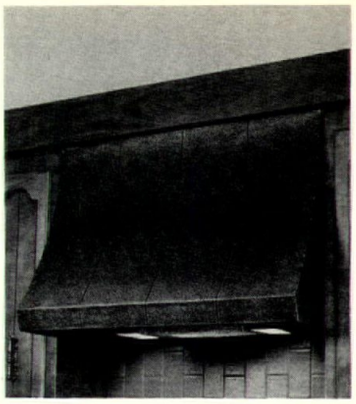
*Full year, 1975.

AVAILABLE IN DROP-IN, BUILT-IN, AND FREE STANDING UNITS.

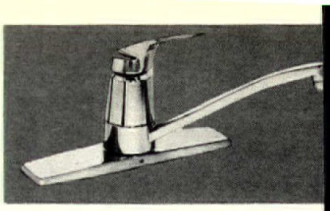


Micromatic® range cooks with microwaves, with conventional electric heat or with a combination of the two. The fully automatic unit has a smooth-surface cooktop. Litton, Minneapolis, Minn. CIRCLE 205 ON READER SERVICE CARD

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 fauc "Aquarian II," has a restyled hand for increased strength. A lubri tion-impregnated O-ring provid smooth spout operation. Americ Standard, New Brunswick, N CIRCLE 208 ON READER SERVICE CAR

GlamourTop, postformed counte top with a high-pressure lamina surface, is available in a wide ran of colors and patterns. It is stain a scratch resistant. Plastic Clad, B mingham, Ala. CIRCLE 210 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 drawe fronts of easy-to-maintain, stain-, scratch- and scuff-resistant Formica® Cabinets come in a wide range of sizes and styles. Kemper, Tappan, Rich mond, 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.

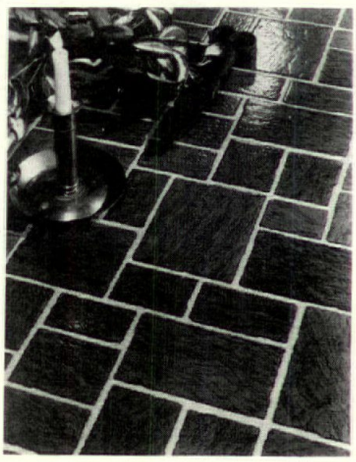
AGA American Gas Association

CIRCLE 99 ON READER SERVICE CARD

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

"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



Prefinished wood flooring, "Cabin Strip," features heavy side bevels, wire-brush surface distressing and an antique-brown finish. Easy-to-install flooring is made of standard ¾" by 2¼" random-length strips. Memphis Hardwood Flooring, Memphis, Tenn. CIRCLE 233 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

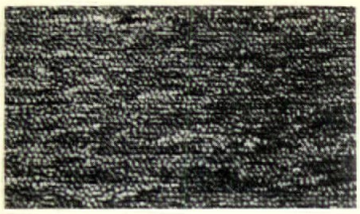
No-wax cushioned vinyl flooring, "Court Stone," has the look of hand-set textured slate. Available in five natural shades, the flooring comes in 9′ and 12′ widths. Congoleum, Kearny, N.J. CIRCLE 230 ON READER SERVICE CARD

Classic windows: The inspired Stack & Strip

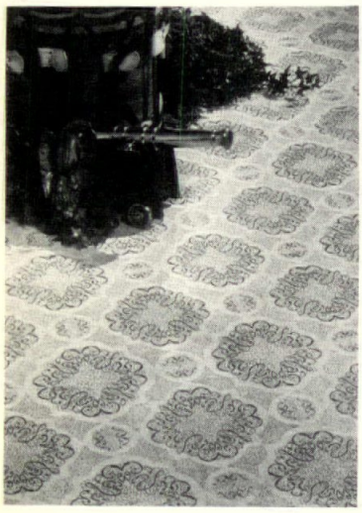
You don't see windows as beautiful as this every day. When you do, chances are they came from Marvin. We work hard to make it easy to achieve the spectacular results. Our Stack & Strip units come in 28 basic awnings and 5 view units. Marvin will set up the complete window at the factory or ship the individual 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. We'd like to send complete information. Marvin Windows, Warroad, MN 56763. Phone: 218-386-1430.

Marvin Windows

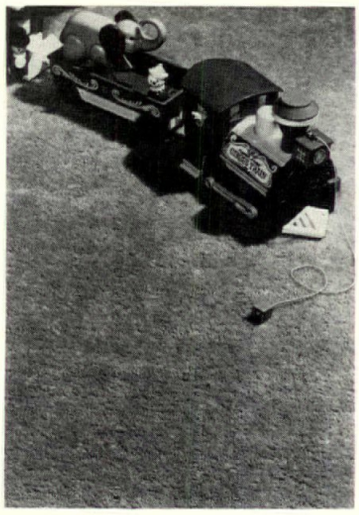
CIRCLE 101 ON READER SERVICE CARD



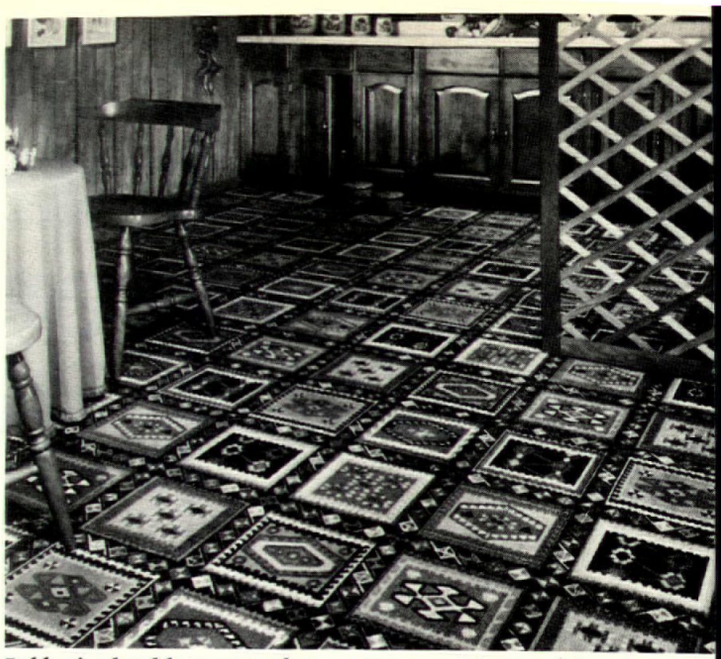
Level loop carpet, "North Point," is highly resistant to abrasion and crushing. Constructed of solution-dyed Herculon, carpet has a low static propensity. Jute or foam secondary backings are offered. Burke, San Jose, Calif. CIRCLE 234 ON READER SERVICE CARD



Multicolored vinyl asbestos tiles, "Annondale," have an intriguing textured scroll design. Measuring 12"x12"x$^{1}/_{16}$", 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



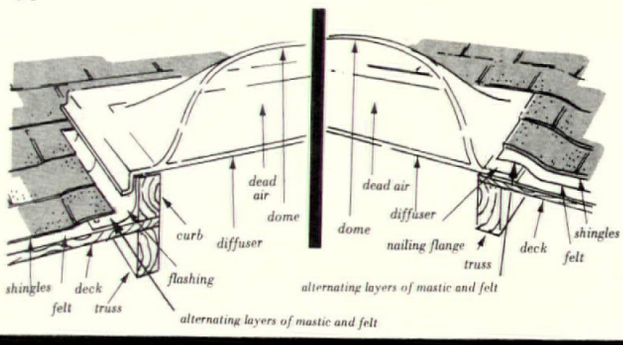
Bold print level loop carpet has a pattern reminiscent of American Indi designs. The anti-static, soil-hiding kitchen floorcovering is part of t "Footlights" collection. It carries a factually descriptive label Sears Ro buck, Chicago. CIRCLE 238 ON READER SERVICE CARD

Durabond® carpet installation ki designed for cushion-back or i door/outdoor carpeting, includ double-faced vinyl tape, seam seale a seam knife, chalk, chalk line, cu ting guide and instructions. U. Gypsum, Chicago. CIRCLE 237 o READER SERVICE CARD

Skymaster® SKYLIGHT

- NATURAL LIGHT
- LOW IN COST
- ENERGY SAVING

Add the pleasant glow of natural sunlight to your home. Install Skymaster Skylights in any room—bathrooms, kitchens, hallways, dens or even in the garage. Break-resistant, clear UVEX domes and diffusers have entrapped air space between them to insulate and prevent weeping. Two styles and a wide range of sizes to fit all applications.



Skymaster Div. of Tub-Master Corp.

Home Office: 413 Virginia Drive, Orlando, Fla. 32803, Telex - 56-7405
Branch Plant: 1600 Missile Way, Anaheim, Calif. 92801, Telex - 65-5440

CIRCLE 102 ON READER SERVICE CARD

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, ¼"-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

emodeling? Think BRICKETTES®
r Mini-Panels or Floor Brick.

hat's right. Three hot products from Modern Methods. omeowners will welcome suggestions and ideas about ow these new products will improve their homes.

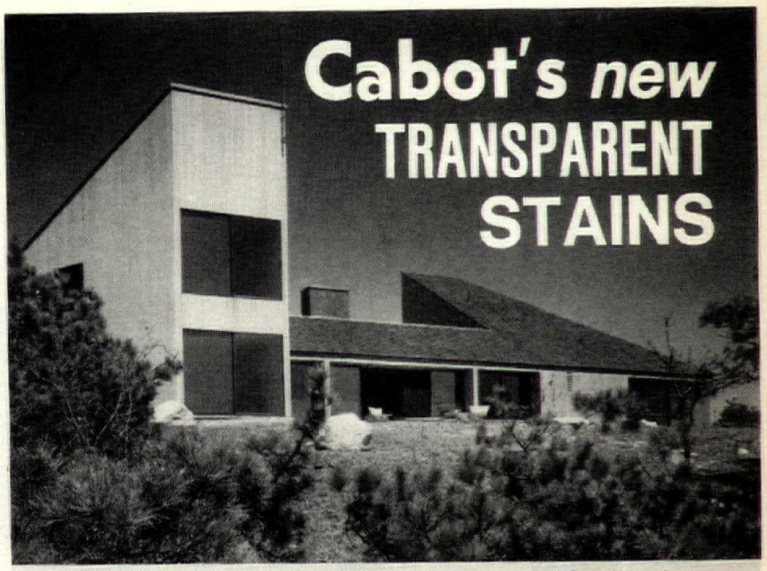
etter looking walls of BRICKETTES. Real kiln-fired brick. ut only 1/2" thick. Fireproof too. Or easy-to-use Mini-anels. They are BRICKETTES, factory-applied to 1/2" sulation board. Or Floor Brick for elegance in foyers, tchens and patios.

RICKETTES or Mini-Panels or Floor Brick.

/rite or call for more information. (502) 685-5128

MODERN METHODS, INC.
NOTHER ORBCO COMPANY
OWENSBORO, KY. 42301

CIRCLE 98 ON READER SERVICE CARD



East Coast home; Architect: James Walker, Boston, Mass.; Cabot's Stains throughout

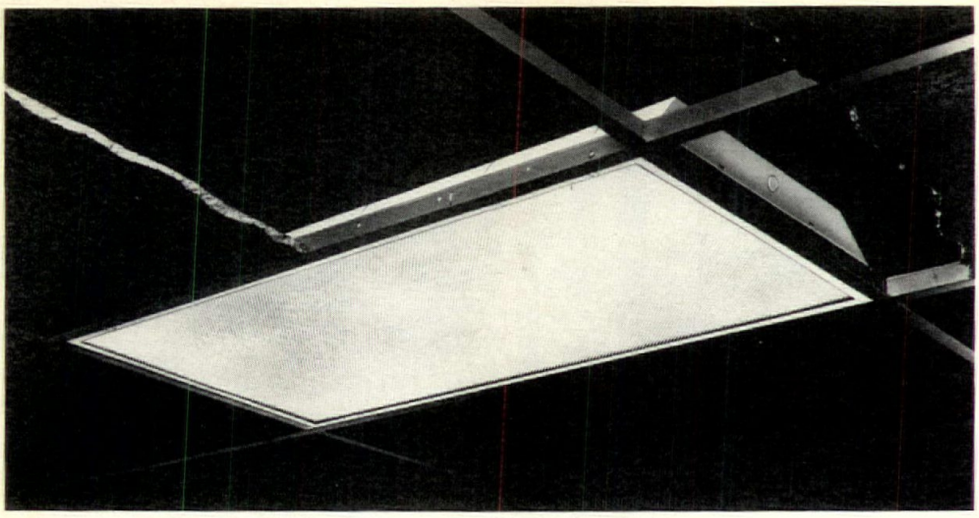
The stain that shows the grain

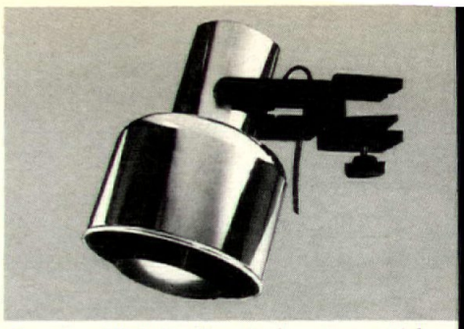
These new stains bring out the best in wood, produce rich, lively colors in a variegated effect depending on the porosity of the wood surface and the exposure. Cabot's Transparent Stains accent the beauty of wood grain and texture, beautify in a choice of 28 colors. Like other stains in the Cabot line, they will not crack, peel, blister . . . are applicable to all types of wood.

Cabot's Stains, the Original Stains and Standard for the Nation since 1877

Samuel Cabot Inc.
One Union St., Dept. 430, Boston, Mass. 02108
☐ Send color card on Cabot's Transparent Stains
☐ Send Cabot's full-color handbook on wood stains

CIRCLE 103 ON READER SERVICE CARD



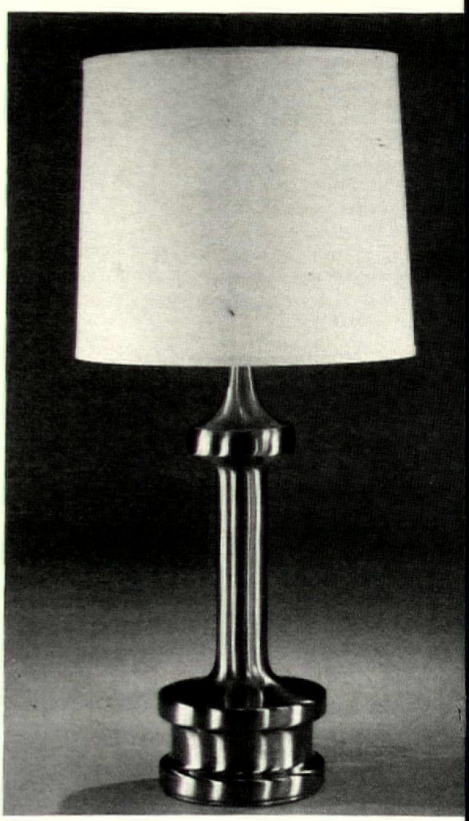


Directional lighting line, "Fabian Series" *(above)* consists of portable wall- and ceiling-mount units. Fixtures available in white, chrome or brass metal finishes have reflectors that intensify illumination. Two and three-light units are offered. Inlite, Berkeley, Calif. CIRCLE 215 ON READER SERVICE CARD

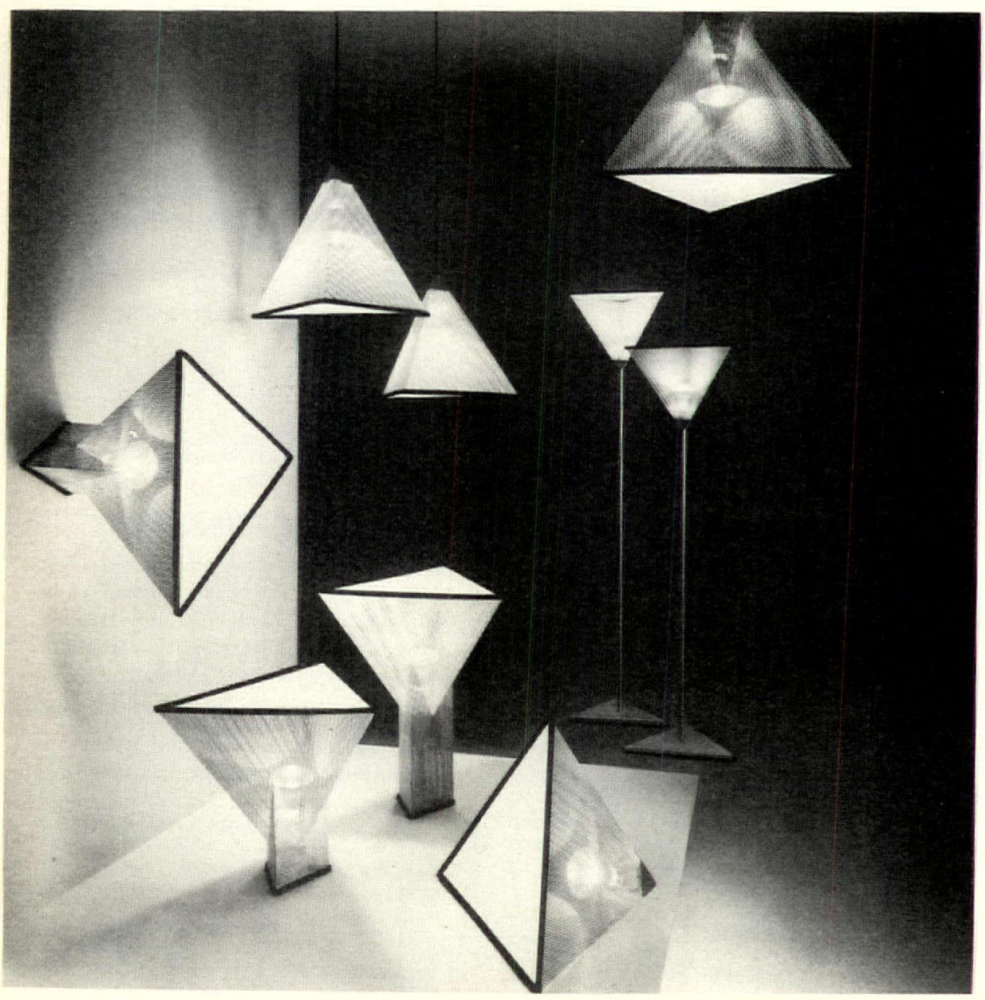
Ultra-thin 3½" recessed troffer, "HEFT" *(above)*, requires less plenum space than conventional units. Fixture, which houses two or four "F40" flourescent lamps, is 2' wide and 4' long. Rigid body is die-formed of ribbed and embossed heavy gauge sheet metal. Keene, Union, N.J. CIRCLE 212 ON READER SERVICE 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

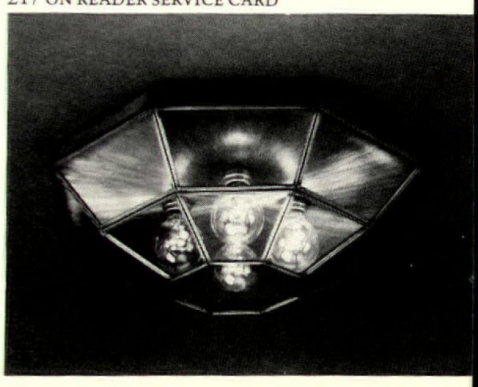
Lighting system, "Trianglo," includes floor, wall, ceiling and table models. Geometric fixtures are constructed of perforated color-baked metal sheeting with all exposed edges trimmed in black rubber. Basic shade is an 18" triangle; floor lamps are 64" and 84" high. Koch + Lowy, Long Island City, N.Y. CIRCLE 214 ON READER SERVICE CARD

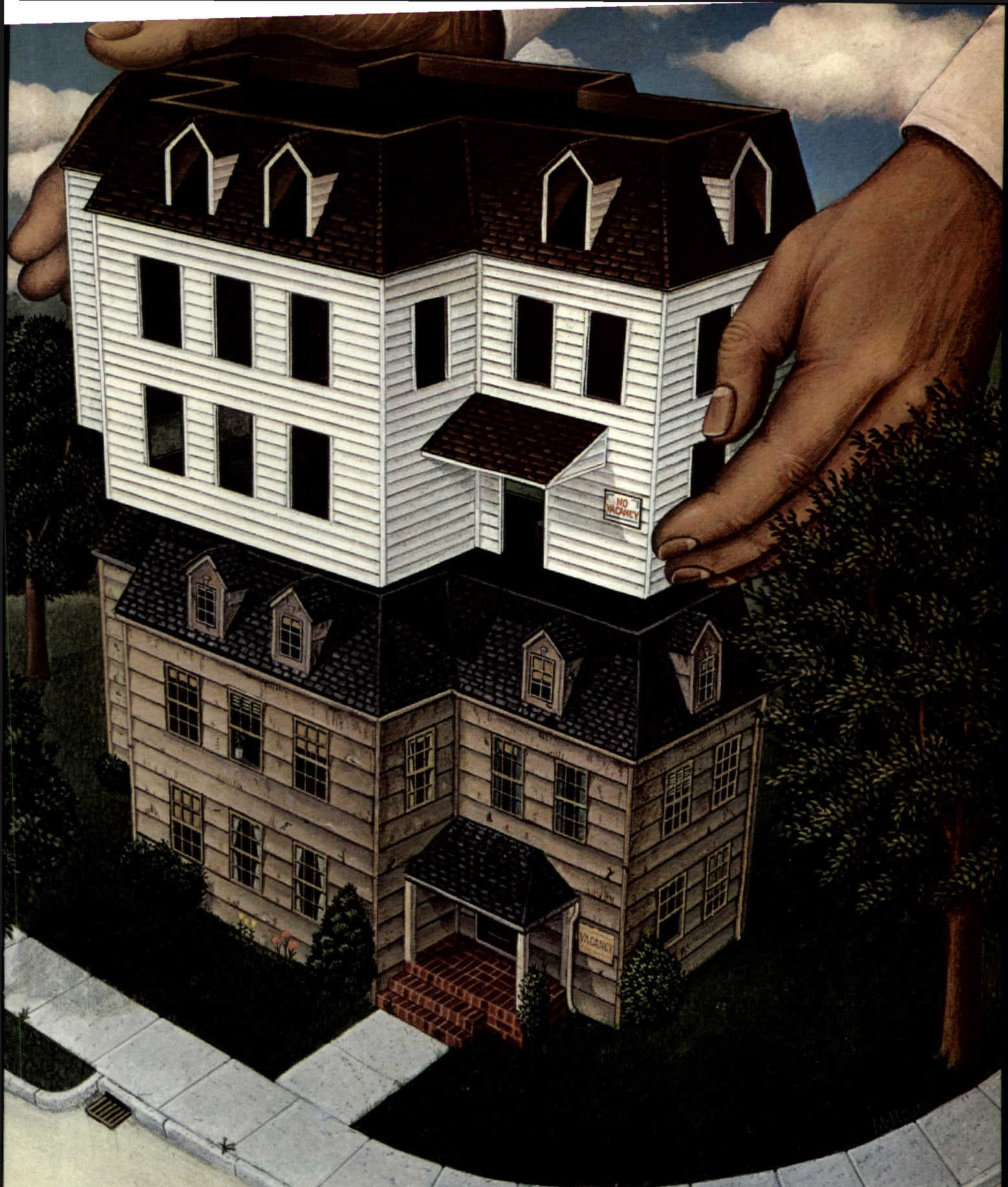


Cast metal table lamp with three-way socket stands 26" high and comes with a 12"x13"x11" parchment shade. Models are available in three metal finishes, eight colors and combinations of rosewood and polished chrome or walnut and Swedish brass. Laurel Lamp, Newark, N.J. CIRCLE 216 ON READER SERVICE CARD



Ceiling fixture, "The Classic" *(below)*, is constructed of handleaded 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





Stay on the right side of your customers. Side with GAF.

face it, when you bid on a job you want to specify
ding materials with the strongest selling points.
erials free of on-site damage. And which give you a
hed job that builds your word-of-mouth
mmendations.

Good reasons for recommending GAF®
guard® vinyl siding and GAF® Timberline®
alt shingles.

GAF Vanguard siding offers many advantages over
l and other siding. It has "built-in" color. So you can
ure Vanguard siding won't peel, blister, flake or
show scratches. And it won't conduct electricity. It never needs painting. And for you—Vanguard vinyl siding is easy to handle, cut, nail and install.

And to top it off, GAF Timberline heavy-duty asphalt shingles have accented shadow lines, an irregular roof pattern, and woodtone colors, without the cracking, splitting, or warping associated with wood.

GAF Vanguard vinyl siding and GAF Timberline asphalt shingles: Two products that make your remodeling stand out.

GAF®

GAF Corporation, Building Materials Group, Box HH46
140 West 51 Street, New York, N.Y. 10020

Send for information: ☐ GAF Timberline Asphalt Shingles
☐ GAF Vanguard Vinyl Siding

Name _____

Street _____

City _____ State _____ Zip _____
(TE·TG)

Roofing and Siding

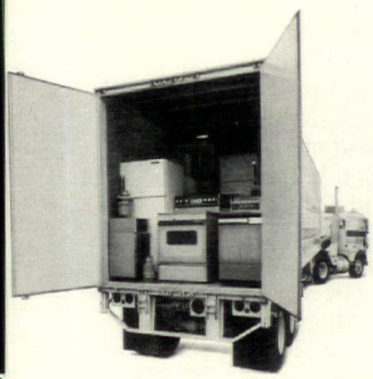
CIRCLE 105 ON READER SERVICE CARD

When you buy Hotpoint, you get your money's worth.

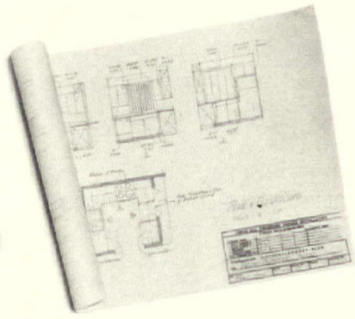
1. You get quality appliances up and down the line. Today, you've got to take a harder look than ever before at what you're getting for your money. That's why it makes sense to do business with Hotpoint. We're a single source supplier of dependable appliances. Appliances with the kind of convenience features buyers are looking for. What's more, Hotpoint is a nationally recognized brand that people know and respect. And that can help you close a sale.

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.

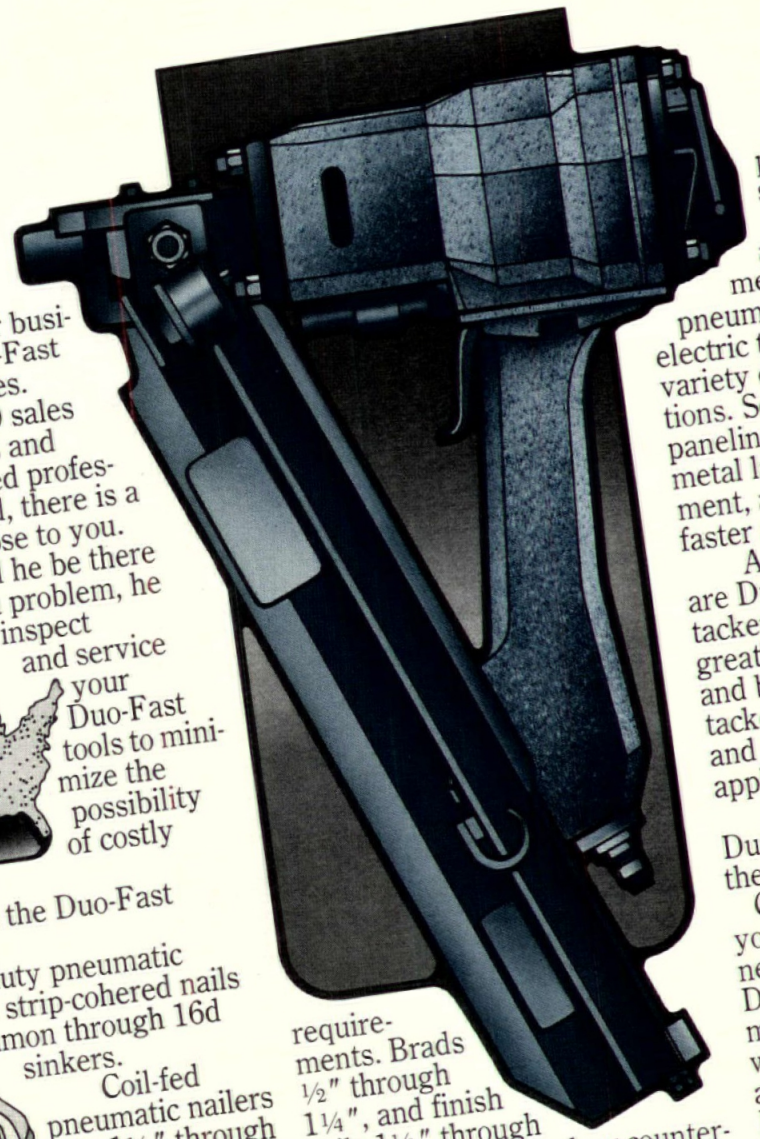
5. You get service that's a selling point, not a sore point. It's called Customer Care® Service—a network of factory service centers in over 350 cities plus thousands of franchised service people across America. It helps build buyer and tenant confidence and can take service problems off your shoulders.

We hustle for your business. And it shows.

Hotpoint

A Quality Product of General Electric Company

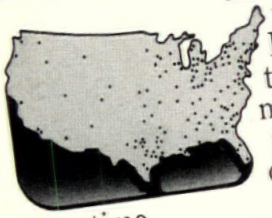
The company that gives you everything in nailers, staplers, and tackers, also gives you the service to keep them working.



In a period when everyone wants your fastener business, compare Duo-Fast with the alternatives.

With over 100 sales and service offices and hundreds of trained professionals in the field, there is a Duo-Fast man close to you.

Not only will he be there when you have a problem, he will periodically inspect and service your Duo-Fast tools to minimize the possibility of costly downtime.



Compare the Duo-Fast product line.

Heavy-duty pneumatic nailers drive strip-cohered nails from 6d common through 16d sinkers.

Coil-fed pneumatic nailers drive 1¼" through 2½" 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 ½" through 1¼", and finish nails 1½" 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 ½" 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 and ceiling tile applications.

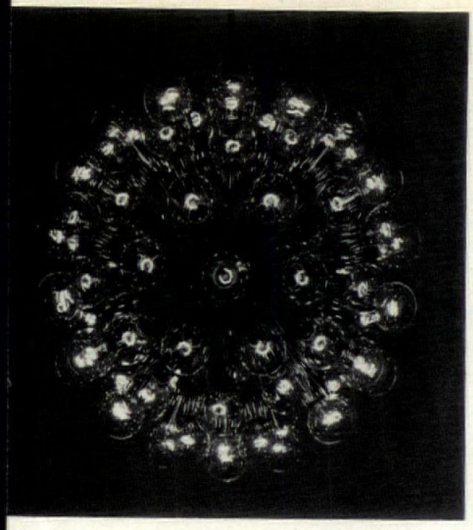
So compare Duo-Fast with the alternatives. Contact your nearest Duo-Fast man. Talk with him about Duo-Fast's exclusive cost-cutting features. And send for a copy of Builder Brochure FT-26.

Do it today!

Duo-Fast Corporation, 3702 River Road, Franklin Park, Illinois 60131.

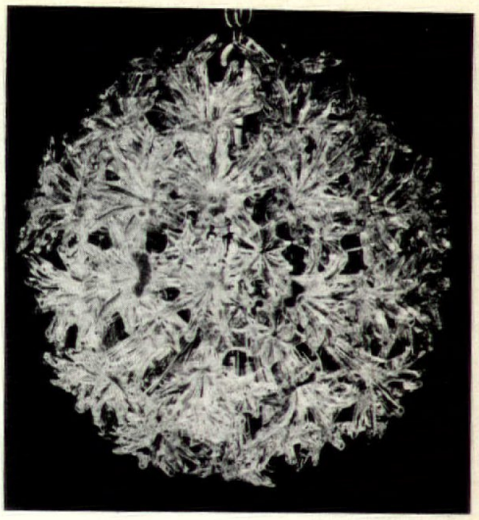
DUO-FAST®

CIRCLE 108 ON READER SERVICE CARD



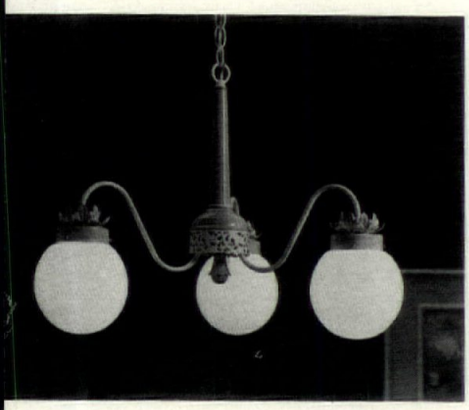
Contemporary chandelier, "Model S 91/30," is constructed of polished chrome and features 91 lights. Unit is 30" in diameter and uses 10w or 15w round globe lights or 15w showcase bulbs. Overall length is 61". A polished brass model is also available. TSAO, New Canaan, Conn. CIRCLE 218 ON READER SERVICE CARD

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

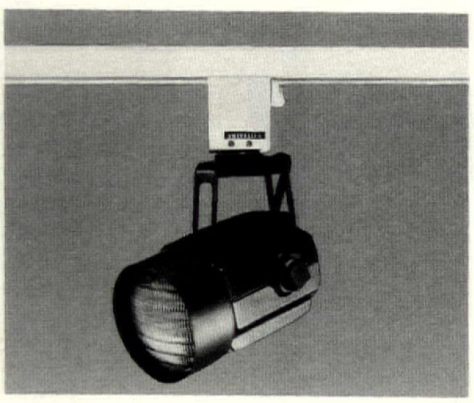


Chandelier imported from Italy, "Esprit," features handblown glass trumpets and stars. Yellow or amethyst spots can be added or glass can be left clear. Frame and stem are chromeplated metal. Chandelier is 24" in diameter and also comes in a half-sphere. Venini, New York City. CIRCLE 224 ON READER SERVICE CARD

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

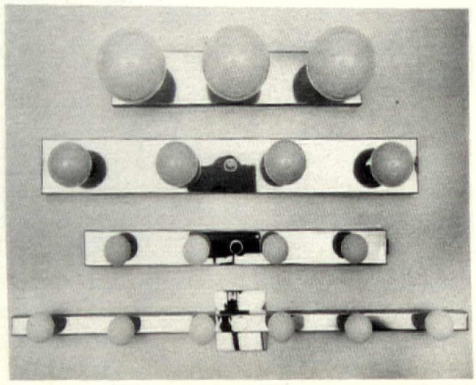


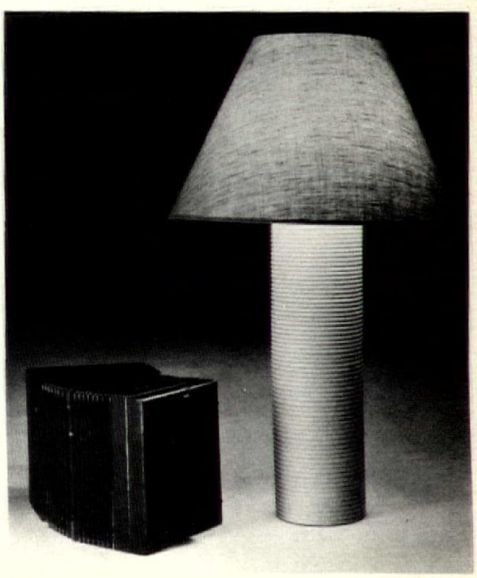
Lighting system, "StarTrack" *(above)*, has three-circuit track and 12v "StarSpot" lights. System can be surface-mounted, recessed or stem-mounted, and each circuit can be used independently or in combination. The "StarSpot" uses 25w or 50w "PAR 36" lamp. Swivelier, Nanuet, N.Y. CIRCLE 222 ON READER SERVICE CARD

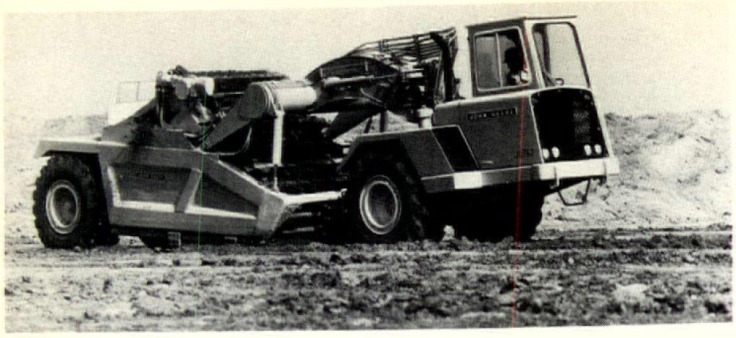
Five-light chandelier *(above)* is part of the "Chadd's Ford" line. The fixture is white enamel with red trim of Pennsylvania Dutch designs. Ceiling lights, a wall bracket and two styles of pendants are also available. Line includes pewter and brass models. Virden, Cleveland, Ohio. CIRCLE 225 ON READER 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

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

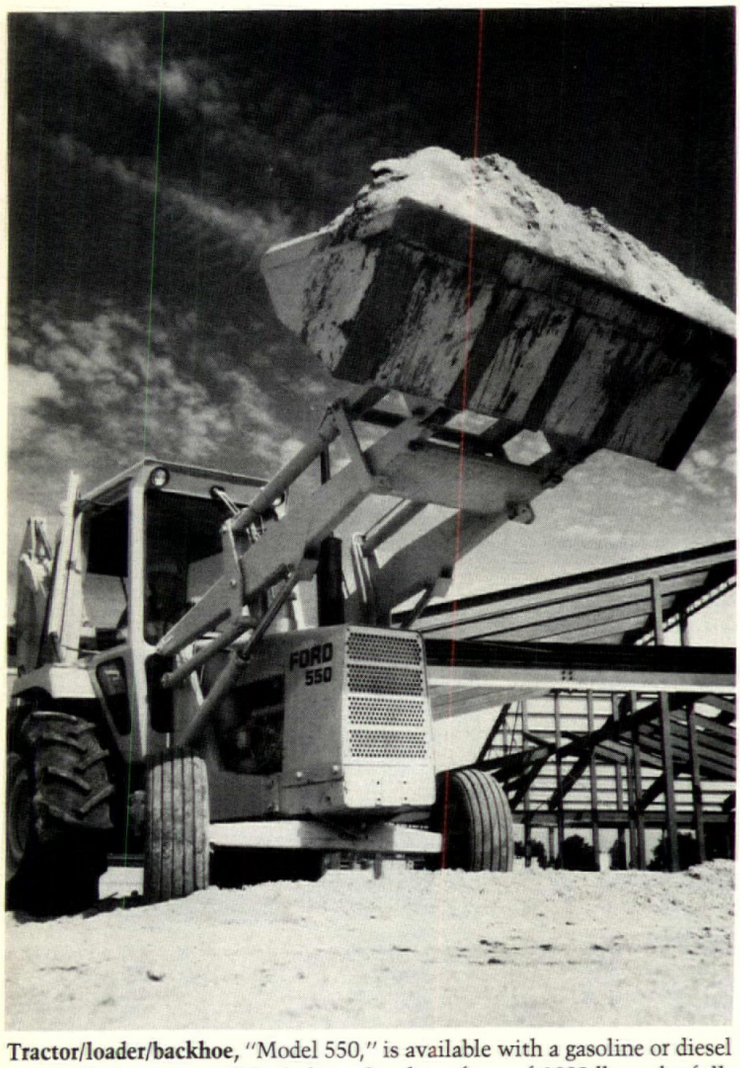






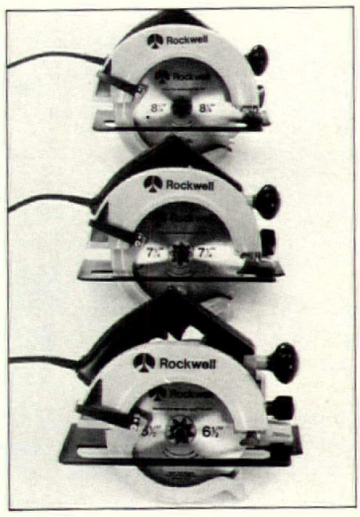
High-volume scraper, "JD762," is a versatile machine with two-axle design. Powered by a 175 hp diesel engine, vehicle has a power shift transmission and a top travel speed of 28 mph. Roll-over protective structure is a standard feature. John Deere, Moline, Ill. CIRCLE 252 ON READER SERVICE CARD

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

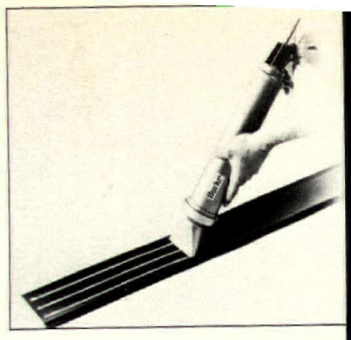


Tractor/loader/backhoe, "Model 550," is available with a gasoline or diesel three-cylinder engine. Vehicle has a breakout force of 8000 lbs and a full-height lift capacity of 4700 lbs. Ford Tractor, Troy, Mich. CIRCLE 254 ON READER SERVICE CARD

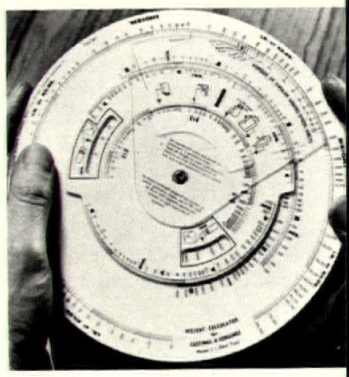
Adhesive gun *(right)* provides a fast, clean, easy way to install carpet and cove bases. The trigger-actuated gun produces an even flow of adhesive beads. Unit is equipped with a three-hole, 4" nozzle. Burke, San Jose, Calif. CIRCLE 255 ON READER SERVICE CARD



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



Line of heavy-duty circular saw *(left)* includes the 6½", 7¼" and 8¼ versions shown and 7¼" and 8¼ extra-heavy-duty models. All fea ture double insulation, safety lock off switches to prevent accidenta starts and a telescoping blade guard Rockwell, Pittsburgh, Pa. CIRCL 256 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

Can't get gas? Straight electric heating cost too much? Fedders has THE ANSWER

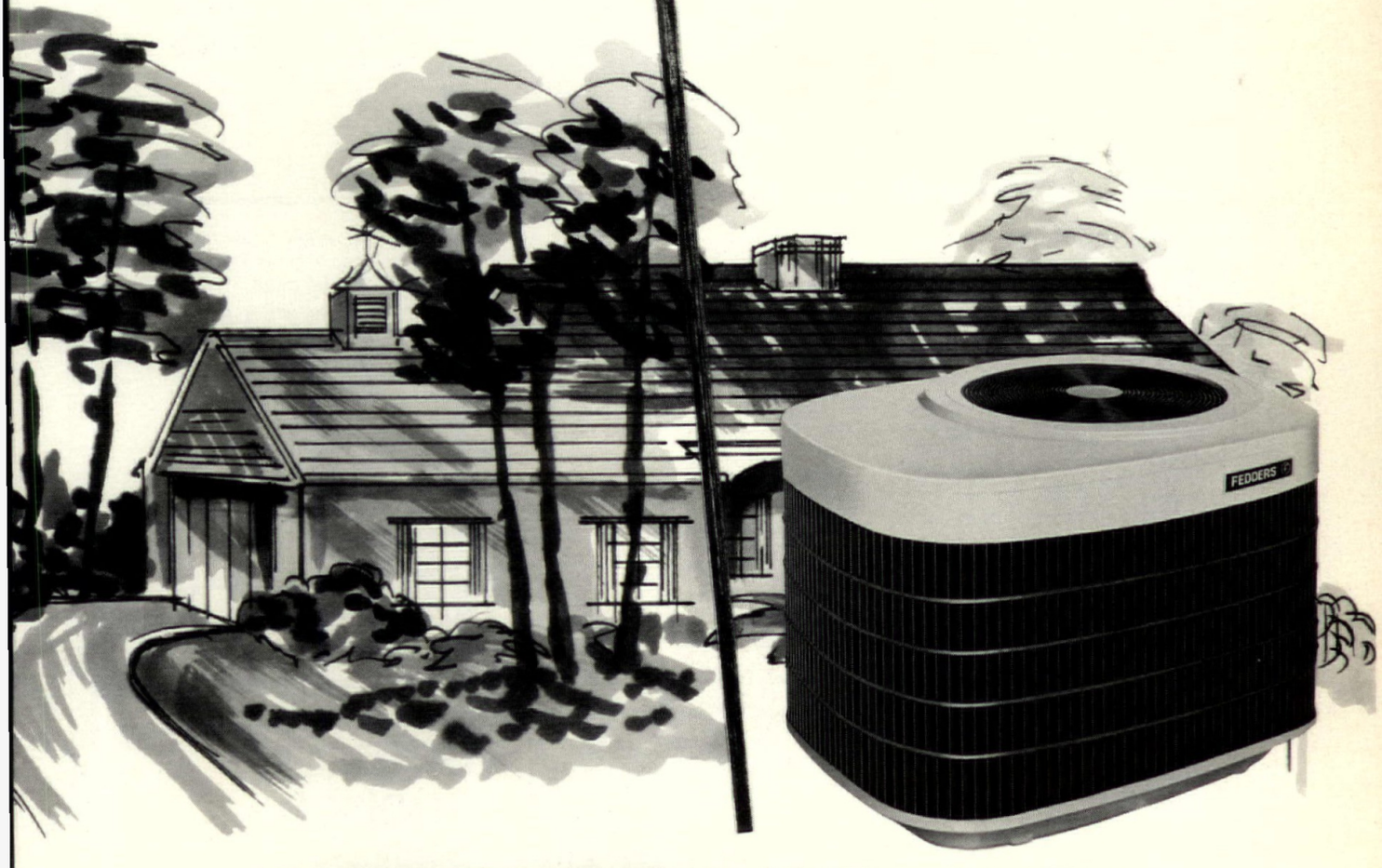
Forget about gas. Never worry about the high cost of straight electric heat. You don't need either one of them. For Fedders has "The Answer."

It's Fedders Flexhermetic II Heat Pump. Put in this energy-saving central heating and air conditioning system and for the first time you'll be able to use and sell with confidence all the fuel-saving characteristics of heat pump heating.

You'll be able to add to your homes the sales appeal of whole house cooling and to tell your prospects how winter fuel-saving can easily help pay for the cost of operating the air conditioning. And you can do this with the assurance that the system that's giving them this wonderful bonus is truly reliable and will continue to provide superb, low-cost comfort summer after summer and winter after winter.

Fedders put reliability into heat pumps with a rotary compressor designed especially for heat pump operation. It's called Rotor-H and its simple design (only three basic moving parts), its special construction and low-friction Carblucon™ bearings have eliminated all the problems long associated with heat pumps. It's so reliable, so durable, Fedders backs it with an optional four-year extended full (labor included) warranty provided the installation is properly certified.

The Fedders Flexhermetic II heat pump is available in six residential sizes. For complete details, circle the reply card number listed below.

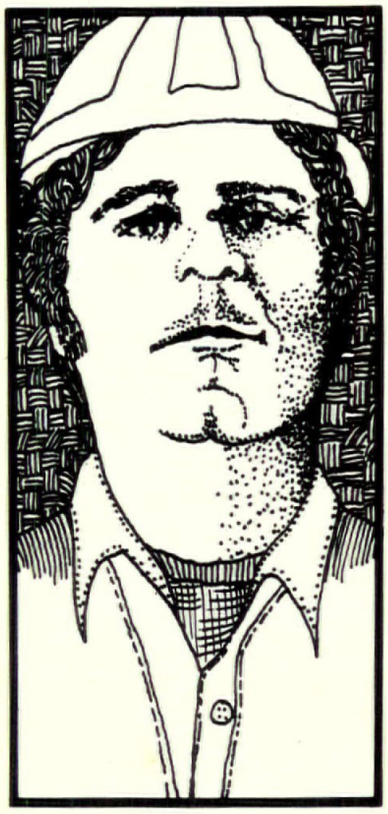


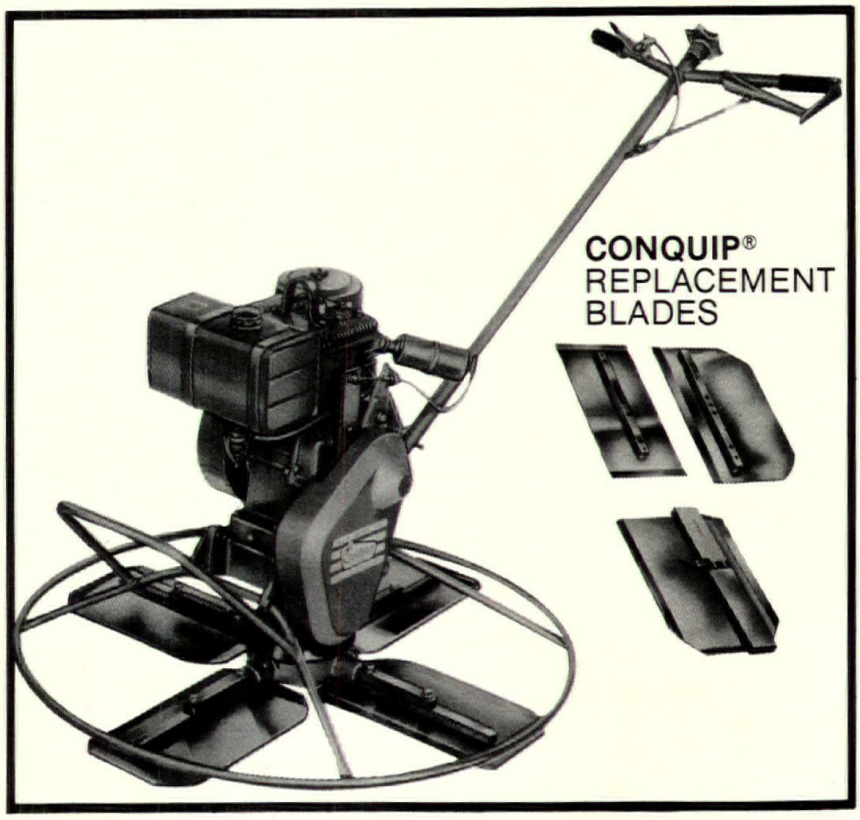
FEDDERS

Air Conditioning Sales Company
Edison, N.J. 08817

CIRCLE 113 ON READER SERVICE CARD

Today's success formula: You, Power Trowelers, and Goldblatt.





THE MAN:

Contractor, Sub-Contractor, or individual... he's got a job to do—a deadline to meet—and a profit to make. To be successful he needs to maximize his speed, minimize his maintenance time—he needs Goldblatt...

THE TOOLS:

Goldblatt Power Trowelers... made in sizes to fit the job, engineered for maximum ease, safety, and speed to get that job done — priced for profit. Available in 28", 34", 36" and 43" sizes... Fingertip Reach Controls. Low Maintenance. Easy to Handle. Both 3 and 4 Blade Models. Either 3hp, 5hp or 7hp Briggs and Stratton Engine.

THE BLADES:

Goldblatt is the only manufacturer to offer a complete line of replacement blades! Conquip® blades are replacement blades equal or superior to those used by original equipment manufacturers. There is a Conquip® replacement blade to fit almost every troweling machine made, over 23 different makes in all.

NEW FROM GOLDBLATT:

Heavy Duty Power Trowelers in 42" or 46" sizes

Please send me the FREE 1976 GOLDBLATT TOOL CATALOG

Name_____

Address_____

City_____

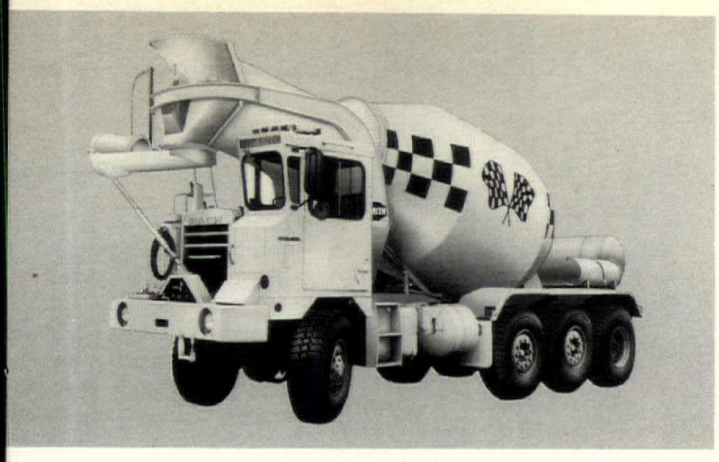
State_____ **Zip**_____

Goldblatt®
TROWEL TRADE TOOLS

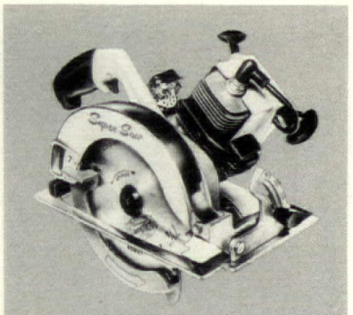
GOLDBLATT TOOL CO.
540–R Osage
Kansas City, Ks. 66110

A BLISS & LAUGHLIN industry

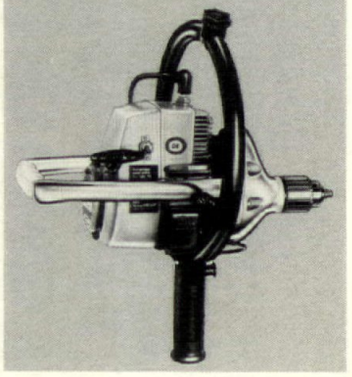
CIRCLE 114 ON READER SERVICE CARD



ront-discharge truck mixer, "Van-uard," with a 9-11 cu. yd. capacity ombines the operating advantages f forward placement and the per-ormance efficiency of a rear-ischarge drum configuration. Unit eatures Gyro-Drive®. T. L. Smith, Marion, Ohio. CIRCLE 263 ON EADER SERVICE CARD



Gasoline-powered tools *(right)* are ngineered to replace electrical nodels. A circular "Super Saw" and variable speed "Piston Drill" are vailable. Both are said to be ex-remely accurate. Piston Powered roducts, Tempe, Ariz. CIRCLE 264 N READER SERVICE CARD

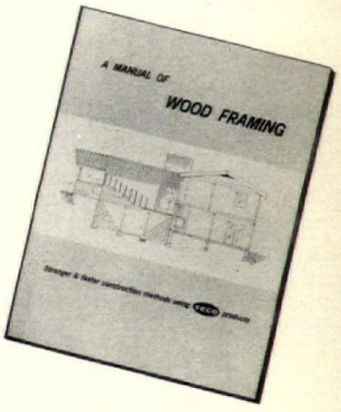


All-purpose work center and vise, Workmate™, weighs less than 33 bs and can be easily set up in min-ites. Adjustable legs provide two convenient heights. Full-length vise will hold 10" wide material. Black & Decker, Towson, Md. CIRCLE 265 ON EADER SERVICE CARD

AVAILABLE from TECO®

Send for this
FREE
8-page wood framing manual illustrating the use of TECO engineered fastening devices.

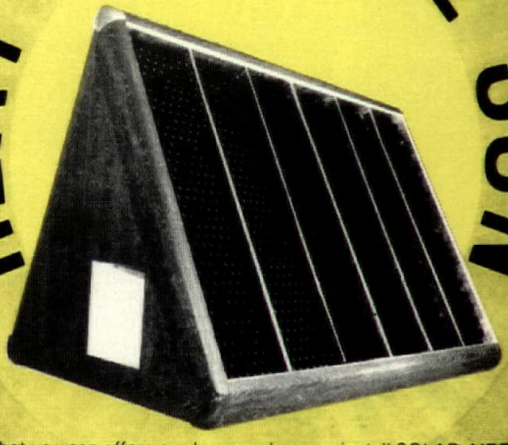
Another example of TECO's "CONCEPT APPROACH" to building efficiency.



TECO
5530 WISCONSIN AVENUE
WASHINGTON, D. C. 20015
PHONE 202 / 654-8288

CIRCLE 59 ON READER SERVICE CARD

HEAT WITH THE SUN



That's what you can offer your buyers when you install SOLAR-AIRE heating furnaces in your new or existing homes. SOLAR-AIRE not only saves heating bills for your buyers, but helps you sell more homes and make more profit. And, now you can take advantage of SOLAR-AIRES 40% cost reductions, due to mass production. Solar heating is now more realistic for new home construction than ever before.

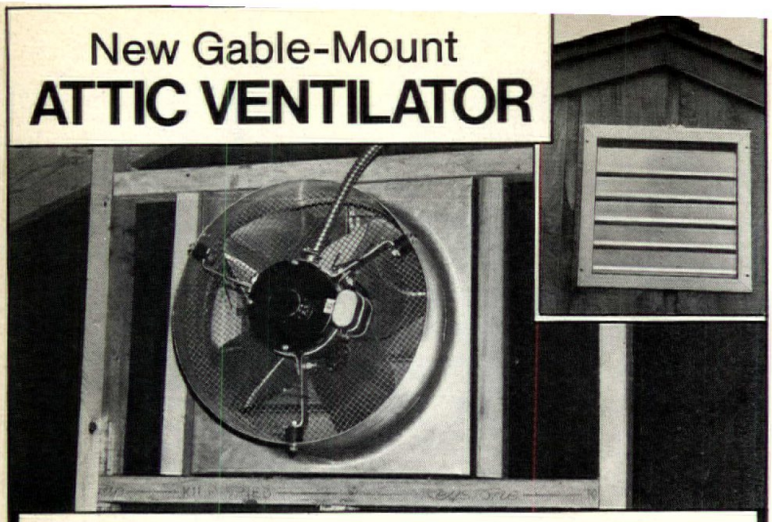
SOLAR-AIRE heating furnaces are free-standing units for fast, simple installation without modification to the house. Just drop on location, fill the heat storage chamber with pebbles, and hookup the ductwork and electricity.

Write today for the full details on Solar Heating and why you should be selling SOLAR-AIRE as a builder or dealer. Complete dealer program available.

SOLAR-AIRE
One Appletree Square, Minneapolis, MN 55420,
Call toll free 1-800-328-1860

CIRCLE 115 ON READER SERVICE CARD

New Gable-Mount
ATTIC VENTILATOR



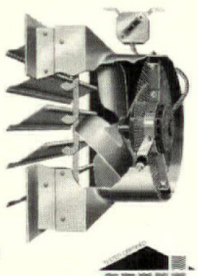
KOOL YOUR ATTIC WITH KOOL-O-MATIC

No Unsightly Roof Jacks or Vents

For a clear, unobstructed roof appearance, install the WA Series Kool-O-Matic power attic space ventilator to control attic heat and moisture automatically. Pre-assembled and self-contained, and including automatic back draft damper, the WA Series installs in the gable wall of new or existing homes for completely maintenance-free operation.

Controls attic heat and moisture

Keeps insulation effective; preserves roof structure. Increases air conditioning efficiency up to 30% for less tonnage, up to ⅓ less operation cost. Certified performance. Write for full-line catalog showing eight roof and gable models offered.



KOOL-O-MATIC®

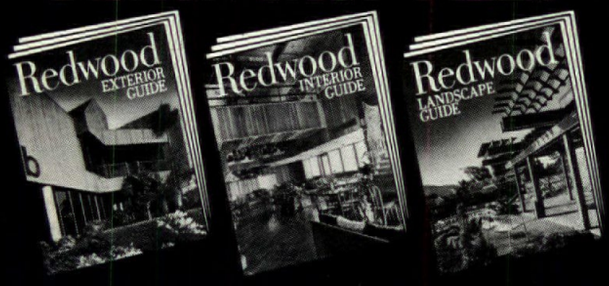
KOOL-O-MATIC CORPORATION, DEPT. 1176

1831 Terminal Rd., Niles, MI 49120 • Phone: 616/683-2600

CIRCLE 60 ON READER SERVICE CARD

Redwood

DESIGN FACT FILES



New design ideas, practical applications and specification data for California redwood. The files you indicate will be sent at no charge.

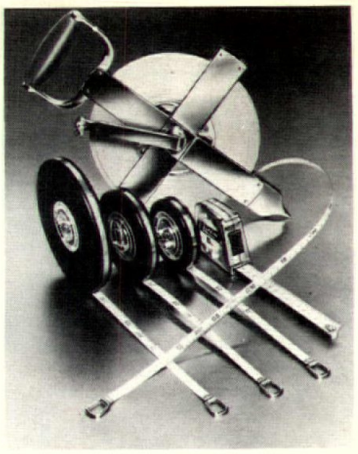
California Redwood Association
617 Montgomery Street
San Francisco, CA 94111

☐ Exterior
☐ Interior
☐ Landscaping

NAME

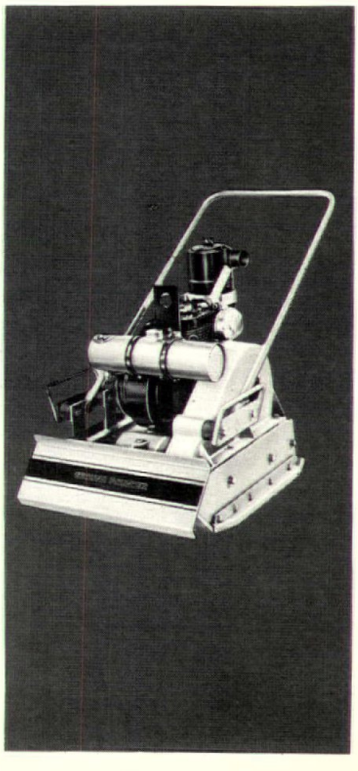
ADDRESS

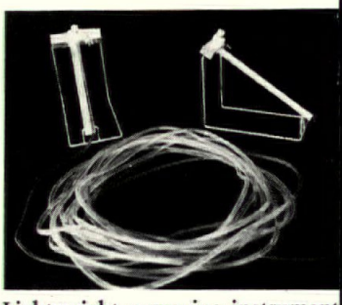
CITY STATE ZIP



Steel metric measuring tapes ar available in a range of lengths Shown are four case tapes measurin from 5 to 50 meters and a 100-mete tape on an easy-to-maneuver fou arm reel. Calibrations are easy t read. Lufkin, Apex, N. C. CIRCLE 25 ON READER SERVICE CARD

Scissor-lift platform is self propelle and supports 1000 lbs. Offered wit a 19′ or 13′ lift height, units are bat tery operated with automati chargers. Platforms have electrica outlets for tools. Patent Scaffoldin Ft. Lee, N.J. CIRCLE 260 ON READE SERVICE CARD





Lightweight surveying instrument "Leveller," can be easily used by one person. Elevation differences are re corded on two calibrated stands 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 centrifuga 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

Join the profit makers

Sweeping 16-page Ad section in BH&G Magazines sent hundreds of prospects to National Homes Builders all across America.

National Homes power-backed promotions help you

DOMINATE YOUR MARKET, BEAT YOUR COMPETITION, INCREASE YOUR PROFITS.

If you were a National Homes builder, right now you'd be enjoying the rich rewards of our Spacemaker Promotion: built around a classic Cape Cod-design home and backed with dramatic 16-page ad sections in 3 national issues of Better Homes & Gardens magazines. Plus a traffic-building "HOME FREE" SWEEPSTAKES tie-in, with ads, posters, counter cards.

It's all just *one* example of the powerhouse marketing support available to National Homes builders all year 'round—promotions which no other company can equal, and no builder could handle on his own. Join the Profit Makers. Get in on the promotions, the big-company backing, the profit potential. Mail the coupon or call (317) 447-3232.

CIRCLE 117 ON READER SERVICE CARD

National HOMES
THE GROWTH SHELTER COMPANY

NATIONAL HOMES MANUFACTURING COMPANY
P.O. Box 680
Lafayette, Indiana 47902
ATTENTION: MARKETING DIVISION

YES! I want to hear the National Homes Profit story. Please have "The Man from National" nearest me call as soon as possible. HH4

NAME_____

COMPANY_____

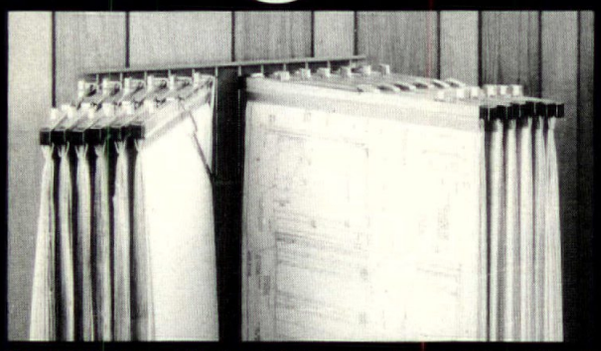
ADDRESS_____

CITY_____ STATE_____ ZIP_____

PHONE_____ AREA CODE_____

In the past 12 months, I have built ____ living units:
____ single family ____ townhouses ____ apartments.
I have ____ lots. My typical selling price is $_____.

Space Program.



SAVE 80%. Your old horizontal filing can take as much as 5 times the space needed by our vertical system.

The secret to success is our binder. It holds plans securely, opens and closes easily, is clearly indexed—and lifts out and slips back so simply you save not only space, but time.

Binders fit a variety of housings—wall racks, cabinets, file/table combinations.

Start your space program. Send for our catalog.

PLAN HOLD®
TIMES MIRROR
17621 Von Karman Avenue, Irvine, California 92714

CIRCLE 61 ON READER SERVICE CARD

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 an holes in plaster and wood. Easy-to apply paste containing vinyl plasti can be painted over as soon as it i dry, and painting is recommende for exterior applications. Bonsal Lilesville, N.C. CIRCLE 244 o READER SERVICE CARD

Drywall stud adhesive *(left)* may b used to attach gypsum wallboard t wood or metal studs. Adhesiv bridges irregularities and does no become brittle. Weldwood, City o Industry, Calif. CIRCLE 245 o READER SERVICE CARD

Concrete-repair compound "Sonopatch" *(below)*, offers fas ten-minute set. Durable, non shrinking compound fills cavities i any type of concrete surface. Non gypsum base contains no metals o corrosion-promoting agents. Con tech, Minneapolis. CIRCLE 246 o READER SERVICE CARD

OPPORTUNITIES IN DISTRESS PROPERTIES

NO RISK OFFER

Now at no risk, you can get straight facts about hundreds of slow-moving distress projects—location, status, lenders involved. They're available exclusively in REAL ESTATE DISCLOSURE DIGEST, the insiders' twice monthly news service. No one else takes time to track down these vital facts buried in voluminous filings by REITS, banks, other lenders. This major department of the Digest is a continuous unfolding of the unique real estate opportunities in these times. And paid subscribers receive a 58-page booklet listing over 1,000 distress properties as bonus.

PLUS

Other major departments keep you abreast of facts and ideas in private companies, REITs, landmark deals, major project status, taxes, accounting—all vital for decision makers in real estate investment.

SAVE 50% ON SPECIAL TRIAL

Decide for yourself—enter a special two-month trial at 50% off regular price and get four issues to study. To qualify, send this coupon to:

AUDIT INVESTMENT RESEARCH, INC.
230 Park Avenue, N.Y., N.Y. 10017

Please send four issues of REAL ESTATE DISCLOSURE DIGEST. My check for $22 is enclosed.

Name _____

Company _____

Address _____

City _____ State _____ Zip _____ H32

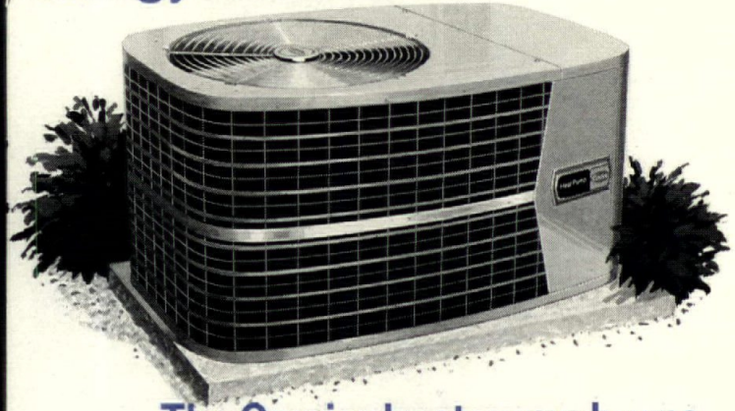
May not be assigned. Refund on request. New York State residents add applicable sales tax

CIRCLE 118 ON READER SERVICE CARD

Keep the home fires burning? Not any more you can't!

Gas for heating is banned in Boston. And in lots of other places. Oil's so costly it's out of sight. Coal? Wood? Forget it! For the home builder, fossil fuels are out.

But don't panic. Let your expert Carrier dealer show you how the efficient Carrier heat pump can give you an astonishing boost in selling your homes.



The Carrier heat pump burns no fossil fuel of any kind. Delivers dependable heat even in sub-freezing weather. Gives the homebuyer twice the heat per dollar. And delivers the marvelous bonus of low cost summer cooling.

But on top of all that, when you put a Carrier heat pump in your homes, you make it easier for lower income families to buy. That's because loan requirements can be less for a heat pump house.

One caution, though. You can't beg, borrow or cajole a Carrier heat pump from anybody but a Certified Carrier dealer. He's fully trained in heat pump selection, installation and servicing.

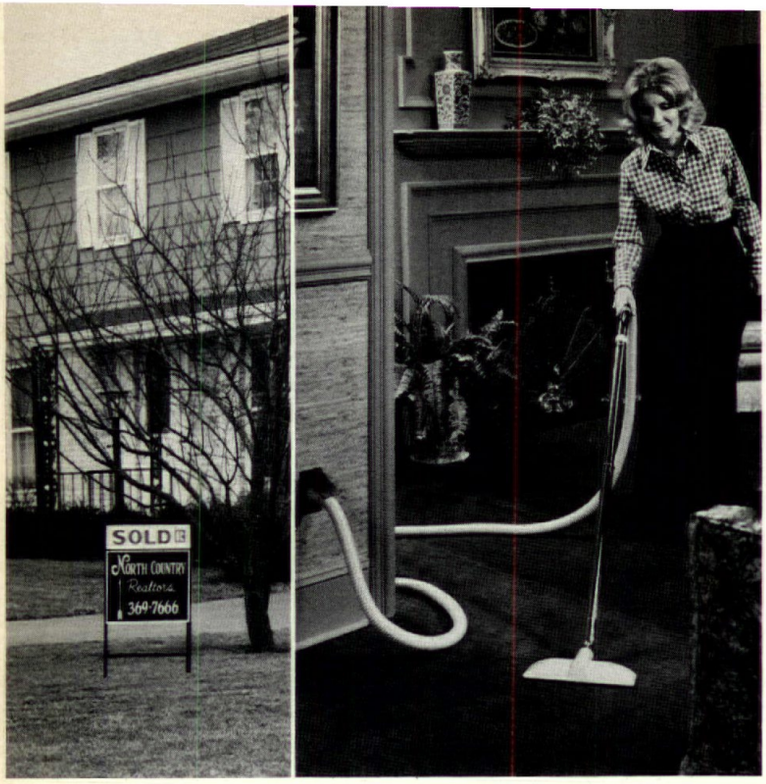
Could you expect much more from the company that founded the air conditioning business back in 1902? And has been advancing the heat pump art for 40 years?

To the Yellow Pages, please. Under Carrier you'll find his name. Heat pumps are his game.

Number One Air Conditioning Maker

Carrier Corporation

Carrier®



The quiet salesman that keeps on selling:

A Built-In Vacuum System. Of course!

So convenient, so efficient... A vacuum system is just the right added touch to help sell more and more homes, condominiums, apartments and commercial buildings. And, VACUFLO® can do it best.

The pioneer built-in, VACUFLO has the Good Housekeeping Seal and over twenty years of built-in cleaning innovation working for you and your customers. It uses no bags or filters (quiet H-P Cyclonic Separation was patented fifteen years ago and is still the most efficient vacuum method available)... It features durable, decorator-styled inlet valves made of tough Lexan®*... a more efficient 1¾" tube system... and more. It's a selling feature that will keep selling you **and** your homes for years.

Put your quiet salesman on the job now. Return the coupon below. Or better yet, call us for proof. H-P PRODUCTS, INC., Louisville, Ohio 44641. Telephone (216) 875-5556.

A LIMITED WARRANTY TO CONSUMERS ★ Good Housekeeping PROMISES REPLACEMENT OR REFUND IF DEFECTIVE. THIS GUARANTEE APPLIES ONLY TO VACUFLO® COMPONENTS IN SINGLE FAMILY HOUSING ... NOT INSTALLATION.

HP® VACUFLO®

H-P PRODUCTS, INC., Louisville, Ohio 44641

Tell me more about the Quiet Salesman... H-P VACUFLO® Built-In Cleaning Systems!

NAME_____

TITLE_____

COMPANY_____

TYPE OF CO._____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

TELEPHONE_____

*Registered trademark of the G.E. Company.

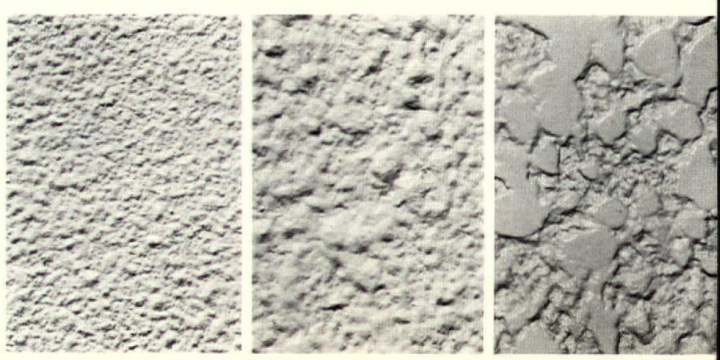
Concrete form releasing agent, "Magic-Kote Quick-Dry," is fast-drying and creates no build-up on formwork. Agent also retards rusting of metal forms. Symons, Des Plaines, Ill. CIRCLE 247 ON READER SERVICE CARD

Latex-based sealer prevents moi ture damage, water seepage and m dew. Easy-to-apply caulk sta white and can be used around tub sinks and showers. Wilhold, San Fe Springs, Calif. CIRCLE 250 O READER SERVICE CARD

Non-asbestos joint compound *(le* is part of line developed to meet fe eral requirements. Ready-mix topping compound, spray textu products and joint compounds powder form are also offered. Go Bond, Buffalo, N.Y. CIRCLE 251 O 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. Bonnveneer, Los Angeles. CIRCLE 249 ON READER SERVICE CARD



CIRCLE 120 ON READER SERVICE CARD

IF YOU HAD TO PAY YOUR BUYERS' FUEL BILLS. . .

WOOD WINDOWS
R·O·W
GLIDING GLASS DOORS

R.O.W is the registered trademark of
R.O.W Sales Company
Ferndale, Mich.

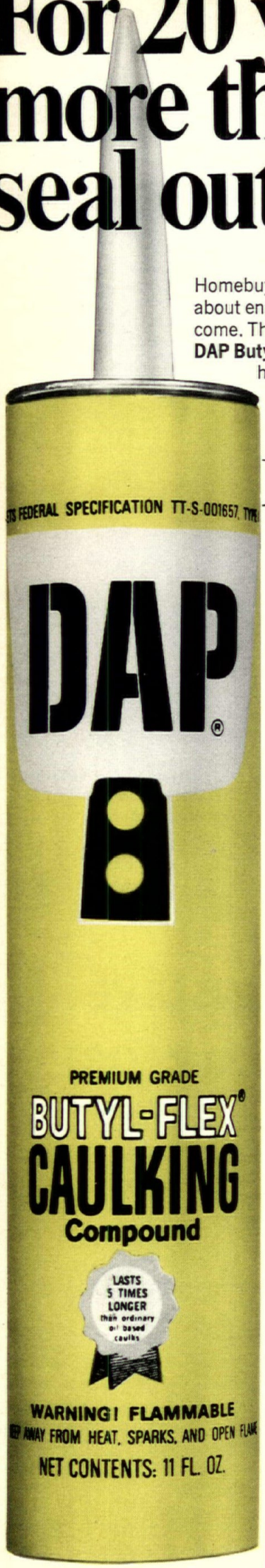
. . . YOU'D PICK THE WINDOWS THAT CONSERVE PRECIOUS FUEL AND ASSURE DRAFT-FREE COMFORT

You have read many times that wood, as a thermal insulator, is about 1800 times more efficient than aluminum. Perhaps bargain windows may have seemed like a good way to cut a little out of construction costs. Now, with national shortages of gas and oil, it's time to consider long term effects. Weather-tight R.O.W wood windows conserve fuel as well as providing greater comfort with lower heating and cooling costs. Long-term home owner satisfaction can be your greatest single asset.

R.O.W SALES COMPANY
1307 ACADEMY, FERNDALE, MICH. 48220

CIRCLE 121 ON READER SERVICE CARD

For 20 years or more this caulk will seal out the weather.



Homebuyers will be concerned about energy costs for years to come. That's one big reason to use **DAP Butyl-Flex® Caulk.** It keeps heat in—shuts out cold and moisture around windows, doors, siding ends, gutters, vents and roof flashings. Assures dependable seals between similar and dissimilar construction materials. Protects up to five times longer than conventional caulks because it's made with butyl rubber. Get it at your paint, hardware or building materials supplier.

End call backs. Use DAP®

The builder's word for quality every time.

DAP Inc., General Offices: Dayton, Ohio 45401
Subsidiary of Plough, Inc.

CIRCLE 122 ON READER SERVICE CARD

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

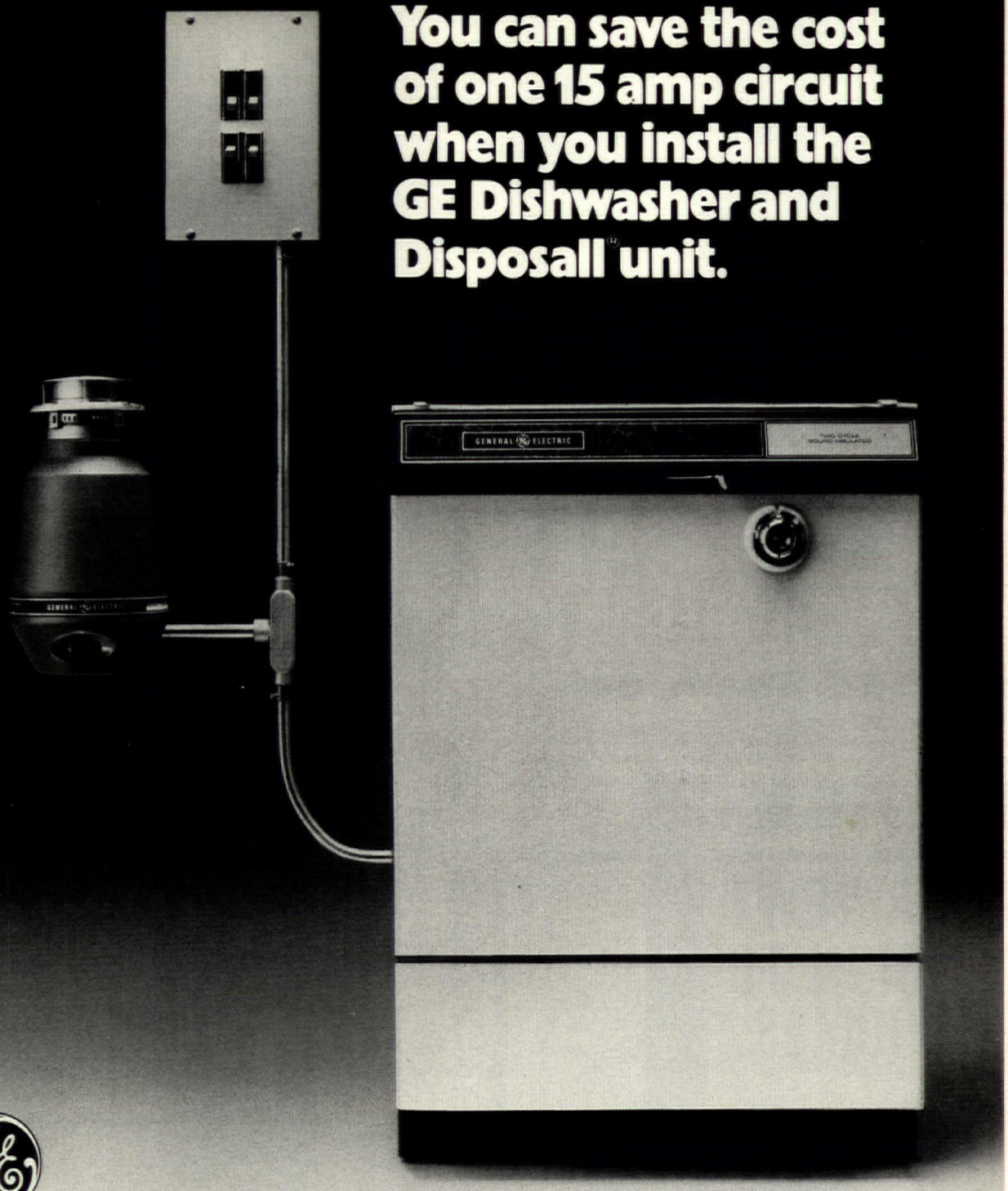
Residential gas and oil furnaces are presented in a series of three brochures. The first discusses an oil heating system. Such features as an atomizing burner and an aerodynamic heat exchanger are pictured and explained. Sketches offer installation suggestions. The second brochure describes a compact gas furnace that can be installed in a crawl space, 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 of one 15 amp circuit when you install the GE Dishwasher and Disposall® unit.



A General Electric Dishwasher and Disposall food waste disposer can be connected to a single 20 amp circuit where local codes permit. This means less labor and fewer materials, which reduces your cost.

Just one more way General Electric saves you money.

And your customer gets GE quality appliances with an improved, simplified wiring system.

You should know that a national survey shows that women rate GE major appliances over any other brand by more than 3 to 1.

And every GE appliance is backed by General Electric Customer Care... Service Everywhere.™ This means that wherever your project is in the U.S.A., there'll be a qualified serviceman nearby.

GENERAL ELECTRIC

CIRCLE 123 ON READER SERVICE CARD

SANURIL® chlorinates with unique flow-control.

Anywhere.
Anytime.
In any weather.

This low-cost way to chlorinate wastewater is simple and reliable because it has no moving parts, needs no electricity, and with its unique flow-control feature regulates chlorine dosage.

The Sanuril unit is tough, compact, corrosion resistant, needs only inlet piping, and is virtually maintenance free.

So you can install Sanuril anywhere and forget it. Sanuril can work unattended for weeks while you tend to all the things that won't.

We have models for applications such as: individual home treatment plants; housing developments; condominiums; or multi-family dwellings with a daily capacity as high as 100,000 GPD.

For more information, write: SANURIL Systems, Diamond Shamrock/Electrode Corporation, P.O. Box 229, Chardon, Ohio 44024.

Diamond Shamrock

CIRCLE 62 ON READER SERVICE CARD

GIBRALTER IV

ADDS A NEW DIMENSION TO YOUR HOMES

Now, with the GIBRALTAR IV you can give your home buyers the beauty of a fireplace with the economy of a wood burning stove.

The GIBRALTAR IV is a high quality, safe and efficient stove constructed of heavy 3/16" and ¼" steel plate. It is designed to hold and radiate heat with high efficiency for years of dependable use.

The GIBRALTAR IV is shipped with a special oxygen metering device to control burning and firebrick. It is 32" wide, 18½" high, has a 6" flue and accepts up to 28" wood. Shipping weight is 350 lbs.

Write or call today for literature and find out how you can profit by saving your buyers money, and give them the beauty and enjoyment of a fireplace with a wood burning stove.

SELF SUFFICIENCY PRODUCTS

One Appletree Square,
Minneapolis, MN 55420
Call toll free 1-800-328-1860

DEALER INQUIRIES INVITED

Classified Advertising

The market-place for the housing and light construction indu

POSITIONS VACANT

Property Manager: experienced, handle all phases of management for 1500 unit apartment and townhouse complex. Opportunity for someone to get totally involved. Box 574 Laurel Springs, N.J. 08021.

Sales Manager: large development company about to start 3600 unit PUD in South Jersey area, need sales and promotion oriented person for a growing successful company. Box 574 Laurel Springs, N.J. 08021.

POSITIONS WANTED

Financial Executive—Heavyweight —Listed co. V.P. Controller—CPA (Big 8 exp.)—Attorney—Acquisitions, financial controls, taxes. Exp'd. real estate, construction industries. Combines technical skill with imagination. $28-32,000 required. For resume: PW-9816 House & Home.

Experienced practicing attorney: created, operated/owned, and has just sold (profitably) his own real estate development, construction, brokerage and consulting companies. Seeks association with major co. or REIT. Will relocate and/or invest. For resume: PW-9702, House & Home.

TO ANSWER BOX NUMBER ADS:
Address separate envelopes (smaller than 11" x 5") for each reply to:
Box Number (As indicated)
Classified Advertising Department
House & Home
Post Office Box 900, NY 10020

BOOKS

How to Install a Central Clear System in Your Home

Wal-Vac's new free booklet is c press. It provides all you need to about installation and maintenar a Central Vacuum Cleaning Sy This free fully illustrated book complete with drawings and p graphs. Wal-Vac, Inc., 2851 Buc S.W., Grand Rapids, Michigan 4

New Home Designs. Finer Ho for Carolina Living, Home Book $2.50 each, Moores's D ing Service, P.O. Box 16, G boro, NC 27530.

SELLING OPP. WANTED

Manufacturer Agent in Ca wants new line for renovation ce & hardware store in Quebec M times and Ontario. More than dealers to call. Albert Girard, Laurentides Boul. Pont Viav, L P. Quebec, Canada.

Enter World's second largest ket. Ph.D. student specializin Soviet-American trade seeks s and medium firms to develop them long term marketing grams. Complete service at rea able cost. Write RA-9741, H & Home.

CAPITAL CONTACTS REPO

"How To Research and Find 'C tal Contacts'." A special infor tional copyrighted report. $2 Check/m.o. Gilbert I. Kynor, D HH, 304 Brooklake Road, F ham Park, New Jersey 07 Money-back guarantee.

ORDER FORM
(NON-DISPLAY)

Classified Advertising Department
HOUSE & HOME
P.O. Box 900, New York, N.Y. 1002

Rate Per Line or Fraction:	1X	2X	3X	4X
	$5.95	$5.75	$5.60	$5.35

NAME .....

ADDRESS .....

CITY & STATE ..... Number of Insertions .....

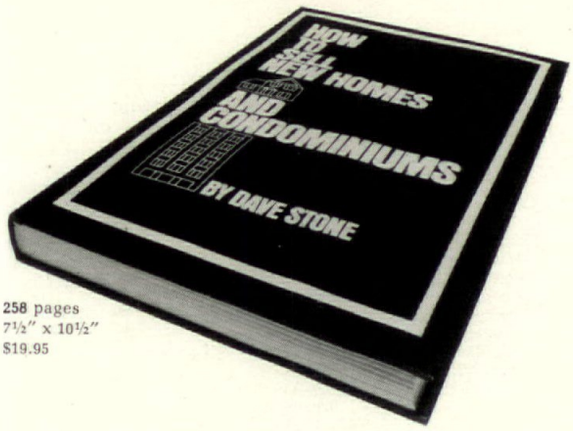
☐ Use Box No. (or)
☐ Use My Name and Address

☐ Bill Me (or)
☐ Check Enclosed

Signature .....

CIRCLE 124 ON READER SERVICE CARD

House & Home presents Dave Stone's new book on how to turn wavering prospects into confident homebuyers



258 pages
7½" x 10½"
$19.95

Dave Stone, President of The Stone Institute, Inc., enjoys a national reputation as realtor, author, lecturer, salesman, sales trainer, sales manager and sales consultant to builders, developers, realty and financial firms in the housing field.

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.

s an outstanding professional in face-to-face selling, Dave Stone knows xactly what it takes to turn wavering prospects into confident buyers.

n his new book on HOW TO SELL NEW HOMES AND CONDOMINIUMS, Dave distills over thirty years of rich and varied selling experience as salesman, ales manager, sales trainer and sales consultant.

Dave Stone digs deep below the surface to give you a clear picture of how uyers and sellers react to each other. He shows both as factors in the human quation that tip the scale—and the sale—in one direction or the other.

HOW TO SELL NEW HOMES AND CONDOMINIUMS is a basic book bout *people*—the people who *buy* homes from the people who *sell* homes. It rings to sight all the hidden worries, fears and hopes that motivate buyers and ellers alike. It shows how these powerful emotions bounce back-and-forth etween buyer and seller. And it reveals how the salesman's own attitudes, noods 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.

HOW TO SELL NEW HOMES AND CONDOMINIUMS was written not only to guide ambitious beginners, but also to update highly professional salesmen on the whole new set of problems involved in selling condominiums.

Worth the price of the book itself is the chapter on Selling Against Competition which compares buyer advantages of each type of housing to the disadvantages of each other type of housing. It provides instant leverage in knowing exactly how to approach almost anyone in the market for a new home or condominium.

That extra sale is all it takes to re-pay your investment in Dave Stone's new book on HOW TO SELL NEW HOMES AND CONDOMINIUMS over and over again. Make Dave's ideas work for you. Fill in the order form below.

SALES STRATEGY THAT WORKS

49 ways to help buyers with equity financing
54 ways to judge competitive location, design, construction quality & financial factors
Sales strategy for scattered sites
6 ways model homes can increase sales volume
Logical sequence for visual aids
Use of calendars, log books and lot-holds
The worst place for floor plans
How to isolate selection and material exhibits
Typical Builder Control Manual for openings
Traffic Report Form to detect marketing problems
Subdivision Control System for materials

SALES TACTICS THAT WORK

How to dissolve buyer tension
How to finesse the complainer
How to set deadlines for decision
How to handle impossible requests for change
How to handle options without losing control
How to reduce major problems to minor factors
How to ask the questions they want to answer
How to create a sense of urgency
How to relate floor plans to living requirements
How to set up return visits
6 knockout questions for openers
8 typical closing questions
95 sales slants for 46 common expressions

SELLING AGAINST COMPETITION

Buyer Advantages	Buyer Disadvantages
New home vs	Re-sale home
Production home vs	Custom home
Custom home vs	Production home
Conventional home vs	Mobile home
Owning vs	Renting
Condominium vs	Single-family
Condominium vs	Townhouse
Single-family vs	Condominium
Townhouse vs	Condominium
Townhouse vs	Single-family
Low-rise vs	High-rise
High-rise vs	Low-rise
Small community vs	Large community
Large community vs	Small community

PROFILE OF TODAY'S HOMEBUYER

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

Yes! Send me
Dave Stone's new book on
HOW TO SELL NEW HOMES AND CONDOMINIUMS
Enclosed is check for $19.95 payable
to House & Home Press.

20% DISCOUNT ON 10 OR MORE COPIES

Mail this coupon with remittance to:

House & Home Press
1221 Avenue of the Americas
New York, N.Y. 10020

Your Name _____

Firm Name _____

Mailing Address _____

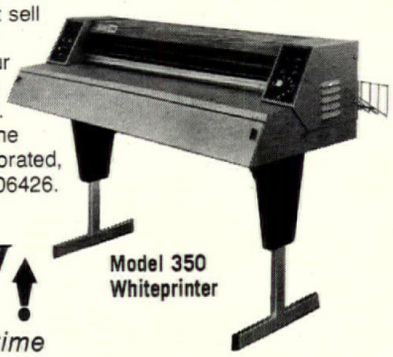
City _____ State _____ Zip _____

HH-4/76

After you buy a Blu-Ray, we don't run off and hide!

Sooner or later, any man-made machine needs service. That's why, when you buy a new model Blu-Ray white printer, you get a 20-page Owners/Service Manual, with over 100 easy-to-follow sequence photographs. So anyone with just screwdriver and pliers saves money as a do-it-yourself serviceman. But we go a step further. We offer telephone service assistance to any Blu-Ray owner in the country!

Blu-Rays are not only made better, as evidenced by our 1-year warranty on parts (excluding lamps, glass cylinders, and labor) they're backed better. One reason for our leadership in compact whiteprinter sales—we don't sell and run. Send for brochure. But before you buy, ask your Blu-Ray dealer to show you our Owners/Service Manual. Or ask us, we'll send you one for nothing. Blu-Ray, Incorporated, Westbrook Rd., Essex, Ct. 06426. Tel. (203) 767/0141.



Model 350 Whiteprinter

BLU-RAY!

we give you more uptime

CIRCLE 63 ON READER SERVICE CARD

2000 HOUSES TO CHOOSE FROM

BUILDERS ● DEVELOPERS ● LUMBER YARDS ● REALTORS

Give Your Customers "The People's Choice" of 2000 Houses to Choose From.

- A UNIQUE HOUSE PLAN BOOK that saves costly hours of preliminary planning.
- 5 EXTERIOR STYLES for each plan.
- UNIQUE DESIGN gives you complete freedom of selecting just the right plan to fit most any need.
- UNIQUE FEATURE - this book is printed to scale (scale included).
- SELECT ANY SIZE AND ARRANGEMENT of 2 to 5 bedroom houses.
- An invaluable sales book you won't want to be without.

ONE BOOK $5.95 plus 50 cents postage & handling.

SPECIAL VOLUME DISCOUNT PRICE:

10 Books — $5.25 ea.; 20 Books — $4.90 ea.; 50 Books — $3.99 ea. postage prepaid

GUARANTEE

If not completely satisfied with plan book return within 10 days (in good condition) and book cost will be cheerfully refunded.

SPECIAL OFFER PLAN OF THE YEAR

1591 sq. Ft. 3 BR. Ranch - Four complete sets blueprints -- a $150.00 Value - yours for ONLY $39.95 POSTAGE PREPAID. This offer is being made at this low-low price to acquaint you with our quality plan service.

WARREN & McDANIELS, INC.
Dept. B
P.O. BOX 402, YAKIMA, WASHINGTON 98907

Please send me _____ copies of your 2000 HOUSES TO CHOOSE FROM

Enclosed is $ _____ (5.95 ea. plus 50 cents shipping)

Please send me _____ copies of your SPECIAL, PLAN OF THE YEAR offer

Enclosed is $ _____ (39.95 ea. postage prepaid)

NAME _____

ADDRESS _____

CITY _____

STATE _____ **ZIP** _____

A-L **Alcoa Building Products, Inc.** 34F, 34G
Fuller & Smith & Ross
Amana Refrigeration, Inc. 19
Grey-North Inc.
American Gas Association 99
J. Walter Thompson
A-I-L **American Plywood Assn.** 36, 37
Cole & Weber, Inc.
A-L **Andersen Corp.** 46, 47
Campbell-Mithun, Inc.
A-I-L-D **Armstrong Cork Company** .. Cov. II
Batten, Barton, Durstine & Osborn, Inc.
Audit Investment Research 118
Gene Wolfe & Company, Inc.
A-L **Bird & Son, Inc.** 49
Humphrey Browning McDougall, Inc.
Blu-Ray, Inc. 126
The K.C. Shenton Co.
A-L **Boise Cascade Building Materials Group** 56, 57
Young, White & Roehr, Inc.
Burke Carpet Mills 108A
Lawrence & Lierle Inc.
A-L **Cabot Inc., Samuel** 103
Donald W. Gardner Adv., Inc.
A-L-D **California Redwood Association** 116
Honig-Cooper & Harrington
Caloric Corp. 21
Coordinated Communication, Inc.
Capitol Products 90
Gaynor & Ducas
L **Caradco Div. of Scovill** 29
Buchen/Reincke, Inc.
Carrier Air Conditioning Co. ... 119
N.W. Ayer & Son, Inc.
Classified 124
Custom Home Plan Club 50D
A **Dap, Inc.** 122
Kircher, Helton & Collett, Inc.
Davis Manufacturing—Div. of J.I. Case 54
Associated Advertising Agency, Inc.
Diamond Shamrock 124
Meldrum and Fewsmith, Inc.
Duo-Fast Corporation 108
Juhl Advertising Agency
A-L-D **E.A. Nord Co.** ..... Cov. III
Ricks-Ehrig, Inc.
Eljer Plumbingware Div. of Wallace Murray Corporation 33
Widerschein/Strandberg & Associates
L **Fedders Corp.** 113
Kenyon & Eckhardt, Inc.
A-I-L-D **GAF (Floor Products Div.)** 35
Daniel & Charles Associates, Ltd.
A-I-L-D **GAF (Bldg. Products Div.)** 105
Daniel & Charles Associates, Ltd.
A-L **General Electric** 94, 123
Young & Rubicam International Inc.
A-I-L-D **Georgia-Pacific Corp.** 26, 27
McCann Erickson Inc.
Goldblatt Tool Company 114
Fremermon-Papin Inc.
H-P Products, Inc. 120
Lord, Sullivan & Yoder, Inc.
A-L **Hotpoint Div./General Electric Co.** 106, 107
Compton Advertising, Inc.
House & Home 34H, 125
Jenn-Air Corp. 97
Foote, Cone & Belding
A **Kohler Co., The** 38, 39
Clinton E. Frank, Inc.
Kool-O-Matic Corp. 116
Boger, Martin, Fairchild Co.
Kwikset (Div. of Emhart Corp.) ..... Cov. IV
Coltrane & Co.
Lake Shore Industries .....
Lord, Sullivan & Yoder, Inc.
A **Lennox Industries** .....
Post-Keyes-Gardner Inc.
McGraw-Hill Book Co. .....
Magic Chef .....
Keller-Crescent Co.
Marvin Windows .....
Discovery Designs Adv.
A-L-D **Masonite Corp.** 5
Kubiak Carpenter & Assoc., I
A-L-D **Masonite Corp.** .....
Marsteller Inc.
Mastic Corporation .....
Juhl Advertising Agency
Merillat Industries, Inc. .....
Phillipps Associates, Inc.
Modern Methods—Div. of ORBCO .....
Rowe, Mowrey & Fields Adv. Agency Inc.
A **Monsanto Company** .....
Advertising & Promotion Ser
A-I-L **National Gypsum Company** ...
Fuller & Smith & Ross
National Homes Corp. .....
Garfield-Linn & Co.
Norandex .....
Hesselbart & Mitten, Inc.
Nutone, Div. of Scovill .....
The Media Group, Inc.
A-I-L-D **Owens-Corning Fiberglas** .....
Ogilvy & Mather, Inc.
A-I-L **PPG Industries** 1
Ketchum, MacLeod & Grove
Plan Hold .....
Reeds and Farris
A-L-D **Potlatch Corp.** .....
Ayer Jorgensen MacDonald
Price Pfister .....
Enyart Advertising Inc.
R. O. W. Sales Co. .....
Rolfe C. Spinning Inc.
A-L **Rolscreen Co.** 34B,
Kerker & Associates
San Valle Tile Kilns .....
Weinberg Advertising Co.
Scheirich Co., H.J. 3
Doe-Anderson Advertising
A-L **Sears, Roebuck & Co.** .....
Gerson Marketing & Advertising, Inc.
Self Sufficiency Products .....
Trademark Communication I
Seminar
Cutting the Cost of the Single-Family House ..108G-
Face to Face Selling ...108A-1
Time-Sharing 108A-1
108C-
A-L **Shakertown Corp.** .....
Solkover, Davidge & Jenkins,
Skil Corporation 34D,
Young & Rubicam International Inc.
A-L **Skymaster—Div. of Tub-Master Corp.** .....
TM Adv. Co.
Solar-Aire .....
Trademark Communications
A **TECO (Timber Eng. Co.)** .....
George Lohr Studios/Agency
Temple Industries 43, 1
Ritchie, Hopson & Assoc.
A-L **Thermador/Waste King**
A Norris Industries Co. .....
Siteman/Brodhead
A-I-L **U.S. Steel Corp.** 50B,
Compton Advertising, Inc.
A-I-L **W.R. Grace & Co.** 22
Charles Palm & Co., Inc.
Warren-McDaniels .....
Smith, Phillips & Dipietro

Advertising Sales Staff

ATLANTA 30309
Glen N. Dougherty
1175 Peachtree St.
(404) 892-2868

BOSTON 02116
Matthew T. Reseska
McGraw Hill Bldg.
607 Boylston St.
(617) 262-1160

CHICAGO 60611
Charles M. Crowe, Jr.
Lawrence R. Kossack
645 N. Michigan Ave.
(312) 751-3700

CLEVELAND 4411
Milton H. Hall, Jr.
55 Public Square
(216) 781-7000

DENVER 80203
Jay Johnson
Dave Watson
123 Speer Blvd., #400
(303) 837-1010

DETROIT 48202
William J. McAfee
1400 Fisher Bldg.
(313) 873-7410

HOUSTON 77002
John Strong
Dresser Tower
601 Jefferson Street
(713) 224-8381

LOS ANGELES 900
Donald Hanson
3200 Wilshire Blvd.
South Tower
(213) 487-1160

NEW YORK 10020
Matthew T. Reseska
1221 Avenue of the Americas
(212) 997-6925

PHILADELPHIA 19102
Raymond L. Kammer
Three Parkway
(215) 568-6161

PITTSBURGH 15222
Raymond L. Kammer
2 Gateway Center
(412) 391-1314

SAN FRANCISCO 94111
Stephen D. Blacker
425 Battery Street
(415) 362-4600

Pre-filed catalogs of the manufacturers listed a are available in the Sweet's Catalog File as foll

A Architectural File (green)
I Industrial Construction File (
L Light Construction File (yell
D Interior Design File (black)

CIRCLE 126 ON READER SERVICE CARD

How Nord bifolds stack up against ordinary wood bifolds.

(1/4" thicker, 92% stronger.)

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.

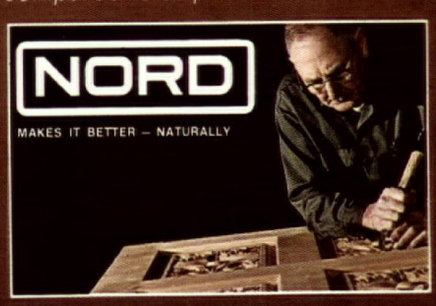
Secondly, we've added an extra quarter-inch to our doors. Instead of 1⅛" thick like most other bifolds, Nord bifolds measure 1⅜" thick.

What does it all mean? In terms of basic bending strength, Nord 1⅜" Western hemlock doors are 91.63% stronger than 1⅛" Western pine. (As computed by the Western Wood Products Association.)

Our doors are more rigid. They have greater depth, a better profile. They look and feel more substantial because they are.

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.



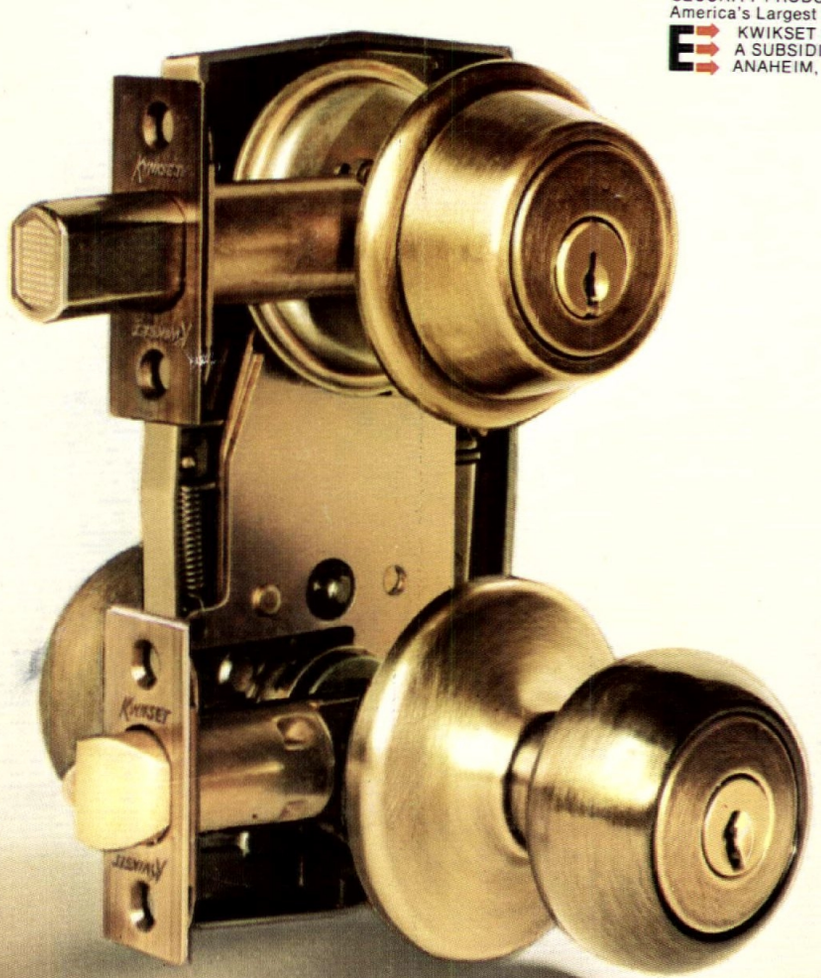
CIRCLE 127 ON READER SERVICE CARD

The new Kwikset Protecto-Lok.™

Because, right now, little things mean a lot.

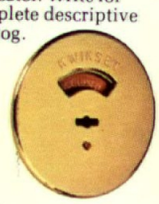
Okay, so a lock that costs maybe three times as much as a regular entry lockset is not exactly a little thing. But if you're building quality homes or apartments, you should consider Kwikset's Protecto-Lok because it's three locks in one. It's an entry lockset with deadlatch. It's a police-tested, extra-security 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.

ANOTHER QUALITY
SECURITY PRODUCT FROM KWIKSET—
America's Largest Selling Residential Locksets
KWIKSET SALES AND SERVICE COMPANY
A SUBSIDIARY OF EMHART CORPORATION
ANAHEIM, CALIFORNIA, U.S.A.



Hotel-Motel Protecto-Lok.

A special model with visual room "Occupied/Privacy" indicator. Write for complete descriptive catalog.



CIRCLE 128 ON READER SERVICE CARD