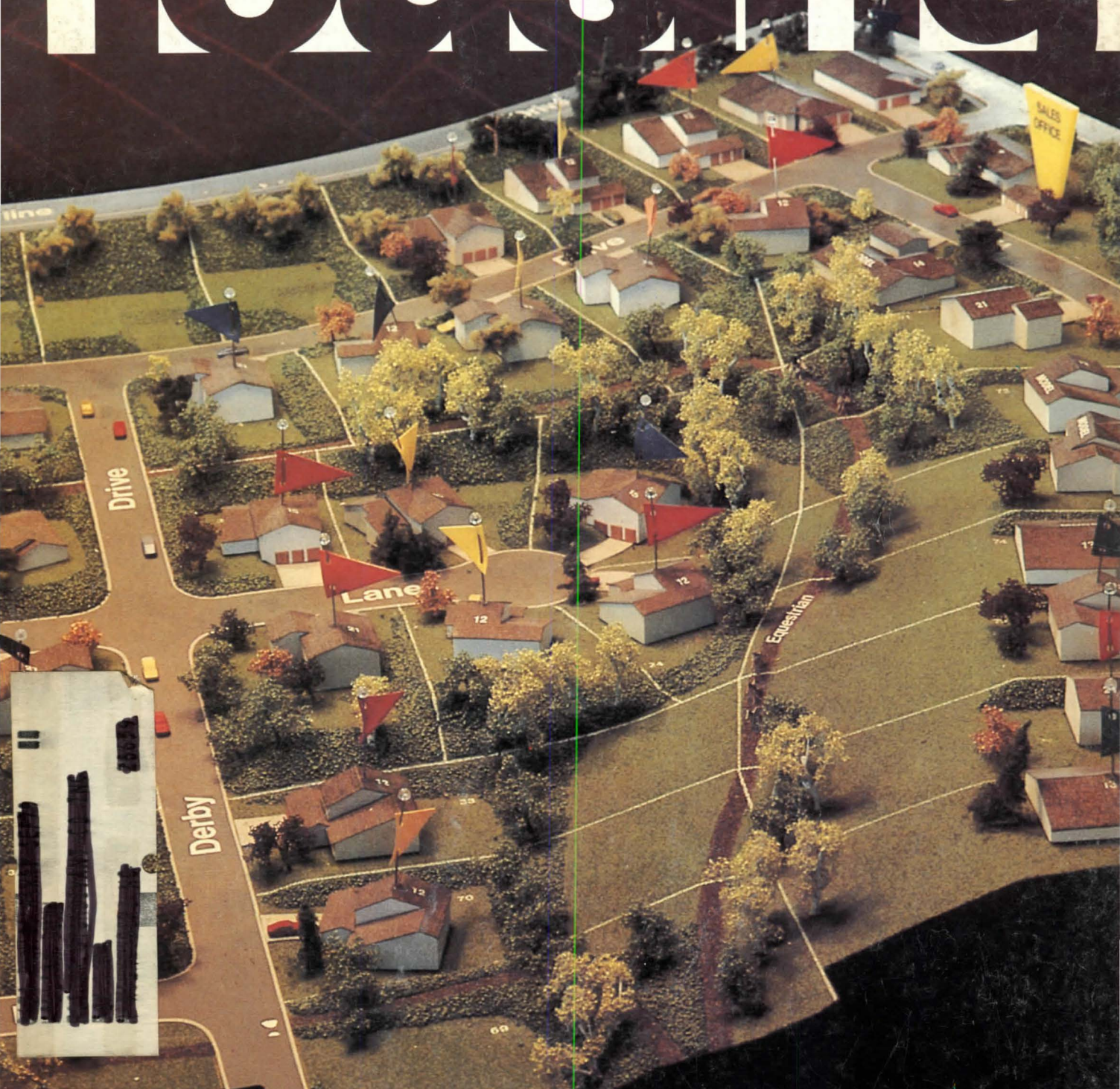


# housing



## Point-of-sale merchandising

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“After 18 years in the home-building business, we know basic flooring materials like VA tile can present problems. So we switched to Tredway and solved them.”

**Tredway installs over NPA-approved particleboard with less subfloor preparation.**

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Tredway adjusts to seasonal subfloor changes.

expensive underlayment is eliminated. That saves us the cost of extra materials and really reduces subfloor preparation time.”

**Tredway installs fast with staples or a band of adhesive.**

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Tredway cuts easily.



Tredway installs with staples.

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**Tredway reduces callbacks.**

“I don’t think I’m different from other builders when I say callbacks are really headaches. Before Tredway, flooring was one of our biggest sources of callbacks. The constant movement of adobe soil, coupled with the sudden tem-

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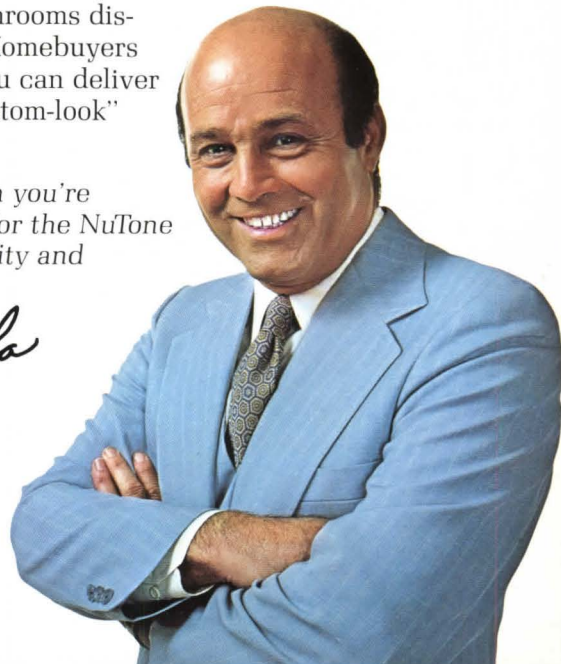
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## Cashing in on the inner city

If you have the temerity to tackle a job in the inner city, you'll be tied up in red tape, bullied by labor unions, victimized by vandals and generally clobbered by high costs.

So goes the pat warning to homebuilders, who just naturally feel more comfortable in the familiar surroundings of suburbia.

But it ain't necessarily so—not everywhere anyway.

There is opportunity in some cities. And it doesn't necessarily depend on federal urban policy, which as this is written is confusing and seemingly without direction. Under the aegis of some states and some cities, private builders and developers are quietly doing very well for themselves in the inner city.

Two cases in point, both drawn from this issue of HOUSING:

- The private—and profitable—rescue of a sick public housing project in Lynn, Mass.

- The sale of new homes to middle- and upper-income buyers in what used to be the worst slum area in Norfolk, Va.

Each case is unusual if not unique. Each bears watching by the housing industry.

In the Lynn case (*p. 70*), a private developer bought the public housing project and took the unusual step of forming a partnership with his tenants. Then he tore down the old buildings and replaced them with a new mix of apartments and townhouses.

Why take on such a venture?

“To make money,” says the developer. “And to prove that the private sector can do a better job of housing the poor.”

In Ghent Square (*p. 56*), the former Norfolk slum, an enlightened redevelopment agency attracts local builders by offering them an inviting mixture: a maximum of marketing support and a minimum of red tape.

Seven builders now operating in the area are selling houses priced from \$50,000 to \$120,000. Their buyers: mostly ex-suburbanites with incomes averaging \$30,000.

But new construction is only part of the in-city story. Don't overlook recycling old buildings to profitable new uses. As we pointed out last month [“Look into those old buildings on Main Street”], there are recycling opportunities all around the country and in cities of all sizes.

Municipal officials and builders have more in common than they may realize. The former seek ways to revitalize the cities; the latter seek new and profitable markets. If the two can get together, a lot can be done.

—JOHN F. GOLDSMITH

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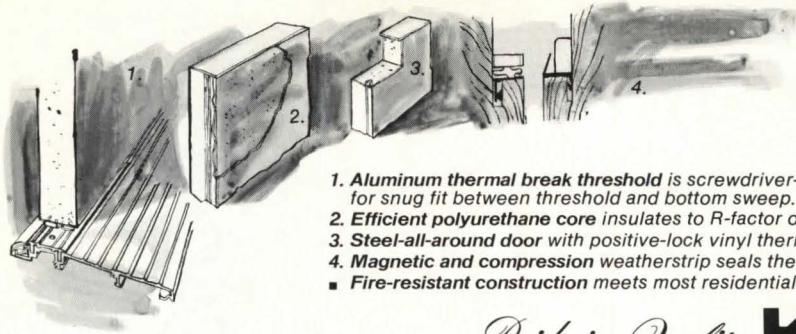
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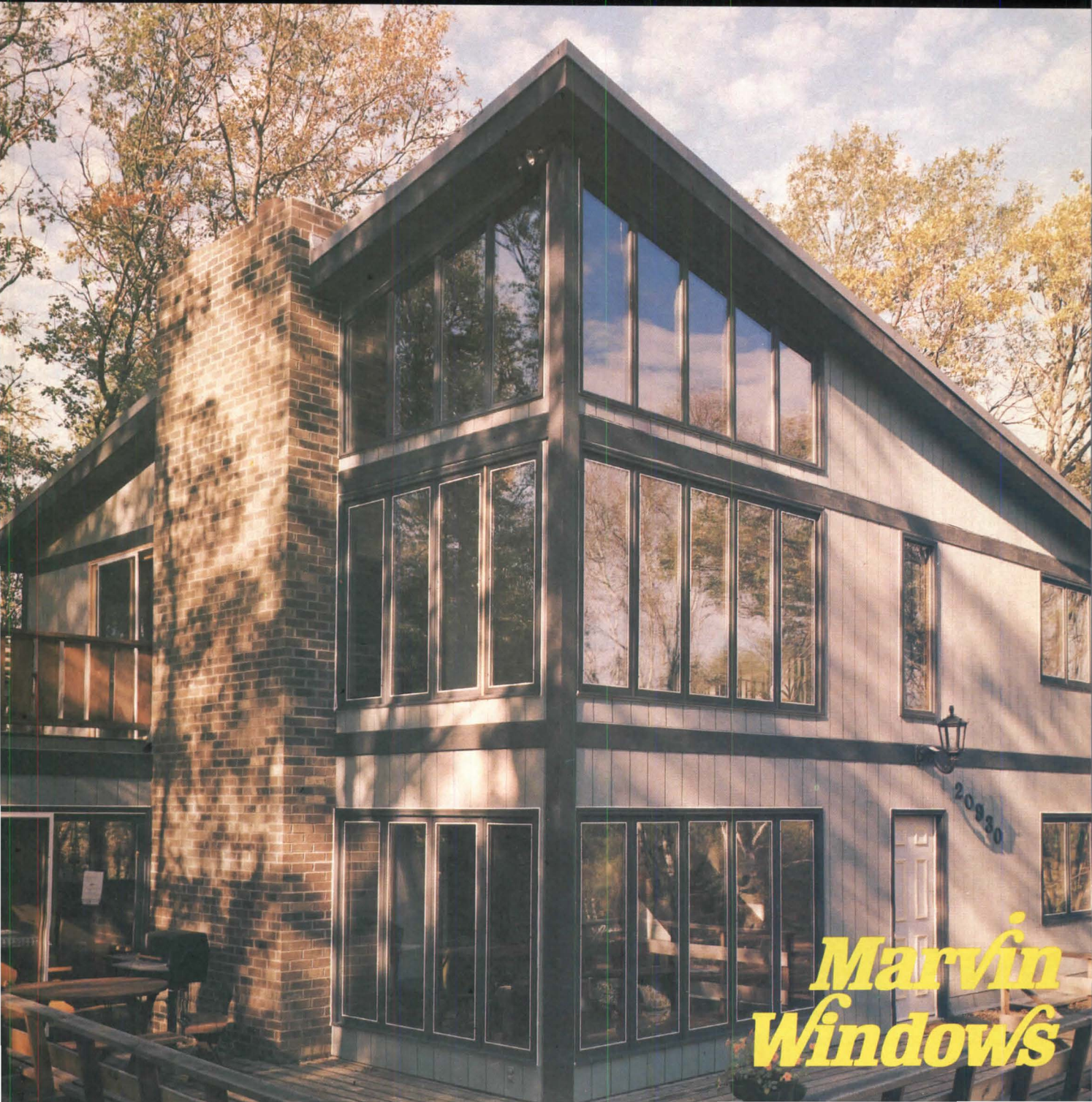
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# HUD backing out of suburbs

Policy change shifts subsidy funds to inner cities

Carter administration officials—and particularly Housing Secretary Patricia Harris—have been talking up the need to “target” existing federal spending to put more of the money where it is needed most.

But Mrs. Harris sparked a sharp political dispute when she announced “a major policy change” that would for the first time earmark—or target—\$174 million of subsidy funds for the construction of low-income housing to 23 selected central cities.

Mrs. Harris said that the new policy would, among other things, “encourage builders to be more responsive to housing needs of the central cities.”

**Omission of suburbs.** Previously, HUD had earmarked a specific amount of new subsidy authority only for a metropolitan area, leaving it to housing sponsors and developers to find sites, either in central city or suburbs, for which they would seek HUD’s approval.

The amount being allocated to an entire metropolitan area is not being changed. But these HUD-selected distressed cities, Mrs. Harris said, “will, for the first time, know what they’re going to get, and this, we believe, will encourage builders” to seek sites and submit applications for more inner-city projects.

**Instant reaction.** For years HUD policy and housing legislation has been to pressure the suburbs to build more subsidized housing to reduce segregation. And one HUD official said that “developers normally find it easier to find sites out in the suburbs; now it’s more likely they’ll look for sites in the city.”

The reaction from the National Association of Counties was instantaneous: one official said, “No matter how you slice it, it looks to me like the suburbs would receive a smaller share of the amount of money that was appropriated”—and the association is vigorously opposed to any such shifting of new subsidy money away from its members.

The HUD response to the political flap was to play down the importance of its “major policy change.” Said one HUD official, “Basically, nothing really

changes; it’s really not a new fund distribution formula.”

**Where big money goes.** John Gunther, executive director of the U. S. Conference of Mayors, had what may be the last word: “We expect to get more money for the central cities under the new formula. That’s the whole intention of the thing . . . If we don’t, there’s been a mistake.”

The 23 cities involved—with more

to be named by HUD later—are New York City, Chicago, Los Angeles, Philadelphia, Houston, Detroit, Baltimore, Dallas, San Antonio, Indianapolis, Washington, D.C., Honolulu, Milwaukee, San Francisco, Boston, Jacksonville, Memphis, Cleveland, Columbus, Ohio, St. Louis, San Jose, Seattle and New Orleans.

—DON LOOMIS  
McGraw-Hill World News,  
Washington

UPI PHOTO



Fed’s chairman, G. William Miller, speaks at White House after being named by President Carter to succeed Arthur Burns (left). Miller’s wife, Ariadna, is at rear.

## WASHINGTON WIRE

A new chairman for the Federal Reserve means that the housing industry can anticipate a somewhat more lenient credit climate. Jimmy Carter chose businessman G. William Miller to succeed Arthur Burns in anticipation that Miller would induce the Fed to work in closer harmony with the administration’s economic policies. Miller is neither economist nor banker, but he is a Democrat with a reputation as a “progressive” businessman.

The one indication of Miller’s views on housing came in an article he wrote for *Business Week* during the 1974-5 recession. To overcome the depression in housing, Miller advocated “a variable personal investment tax credit for purchase of new, owner-occupied dwellings. It could range, perhaps, from \$1,000 to \$2,500.” He also proposed “a decrease (or even a credit

in bank reserves required for loans for high priority purposes, such as for housing or for small business.”

Miller has since backed away from these proposals, pointing out that they were made during a recession and that he would not advocate them under current economic conditions. However, his 1974 views presumably are indicative of his willingness to pay special attention to housing in periods of economic difficulty.

“Havoc” is wrought on U.S. cities by state and local government housing policies, according to an American Bar Association report. The ABA project—funded by a \$500,000 HUD grant—also accused state and local governments of “promoting racial and economic segregation.” The ABA’s 625-page tome, *Housing for All Under Law*, has been four years in the writing.

# Pooled conventionals: How big a future?

The year 1978 looms as a test period for the idea that the fastest and surest way to get more money for housing is by pooling mortgage-backed securities (MBSs).

So far, nearly all of Wall Street's big business in securities backed by pooled mortgages has taken place at the non-risky shallow end of the pool. The pools contain only government-backed FHA-VA mortgages, written to uniform underwriting standards.

Now, just when the market threatens to turn sour, mortgage men must take a gamble if the pools are to continue to pull fresh money into a widening mortgage market. Having now sopped up most of the new FHA-VA loans, the poolers are eyeing conventionals. Such mortgages have no federal support and vary widely in quality from issuer to issuer.

**\$850 billion out there.** Conventionals constitute upwards of 85% of the trillion dollars in residential mortgages outstanding, however. And the success of FHA-VA pools has been so spectacular that even savings-and-loan leaders speculate that pools may someday replace the S&Ls themselves as the primary source of money for builders. But that won't happen unless the problem of pooling conventionals is solved.

Last year a couple of big lenders, Bank of America and First Federal S&L of Chicago, marketed a total of \$225 million in securities backed by pools of conventionals. But this is chicken feed compared to the potential if Wall Street can be persuaded to welcome pooled conventionals.

**Trouble signals.** In 1978 the S&Ls, the normal source of funds to finance conventional home loans, are going to experience disintermediation and a hefty drop in deposit inflow. Yet builders will keep S&L loan demand strong. The question, therefore, is how much pools can do to cover the shortfall in new S&L deposits. Already there is talk in Wall Street of \$3 billion in conventional issues this year.

Yet troubles mount for the fledgling conventional pools. For one thing, this year should see yields in the corporate bond market become more competitive with mortgage rates. But what has

poolers even more edgy is a move by Standard and Poor's rating agency to grade the investment quality of MBSs based on pools of conventional mortgages.

**Rating fever.** The S&P move makes it imperative for any smaller mortgage lending institution thinking of issuing a pool of conventional MBSs to get a high rating. Even the Bank of America, says Vice President Lewis Teal, has decided it will try to meet the tests S&P has set up.

Yet S&P isn't making it easy for any would-be MBS issuer. It has stipulated requirements that conflict with bank and S&L requirements and also take a lot of the profit out of the sale of the securities. The issuer's earnings spread would be cut wafer thin by S&P's demands for wider investor protection.

**'Die in their tracks.'** "Private [conventional] issues will die in their tracks if they do not solve this problem," says Ronald Struck of the Wall Street underwriting firm of Hornblower Weeks Noyes & Trask.

But Bank of America's Teal, who has been in discussion with the insurance industry, feels the problem will be licked. "We can produce risk characteristics in a conventional very similar to Ginnie Mae's with their government guaranty," he insists. Ginnie Maes are FHA-VA mortgage-backed securities guaranteed a second time by the Government National Mortgage Assn.

**The Ginnie Mae bonanza.** What the market is really looking at is the explosion of Ginnie Mae sales on Wall Street—\$18 billion in 1977. It is mortgage bankers who write and service FHA and VA loans. Because mortgage bankers don't have the capital to hold long-term loans in portfolio for a decade or two, they used to sell their loans to commercial banks. Now they pool them as securities.

But now that Ginnie Mae securities absorb the bulk of new FHA and VA loans written, the mortgage bankers, like the S&L men and bankers, are turning hungry eyes on conventional loans. FHA is viewed as a declining sector of the market.

**Need for guaranty.** Mortgage bankers know they will be frozen out of

pooling conventionals, however, unless they can get some large government or private outfit to guarantee private loans for them. That is why the rise of Ginnie Mae pools has brought more talk of mortgage bankers being allowed to trade with the S&Ls' secondary market arm, the Federal Home Loan Mortgage Corp. Freddie Mac buys conventionals, repackages them as securities and sells them. But Freddie Mac does not have an explicit federal guaranty and does have capital limitations on its activity. Mortgage bankers are also pushing hard to get Ginnie Mae to guarantee conventional mortgages for them.

Ginnie Mae is making a proposal along those lines for consideration by its parent agency, the Department of Housing and Urban Development. And sources at Ginnie Mae predict that HUD will reach a decision within two years.

But to get HUD to buy the idea, mortgage bankers will have to prove that it will mean an increase in capital coming into housing and that it is good public policy to strengthen housing by that amount at the cost of the government taking on a huge contingent liability in the conventional security guaranties.

—STAN WILSON

McGraw-Hill World News,  
Washington

## S&L league criticizes anti-redline proposal

The United States League of Savings Associations has cautioned that, unless modified, the proposed new federal regulations to prevent discrimination in mortgage lending could be so inflexible as to force lenders to make unsound loans.

At the same time, the trade group reiterated that it supports the concept that lenders should neither redline nor follow discriminatory practices.

The league, which represents 4,461 savings and loan associations, made the statement in commenting on proposed new regulations of the Federal Home Loan Bank Board. The rules are designed to prevent rejection of mortgage applications solely because of the location or age of a dwelling or solely because of the borrower's level of education or arrest record.

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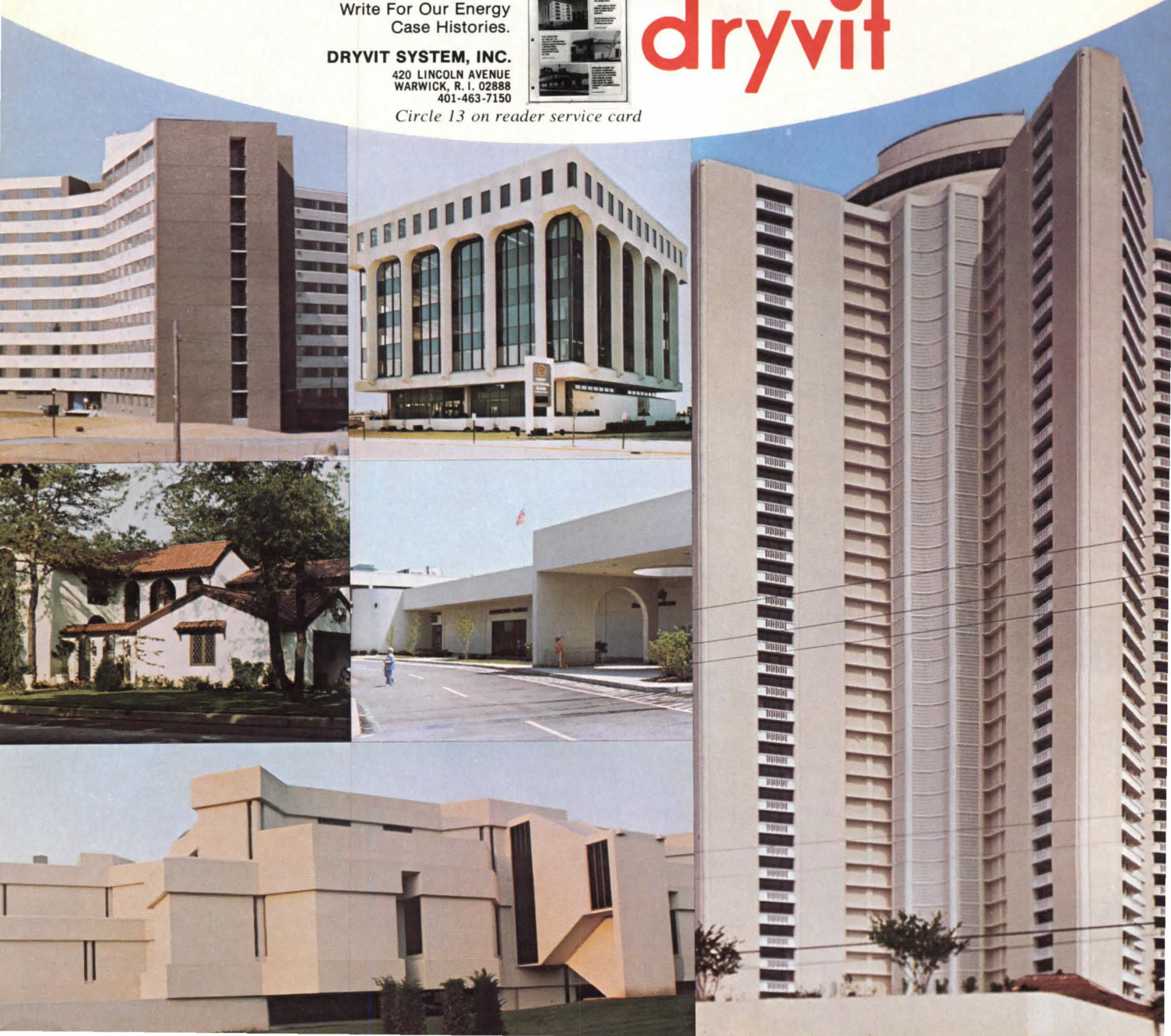
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# Housing stocks on the rebound for '78

Despite an expected decline in housing starts, homebuilding companies are probably headed for a stock market comeback.

The reason for this bullish forecast, says Research Director Richard Bove of Wall Street's Wertheim & Co., is that the housing industry's issues are deeply undervalued. He notes that many stocks are now selling at three, four and five times earnings.

What should the ratio be? Given the continued strong demand for new homes—and especially single-family detached houses—Bove feels that “prices should be six or seven times earnings.”

Although the difference between three-to-five and six-to-seven price/earnings multiples isn't that great, the impact on trading prices is significant. Usually, a one-point increase in the multiple brings the stock price up 20%.

According to Bove's timetable, the recovery is still six months away. Reason: Investors, aware that the current housing cycle has peaked, will be cool to these issues. But once they realize that the industry isn't in for bad times, investment interest will perk up.

**New value measure.** The top performers in '78 and beyond, says the Wertheim analyst, will be builders whose business is geared to inventory turnover rather than land accumulation.

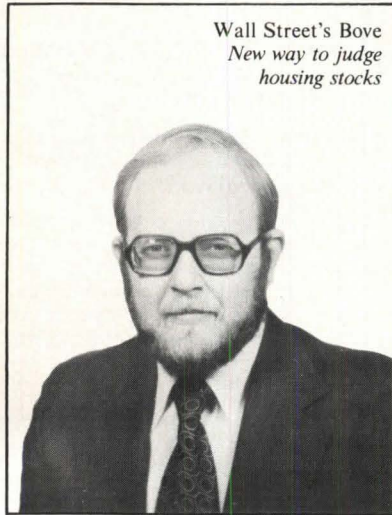
“Without a lot of money tied up in land, a very illiquid asset, both the balance sheet and earning statements of inventory-turn builders should continue to improve,” Bove explains. “They'll also have more flexibility when hard times come.”

For these reasons, Bove is high on such issues as Ryan Homes, Pulte Home Corp. and the Ryland Group.

**The big turnaround.** Turning a balance sheet around is no small or quick thing, however. “It took us almost four years,” says Chairman James Grosfield of Pulte. At this point, the Michigan company builds only against orders and it inventories only enough land to take care of immediate needs—i.e., acreage to be used within two years.

Says Grosfield: “We've created a

Wall Street's Bove  
New way to judge  
housing stocks



balance sheet with highly liquid assets. We did this by taking our money out of long-term assets, like land, and put it into highly liquid short-term assets—i.e., buildings. Last year, for instance, our home inventory rolled over four times.”

The firm's financial plan also calls for reduced leverage. Its shareholder equity-to-debt ratio, in fact, now stands at a healthy 1:1.

What's more, Pulte typifies the

undervaluation of many housing stocks. Its P/E multiple is only 3 to 1, and so it is ripe, it would appear, for some investment action.

**Mobile homes.** Contrary to recently published reports that mobile home stocks are under the gun because of an uncertain energy situation, Bove feels these issues are in an upbeat market position.

“An unfavorable energy picture will definitely hurt the recreational vehicle (RV) market,” he says, “but not mobiles.”

Proof of the pudding, he states, is the fact that commercial banks, which liquidated most of their mobile home loans in the last 3½ years, are starting to buy again. The catnip for banks: rising shipments, increased retail demand, more liberal financing terms and a sharply upgraded product.

Bove, however, sees only a “moderately positive” price trend for land development company stocks in '78, mainly fueled by a much stronger Florida market. Main beneficiaries should be GDV Inc. and Deltona Corp., both of which have extensive raw land holdings in Florida.

—BILL MULLIGAN

## HOW SOME KEY STOCKS FARED IN '77

	Exchange	1977		Dec. 30	Dec. 31
		high	low	1977	1976
<b>BUILDING COMPANIES</b>					
Centex Corp.	NY	16¾	10½	13¾	12½
Cenvill Communities	AM	22¾	12½	18½	12½
Kaufman and Broad	NY	8¼	5½	6½	8¼
Presley Cos.	AM	17½	7½	10¼	9¾
Pulte Home Corp.	AM	9½	6½	8	6¼
Ryan Homes	AM	20	14¾	16½	19¾
Shapell Inds.	NY	20½	15½	18	19
U.S. Home Corp.	NY	8¾	6¾	7¾	8¼
<b>MOBILE HOMES &amp; MODULES</b>					
Champion Home Builders	AM	4	1¼	1¾	3¾
Coachman Inds.	AM	19¾	11½	13½	16½
Conchemco	AM	15¾	9½	14½	10½
Fleetwood	NY	19¾	9½	12¼	19
Golden West	AM	19½	9¾	19	12
Mobile Home Inds.	NY	4¾	1¾	2¾	4¾
Oakwood Homes	AM	11¾	8¼	10¾	10
Redman Inds.	NY	4¾	2¾	4	3¾
Shelter Resources	AM	3½	1¼	2½	2¼
Skyline	NY	19¼	12	14¾	18½
Zimmer Homes	AM	10¾	5¼	9¾	7¾
<b>LAND DEVELOPERS</b>					
Deltona Corp.	NY	7¼	4½	5¼	5
GDV Inc.	NY	7½	4½	7½	5¾
Horizon Corp.	NY	2½	1¼	2½	1¾





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## Potter's Touch

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Let me see and feel Potter's Touch for myself. Please send me the name of the Florida Tile Distributor in my area, information on your Builder-Model Home Program, literature on Potter's Touch and an actual sample of this new tile. (Offer expires August 31, 1978) **HH278**

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COMPANY \_\_\_\_\_

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# FmHA sets tightest insulation guides

The highest insulation standards yet written by a federal agency have been released by the Farmers Home Administration of the Department of Agriculture.

Gordon Cavanaugh, FmHA administrator, said the Department of Housing and Urban Development and the Veterans Administration were consulted and that the FmHA standards are in "substantial conformity" with the insulation revision to the Minimum Property Standards expected to be published soon.

The new standards, which will become effective March 15, 1978, will apply to all single- or multifamily dwelling units to be constructed or purchased with rural housing loan or grant funds.

**New and used homes.** For new homes of conventional wood-frame construction in areas with more than 2500 degree-days (Birmingham has 2600), R-30 or R-38 ceiling insulation, R-19 wall insulation, and R-19 insulation in floors over cold spaces will be required to meet the FmHA U-values, according to the National Mineral Wool Insulation Association.

For existing homes, the R-values are the same except that no values are listed for walls.

The FmHA has followed the MPS since 1971, but Cavanaugh noted that the thermal performance standards of

FmHA REQUIREMENTS FOR NEW OR EXISTING CONSTRUCTION <sup>1</sup>					
Maximum U-Values					
Winter Degree Days	Ceilings	Walls <sup>2</sup>	Floors <sup>3</sup>	Glazing <sup>4</sup>	Doors
1000 or less	.05 (19)	.08 (11)	.08 (11)	1.13 (S)	-----
1001 to 2500	.04 (22)	.07 (11)	.07 (11)	.69 (D)	-----
2501 to 4500	.03 (30)	.05 (19)	.05 (19)	.69 (D)	Storm door if hollow-core door or if over 25% glass
4501 to 6000	.03 (30)	.05 (19)	.05 (19)	.47 (T)	Storm door
6001 to 7000	.026 (38)	.05 (19)	.05 (19)	.47 (T)	Storm door
7001 or more	.026 (38)	.05 (19)	.05 (19)	.47 (T)	Storm door

<sup>1</sup>Numbers and letters in parentheses have been added by the National Mineral Wool Insulation Association. The numbers are the insulation R-values needed to achieve the U-values in conventional wood-frame construction. The letters refer to single, double, or triple glazing.

<sup>2</sup>Wall values are not listed for existing dwellings. The FmHA notes: "Walls shall be insulated as near to new construction standards as economically feasible. Any exterior wall framing exposed during repair or rehabilitation work shall have a vapor barrier installed and be fully insulated."

<sup>3</sup>Floors of heated spaces over unheated basements, unheated garages, or unheated crawl spaces. A basement, crawl space, or garage shall be considered unheated unless it is provided with a positive heat supply to maintain a minimum temperature of 50°F.

<sup>4</sup>For existing construction, the U-value is .69 for areas with more than 4500 degree-days.

the MPS do not now provide adequate protection for FmHA borrowers or security for the interest of the government. He said some houses have been

conveyed into government inventory because the owners could not meet mortgage payments and fuel bills for heating.

## THE COURTS

# Court says builder must donate school land

Municipalities can force builders to turn over land for schools and parks to serve new subdivisions, the highest court in Illinois has ruled.

The decision, by which the Illinois Supreme Court seemed to reverse at least three of its own earlier rulings, was a major loss for the Home Builders Association of Greater Chicago and individual developers;\* the statute in question, from Naperville, Ill., has already been copied by Kane County, just east of Naperville, and the judicial endorsement is expected to speed adoption of similar rules in other

jurisdictions.

**Recognition of need.** The key to the legality of the city's demands, explained Justice Joseph H. Goldenhersh in Springfield, is that they were "fairly proportioned to the need for new school and park facilities created by the proposed developments." For instance, the state's standards call for 10 acres of park for every 1,000 residents, but the statute requires builders to turn over only 5.5 acres for each 1,000 of population projected for new developments. It also gives credits for private open spaces and recreation areas within the developments.

To enforce its 1972 statute, Naperville

simply refuses to okay a subdivision plan until the required land—or its cash equivalent—is contributed to the city. One developer who challenged the local law—The K Co., owned by James and J.L. Krughoff—flatly refused to make the dedication. The other, a combination of the Macom Corp. and the Oliver-Hoffman Corp., contributed the necessary \$37,650 in lieu of land.

Naperville, in the boom region west of Chicago, had more than doubled its 1960 population of 12,993 by 1973.

—DAN MOSKOWITZ  
McGraw-Hill World News,  
Washington

\*Krughoff v. Naperville, Docket 48963.

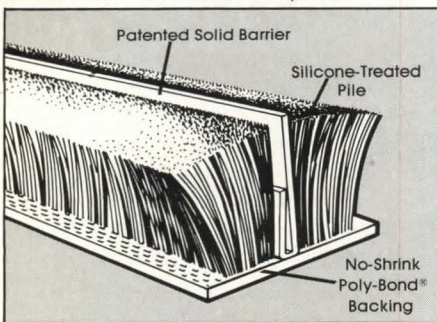
# Tests prove Fin-Seal<sup>®</sup> weatherseal conserves energy even after 9 years on the job!



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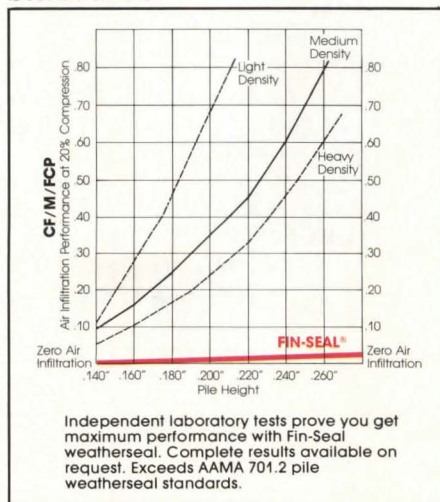
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# Long Island: Housing's paradise lost?

It was once the best of all possible worlds for a homebuilder.

But now Long Island—birthplace of William Levitt's Levittown—suffers the pangs of economic recession while homebuilders around the rest of the country move into another big housing year.

Added to a long list of economic woes—high unemployment, high taxes and loss of industry—is a glutted resale market that threatens the island's once prosperous homebuilders.

The pinch is tightest in the middle-income strongholds. In Suffolk County, the island's eastern sector, housing starts have plummeted from the 1972 peak of 12,000 to 6,000 in 1977. The inner county of Nassau has had almost as severe a fall-off.

Builders declare optimism, but none foresee an immediate cure for the lingering illness or its newest complications.

**'Negative.'** Andrew Monaco is president of New England Village Inc. of Smithtown, L.I. He is the immediate past president of the 2,400-member New York State Builders Association. Normally, he says, "I'm a confident man because you have to be in this business." Now, however, Long Island's resale glut—in which \$30,000-\$50,000 homes remain on the market for six to nine months instead of 60 to 90 days—has him singing a different tune.

"I've never said this before in an interview," Monaco says, "but for the first time I'm negative about the situation here."

How has Long Island undergone a Jekyll-Hyde transformation in five years? Other area homebuilders, while not directly echoing Monaco's "negative" outlook, are in agreement about the reasons for a resale market in which 38,000 homes—6% of the total—are up for sale.

**Taxes and equity.** "High taxes," declares Gerald Kramer, president of Suffolk Village of Bayville, L.I., "are killing us."

For Long Island homebuyers, property taxes amount to 5% to 7% of the total cost of a new home, a heavy bite by any standards.

"Another problem," says Peter

Klein, a partner in Klein & Eversoll Inc. of Hauppauge, "is the cost of carrying an unsold home while paying for a new one. Middle-income buyers wanting to move up out of a \$30,000 home need the equity from the sale of the old house. They can't afford to carry two homes and there's no sense buying a new home that's just like the one they want to leave. Combine that with the tax problem and you see why the market is stymied."

**Unemployment.** Donald Eversoll, Klein's K&E partner, spent four years as president of Kaufman and Broad's Long Island division before the big builder closed it two years ago. He agrees with his partner's assessment but cites another reason for the Island's continuing difficulties.

"Layoffs of municipal workers in New York City have hurt all of us during the past three years," Eversoll says. "Tens of thousands of city workers own homes on the island and many still living in the city were on the verge of buying their first home here when the ax fell." Nearly 65,000 city employees have lost their jobs due to budget cutbacks.

Eversoll adds: "Our immediate problem is the threat of layoffs for those people the ax missed. The last thing a person is going to do when his job is in jeopardy is buy a new home."

**City residence law.** While Suffolk and Nassau builders attempt to cope with their latest problem, yet another looms on the horizon. "If that law takes effect," says Monaco, "we'll be hurt even worse."

"That law" is the controversial proposal endorsed by several New York City politicians. It would require all of the city's employees to live within its five boroughs. The proposal is currently in limbo, but New York's mayor, Edward I. Koch, reportedly favors its implementation. Monaco estimates that about 20% of the new homebuyers on Long Island work in New York City.

**The brighter side.** All is not gloom and doom, however. Builders agree that new homes costing over \$50,000 are selling well, particularly along the shoreline.

"We've sold a lot of homes in the

\$50,000-\$70,000 range in Stony Brook and Holbrook," says Peter Klein. "Since we opened shop in August '76, we've sold over 200 new homes."

Following the departure of Kaufman and Broad from Long Island, Klein & Eversoll Inc. purchased 270 undeveloped K&B lots. Sales of the new \$50,000 homes on those lots, Eversoll says, "are brisk."

Kramer expects a break in the resale logjam "in about 18 months because it'll take that long for Albany [the state capital] to get off its butt and get us some tax help."

**Relief proposals.** Suffolk's new county executive, John V.N. Klein, a Republican, has proposed several measures that builders think will encourage new home sales if and when they are implemented. Klein's measures include:

- Granting homeowners a partial exemption from property taxes for five years on additions to residential units.

- Exempting a designated portion of an individual's home from taxes, regardless of his ability to pay.

- Setting property taxes according to the homeowner's income.

- Adopting a program in which homeowners over age 63 are exempt from all property taxes.

Don Eversoll, despite his belief that "Klein is progressive and he's on the right track," thinks the proposals face an uncertain future.

**'Profit is taboo.'** Monaco offers another reason for hesitation on the part of state legislators.

"The building industry," he says "is looked upon as the savior of the economy. But when we make suggestions, people in government always think our aims are self-serving. Every time we suggest ways to help our industry, they feel we're just waiting to get our fingers in the money pie.

"The word 'profit,' as far as politicians are concerned, is taboo. Mention profit to them—the life or death of any business and community—and they put their hands in their pockets."

The Long Island homebuilding industry, he says, "needs help right now—immediately—to stop the migration of people and jobs. But the way things look now, we're not going to get it."

—TOM ALLEN



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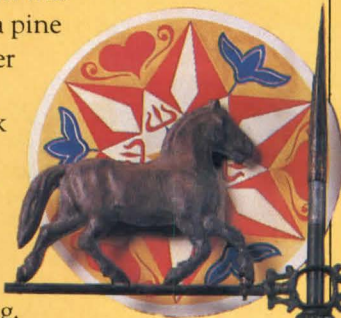


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**Georgia-Pacific**

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# British housing: New lease on life

The 37th International Building and Construction Exhibition, Interbuild, held in Britain's new National Exhibition Center near Birmingham November 16-25, provided a ray of hope for the country's deeply depressed housing industry.

Cuts in government spending in the last two years to control runaway inflation, along with interest rates of 15% to prop the sagging pound, have left their mark on the housing industry: Starts for 1977 were down 26%, most building companies are working at no more than 75% capacity and unemployment in the construction industry is 14%, over twice the national average.

**123,000 at show.** Despite the gloom, however, the biennial Interbuild drew a record attendance of 123,080, nearly 25% more than the 1975 show. And foreigners did little to boost this figure; 90% of the visitors and exhibitors were British. Billed by organizers as the largest exhibition of its kind ever staged in the English-speaking world, Interbuild took up five halls, with 1,200 exhibitors sprawling over 455,000 sq. ft. Interbuild's official spokesman, John Phillips, explained the uncharacteristically bullish mood of the show this way:

"Two years ago, everyone knew the situation was grim and that it would be that way for sometime. This year the industry is in terrible straits, but people can see some daylight."

Added William Bryant of the National Federation of Building Trades Employers (NFBTE), which represents 13,000 of the country's smaller builders:

"The exhibition got a real boost from the government's realization of just how much damage it had done to the industry."

**More money.** Indeed, Prime Minister James Callaghan's Labor government has restored \$900 million to the country's decimated public works budget since March. While this is barely half the \$1.7 billion chopped in the previous two years of economic restraint, the bulk of the restored funds are ticketed for housing and not heavy construction, which also suffered heavy cuts.

New government policy is to chan-

nel available funds into inner-city areas, especially in renovation of existing sub-standard housing rather than for expanding new towns [See "Britain Gives Up on New Towns," H&H, August '77.]

The policy was already making its impact at Interbuild. Producers of equipment linked only to new housing construction found interest far lighter than those also involved in the housing renovation market. Producers of high-cost but low-maintenance items received particular attention.

**Energy a topic.** J.M. Colquhoun, sales manager of Certex Ltd., building components division, Skipton, England, explained the intense interest of local housing authorities in the company's new PVC window frames this way:

"Local governments restoring old public housing are waking up to the fact it costs more in the long run to buy less expensive materials and then employ a lot of people to keep them up."

Energy conservation also made an appearance in a special 10,000-sq.-ft. "Ambient Energy" display. The 33 exhibitors, dominated by fledgling solar energy-panel manufacturers, had interest buoyed by a recent parliamentary recommendation that the government provide grants of up to \$700 to

cover installation costs of solar collectors for heating domestic hot water.

**Few American exhibits.** One such manufacturer, Kleen Line Systems, Prescott, began producing a range of aluminium sheets with acrylic-coated steel pipes earlier this year. The company sells 21-foot-square panels for \$210, mostly to export customers. In Britain, sales director Paul Thompson admits, the market is still slow. "Its rather like ice cream," he says. "You sell a lot in hot weather."

The presence of modest DuPont and Westinghouse stands lent prestige to the display, although organizer Charles Kneivitt said numerous other U.S. companies declined to exhibit.

—TY MARSHALL

McGraw-Hill World News, London

## Back to school

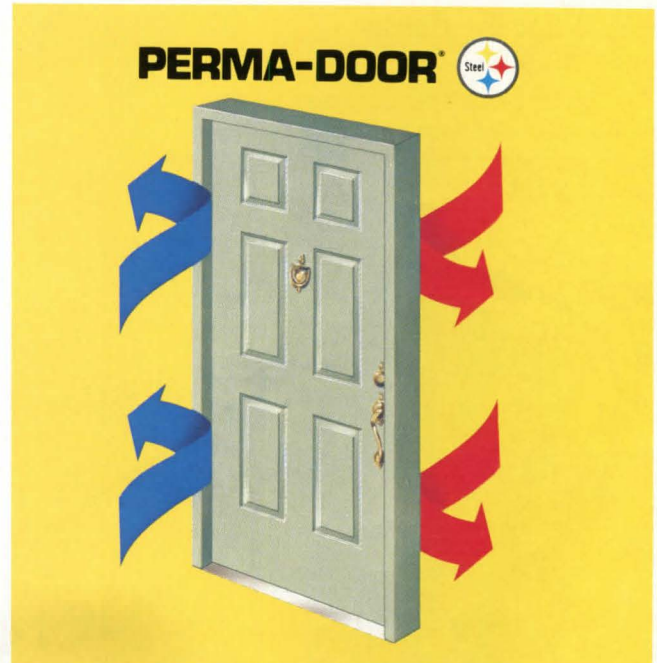
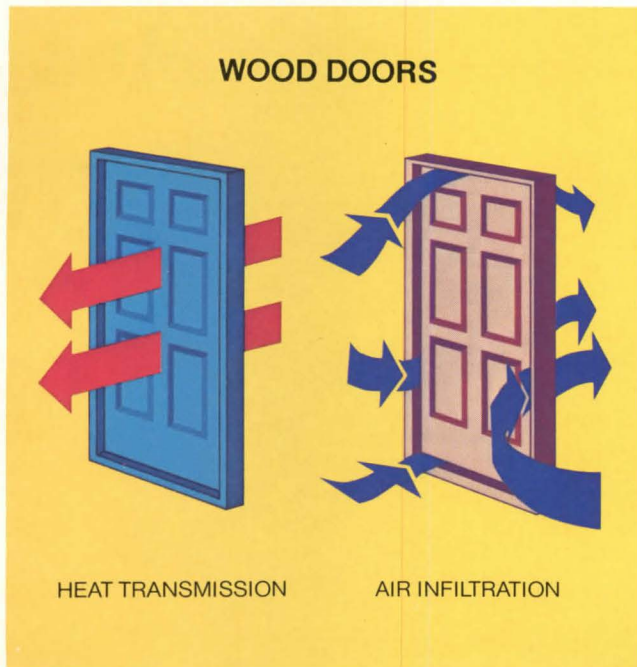
A course in single-family homebuilding will be offered for 60 builders by the New Ventures School March 13-17 in Washington, D.C. Housing Capital Corp., a subsidiary of the National Housing Partnership, will provide free tuition, texts and meals for those chosen to attend. Write to Dept. of Corporate Affairs, National Housing Partnership, 1133 15th St. NW, Washington 20005.



**Interbuild**, biggest builders' exposition in English-speaking world, attracted 123,000 persons. Visitors to one of five exhibition halls are shown above.



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The Perma-Door® steel entrance system solves the problems homeowners encounter with a wood door. Particularly the problem of air infiltration due to warpage: *heat loss*.

Wood doors lose heat in two ways: heat transmitted through the door itself, and heat lost around the door's perimeter (which is where you lose the most).

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\*American Society of Heating, Refrigerating and Air Conditioning Engineers.



## PERMA-DOOR®

by **Steelcraft®**  
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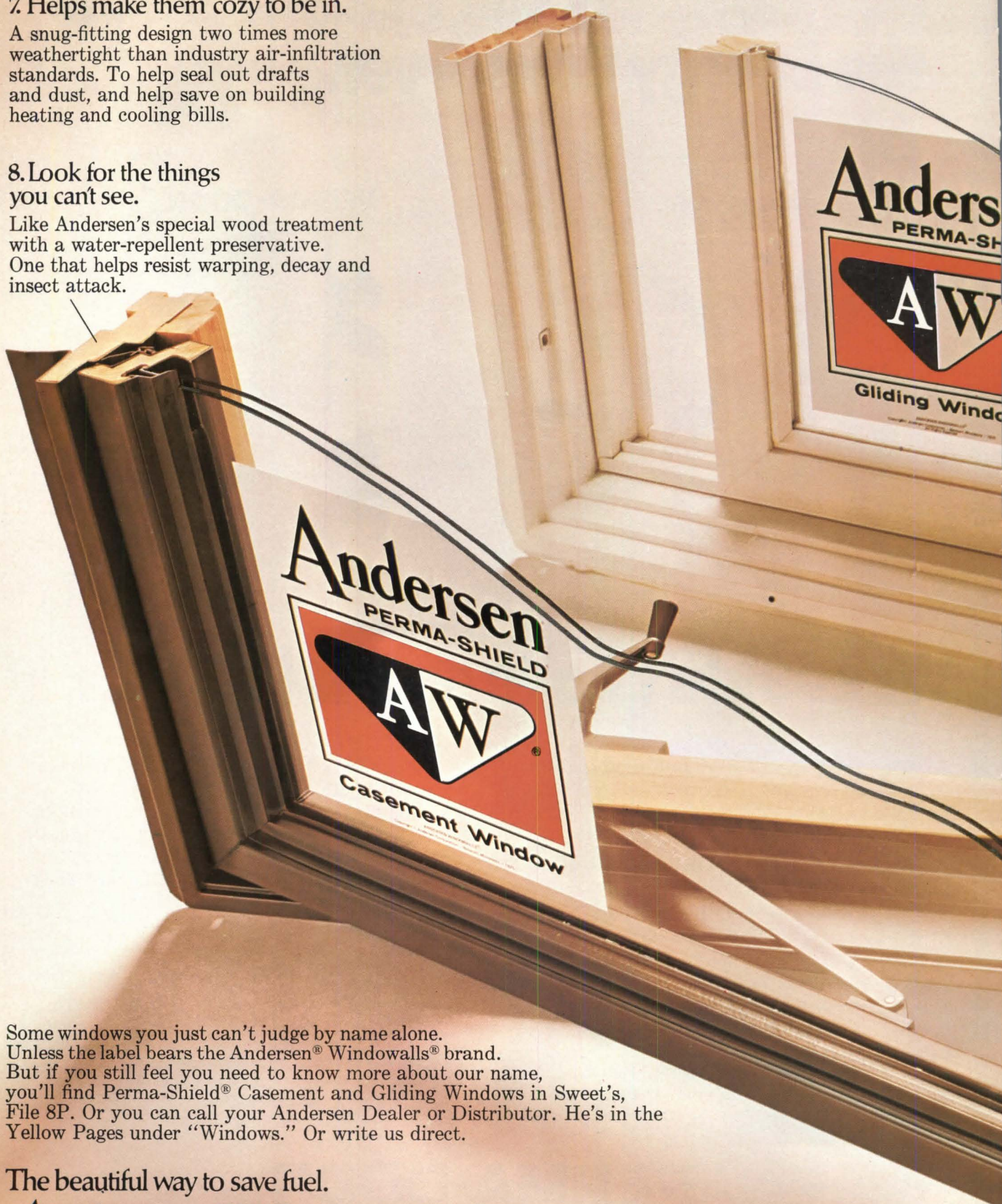


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**8. Look for the things you can't see.**

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The beautiful way to save fuel.

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Printing limitations prohibit exact color duplication. Use actual sample for building specifications.

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## 2. And what's in the window.

Rigid vinyl over wood, one of nature's best insulators. Carefully selected, moisture controlled and precision milled.

## 3. Know why the glass is functional.

Double-pane insulating glass isn't just added. But rather, it's made practical by Andersen's snug-fitting design and use of wood.

## 4. And why the window lasts.

The Perma-Shield rigid vinyl sheath doesn't rust, pit or corrode. Doesn't chip, flake, peel or blister. Stands up beautifully to time and weather, while demanding little maintenance.

## 5. Know how it helps make building easier.

Perma-Shield Casement and Gliding Windows come assembled for fast, easy installation. Continuous vinyl fin eliminates need for separate flashing.

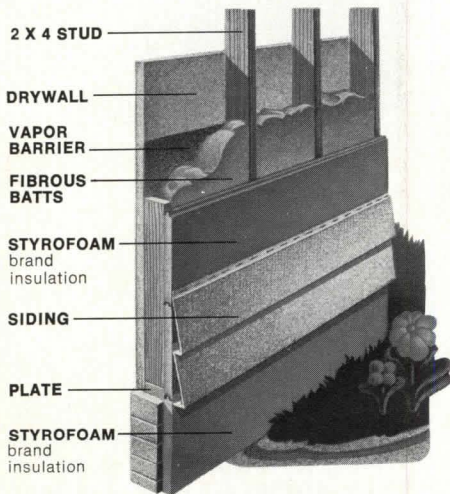
## 6. How it helps buildings look beautiful.

Andersen's neat, trim lines and classic profile. And an exterior rigid vinyl sheath in your choice of white or Terratone with Perma-Shield Casement Windows. White vinyl inside and out with Perma-Shield Gliding Windows.

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energy savings  
value!**



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The tests, conducted by Ohio State University under a grant from Dow Chemical U.S.A., compared energy costs of homes identical except for insulation systems. (Write for test procedures and results.)

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Analysis indicates that STYROFOAM brand insulating sheathing cuts energy costs by working three extra ways to improve insulation performance:

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<sup>†</sup>Some homes will perform better, others not as well. Energy savings will depend on factors such as climate, fuel type, workmanship, house design and living habits of the occupants.

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STYROFOAM brand insulation is combustible and should be properly installed. A gypsum board interior finish should be used in residential construction. For specific instructions see Dow literature available from your supplier or from Dow.

# Irvine grad heads Woodlands

The new president of the Woodlands Development Corp. is **Edward P. Lee**, former vice president of land operations for the Irvine Co. in California.

Lee moves into the Houston executive offices vacated by **Leland Carter** in July 1976. The company, a subsidiary of Mitchell Energy & Development of Houston, is building the new town of Woodlands nearby.

Another builder takes over the city of Houston itself—as mayor. He is **James J. McConn**, a single-family developer since 1959, who moves into City Hall after defeating former District Attorney **Frank Briscoe** in a runoff election. McConn is a Democrat.

Along with Lee, other Irvine alumni find nests. **Kenneth Agid** [H&H, Aug.] finally hands in his resignation as Irvine Pacific Development's vice president and joins Market Profiles, a market research firm in Orange County, Calif. But Agid, serving as a consultant, still reports to his former boss, **Frank Hughes**, vice president in charge of Irvine's residential division.

**William R. Watt**, ex-head of Irvine's multifamily division, forms his own development firm and staffs it with Irvine grads. Watt serves as president of the company, the Raywood Development Group, and **Robert Spooner**, former Irvine director of multifamily development, is vice president.

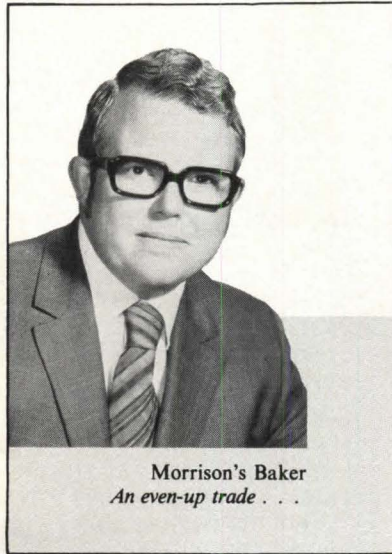
Irvine's **Donald E. Moe** is named director of marketing for Irvine's residential division. The post had been vacant since **Douglas Gfeller's** resignation [H&H, July]. Moe has been director of commercial marketing.

Two Olin-American subsidiaries swap execs. **Thomas J. Baker** moves from the chief executive's chair at Cavalier Homes of Phoenix to another with Morrison Homes in Pleasant Hill, Calif. Morrison's executive vice president and chief operating officer, **Dudley Frost Jr.**, becomes president of Cavalier.

**Laurence M. Netherton** is elected vice president in charge of real estate operations for Inland Steel Urban Development Corp., a subsidiary of Inland Steel of Chicago. Previously manager of real estate investments and finance, Netherton is responsible for

activities in the subsidiary's Sausalito, Calif. and Columbus, Ohio offices.

Hoffman Properties promotes **Wil-**



Morrison's Baker  
*An even-up trade . . .*

**liam Filerman** from sales coordinator to vice president. The company is a subsidiary of the Hoffman Group of Hoffman Estates, outside Chicago.

**Gary Morgan** is appointed vice president of construction for Homes by Dave Brown Inc. of Phoenix. He was contracts manager.

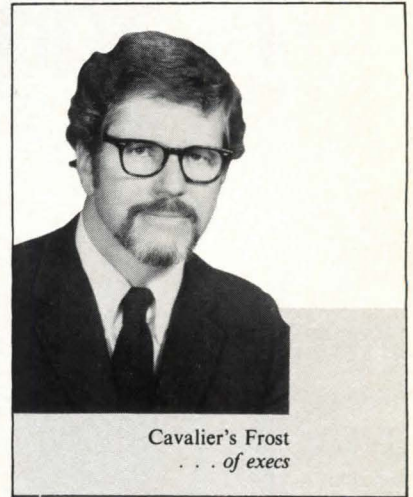
**William A. Ross** becomes president of the new Charter Homes of Columbia, Md., a subsidiary of the Brandermill Group, also of Columbia. Ross was vice president of operations and manager of the Ryland Group's Columbia, Md., division.

**Howard H. Mandel** is named president and general manager of the newly formed New Jersey division of Leisure Technology Corp.

U.S. Home adds one exec to its roster and promotes another. **Thomas P. Myers**, formerly director of the casualty insurance program for U.S. Gypsum, takes a similar post with U.S. Home. **David Freeman** advances from mortgage loan officer to vice president of U.S. Home Mortgage, a division of U.S. Home's operation in Clearwater, Fla.

**James E. Kaercher** is appointed as director of building for Homestead Properties Inc. of Homestead, Fla. Kaercher was president of KAER Construction in Miramar, Fla.

**Carl Buckner** is named sales man-



Cavalier's Frost  
*. . . of execs*

ager for Imperial Homes in Griffin, Ga., a Wick Building Systems subsidiary.

**DEVELOPERS:** **Evan L. Murphy** takes over the presidency of Pacific Coast Properties of Thousand Oaks, Calif. He had been president of Leadership Housing Inc. of Fort Lauderdale, Fla. Pacific Properties is a subsidiary of Cenvill Communities of West Palm Beach, Fla.

**Martin Renton Jr.** gets a second hat. The chairman of the Christiana Companies of Santa Monica, Calif., becomes their president. The post had been vacant.

**LENDERS:** **Charles B. Stuzin**, managing officer of Citizens Federal S&L of Miami, is elected president to succeed his father, **David Stuzin**, who continues as chairman and chief executive.

**Bruce L. Berlage**, a builder in Washington, D.C., is tapped as executive vice president of Homes of America Inc., a nationwide network providing joint venture and seed money. The firm is organized by Housing Capital Corp., a small business investment company owned by the National Corp. for Housing Partnerships. Berlage was president of Berlage-Bernstein Builders Inc. of McLean, Va.

**THE COURTS:** A federal grand jury in Cleveland indicts **Charles Lucas** on charges of accepting bribes from area developer **Carl Milstein**. Lucas has

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so we had to have the house.”**

You hear it over and over when you install Long-Bell® cabinets. Because when you capture a woman's imagination, you've gone a long way toward making the sale.

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Why wait? Send for our descriptive literature now. Let Long-Bell cabinets help sell your kitchen... and the whole house.

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- Over 250 units next year.
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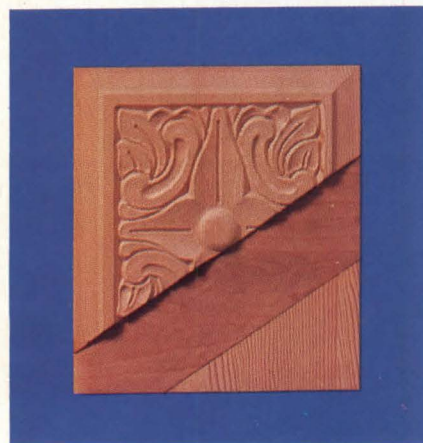




# Nord discovers a cure for the splitting headache.

When it comes to good looks and a long life, you just can't knock wood doors.

But, to get the most out of a wood door, you've got to take a little extra care. That's because the durability of a wood door hinges on its finish. If it's stained and sealed right, the door will last for years. Done wrong, there's a chance the door panels can split.



When that happens, you've got a door to replace. Which is one headache you could probably do without.

That's why Nord has come up with a new multi-ply door panel called Weatherbond™. These panels are so



tough, we'll state right here in writing that they'll never split.

To find out just how rough a treatment Weatherbonds can take, Nord sent them to an independent testing laboratory. In one torture test, the laboratory soaked Weatherbonds in boiling water for four straight hours. Then, they were force-dried at 145°F for 20 hours. After a second boiling, the Weatherbond panels were still completely free from any splits.\* And tests like these far exceed the demands placed on wood doors in any normal installation.

Of course, strength is only one of the beauties of Weatherbonds. The

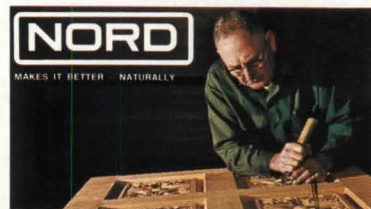
straight-grained western wood takes stain handsomely. And the deeply-carved panels have a look you'd swear was done by hand.

What's more, since Weatherbonds are made by Nord, the world's largest maker of stile and rail doors, you know they've got quality you can count on. The Nord name also means you won't have to pay a "custom-made" price to get a door with a custom-made look.

Weatherbond construction is available now in a variety of Nord carved entry doors. So be sure to specify Weatherbond on your next order. It just could be the cure you've been looking for.

*If you'd like to see some of the possibilities Nord doors open up, write us. E. A. Nord Company, Everett, WA 98206.*

\*In accordance with the U.S. Department of Commerce National Bureau of Standards testing procedures outlined in PS1-74.





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cradle insulating glass and form leakproof,  
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provides two complete systems  
for a total weathertight seal:  
stainless steel on sash...

...vinyl on the frame.  
An extra tight fit to prevent  
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# Caradco

wood casement windows are a proven way to  
give you energy-saving, cost-cutting comfort.

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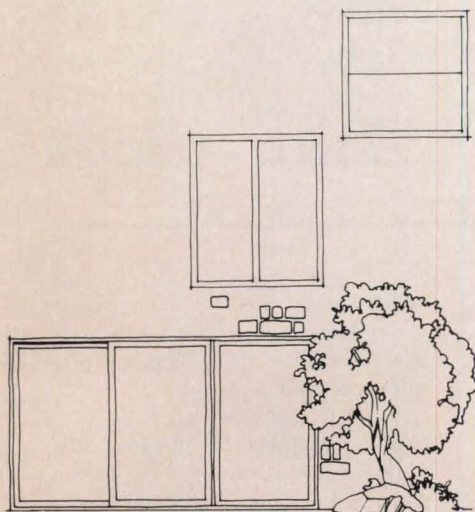
ready to finish in traditional or contem-  
porary colors for a custom, personalized  
look making the entire exterior more  
elegant.

**unfinished inside,**  
to be painted to harmonize  
with room decor.

**wood's natural warmth**

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warm to the touch and pleasing in appearance.

the smart, efficient  
wood casement window  
from the new **Caradco**.



*Caradco has a smart way to save energy wherever there's an opening. A complete line of double-hungs, casements, slider windows for commercial and residential buildings, including four widths, six heights, picture windows, bows and bays. Plus Caradco patio doors to give the same high-fashion, energy-saving features of Caradco windows, with the added comfort of interlocking weatherstripping and a thermal-barrier sill. Plus added safety, with a heavy-duty bolt security lock standard at no extra cost.*

**Caradco** windows are made of wood—nature's best insulator; they have double weatherstripping for the ultimate weathertight seal around the perimeter of the sash and are glazed with insulating glass (triple glazing optional) to cut heat loss through the glass area dramatically.

**Caradco** windows help you keep warm where it's cold and cool where it's hot. These days, nothing is more important than that kind of efficient energy saving.

Wood insulates hundreds of times better than metal. Caradco's double weatherstripping system—stainless steel on the sash, vinyl on the frame—seals window to far exceed exacting weathertight standards when window is closed and locked. And Caradco's unique triple glazing offers even more energy savings.

Create the window look you want from the total Caradco package, including every popular window style.

Call your Caradco distributor. See how Caradco can be the fashionable and functional answer to your energy-saving window and patio door needs.

**Caradco**

**Caradco Window and Door Division**

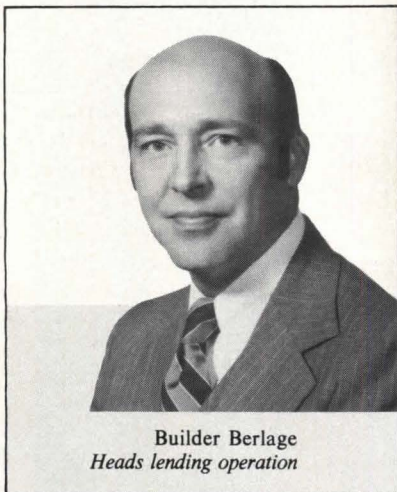
**Scovill**

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**Saves energy naturally**

been director of HUD's Cleveland insuring office since 1971. The same grand jury is reportedly looking into an alleged scheme to submit false cost information on HUD-insured apartment projects.

**ASSOCIATIONS:** **David Olan Meeker Jr.**, former HUD assistant secretary for community development, is nominated as executive vice president of the



Builder Berlage  
Heads lending operation



Woodlands' Lee  
Building a new town

American Institute of Architects. If confirmed by the AIA board of directors, Meeker will succeed **William Slayton**, who announced his resignation last May.

**Erwin B. Drucker** is elected president of the Institute of Real Estate Management (IREM) for 1978. Drucker

succeeds **Joseph T. Aveni** who returns to Hilltop Management Co. of Cleveland as its president. Drucker is a partner in the real estate firm of Drucker and Falk Inc. of Newport News, Va. IREM is an association of certified property managers and is affiliated with the National Association of Realtors.

Another NAR affiliate, the American Institute of Real Estate Appraisers, names a president. **Charles Akerson**, a Boston appraiser, takes over in '78. Dayton appraiser **John Remick** is first vice president.

**W. Scott Biddle** is installed as president of the Orange County (Calif.) chapter of the Building Industry Association.

**David P. Bennett** is elected president of the National Building Material Distributors Association at the NBMDA's convention in Houston. Bennett is president of Bennett Building Supply Co. of Pittsburgh, Pa.

In Canada a former steeplechase jockey, **John Oliver**, becomes president-elect of the 9,500-member Toronto Real Estate Board.

## The Mann who curbed speculators resigns

It's greener pastures for Maurice Mann, the \$87,600-a-year president of San Francisco's Federal Home Loan Bank.

Mann, in the post since 1972, has resigned to join Warburg Paribas Group Inc., an investment banking firm at a higher salary.

Bay Area speculators won't mourn his exit. Mann, in an effort to halt California's rampant real estate speculation, raised the bank's interest rate to savings and loans that borrow from it. They, in turn, upped the cost of mortgage loans to real estate buyers, spiking the speculative trend.



Bay Area's  
Mann  
To private  
practice

## Hallcraft discovers an angel up north

Phoenix-based Hallcraft Homes may be coming out of the woods. The troubled corporation plans to merge into Nu-West Development Corp. of Calgary, Alberta, a publicly held builder with operations in Canada and in Seattle, Los Angeles and Denver.

The Canadian firm would set up a subsidiary, Nu-West of Colorado, that would be 20% owned by Hallcraft's common stockholders. Nu-West would acquire at least 85% of Hallcraft's \$15 million in outstanding convertible debentures. The long-ailing Phoenix firm currently has a shareholders' deficit of \$22 million. The SEC suspended trading in Hallcraft's stock on Dec. 30 for 10 days.

## BRIEFS

**Salt 'n sun** may be the energy-saving combination of the future. General Electric scientists now claim that Glauber's salt, a previously useless sodium sulfate, could be the best and most inexpensive substance in which to store solar energy. GE is testing the salt in revolving drums with special crystals. It says the machines may be economical and compact enough to go in the basements of most homes.

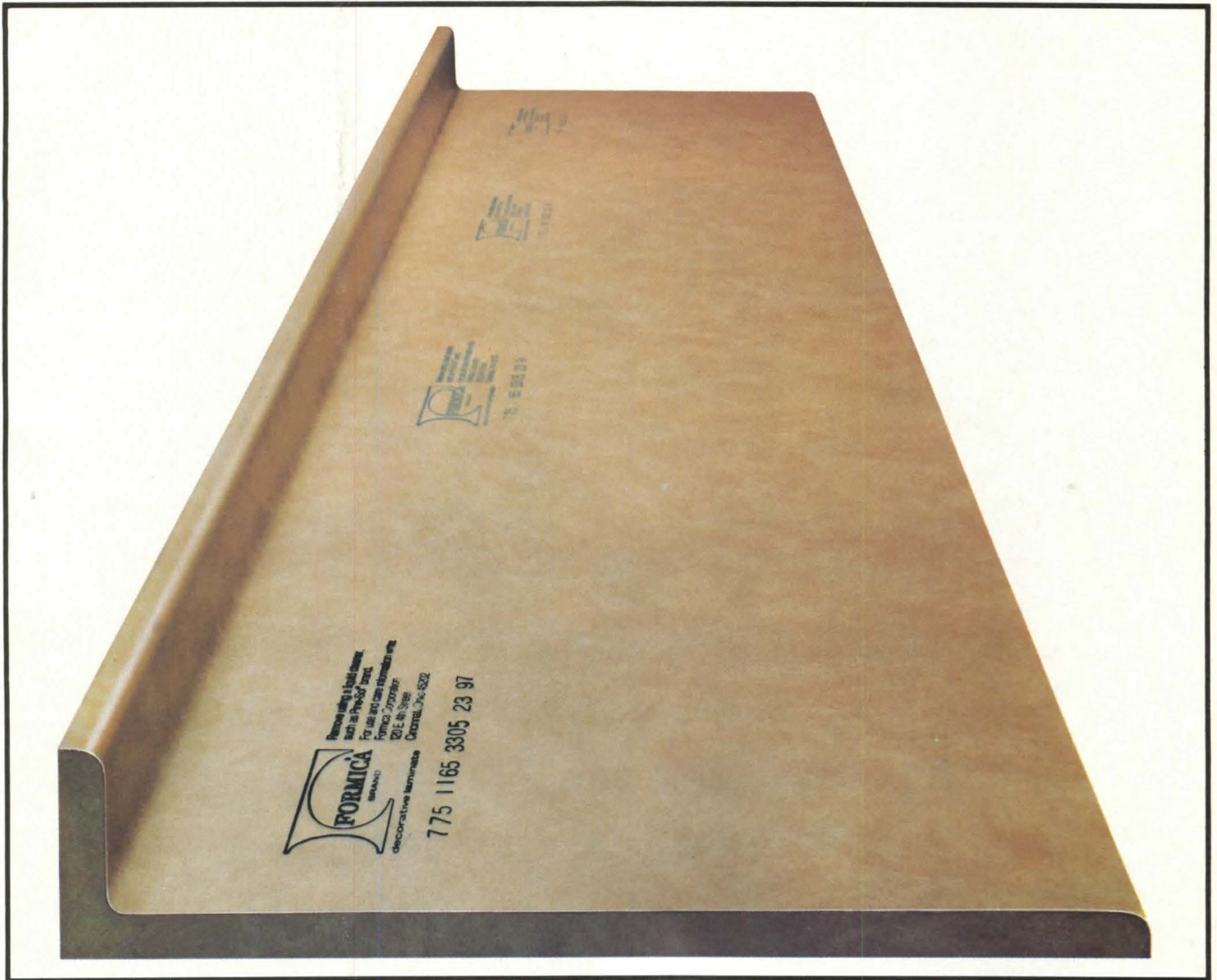
**A 3-for-2 stock split** is declared by Golden West Homes of Santa Ana, Calif. Second quarter net rocketed 112% to \$1.5 million, or \$1.05 a share, up from \$729,000—or 50

cents a share—for the same period the previous year. Shares closed at \$18.12 on the Amex the day of the announcement.

**A 72% jump** in third-quarter earnings is expected by U.S. Home Corp., Clearwater, Fla. Net will leap to \$4.4 million, up from \$2.6 million for the 1976 third quarter. Revenues will rise to \$140 million, up 33%.

**A competitor is disarmed** by Kaufman and Broad Home Systems Inc., the big homebuilder's manufactured-housing subsidiary. It agrees to buy Tampa-based Celtic Corp. for \$3,122,000.

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CypresSide™ hardboard siding. It's stately without being stuffy. And it's a look you won't find anywhere else. Specify light Gray or deep reddish Brown. For more information, write Masonite Corp., 29 N. Wacker Drive, Chicago, IL 60606.

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Photographed in Florida at Cypress Gardens.

# Colleges offering land to builders

Developers who are hamstrung by today's high cost and/or shortage of building sites may be overlooking a potential land bank—the nation's colleges.

How much undeveloped property do the schools own? No one really knows because data is skimpy at best. However, this much is certain: The book value of all land held by U.S. colleges is conservatively estimated at almost \$5 billion.

What's more, cash-shy but land-rich institutions are searching for new ways to generate income from their excess real estate.

Item: Rutgers University, which owns a 106-acre tract in Highland Park, N.J., recently leased 34 acres to a private developer who is building 351 garden apartment and townhouse rental units on the site.

Item: In California, Stanford University put up the land for a shopping center that brings in more than \$1 million annually in lease income.

Item: Princeton University will shortly launch Forrestal Center, a mixed planned-use development (MPUD) that's going up on 1,600 acres of school-owned land. It will have research facilities, office buildings, a conference center and hotel, retail shops and 600 housing units—both rental and for-sale. Princeton plans to develop the project itself.

**Tip of iceberg.** "I think this is just the beginning; we'll probably see a lot more of these hybrid developments in the future," says George Sternlieb, director of the Urban Policy Research Center at Rutgers.

K.S. Sweet Associates, the real estate advisory firm that put Princeton's MPUD together, agrees. Says marketing consultant Bill Nolan: "We've already had inquiries from a dozen major universities."

The reason, of course, is economics. Many colleges have amassed sizable land holdings through donations, bequeaths and acquisitions. But with enrollments tapering off and tuition costs rising, the booming education market of the 1950s and '60s is about over. So is the need for land-eating expansion programs. Schools, therefore, have begun to put their real estate to work.

**Lease deal.** Rutgers, for instance, owns 2,000-plus acres of undeveloped land. But it has no use for much of this property for 50 or more years.

In its first foray into the real estate market, the school closed a ground-lease deal with Lanid Corp. of Clinton, N.J., a developer of condos, rental housing and office buildings. The lease is for 50 years.

Lanid Corp., along with its minority (25%) partner, Richard P. Brown Associates, an architectural planning firm, will jointly develop Forest Glen, an \$8-million project that calls for 324 one- and two-bedroom garden apartments to rent at \$310-\$435. Another 28 two-bedroom townhouses will go at \$495.

**Income.** Lease payments are based on a sliding scale that's tied to the project's success. Construction on the

empt from paying real estate taxes, the Highland Park site is controlled by a private corporation set up by the school's trustees. But when the town, which is 98% developed, rezoned the land to increase its ratables, Rutgers' annual tax bill jumped from \$15,000 to \$75,000—an increase it has refused to pay. Although the matter is still in "friendly" litigation, the new housing project should calm the waters.

**Tax contribution.** For one thing, Forest Glen will help to ease the town's critical shortage of rental units (the vacancy rate is virtually zero). It's also expected to boost Highland Park's tax revenue by \$225,000 yearly, three times more than the new tax rate Rutgers doesn't pay.

Lanid comes out ahead, too. "Without access to the school land, one of the last good-sized lots left in the borough," says President H. Charles (Bud) McNally, "we'd be shut out of this important market. Sure, we'd prefer to own the land. But if leasing is the only avenue open—and that's the case here—we'll take it."

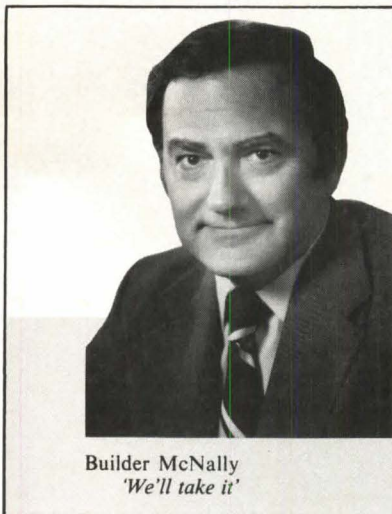
While ground leasing eliminates the need for a big front-end investment in land, McNally feels this is offset by reduced financing capability—i.e., it's harder to find lenders to back a developer who doesn't own the land—and the increased difficulty in selling.

To hold down the debt load, Forest Glen is being financed (and built) in three phases. The lender for the first section is Mutual Benefit Life Insurance Co., which wrote a 30-year mortgage for \$2.6 million at 9¼%.

**Cooperation.** Municipal attitudes, for a change, helped rather than hindered the project. Says McNally: "It took less than six months to get all the approvals—master plan, zoning, environmental impact, etc.—from both the town and county planning boards. The usual red tape just wasn't in evidence."

But that really shouldn't surprise anyone, according to Mayor Harold Berman of Highland Park. "City governments," he explains, "can make things as easy or as difficult for a builder as they want. We made it easy because it was to our advantage to do so."

—BILL MULLIGAN



137-unit first stage started in December, and Rutgers will pocket \$90,000 a year for ground rent initially. This will escalate to about \$250,000 five to seven years after all units are rented.

For Rutgers, the leasing set-up is the best of two worlds: It's making money on a non-productive asset without relinquishing title to property that, conceivably, might be needed for educational purposes in 70 years.

The new project also solves some other problems.

Highland Park, a community of 15,000 in fast-growing Middlesex County, has been threatening to sue Rutgers for back taxes on the land. Although land-grant schools are ex-



# "An important, built-in energy saver in all the homes we build is PPG Solarcool® Bronze glass."

—Gary Pollard,  
Vice President, Marketing,  
The Babcock Company, Coral Gables



Bent Tree Project Supervisor Allen Farrington



The Babcock Company, a leading builder in the sunbelt for 42 years, has chosen PPG Solarcool Bronze reflective glass for all the windows and sliding glass doors in its beautiful new Bent Tree Development in Florida.

"Solarcool is a key energy factor and a highly visible sales feature in our standard energy savings package," says Mr. Pollard. Other parts of the package include attic insulation, roof turbine ventilators and exterior wall insulation.

By reducing glare and heat gain from the southern sun, Solarcool glass can save up to 17 percent on air-

conditioning costs compared to clear glass. (Data based on a PPG computer energy analysis of a Bent Tree home. Savings may exceed that in other locations.)

In the daytime, the glass reflects the lovely Florida sky and water and increases daytime privacy. Ultraviolet light, a major cause of interior fading, is cut way down.


Project Supervisor Allen Farrington adds that "I feel good about giving our customers value. And since Solarcool is standard in all our models, it makes production efficient."

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Four of these new houses  
just made the other six obsolete.

**Ten test houses helped Owens-Corning prove that efficient design can cut heating and cooling costs as much as 59 percent.**

Ten empty houses stand in a field in Arkansas. They're air-conditioned in summer, and heated in the winter. And they're almost identical, except for the design of their energy conserving systems. And except for the amounts of precious energy they use.

They're part of an Owens-Corning test project to determine the energy savings of a unique type of home. A home specifically designed to be *energy efficient*.

A home with extra space under the roof, behind the walls, and under the floor, to allow for thicker Fiberglas\* insulation. A home with a full com-

plement of energy-saving features.

And, surprisingly, a home that may cost no more to build. Because there may be major construction trade-offs to offset extra costs—like savings on framing lumber and HVAC equipment.

#### **Testing energy efficiency**

Four houses at the Arkansas test site were built with Owens-Corning's unique specifications (special construction plus insulation levels of R-38 ceilings/R-19 walls/R-19 floors). Three others were conventional homes, with intermediate insulation levels (R-19/11/11). The final three were conventional homes built with minimum insulation levels (R-14/11/11).

There were ten houses, without

occupants—to eliminate variables caused by different life-styles.

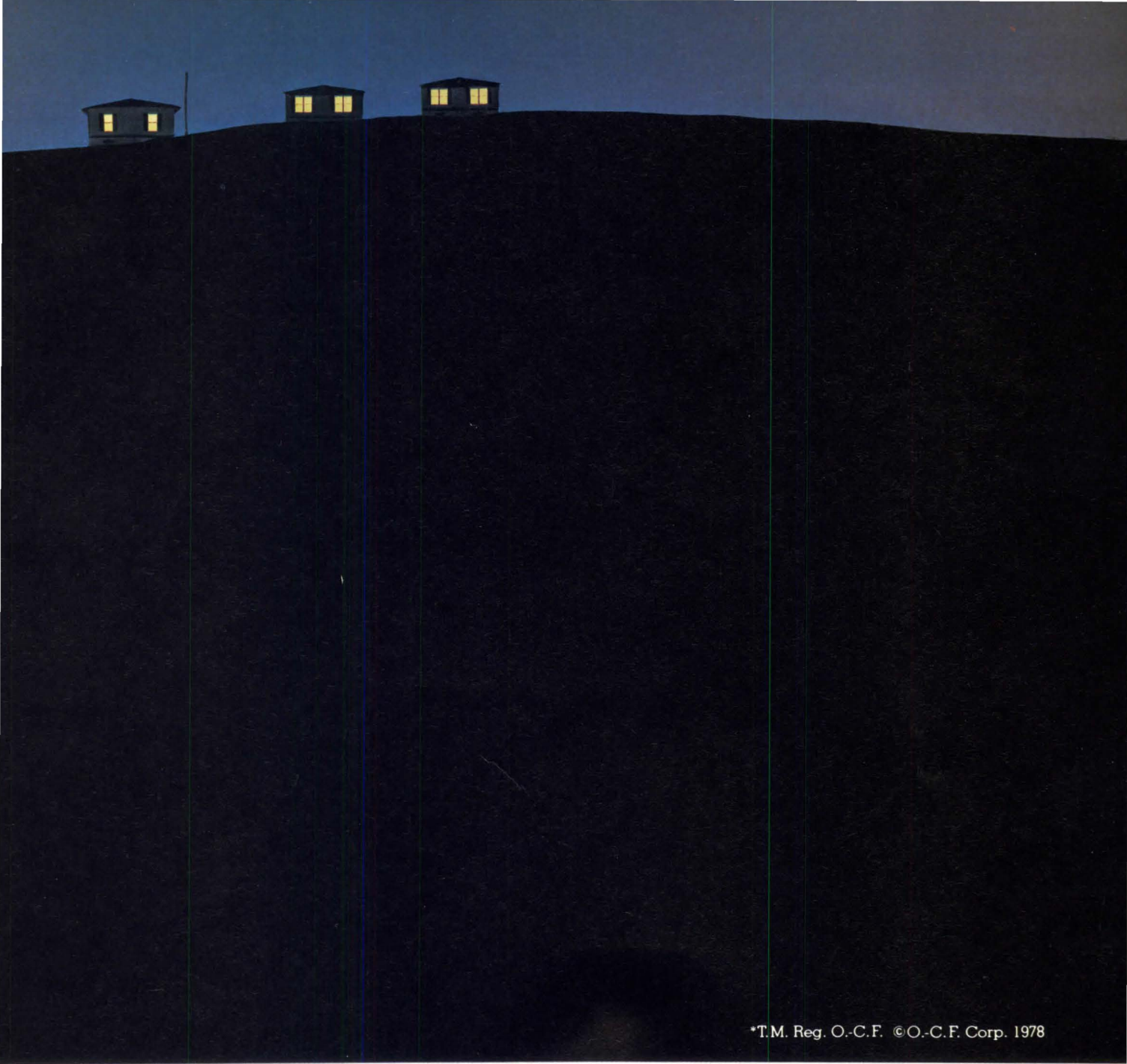
Their energy consumption was metered for a full year by the Arkansas Power and Light Co. and Owens-Corning Fiberglas.

The results?

The houses built to the toughest specifications used an average of 59 percent less energy than the houses built to the minimum specifications. *Fifty-nine percent!*

Not only that, they used an average of forty-three percent less energy than the houses built to the intermediate specifications—which are about the same as the specifications most builders use.

The houses in Arkansas were manufactured homes—which



\*T.M. Reg. O.-C.F. ©O.-C.F. Corp. 1978

minimized variations in construction. But the *principles* Owens-Corning has tested and proved are equally applicable to the houses you build.

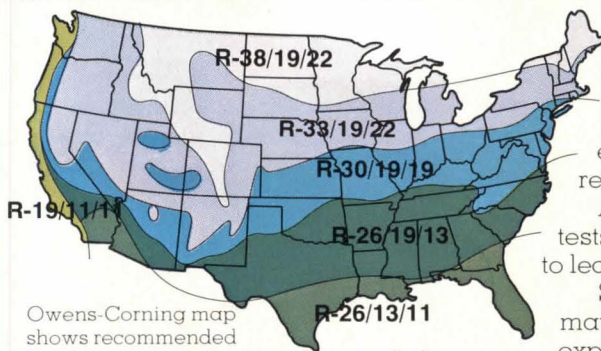
**Selling energy efficient homes**

There's no doubt buyers are anxious for homes with reduced fuel costs. A recent survey found 80 percent of home buyers willing to spend \$600 more on their home, even to save \$100 yearly on fuel bills.

And, as the Arkansas test shows, fuel savings in efficiently designed housing can be *dramatic*.

**Setting new standards**

Owens-Corning is moving ahead in lots of areas. We've developed recommenda-



Owens-Corning map shows recommended R-values of insulation for ceilings/walls/floors in different parts of the country.

tions for suggested amounts of insulation (see map). These are guides to *economical* amounts of insulation in different parts of the country, considering climate, energy costs, and other factors.

We've developed new products—like new Fiberglas batts with higher R-values (R-30, R-38)—that make it easier for you to meet those recommendations.

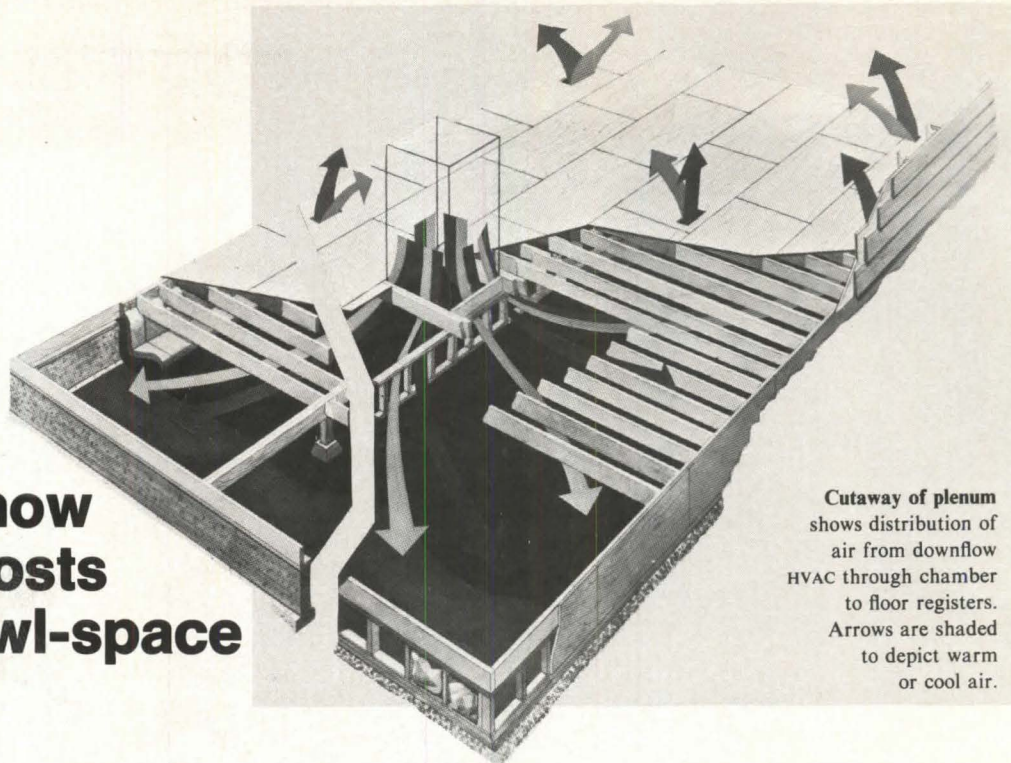
And we've been performing tests like the Arkansas experiment to learn more about insulation.

Some of the recommendations may continue to change, as we expand our knowledge. But what we've learned already is making many of our old ideas obsolete.

To find out more about building energy conserving homes, contact X.D. Meeks, Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.



## Here's how to cut costs in a crawl-space house



Cutaway of plenum shows distribution of air from downflow HVAC through chamber to floor registers. Arrows are shaded to depict warm or cool air.

Try using the entire crawl space as a heating and cooling plenum.

There's no ducting needed because conditioned air is blown directly into the chamber and then up to the living areas through registers cut in the floor. And that can mean big savings in materials and labor—how much, of course, depending upon the size of the home and the area in which it is located.

"We cut \$450 off the \$900 we normally spend for conventional duct systems in each of our houses," says D.L. Nelson, an Oakland semi-custom builder. He is installing plenums in a 19-unit single-family project in Suison, Calif.

Nelson is getting a 50% saving because his market will not accept slab foundations. But even in areas where slabs are used, plenums may bring costs down to the point where builders can offer more appealing all-wood floors.

**How system works.** All that's required to turn a crawl space into a plenum is insulation. (Nelson is using R-11 foil face).

A downflow furnace keeps air in the chamber under slight pressure to assure uniform distribution (*see diagram*). Registers are placed in the floor wherever needed.

Nelson uses the same-sized HVAC unit that he puts in his conventionally-ducted homes. And in one of his plans—a 1½-story layout—he adds a

chase and fan to pull air to the upper level.

The builder found no code problems with the plenum and feels no one else should either; it meets most model building and mechanical codes.

"We got local code approval in less than two weeks," he says.

**The market appeal.** Besides cost savings, Nelson claims his plenums offer energy-conservation benefits which have appealed to buyers.

For one thing, homeowners get the advantage of both radiant and perimeter heating/cooling because the floor is always warm in the winter and cool in the summer. For another, there's no heat loss from outside air circulating under the floor—a common situation with vented crawl spaces—because the plenum is totally sealed.

"The homes have not been up long enough to provide an accurate test of the system's energy savings," says Jerry Brown, Nelson's construction manager. "But we believe there will be definite economies over the long run."

Nelson switched to the plenums last year after building the first four houses in the project with perimeter ducts. The chambers were not heavily promoted initially, however, because they were a radically new concept to the Bay Area. (Suison lies midway between San Francisco and Sacramento).

"We were afraid of inherent consumer prejudices," says Lynn Evans,

Nelson's sales manager. "But when prospects went to the models and saw and felt the system, they were amazed. A few even questioned whether the plenum was working because they missed the old, familiar blast of air from the registers."

Nelson has built 15 homes, sized from 1,728 to 2,250 sq. ft., on the site (along a single block near Suison's waterfront). To date, 12 have been sold at prices which opened from \$79,900 to \$93,500 and are now \$1,000 per unit higher.

The project, called Sundown Marina, is expected to be built out this summer.

—JOEL G. CAHN

## Boca Raton keeping growth curb of sorts

Boca Raton's councilmen have just voted 4-to-1 to keep the Florida city's growth cap at 40,000 housing units despite the minority argument that present zoning will allow 43,145 units and thus make the cap a shibboleth.

The council reaffirmation of the growth limitation will go to the voters February 7 as a City Hall recommendation and it is expected to be upheld at the polls. There now are 21,149 housing units in the blue-chip community in Palm Beach County and 6,444 additional have been approved for construction. It is estimated it will be between 12 and 15 years before the 40,000 mark is reached.

—F.S.

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## 1. Detail

Colonist, the die-formed door, has a carefully executed wealth of detail that exactly duplicates the appearance and character of wood stile and rail doors. Cove and bead, grain and joint details are all sharp, clear and realistic. Only Colonist does what a die-formed door should do: look like the real thing, capturing all the pure aesthetics of original Colonial design.

## 2. Durability

Colonist is not like a wood door in one respect: Colonist is tougher. Since it's die-formed from a single sheet of hardboard (which is 50% denser than wood), there are no joints between the stile, moldings, panels and rails to separate through hard use or with the passage of time. So Colonist is in fact better than a wood door.

## 3. Price

Despite these superior features, Colonist faced doors sell for about half the price of wood stile and rail doors. So any way you look at it, with quality in mind...choose Colonist.

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

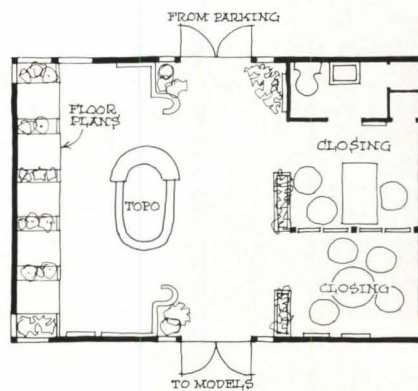


Colonist and Masonite are registered trademarks of Masonite Corporation.





RICK MADSEN



**Sales office** with a formal look inspired confidence in prospects, who were asked for non-refundable \$5,000 deposits. Topo table (see cover) was an important closing tool; there were no models. The office, in a detached three-car garage, was later converted to a guest house and sold. Project: Country Ridge, Tustin, Calif., a joint venture of Darrow Corp. and Daon Corp. Office designer: Crockett & Associates, Costa Mesa, Calif.



# Sharpen your point-of-sale merchandising

The builder's sales effort is just as important as ever. When business is booming—and it is today—the inclination is to ease up. Who needs strong point-of-sale merchandising?

Why put all that effort into sales offices, sales displays and model homes? Here's why.

Today's buyers are wise buyers. They know house values, and they often buy homes for investment. They take more sophisticated selling, so the point-of-sale effort is crucial.

For another thing, most builders step up construction in a hot market. They are doing so now. So there's more competition for a share of the market, hot as it is.

Finally, there's no assurance that the housing boom will last. If it cools, strong point-of-sale merchandising can be a lifesaver.

There are many ways to dramatize a project's selling points: location, special design, amenities—even your own expertise.

Successful merchandisers are doing it effectively. To learn how, see the next ten pages.

—BARBARA BEHRENS GERS  
AND JUNE R. VOLLMAN

# Tune your **SALES OFFICE** to your target market



## For veteran homebuyers: the old-money look

Typically, this market is comprised of affluent families who feel they've arrived. So they're searching for a place to put down their roots. As they've moved up in the world, they've acquired tastes for possessions that have lasting value, and they want their new homes to reflect those tastes.

So says Ric Baker, marketing manager for the Robert P. Warmington Co., which is developing Hunters Pointe in Anaheim Hills, Calif. The project's single-family houses are architecturally reminiscent of the stately old homes that dot the English and French countryside; so the sales office was designed in

the image of an elegant library in an old English manor. Most furnishings and accessories are replicas of antiques; even the builder's picture (*photo above*) is done as a fine-arts portrait.

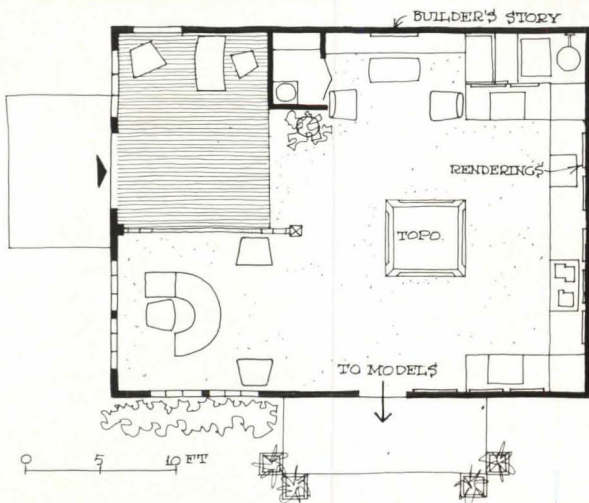
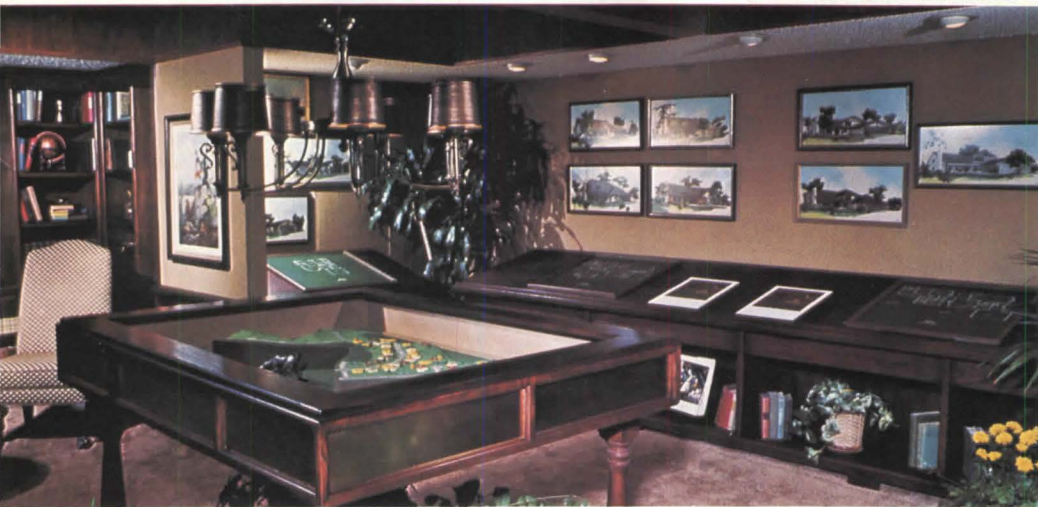
Baker says the aura of old-world permanence has been a strong factor in the project's success. Since it opened last April, the first two phases of 79 homes sold out at an average price of \$160,000.

Hunters Pointe's marketing program won the grand award in the fourth annual MAME\* competition. Sales office designer: Bob Englander of Mel Grau & Associates.

\*Major Achievement in Merchandising Excellence, awarded by Sales and Marketing Council, Building Industry Association.



PHOTOS: DAVE ROSS



**Builder-story display** is artfully arranged as a framed picture (*top photo*) so as not to diminish the manor house and library atmosphere. Elevation renderings (*lower photo*) also are treated as photos. Note the rich fabrics used to upholster the chairs, the draped curtains and ornate chandelier (*photo, facing page*). All are added touches of old-money elegance. This sales office is in the three-car garage of a four-bedroom house.

FOR MORE  
SALES OFFICES  
TURN  
THE PAGE



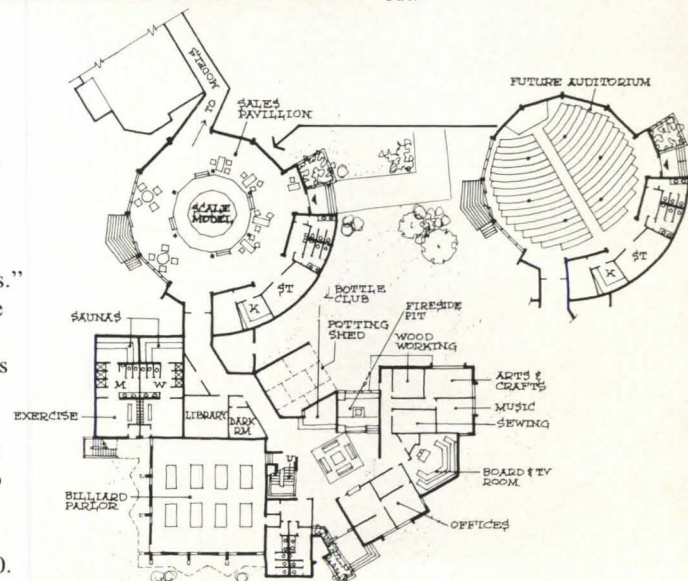
**Active-life** merchandising theme is reinforced by using a green and earth-tone color scheme throughout the sales office (*photo left*). The large plan below shows how the sales office is designed to lead prospects into the project's indoor rec facilities—a large rec clubhouse, subdivided into spaces for a range of hobbies, exercise rooms, saunas and a billiard parlor. The second floor (*not shown*) houses a kitchen and a large cardroom that can be turned into a party room. The small plan below shows how the sales office will be converted into an auditorium when Park Place's 1,056 units are sold out.

## For uneasy empty nesters: emphasis on carefree living

Most prospects visiting this sales office at a mid-rise condo complex are active retirees about to move from single-family homes. "They're nervous about adjusting to a new life-style," says architect-developer Philip Perlman. "So we merchandise the free-and-easy aspects of condo living—the fact that they'll have plenty of time for recreational activities."

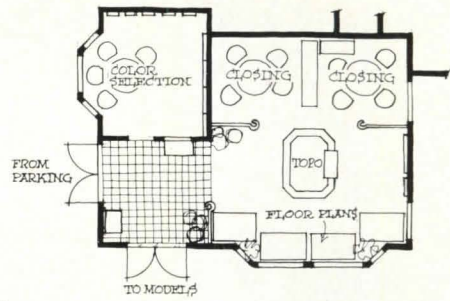
For example, the action-photo display above the topo table (*photo above*) focuses attention on the full range of activities that are just a few steps from the project's site. And the sales staff's desks are located so that prospects can't miss seeing the adjacent golf course.

Perlman's project is Park Place, the only mid-rise complex in The Village of Pembroke Lakes, a recreation-oriented PUD in Pembroke Pines, Fla. Park Place's 168-unit first building is sold out; one-third of the 172-unit second building was presold when construction started. Prices: \$25,900 to \$56,400.





**Low-key closing area** (left) includes storage space for salesmen in the bottom of bookcase divider. For prospects who might prefer more privacy, the color selection room (plan right) was provided with a door. The office is in a slightly expanded three-car garage attached to one of the project's four furnished models.



PHOTOS: RICK MADSEN



## For young conservatives: a home-like atmosphere

Though only in their mid-thirties, buyers at Diamond Ridge, Diamond Bar, Calif. aren't very adventurous. "They're family-oriented," says Weatherfield Homes' Executive Vice President Bill Mitchell, "and they have rather conventional tastes." That's why the Diamond Ridge sales office features traditional-style furniture and the plants-and-earth-tone decorating scheme that's been popular for years. The look reminds prospects of their own homes.

These buyers are also highly quality-conscious, says Mitchell, and "to them, quality means something they can see."

"So we have a parquet floor in the sales office entryway, and we stained rather than painted wherever we could to give the office a rich look."

The round tables and chairs in the closing areas (photo top of page) are antique reproductions. "Moreover," says Mitchell, "the informal seating arrangement puts buyers at ease because it's not an obvious selling situation."

Prices at Diamond Ridge range from \$89,000 to \$125,000. Sales opened in June and 113 homes were sold in the first seven months. Sales office designer: Crockett & Associates, Costa Mesa, Calif.

# Key your **DISPLAYS** to your strong sales points

## **Blueprint-like plans signal something new in design**

This is the floor-plan display for Twin Lakes, a townhouse project in Fairfield, Ohio. One of its major selling points is contemporary West Coast design, a major departure from the traditional architecture that's the norm for production housing built in the Cincinnati area [H&H, May '77]. So the project has a distinctive custom-designed look.

"We capitalized on that point by designing the floor-plan display to simulate an architect's office," says Neil Bortz, president of Towne Properties Inc. "Our buyers have been intrigued by the display. It makes them feel like they're building their own homes."

The display was designed by Mrs. John Lovatt and Charles H. Graham.





## Warm displays recall a rustic heritage. . .

Rough-textured paneling and a topo table fenced like a corral remind Heritage Park prospects that the project's site in El Camino Real, Calif. is part of the old Irvine Ranch. Developer: Broadmoor Homes Inc. Display designer: Crockett & Associates.



## . . . and cool displays hint of the nearby waterfront

To capitalize on a prestigious Newport Beach location in California, this sales office uses a boating motif. Light-tone walls are decorated with blow-ups of yachting scenes, and displays are trimmed in light-colored wood. Project: Sea View. Developer: Broadmoor Homes Inc. Display designer: Motivational Design & Marketing Inc.

## Super topo sells the neighborhood

It has to because prospects can't see "their" lots from the sales office at Charter Terrace, Laguna Niguel, Calif. So Charter Development Corp. uses the detailed topo table below to take the mystery out of a hard-to-explain hillside site. Moreover, the scale-model houses are an incentive to sales. "Prospects identify strongly with them," says marketing director John Ullom. Display designer: Crockett & Associates.



BOB SCOTT PHOTOGRAPHY



## Pop-out photos dramatize builder's know-how

In the last 21 years, Witkin Homes Inc. (now the Denver division of U.S. Home Corp.) has established a reputation for building quality single-family houses. So builder expertise is a major marketing tool. At Westridge, shown here, the builder story is presented as a pop-out display showing: 1) what goes under the "skin" of Westridge houses; 2) quality finishing materials used; and 3) the company's key personnel. Display designers: Ron Rulof and Maryann Dumas.

PHOTOS: DAVE ROSS

RICK MAIDEN

# Use your **AMENITY PACKAGE** as your primary merchandising tool

That's what Pardee Construction Co. is doing at Villa La Jolla, a condo conversion in La Jolla, Calif.

Prospects are encouraged to consider the project's lavishly landscaped courtyards, its two pools and the recreation lounges as their basic buy.

"The one- and two-bedroom flats are presented merely as extensions of a resort-like way of life," says Walter Browder, Pardee's director of communications and mastermind behind the merchandising scheme.

What's more, the common areas are meticulously planned to attract a specific market—prestige-conscious buyers. A prime example: the recreation lounges pictured below and at right. They're full of "name" furnishings that status-seekers can call their own if they buy a unit.

And the landscaping—90% of it is new—is deliberately reminiscent of a nearby neighborhood that is highly

exclusive. (Landscape architect was Ron Pekarek.)

To make this merchandising approach work, Pardee keeps its prospects' attention focused on the common areas. For example:

- A courtyard conversation area where prospects are encouraged to stop and rest has seats that face away from the relatively uninteresting mid-rise buildings. Instead, prospects see an unusual Chinese heron fountain and a palm-surrounded pool. "The view from that spot can do a lot to sell units," says Browder.

- A decorated model features wicker furniture on the balcony. That same informal look is repeated inside, making the living space seem an extension of the outdoors.

The flats at Villa La Jolla are currently priced at \$58,500 and \$68,500 with some premiums for views. Since an April opening, 175 of 240 units have been sold.

WILL GULLETTE





**For young sophisticates,** the lounge at left is decorated in an eclectic high-style fashion. Note the bright yellows and greens. Not only do these colors appeal to a young market; they give the lounge a sunny look that emphasizes the project's outdoor orientation. Prospects also see these signs of community-oriented merrymaking: a piano, a rug that can be rolled up for dancing, and kitchen facilities that include a microwave oven for heating snacks. The lounge's French doors (*not shown*) open onto a terrace large enough for indoor/outdoor parties. Most young buyers have been priced out of other area housing.

**For buyers over fifty,** the lounge above features a subdued color scheme and expensive rattan-and-leather furniture. Note how the tile floor extending beyond the French doors makes the lounge seem part of the pool area, and how the lounge's tropical plants are a reprise of the pool-area landscaping. Furthermore, upholstery is vinylized so swimmers will feel welcome inside. The library at left is not merely decorative—it tells prospects that Villa La Jolla buyers are people who enjoy good books. Older buyers are mostly former tenants of the project (about a third of the tenants bought units, 10% more than Pardee anticipated).

JOHN HULING

PHOTOS: MALCOLM LUBLINER





# Stretch your merchandising dollar with selective **INTERIOR DESIGN**

Case in point: The Richlar Partnership shaved about \$30,000 off its model-home merchandising budget by using this selective interior-design concept for two of three models at Valle Lindo in Camarillo, Calif.

The rooms are bare of furniture; yet they give buyers the impression of being fully furnished, says Dick Weiss who, with Larry Field, is building the project. Interior designer Karen Butera of The Inside Story achieved the totally-furnished effect:

- With shelving, books and a few accessories, as in the room shown below.
- With pictures and a bright wall hanging, as in the multi-level setting at right.
- With imaginative, impressionistic wall murals, as in the rooms shown at left.

Weiss believes selective interior design makes good merchandising sense when you're selling in a hot market like southern California.

"We knew we didn't need fully furnished models when we opened last spring," he says. "But we didn't want bare models either, because buyers find them unsatisfactory."

Valle Lindo's single-family houses are priced from \$65,000 to \$90,000. To date 62 of 70 houses in the first two phases are sold.





Norfolk's mini-neighborhoods



# Small townhouse projects sell big in inner city

No fewer than seven builders are selling privately-built and conventionally-financed townhouses in downtown Norfolk.

And these small projects—they range from nine to 47 units—are moving fast despite sales prices of from \$50,000 to \$120,000.

Nearly three-quarters of the 94 townhomes built or under construction have been sold.

And there are solid waiting lists for units yet to be released.

The seven projects are all in Ghent Square, 65 former slum acres being redeveloped in little neighborhoods for new middle and upper-income buyers (*see site plan on next page*). When fully built out in about seven years, the tract will contain between 450 and 500 homes—mostly townhouses, but with a handful of large detached houses. Ultimately, 15 private builders are expected to participate in the redevelopment effort.

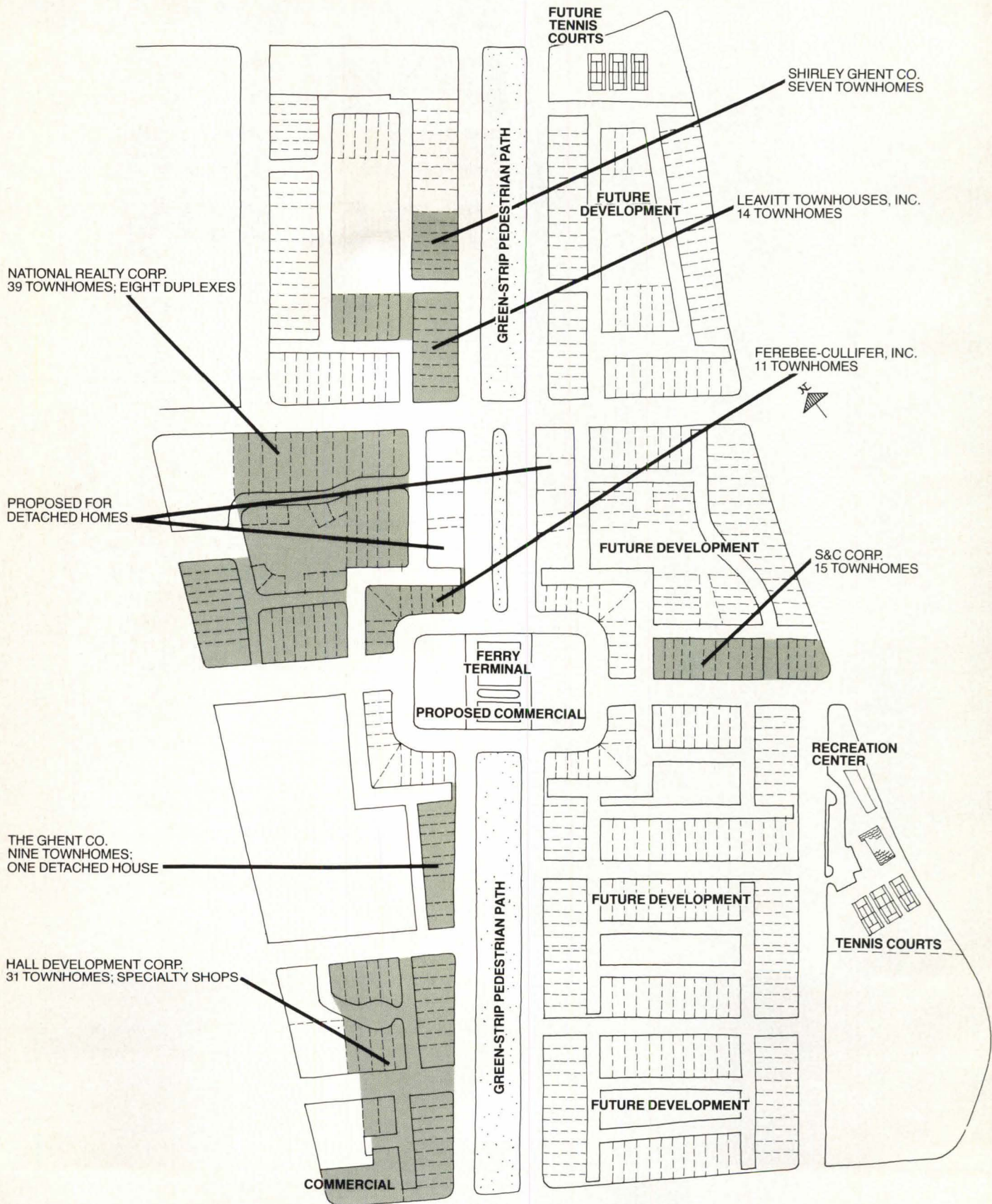
Why are Ghent Square's townhomes selling well? There are three reasons:

- The location is excellent—in the center of Norfolk's business and cultural activities.
- The site development is unusual—builders are buying fully-developed lots in the midst of well-planned and already-installed roads, public landscaping and recreational facilities.
- And a large, untapped market exists nearby—Ghent Square has succeeded in luring back to the city scores of young, affluent buyers who had fled to suburban tract homes.

To see why private builders are willing to chance for-sale housing in an urban renewal district, turn the page.—JOEL G. CAHN

**Three townhouse projects** are seen in foreground and at right in aerial view of Ghent Square. In center is 1887 ferry terminal, reconstructed on site during 1975-76 to serve as focal point for community. Norfolk skyline is in background.

# A parcel of pocket-sized projects...



# Planned for builders by an enlightened agency

## Ghent Square plan

**Siting.** Small projects, mostly of townhouses, cluster around open common areas. Lots are 25 ft. wide and average 90 ft. deep. Land around ferry terminal is proposed for commercial use, to be leased by housing authority.

**Roads.** Public streets run in front of units, private roads in rear. Alley concept was used by cities years ago.

**Landscaping.** Dominant element is 120-ft.-wide green strip halving the area and providing pedestrian north-south walk-through. Landscaping and lighting patterns are carried into adjoining rehab area to unify streetscapes of old and new districts.

**Design.** Floor plans differ, but details, textures, materials, roofscapes and facades suggest architectural style of rehab area's older homes. Private patios and yards are in rear because homes have only 8-10 ft. setbacks.

**Costs.** The housing authority spent \$9.4 million of HUD funds to acquire and clear land and relocate former occupants. Additional \$5.6 million of HUD money was used for public streets, utilities, sidewalks and landscaping. And \$4.7 million more has been or will be spent for private roads, rec facilities and professional fees. This money will come from sale of land to builders.

**Consultants.** Land planning: Harry Weese & Assoc., Chicago. Landscaping: Sasaki Assoc., Boston. Lighting: William Lamb Assoc., Cambridge.

"We never would have come into Ghent Square if the Norfolk Redevelopment Housing Authority had followed traditional urban renewal practices."

So states builder Carl Hall, who is putting up a 31-unit townhouse project on the site (*see next page*).

But after the authority acquired and cleared one of the worst slums along the East Coast, it resisted the temptation to let a lone developer build high-rise housing for rich or poor. It opted instead for an innovative scheme calculated to bring middle-class buyers back into the city.

The plan included:

- Reducing density on site (from 7.9 per acre to 7.3) by limiting new construction to mostly one-family townhomes of three stories or less.

- Tying in site planning and architectural style with the rehabilitation of an adjoining district of turn-of-the-century homes.

- Fully developing the tract with streets, utilities, landscaping and recreational facilities before offering it to anyone.

- And selling the land in small chunks to a number of builders.

"We wanted a unique community of in-town neighborhoods," says David Rice, the authority's executive director. "And we didn't think we'd get much architectural variety or distinction by letting one guy put up a few basic townhouse designs and repeat them."

## So the authority courted private builders

And it needed a lot of them to make its pocket-project concept work.

The small scale was itself an inducement to builders. And NRHA found other ways to stimulate builder interest in the inner city.

As a non-profit organization, for example, the authority could offer prime downtown land at a price no private developer could match. Since the site plan was already in existence, builders would not be held up by public hearings and zoning approvals. And since there were no other governmental agencies involved, much red tape and paperwork could be eliminated.

"We had none of the problems one normally associates with urban renewal," says Robert M. Stanton, who has built a ten-unit project in Ghent Square (*see page 64*). "It was just like buying improved lots in the suburbs."

## Still, builders had reservations at first

Many builders felt that almost three decades of deterioration had given the area such a bad image that nothing would sell there.

Others believed that the authority's per-lot asking price (\$10,000 and up) was pretty steep for a piece of land with only 25 feet of frontage. And a few pointed out that the recreational facilities, while promised, had not been built and would have to be "sold" to buyers with models and sketches.

"It was evident that we had to do something fast to get things moving," says John R. Draper, NRHA's real estate officer.

One of the authority's first steps was to make builders an important target audience in the \$250,000 promotion campaign it launched to promote Ghent Square throughout Norfolk and its suburbs.

"They invited us to meetings, slide shows and panel discussions," says Hall. "They kept hammering on the opportunities for builders in Ghent Square. They made us feel that they were more interested in solving our problems than in putting administrative roadblocks in our way."

The authority eased builders' cash-flow problems by agreeing to take 10% deposits (later, upped to 25%) for each lot purchased. It also built the recreational facilities and put an extensive exhibit center in the rec building as an additional selling aid. And it convinced local financial institutions to guarantee mortgage money to qualified buyers.

"It was comforting to know that when you've sold your first home, your buyer would get his mortgage," notes Henry Clay Hofheimer, who is building a 47-unit project on the site (*see page 62*).

## Builders responded to these extra efforts

The authority sold 79 Ghent Square lots to two builders within six months after its promotional effort began. Five additional builders have subsequently bought in, bringing the total number of lots purchased to date to 144.

"Two of these builders have already taken options on more Ghent Square lots," notes Draper. "And we've been getting a growing number of inquiries from new builders who want information on financing, availability of unsold lots and administrative procedures."

Most important, from the authority's viewpoint, is the profile of Ghent Square buyers. They are young professionals (averaging 40 years of age) with small families who earn more than \$30,000 a year.

"Almost half of them are moving from suburban detached homes," says Rice. "We've brought people back into Norfolk. And that's really the only way to revitalize a city."

To see how three Ghent Square builders have attracted this market, turn the page.



## He created a flexible plan for a mixed market

Builder Carl Hall (pictured above) is offering only one plan in his 31-unit Ghent Square townhouse project.

But by using movable partitions for almost every interior wall, he has been able to do a lot of customizing of the 25-ft.-wide, 2,000-sq.-ft. layout.

"The units may look the same from the outside," he says, "but very few are alike inside."

Most of Hall's floor-plan changes affect the second-floor sleeping area. He has eliminated bedrooms, changed room configurations and added private spaces such as studies or dens.

"We even turned the entire floor into one huge master suite for a childless couple," he says.

**Warm buyer response.** Hall sold 19 of the 20 houses in his first phase almost as fast as he released them (base price: \$67,500). And there is a solid waiting list for the final phase which will open next month at \$74,500.

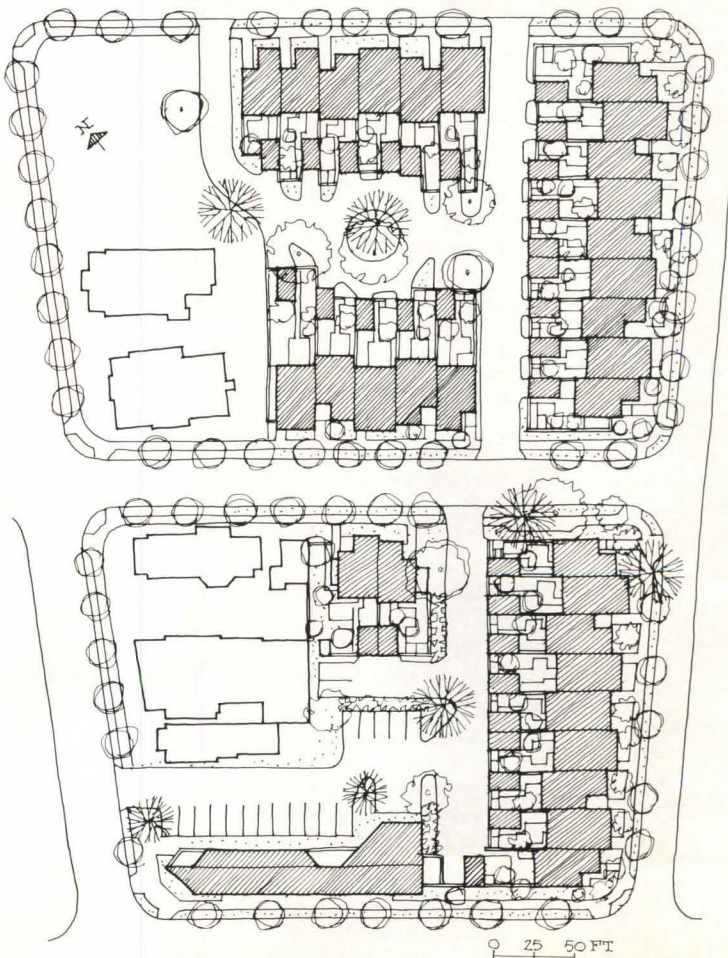
"At first we thought we'd get mainly young couples," Hall notes. "But we're selling to all age groups and a mixture of singles, couples and families. I guess the plan's versatility is attracting a much broader market than we anticipated."

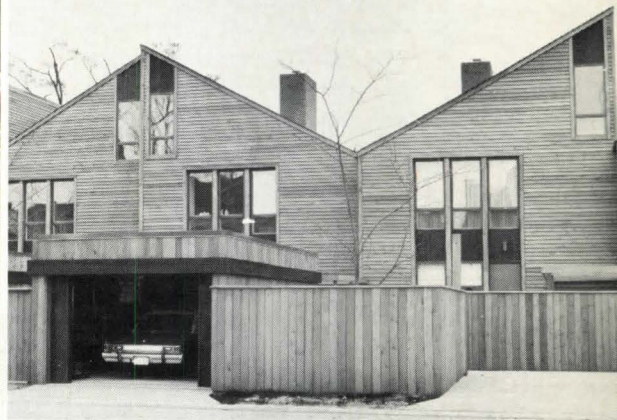
**Modern design.** Such features as recessed entries, sunken rooms, skylights and ganged windows make the units the most modern-looking built thus far in Ghent Square. But there are enough traditional elements—bay windows, gable-style roofs and wood siding—to keep the design consistent with the area's overall architectural theme.

Hall bought the two-block parcel in 1975 for \$342,000. He is spending an estimated \$52,000 a unit to build, which translates to roughly \$25 a sq. ft.

And while the project is Hall's first building venture, his sales success has spurred further interest in the field.

"We've already drawn up plans for another urban townhouse project in neighboring Hampton," says the Norfolk corporate and tax attorney. "They've also got a good redevelopment authority."





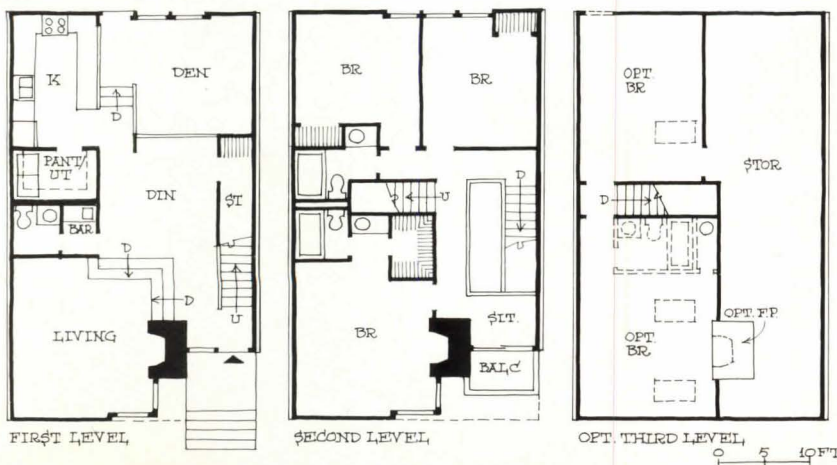
PHOTOS: M. ARNOLD/NRIIA

**Site plan** at left shows 31 townhouses grouped in five buildings on two-block parcel. As in all Ghent Square projects, units front on public streets and back up to private lanes. Building in bottom left of plan is 7,000-sq.-ft. commercial structure for which builder will break ground this spring. Modular construction will permit a variety of specialty shops on one or two levels. Architect: Carlton Abbott, Williamsburg.

**Transitional architecture** is seen in exteriors of townhouses pictured above. Bay windows, gable-style roofs, staggered setbacks and wood siding are all reminiscent of turn-of-century attached housing. Recessed entries, ganged windows and sharply-angled contours are modern touches. Rear-view photo (*above right*) shows walled private patio and two parking variations—standard pad and optional one-car garage.

**Three-story plan** (*below*) has great flexibility because of movable interior partition walls. Den and living room are sunk-en on first floor to provide a multi-level look. Ten-ft. ceilings help offset units' narrow 25-ft. width.

**Extra living space** is obtained by finishing off 500-sq.-ft. third floor (*photo, top right*). Skylights help bring in natural light. Most first-phase buyers bought \$11,500 option. They were mainly from \$90,000-and-up detached homes in the suburbs.





## He offered multiple plans for varied buyers

Builder Henry Clay Hofheimer (pictured above) planned three different layouts for this 47-unit project, the largest in Ghent Square.

"We expected many kinds of buyers," says Hofheimer, whose National Realty Corp. is building and financing the development. "And we wanted to give them sufficient floor-plan variety to suit their individual needs."

Two of the plans are townhouse designs—a 1,700-sq.-ft., two-story layout priced at \$64,800, and a 2,200-sq.-ft., two-level arrangement (plus an unfinished third floor) which sells for \$75,000. The third is a 1,250-sq.-ft., three-story duplex unit priced at \$50,000—lowest of any Ghent Square home.

**Buyer response.** Hofheimer's multiple-plan strategy appears to be working; 27 units have been sold thus far, most of them as soon as they have been released. And the builder expects no trouble meeting the project's build-out deadline this summer.

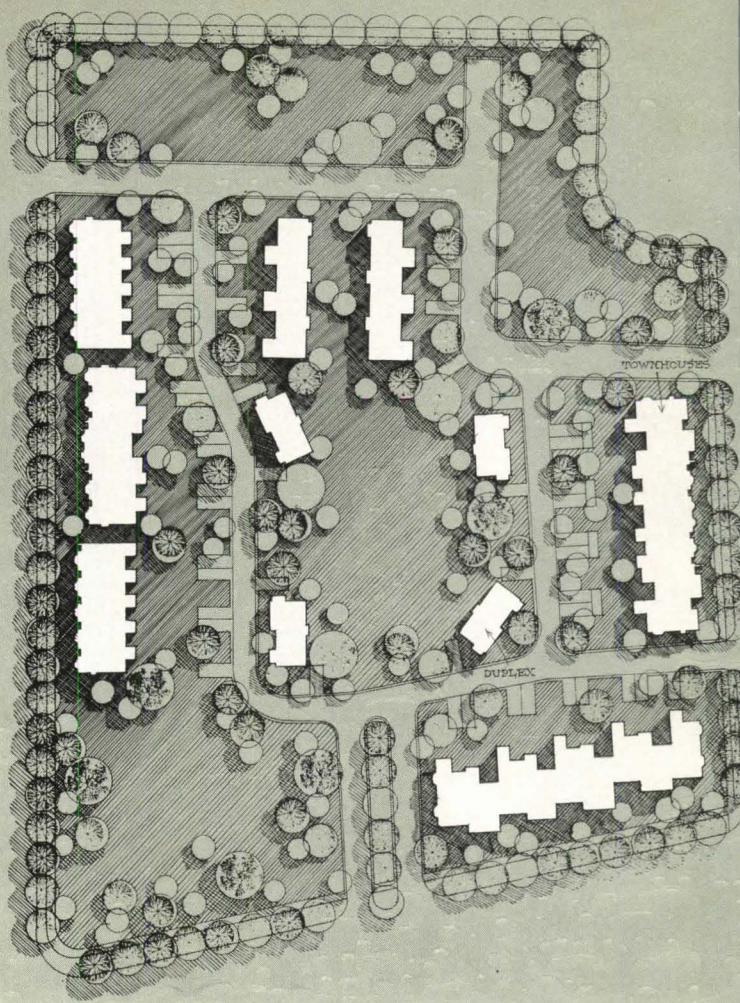
"The townhouse buyers are mostly families, empty nesters and childless marrieds who have owned a previous home," he says. "The duplex units are most often preferred by singles and couples who are moving up from rentals."

**Victorian style.** Architecturally, the units closely resemble many of the older homes in the Ghent rehabilitation area next door. Hofheimer got assistance from such groups as The Athenaeum and the Victorian Society of America in developing the designs, and incorporated many of their suggestions into the units' exterior and interior details.

National Realty purchased the parcel in 1975 for \$547,000. Construction costs have averaged \$47,000 a unit, or \$25 a sq. ft.

Hofheimer has lived in Norfolk all his life (his house is two blocks from Ghent Square) and is one of the city's most prominent citizens. While he has built shopping centers, apartment buildings, roads and bridges during a 50-year career in the construction business, the townhouse project is his first venture into for-sale housing.

"There's a certain civic pride in building in Ghent Square," he says. "It's satisfying to be part of this effort to revitalize our city."

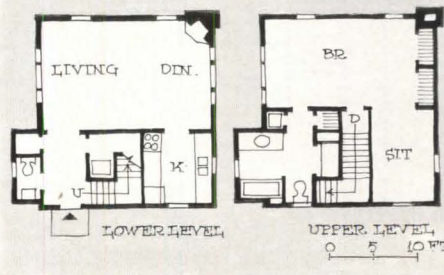


Site plan shows 39 townhouses located in seven buildings around parcel's perimeter and eight duplex units which back up to a central common area.



**Duplex layout** (photo and plan at left) offers 1,250 sq. ft. of space on two floors. Third floor can be finished to add living area. Unit has as much room as any apartment, plus benefit of homeownership. And sales price of \$50,000 is lowest of any Ghent Square home, another inducement for young singles and couples moving up from rental apartments. Project architect: Wylie Cooke, Norfolk.

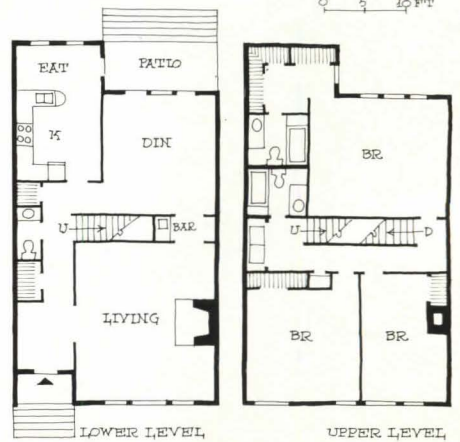
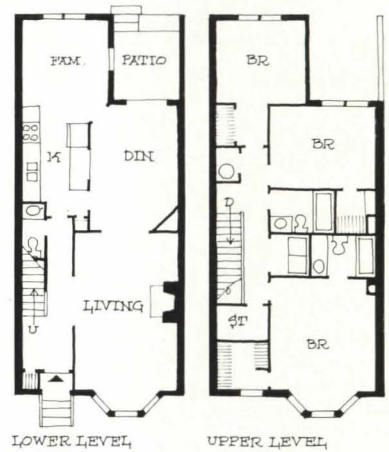
PHOTOS: M. ARNOLD/NRIA







Two townhouse plans have appealed to families, empty nesters and couples, most of whom have owned previous homes. Two-story layout (seen in plan at right and at left in photo above) packs 1,700 sq. ft. of space in narrow 20-ft. width. Three-story layout (shown in plan at bottom right and at right in photo above) has 2,950 sq. ft. of living area when third floor is finished as an option. Exterior of units has brick facade, dormers, decorated trim and steep roof pitch for a traditional look. Photo at left shows bay-windowed living room of two-story townhouse unit.





## And he built two types of housing in a mini-project

Builder Robert M. Stanton (pictured above) planned both attached and detached housing for this ten-unit development.

And he had no difficulty in selling out the project: The nine townhouse units, priced at \$55,000, were gone within six months of opening and the detached house was sold for \$110,000 when it was only 30% completed.

"There wasn't much selling to do," he says. "Two other projects had already opened for sales and buyers were pretty excited about the whole Ghent Square idea."

**A building first.** The 2,400-sq.-ft. detached house is the first to be built in Ghent Square. Stanton included it in his project as a test to see if such high-priced housing would appeal to urban buyers.

"Since it sold so quickly," he says, "I'm planning to put up another detached home a little further up the street."

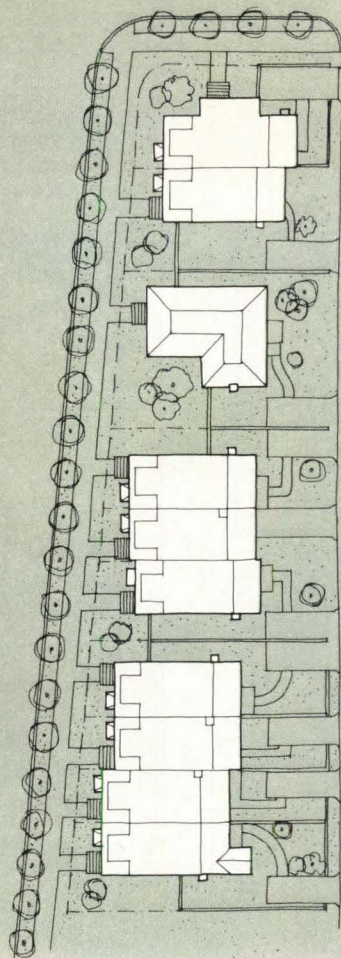
The builder indicates that his townhouse buyers were mainly singles and couples (six of the nine have no children). They liked the units' colonial design, which Stanton "borrowed" from reconstructed houses he'd seen in Williamsburg, and the fact that the townhomes face open areas in front and back that will never be developed.

Stanton's building firm, The Ghent Co., bought the parcel in 1976 for \$91,400. He spent \$700,000 to build the project, which translates roughly to \$23 a sq. ft.

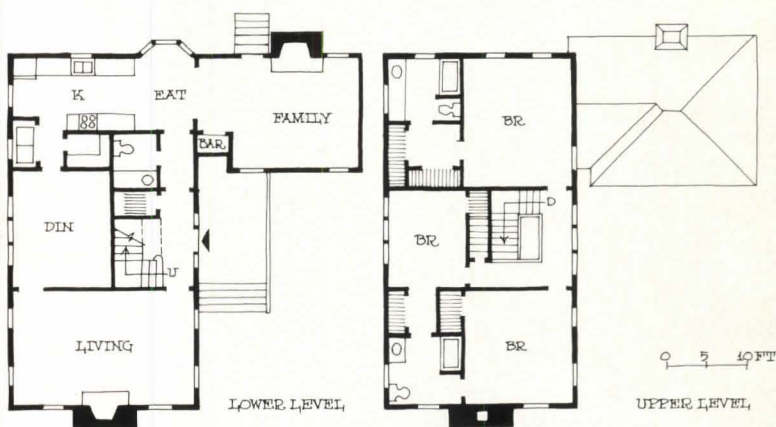
**Non-res builder.** A long-time Norfolk Realtor, Stanton had previously built shopping centers and office buildings in the area. He also put up a six-unit townhouse project across the street from Ghent Square before buying into the renewal district "to see if I could successfully build and sell attached housing."

And as a result of the Ghent Square sellout, Stanton has created a new company, S&C Corp. (his partner is architect Wylie Cooke), which is building a second townhouse development in the renewal area.

"We plan to open 15 units this spring," he says, "at prices in the mid-\$70,000 range."



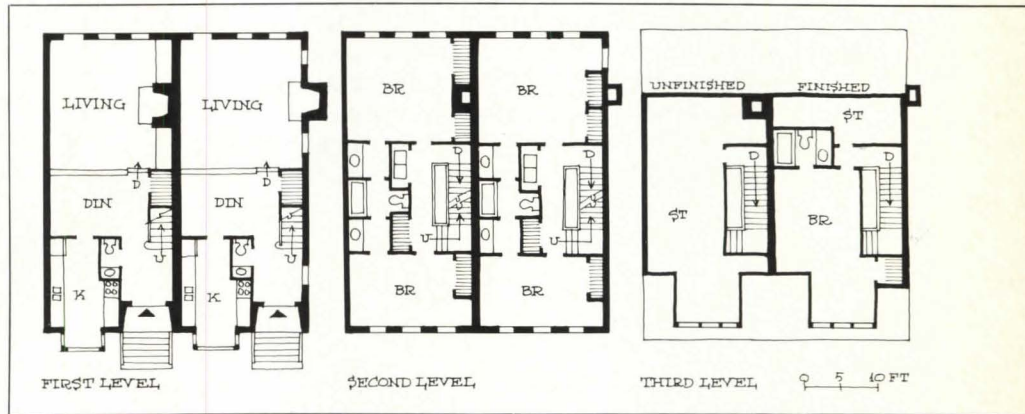
**Site plan** of ten-unit project locates nine townhomes in three buildings and one detached house along a single block of Ghent Square. Siting of detached house in middle of townhouses breaks up row look of attached-unit buildings. Property in front and back of homes is not planned for development, one reason why project sold out in less than six months. Architect: Wylie Cooke, Norfolk.



**Detached house** (plan above, photo at left) offers 2,400 sq. ft. of living space on two floors. Part of third level can be finished to add rooms. Architecture is identical with townhouse exteriors. House was sold for \$110,000 when only 30% completed, prompting builder to plan another on same block.



Colonial look is seen in brick facade, slate-style roof shingles, dormers, bay windows and wood trim in front view of units (photo above) and in picket fence and woodshed-like storage area in rear (photo below). Builder was influenced by reconstructed homes in Williamsburg.



Townhouse layout (plan of two units is shown above) provides 1,600 sq. ft. of space on two floors. Third level can be finished off to add 400 sq. ft. at a cost of \$11,000; six of nine buyers took this option. Interior design is traditional, but modern elements such as sunken floors (photo at left), open banisters and open stairwells add perceived and real space to a narrow, 25-ft. wide unit.

# WINDOW

## FOR THE ENERGY-SAVING HOUSE

Too many builders think the way to trim heating or cooling costs is to reduce window area. That theory is misleading, and here's why:

It's based only on thermal calculations. They show, for instance, that even a triple-glazed window can't compare with a solid wall as an insulator. That's true.

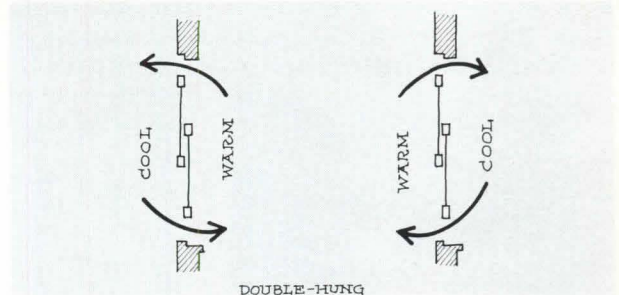
But the theory completely ignores the advantages of windows—that they let in light and air and act as passive solar collectors. Heat gained through a window, for example, may more than offset heat lost by conduction or infiltration.

How do you make the most of these advantages and, at the same time, overcome the disadvantages of glass as an insulator? One answer to that question is, of course, proper window installation. Other answers are spelled out below and on the following pages. — ELISE PLATT

### WINDOW TYPES

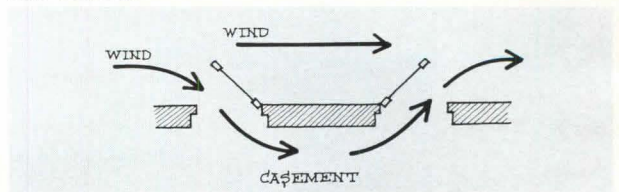
Each offers different ventilating advantages

*Double-hung* windows ventilate—even where there is no wind. Opening at top and bottom, they take advantage of the difference in density between warm and cool air. If outside air is cooler, it pushes indoors through the bottom opening and forces the warm air out the top. If outside air is warmer, the process reverses. The farther apart the openings, the better the ventilation. But air can often infiltrate the perimeters and joints of these windows, so they must be fully weatherstripped.



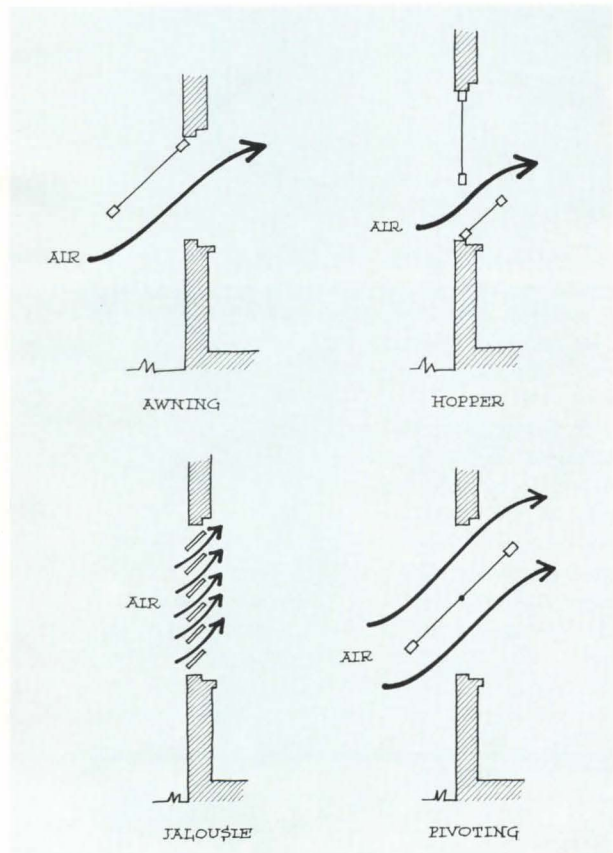
*Single-hung windows* are best used where ventilation is not so important. They look like double-hungs, but the upper sash is stationary. It reduces air infiltration.

*Casements* ventilate well when installed parallel to the wind. Projecting units capture the breeze. If two opposite opening units are on the same wall, the wind will enter through one and exhaust stagnant indoor air through the other. Casements close snugly into frames, sealing out wind and weather.

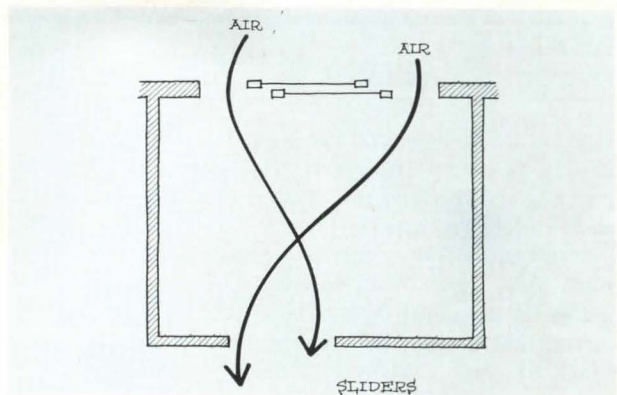


# DESIGN

Horizontally operated windows include jalousies, awnings, hoppers and pivoting types. They draw in air at an upward angle and alleviate the stagnation near the ceiling. These windows can be opened in bad weather. Jalousies are the most effective ventilators, but air infiltration and security are problems.



Sliding windows can have the largest surfaces, so they are the best solar collectors. They are also the easiest to use in directing air flow. Opening one or both sides will ventilate part or all of a room.

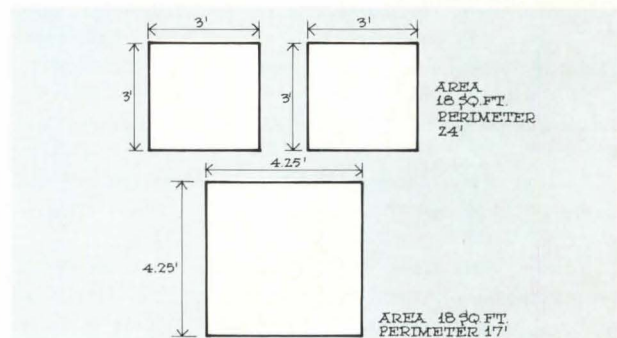


## SIZES AND SHAPES

You need not reduce window areas to save energy

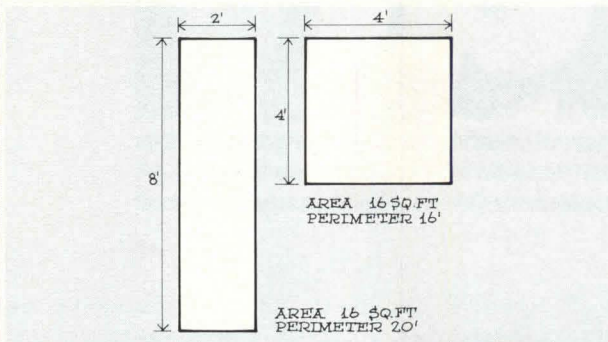
Taking a harder look at sizes and shapes often helps. Remember: Every 3 ft. of perimeter wastes as much energy through infiltration as 1 sq. ft. of glass loses by conduction.

Fewer but larger windows provide the same surface area but reduce total perimeter, leaving fewer joints to seal. Two 3-ft.-square windows cover 18 sq. ft. and have a 24-ft. perimeter; one 4.25-ft.-square pane covers 18 sq. ft. with a perimeter of only 17 ft.



# WINDOW DESIGN

Squares have shorter perimeters for the same areas than other shapes. A 2' x 8' window has 16 sq. ft. and a 20-ft. perimeter; a 4-ft.-square pane also has 16 sq. ft., but its perimeter runs only 16 ft.

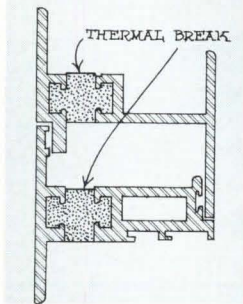


## FRAMES

Design, not material, is critical

Wood is the best natural insulator, but it warps and it is sometimes hard to maintain. Vinyl protectors, aluminum cladding and chemical preservatives have overcome most of wood's problems, however.

If aluminum-frame windows are used, they should have thermal breaks to block the flow of heat through the metal. The Architectural Aluminum Manufacturers Assn. now tests these windows for thermal and condensation qualities, and the ratings go to suppliers. A look at them can be helpful.



Both wood and aluminum frames need weatherstripping to reduce air infiltration around perimeters and through joints. Stripping wears off wood because of friction, but it can be replaced.

## GLAZING

Here's where you stand to gain or lose the most

Glazing is the most important part of the window when it comes to saving energy. Double-glazed windows are up to 50% more efficient than single-glazed units. With ever-rising fuel costs, single-glazed windows are obsolescent.

Double glazing is achieved by adding storm windows to single-glazed prime units or buying double-glazed windows.

And what of triple glazing? Its cost effectiveness is still being debated, but the fact remains: it further improves thermal efficiency.

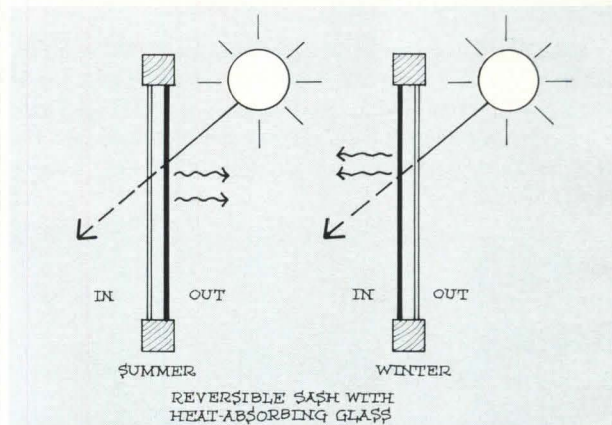
To triple glaze, storm windows are often used with double-glazed prime windows. Triple-glazed prime windows are manufactured, of course, but they should be checked to see

that they have a second insulating air space. Simply inserting a third pane of glass in the same channel as the second may be legal, but it does not improve thermal efficiency. The Farmers Home Administration recently incorporated triple glazing in its building standards—and some manufacturers hint that there may soon be a shortage of the factory-built units.

Two other glazing materials are heat-absorbing and reflective glasses. Their impact will probably increase.

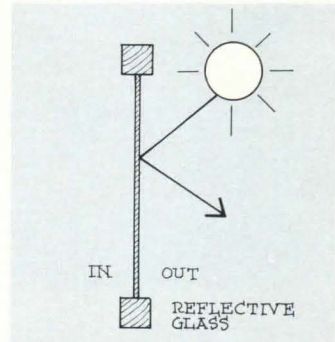
Heat-absorbing glass can reduce or increase heat gain in a room. The tinted material captures solar heat and dissipates it indoors or out.

Heat-absorbing glass is best used as one of the twin sheets



of double glazing in a reversible sash. The sheet faces outward in summer, absorbing the sun's heat and deflecting it outdoors. The sheet faces inward in winter, but it then absorbs and deflects the heat inward to help warm the house.

Reflective glass, with a mirror finish, cuts heat gain by deflecting most of the sun's light and heat away from the interior space. It is especially well-suited to air-conditioned buildings.



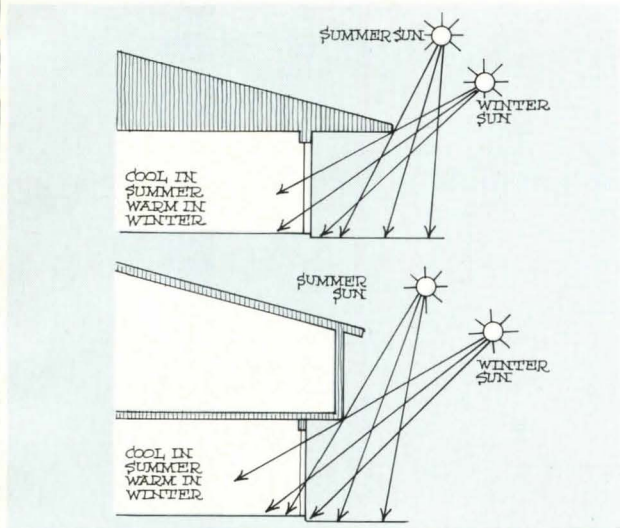
## SHADING

It pays to take the heat off the glass

Projections, overhangs and awnings shade windows from summer sun and reduce heat gain. They also reduce heat loss in winter and shelter the windows from the elements.

Operable shutters and rollblinds shade in the summer and insulate in the winter. They also permit ventilation and individualized control of each window.

These shading devices should be placed outside the windows to block the sun's rays before they strike the glass.



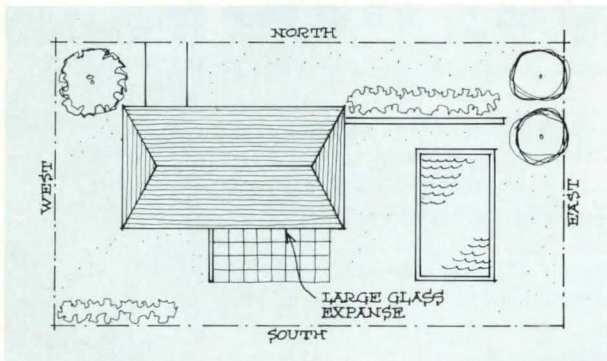
## SITING

It's smart to let nature work for you

All of the product information available is useless if windows are not properly oriented.

The sun can be a great helper.

In moderate and colder climates, large glass expanses should face southward so that the low winter sun can enter for most of the day. These windows will gain more heat



from the sun than the heat they lose by conduction.

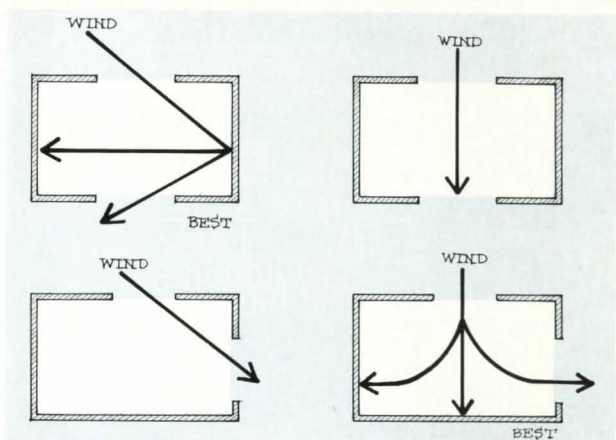
In summer, when the sun is high, windows facing south receive less direct sunlight. And overhangs, deciduous trees, sun screens and window treatments can help block the sun.

A point to remember: All year long, windows oriented east or west must contend with the low-angle sun rays for half of each day.

The wind, too, is important. Windows facing into the wind invite air infiltration and heat loss by conduction.

Direct wind pressure should usually be avoided or buffered by a barrier such as a fence or a row of trees or shrubs.

A builder can, however, take advantage of the wind direction for better ventilation. If windows are placed on

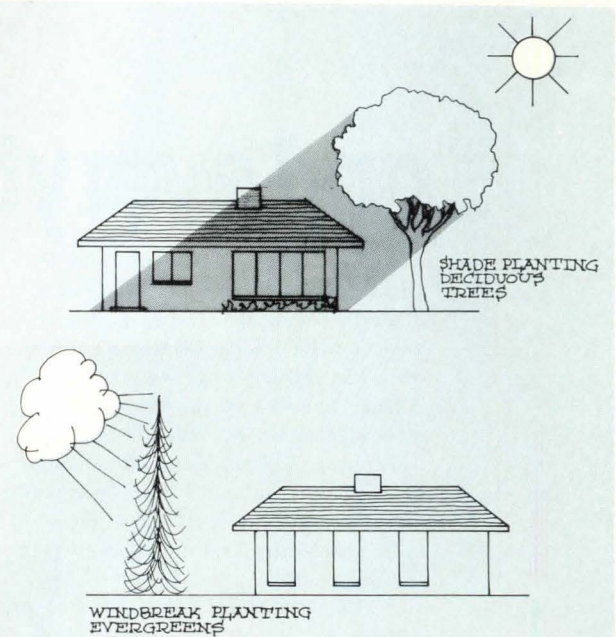


opposite sides of a structure and the building is out of line with the wind, the air will ricochet around the interior space instead of simply blowing through.

When windows are set at right angles, one should face the wind for the same ricochet effect.

Vegetation can provide both shade and insulation. Deciduous trees offer summer shade but allow solar energy to enter in the winter months. Trees with low foliage can shade east or west windows from low-angle sun.

Evergreens provide good shade in summer, insulate in the winter, and reduce heat loss at night.



Outside ground planting reduces heat gain through the windows in the summer. The plantings absorb solar energy and lower the outdoor temperature. They also prevent glare.

Light-colored ground surfaces reflect light and heat into the windows. Dark surfaces absorb the sunlight and raise the outdoor temperature. This creates an additional insulating layer of warm air on the outer surface of the glass and so prevents heat loss. So either light or dark surfaces can be used to advantage in the winter.



# A public housing project goes private...

## ...and everybody wins

Massachusetts has come up with an unusual cure for sick public housing: a partnership between developers and tenants.

The new concept involves selling badly rundown projects to private developers who, in turn, replace them with subsidized mixed-income housing that's jointly-owned by the developer and a tenants' organization. Under the state's plan, which is being financed by the Massachusetts Housing Finance Agency, displaced low-income residents get first call on the new units.

The first of these changeovers is now under way in Lynn, near Boston. Called King's Lynne, it's a 441-unit community that will replace America Park, an all-but-condemned project built in the early '50s.

To avoid a mass relocation of tenants, the existing 408 units are being replaced in three stages.

Problem-prone from the outset, the original housing was in such bad shape, says a MHFA official, "that all the rehab money in the world couldn't make it right." Sentiment to unload the eyesore ran strong.

However, tenants and kindred groups mounted a campaign to save America Park. The result was new legislation, passed in 1973, that for the first time allows a local housing authority to sell an obsolete state-funded project to a private company for the purpose of redeveloping it as mixed-income housing. The law also gives tenants a big say in the new project's planning and design.

**'Who ever heard of it.'** Corcoran, Mullins & Jennison Inc., a Quincy firm, won the America Park conversion job. Only four other developers submitted a proposal.

"That's not surprising," says Joseph Corcoran. "Most developers were leery at first. After all, who ever heard of a partnership with tenants?"

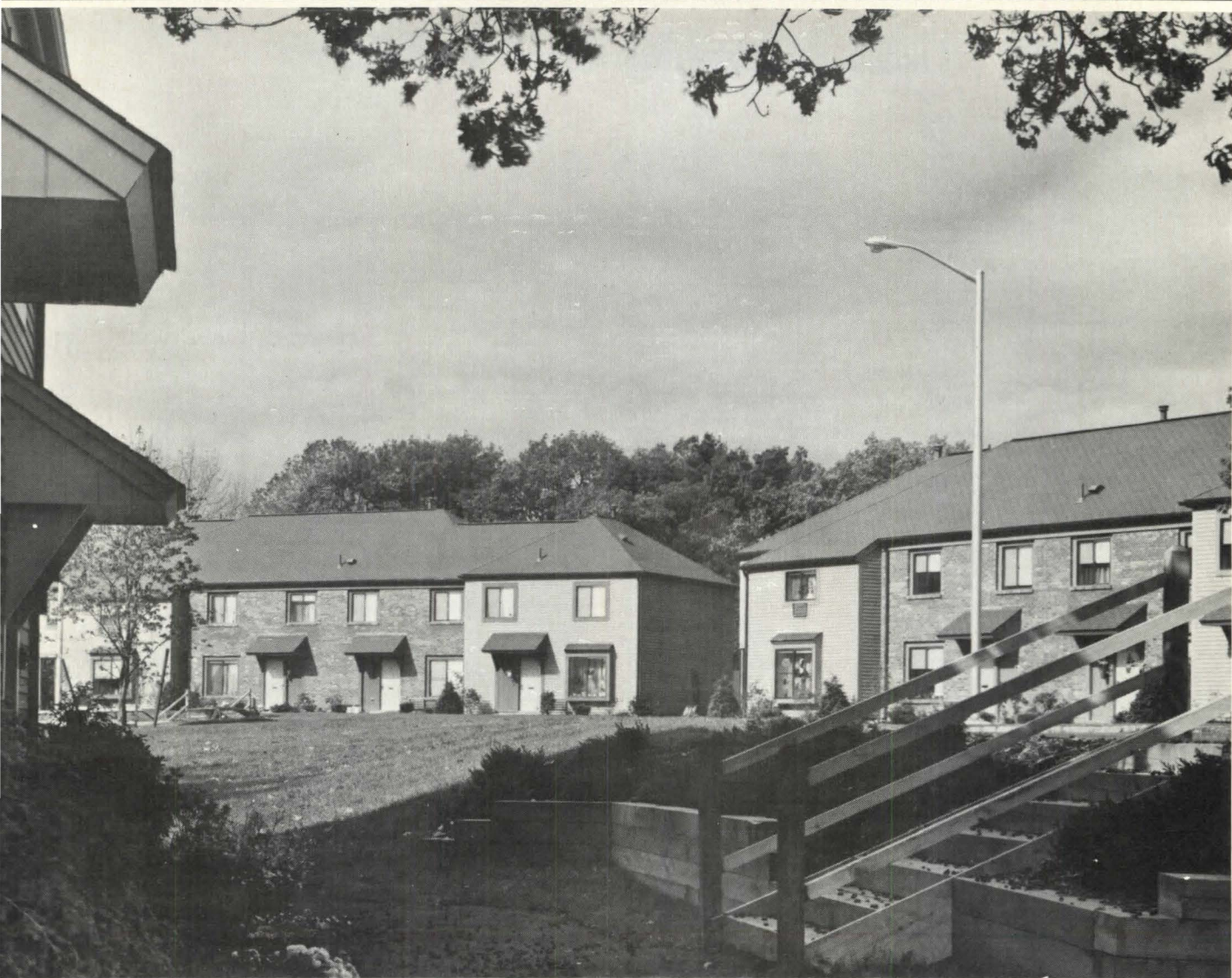
The developer cites two reasons for taking the job. "First," he says, "we expect

C.L. NORTON PHOTOGRAPHIC SERVICES



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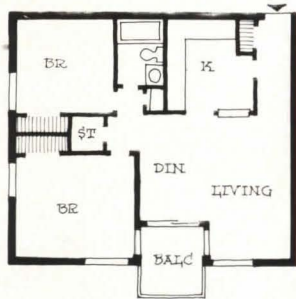




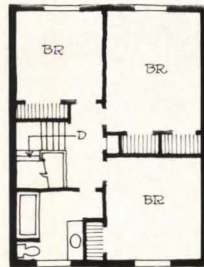
**'Best in the state.'** That's how long-suffering America Park tenants rate the new project. Old, slum housing has been replaced by color-splashed brick buildings with pitched roofs and lots of wood trim. Not shown in above townhouse photo: outside 4x8 ft. storage sheds (for bikes, snow tires, etc.) that serve as patio dividers. Project's 177 townhouses are dispersed around two garden apartment and four mid-rise buildings.



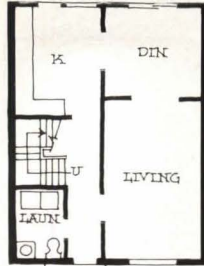
# The prize: housing that works



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LOWER LEVEL,  
3-BEDROOM TOWNHOUSE

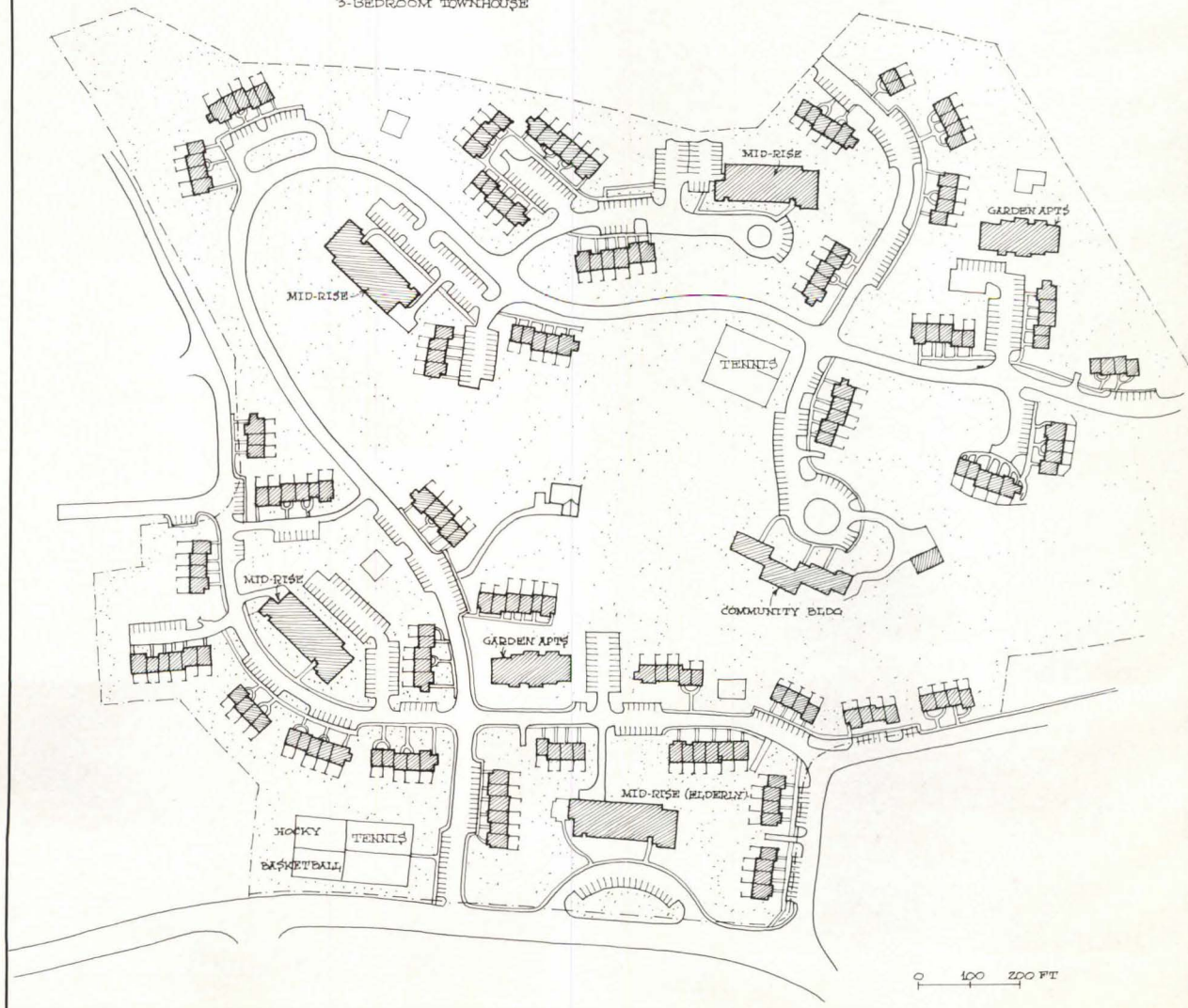


2-BEDROOM GARDEN APARTMENT

1-BEDROOM GARDEN APT.

**Tenants' choice.** King's Lynne residents called many of the design shots. In addition to bigger rooms (architect Claude Miquelle made paper cutout furniture models to show that everything fit), new units have more window area, eat-in kitchens, curtained sliding glass doors, extra storage and closet space. Tenants also asked for—and got—wallpapered kitchens and baths.

**Breathing room.** In contrast to America Park's dismal barracks-type setting, new site plan has a density of eight units per acre. Some 63% of the land is open space.



to make money on it. Second, we saw an opportunity to prove that the private sector can do a better job of housing the poor."

**A working partnership.** Under the ground rules set down by MHFA, all policy decisions on King's Lynne—from site planning to daily operations—are made by the developer and tenants on a 50-50 basis. Recommendations, reached at weekly meetings, are turned over to Corcoran's on-site management group for action.

Another proviso: Tenants, who have no financial stake in the project, must get an unspecified share of the profits. A participation deal, therefore, had to be negotiated by the two partners. Here's how it works.

Corcoran, Mullins & Jennison has, as its developer's fee, a 10% equity in the \$19-million project. (The MHFA holds the rest.) The firm plans to sell 75% of that equity—worth \$1,425,000—to a syndicate of limited partners who want tax shelters (i.e., the accelerated depreciation losses that come with the construction of low-income housing) and retain the other 25% as its own tax shelter. The buy-in cost for outside investors: 15% of the full mortgage amount, or \$2,850,000.

Under the terms of its profit-sharing agreement, the tenants organization gets 10% of the syndication proceeds—i.e., up to \$285,000. Most of this will be spent on recreation programs and social services for the residents.

In addition, Corcoran is further sweetening the pot. Here's how:

King's Lynne, a limited-dividend project, allows the developer a maximum return of 6%. Corcoran is giving 1% of this to the tenants "so they'll have a vested interest in maintaining an economically sound operation." And, with its limited partners taking 75% of the remaining 5%, Corcoran doesn't expect to make much on the project's bottom line. The profit, in short, is in syndication.

**Financing terms.** MHFA is providing the developer with a 4½% short-term construction loan of \$19 million. The loan will be converted to a 40-year mortgage when the project is completed in early '79. The mortgage, backed by tax-exempt municipal

bonds, should cost about 7%.

Over and above MHFA's funding, the Massachusetts Department of Community Affairs has allocated \$7 million to pay for tenant relocation, social services (e.g., job counseling, mental health, tutoring) and retirement of debt on the original project. Which means that King's Lynne will cost the state \$26 million, plus rent subsidies.

An immediate beneficiary will be the city of Lynn. It stands to collect about \$200,000 a year in real estate taxes from the privately owned project.

The developer's first order of business was to acquire America Park. Its owner, the Lynn Housing Authority, sold the 69 buildings on 58 acres to King's Lynne Apartment Co., a joint venture between Corcoran and the residents organization. The price, a nominal \$75,000, came out of MHFA's construction loan.

**The housing mix.** Plans call for construction of 48 garden apartments, 216 mid-rise apartments (including a 56-unit building for the elderly) and 177 townhouses, with up to four-bedroom units offered. All told, 166 units are earmarked for low-income America Park tenants. Some 269 families were eligible for the new housing, but many decided to relocate. The remaining units will be divided between moderate-income residents and those who can afford the going market rates in the Lynn area.

State subsidies figure prominently in the rent structure, with monthly payments averaging about \$125-\$200. Rents are in the \$245-\$375 range, with differentials of up to \$175 for market-rate apartments.

Low-income families—those with maximum earnings up to \$8,100 for six people—pay a flat 25% of their income. The limits for moderate-income tenants range from \$14,500 (for a one-bedroom unit) to \$20,400 (four bedrooms). Residents whose earnings exceed these levels pay 25% of their income.

The non-subsidized flats aren't finding many takers, however. In the 210-unit first phase, only three of the first 105 families now in residence are at the market rate.

Comments Corcoran: "Once you break the ice in a mixed-income situation, other people tend to follow. We fully expect to attract more high-income families in the next two stages."

**Greening of a project.** King's Lynne, of course, bears little resemblance to its predecessor. The old, barely sound buildings have given way to new units built with different types and color combinations of brick, clapboard and vertical wood siding.

Other notable additions: new landscaping, a community building with teen center, sports facilities (including a competition-size swimming pool), play areas for children, parking lots and dumpsters for storing trash.

"We changed everything but the original street pattern, which was quite good," says architect Claude Miquelle. "But even here we designed new signs and changed the street names. Our assignment was to eradicate all vestiges and memories of America Park. And that's what we did. There is no differentiation between low-income and market-rate apartments, and there's no hierarchy of location either. It's a fully integrated project."

**Tenants' view.** "We've had some hassles with Joe Corcoran but it's a good partnership," says Eleanor Atkins, vice president of the King's Lynne Residents Council. "One of the main reasons is that he expects—and respects—our input.

"Originally, we were worried that everything would change once the development got into the ground. But nothing has. We've always been able to work out our problems without marching the tenants. Joe Corcoran has taught us a lot . . . but I think he's learned something from us."

The project also has some Washington fans. Says William J. White, general manager of HUD's New Community Development Corporation: "King's Lynne is an example of what can be done with sick public housing developments anywhere in the country. This new approach, which offers an alternative to rehab and demolition, should have tremendous potential. I also think HUD will have a role to play in this area." —BILL MULLIGAN

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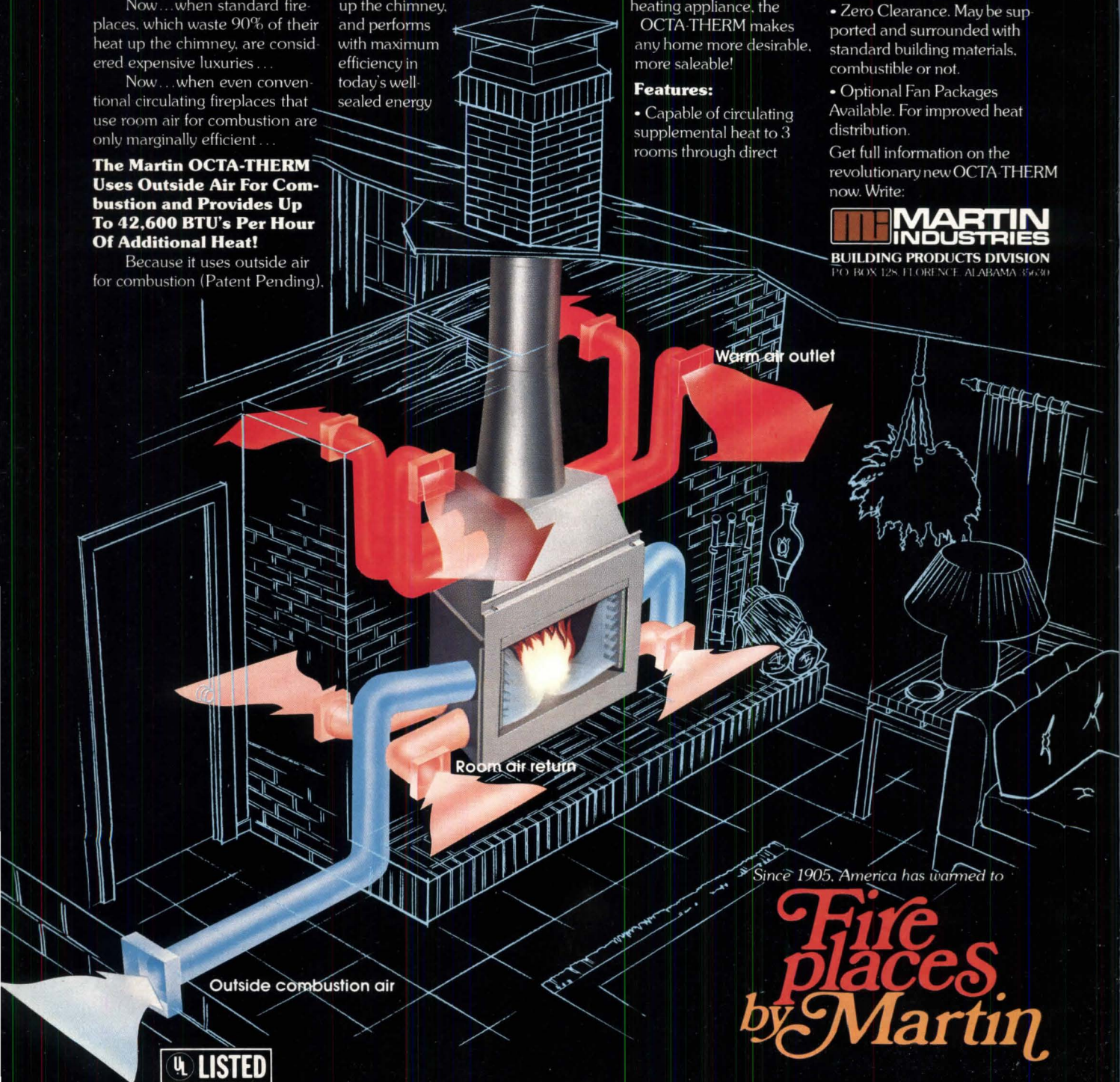
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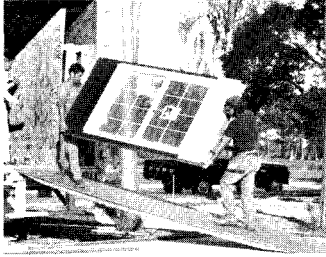
Since 1905, America has warmed to

*Fire  
places  
by Martin*

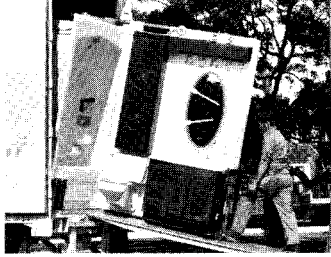
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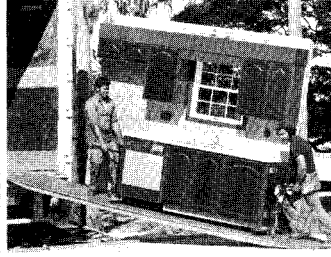
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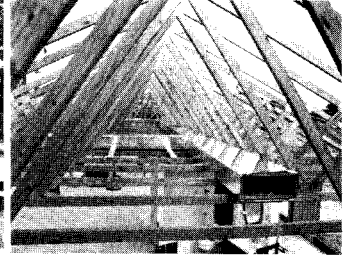
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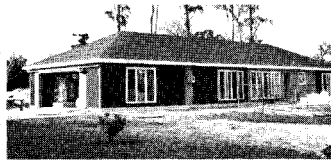
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- Marketing Directors
- Sales Managers
- Realtors

Miami, Fla. Feb. 9-10

Newport Beach, Cal. Mar. 9-10

Houston, Tex. Apr. 10-11

# Market-oriented sales management

An intensive two-day program designed to show you how to sell your product to your market

**Miami, Fla.**  
**February 9-10**  
**Marriott Hotel**

**Newport Beach, Cal.**  
**March 9-10**  
**Marriott Hotel**

**Houston, Tex.**  
**April 10-11**  
**Warwick Hotel**

**You'll study with Dave Stone, America's foremost new-home sales consultant**

Over the past four years he has taught sales techniques and management to more than 1,000 House & Home/Housing seminar attendees

Now, in this new seminar, he will stress the vital link between your sales strategy and your over-all marketing program

#### **Here's why you should attend**

Because whether you're a small or large builder, today's skyrocketing costs mean you simply can't afford to miss your market

Because if your selling program isn't fully in tune with your marketing concept, chances are you will miss your market

And because if you haven't trained your salespeople—or your Realtors—to sell your particular product, you can't expect them to sell effectively

#### **So at this seminar, Dave Stone will show you . . .**

- How to develop successful sales/marketing strategy
- How to create an effective sales environment
- How to select the right sales people for your program
- How to train those people to sell your homes



**You'll learn to develop special techniques for selling specific buyer groups, including . . .**

- The first-time buyer
- The family move-up buyer
- The family move-down buyer
- The single buyer
- The empty nester
- The retirement buyer
- The resort-home buyer

**You'll explore the advantages of builder/Realtor cooperative sales programs and how to set them up. Specifically, you'll learn . . .**

- How to establish a successful builder/Realtor relationship
- How to execute builder/Realtor agreements
- How to operate equity trade-up programs
- How to determine compensation and incentives
- How to develop a comprehensive training program
- How to simplify builder/Realtor forms and systems

**You'll review these basic skills and techniques as they apply to market-oriented selling**

- Qualifying prospects
- Building perceived values
- Handling objections and serious questions
- Creating a sense of urgency
- Closing the sale
- Preventing cancellations
- Building referrals

**And you'll have ample opportunity to discuss all these subjects, plus your own particular concerns, with Dave Stone and your fellow students in both formal and informal sessions**



Dave Stone's expertise in real-estate sales and sales management comes from years of on-the-job experience. He began his career as a homebuilder and salesman, then served as General Manager of Stone & Schulte, a realty firm that represented some of the most successful homebuilders in Northern California. He is currently President of The Stone Institute, a marketing and sales consulting firm with both building and realty clients in all parts of the country.

In the past few years, Dave Stone has been widely hailed as homebuilding's leading teacher of sales management. He has lectured to more than 100,000 builders, sales executives and salespeople, many of them at House & Home/Housing's seminars. He has produced training films and tapes for the housing and real-estate industry, and has authored nine books on real-estate sales—among them the best-selling "How to Sell New Homes and Condominiums," published by House & Home Press.

---

**Special seminar features**

An early-bird brainstorming session where Dave Stone will discuss individual problems

A comprehensive workbook that will serve as a permanent reference guide

Detailed sales-training schedules

Checklisted management-systems forms that you can apply to your own operation

A personally developed management-action plan for ideas and programs that you can begin to implement immediately

# Market-oriented sales management

**How to register**

Please complete and return the coupon below to:  
 Seminar Dept., House & Home/Housing  
 1221 Avenue of the Americas  
 New York, N.Y. 10020

Or you may register by calling  
 (212) 997-6692. All registrations will be confirmed by mail.

**Seminar fee** \$395  
 The full registration fee is payable in advance, and includes all luncheons, workbooks and other meeting materials.

**Seminar hours**

Registration starts at 8:30 a.m. the first day. Programs run from 9:00 a.m. to 5:00 p.m., with a special optional brainstorming session beginning at 7:30 a.m. the second day.

**Hotel reservations**

While House & Home/Housing does not make individual reservations for seminar participants, we have arranged with the Marriott Hotels in Miami and Newport Beach and the Warwick Hotel in Houston to hold a special block of rooms for our attendees. You can reserve your room at either of the Marriott Hotels by phoning (800) 228-9290, and at the Warwick Hotel by phoning (800) 323-7500 from all areas except Illinois, which is (800) 942-7400, and Canada, which is (800) 261-6353.

Please be sure to say that you are attending the House & Home/Housing seminar. This will identify your reservation with the block of reserved rooms, and assure you of the special seminar rate. And we suggest that you make your reservations as early as possible.

**Tax Deduction of Expenses**

An income tax deduction is allowed for expenses of education (includes registration fees, travel, meals, lodgings) undertaken to maintain and improve professional skill. See Treasury regulation 1.162-5 Coughlin vs. Commissioner 203F. 2d 307.

**Seminar Dept.**  
**House & Home/Housing**  
 1221 Avenue of the Americas  
 New York, N.Y. 10020

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- Newport Beach, Mar. 9-10  
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- Houston, Apr. 10-11  
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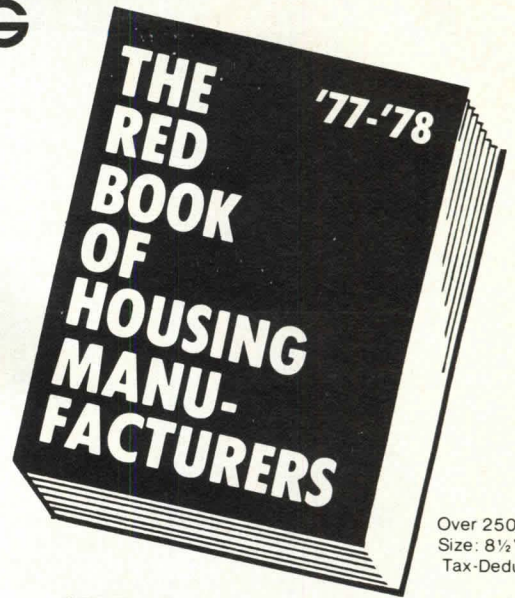
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# GET THE FACTS ON THE PEOPLE INVOLVED IN MANUFACTURED HOUSING

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The most persistent problem facing homebuilders in recent years is the rising cost of on-site labor. More and more builders are boosting profits as well as maintaining schedules by finding a "Better Way"—factory-made components.

Many housing experts believe that the industry is pricing itself out of the market. But many smart homebuilders are finding a "Better Way" to fight rising costs—they use factory-made components. You'll find hundreds of details on over 1,000 companies that are involved in this "Better Way" of homebuilding today in the All-New RED BOOK of Housing Manufacturers.

In just the last few years, builders have seen dramatic breakthroughs in productivity due to greater use of industrialized methods in construction, standardization of construction and enormous improvement in the tool industry. Thus, more and more housing components are manufactured at off-site locations.

The Industrialized Housing Industry is big, complex, and **hidden**. It is hidden among thousands of firms, big and small. These companies, spread all over the country, produce a wide variety of housing products. Some—like those who produce mobile homes or pre-fab houses are easily identified. Others like homebuilders who manufacture their own components, require a marketer of building products to be constantly looking for new information. **Industrialized housing is too big and too complex to be surveyed with a quick glance.** THE RED BOOK OF HOUSING MANUFACTURERS has been designed to provide you with the detailed marketing research data you need. **It will uncover the "hidden" aspects of industrialized housing for you.**

HERE IN ONE BIG PACKAGE IS THE MARKETING INTELLIGENCE YOU NEED TO MAKE THE MOST OF THE EXPECTED UP-TREND IN HOUSING . . . It will help you recover lost ground in the months ahead.

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These are just a few of the many profitable ways you can use the RED BOOK. **In fact, just one good contact, can easily repay your investment.**

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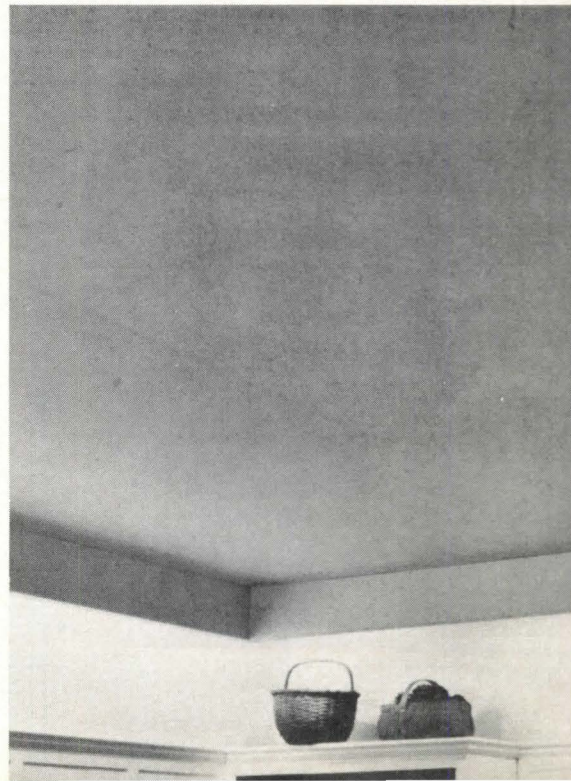
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# PRODUCTS



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**"Lytetrough"** (above) has a built-in look that suits traditional and contemporary interiors. It comes in 60' and 120' lengths that can easily be cut to size. Surface is matte white vinyl veneer which can be painted to match decor. System features integral lip (right) which conceals lamps from view. "Mini-swivel Wall Washer" and "A-lamp Wall Washer" (not shown) are lamp holders recommended for use with system.



## Track lighting priced for the builder

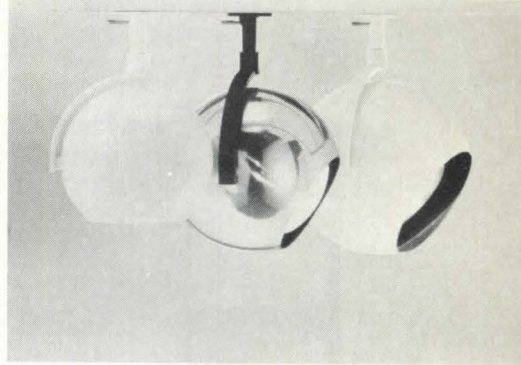
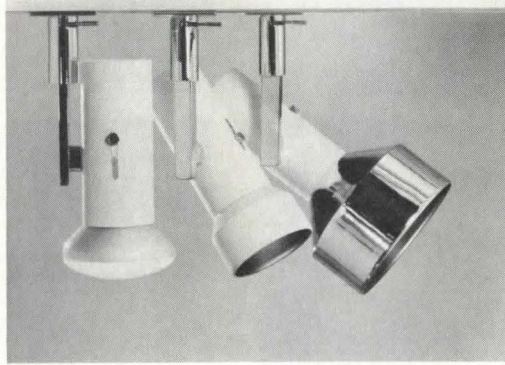
It's called Basic Lytespan®. And it's cost-competitive with conventional lighting, so builders can offer it as a standard item.

The system features shallower ( $\frac{3}{4}$ " ) tracks and more compact holders. Applications include accent lighting, plant lighting and decorative installations.

Basic Lytespan® track can be recessed or mounted on ceiling or stems. It can even be used horizontally or vertically on walls. The extruded aluminum track is easy to install—2', 4' or 8' sections plug together with concealed one-piece couplers and the outlet box feed-in can be located anywhere along the track to make use of existing outlets.

Rotating "Lytespots" (see photos below) can be snapped in place anywhere along the track.

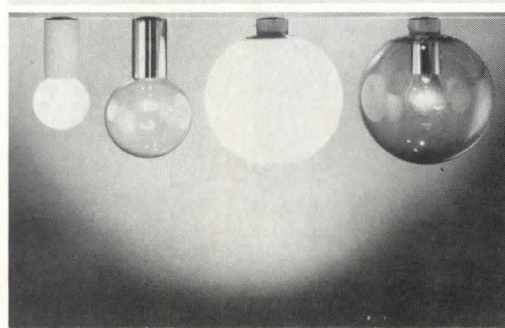
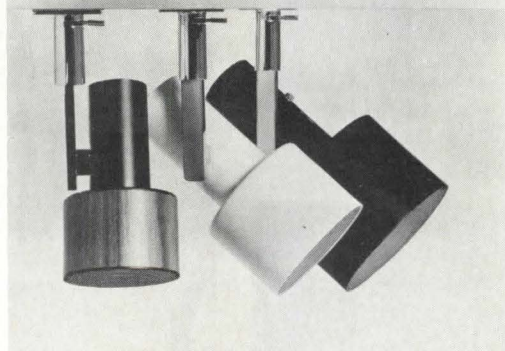
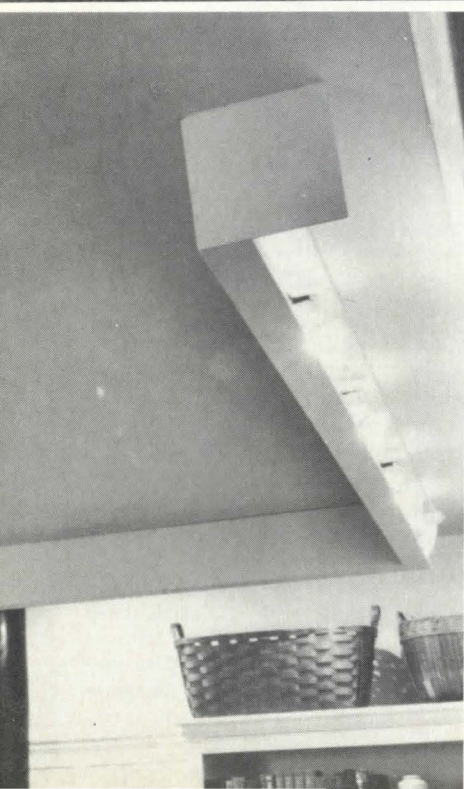
In addition, Basic Lytespan® track can be used behind "Lytetrough" (photos left), a particleboard baffle that's less costly and less time-consuming to install than custom cornices. Lightolier, Jersey City, NJ. Circle 200 on reader service card



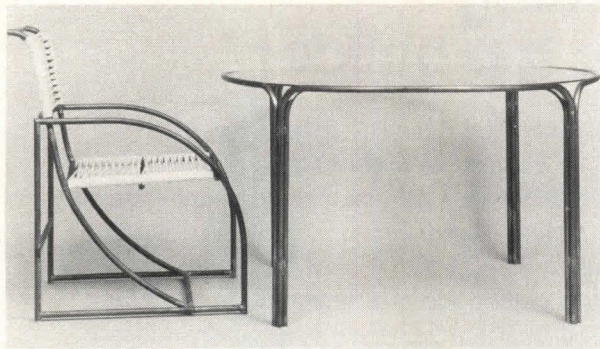
"Basic Universal" housing (above left) comes in matte white finish with white or polished aluminum cowl.

"Basic Lytesphere" (above) is offered in white or polished anodized aluminum with black support.

"Lytebeam" cylinders (left) are available in matte white or black, or with vinyl teakwood-look trim.



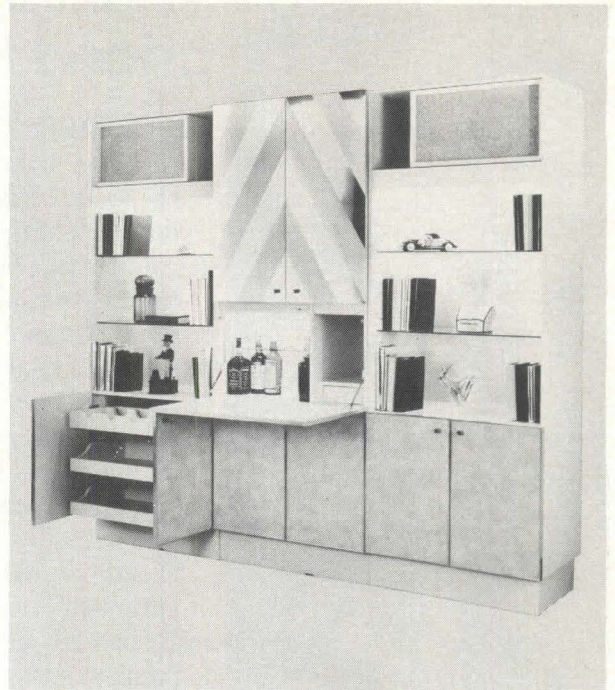
Decorative elements (left) provide bare-bulb effect or diffuse light through opal or smoked glass spheres.



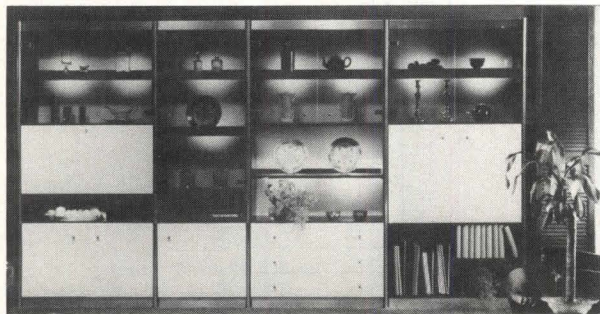
**Outdoor dining ensemble, "Bronze Age" (above),** is constructed of genuine bronze tubing. Table top is made with tempered glass, and seats are made with cotton cording. Terra, So. El Monte, CA. Circle 220 on reader service card



**Contemporary lounge chair, (right) designed by Heinz Meier,** features a satin-finished steel frame. Upholstery is available in natural tones on reds and purples. Landes, Gardena, CA. Circle 221 on reader service card



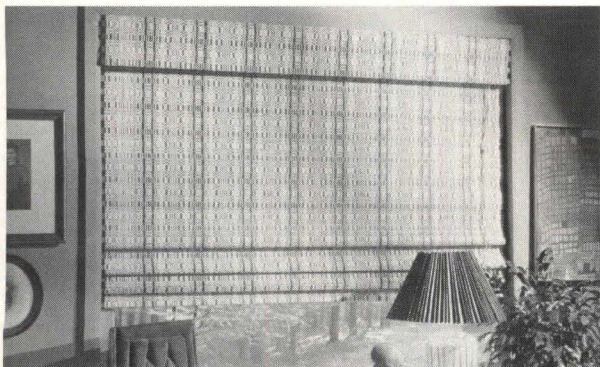
**Wall storage system (above)** has 32'' and 16'' wide modules featuring a variety of built-ins. Door and drawer fronts come in polished or brushed aluminum, ultra-suede, or mirrored. Prestige, Freeport, NY. Circle 224 on reader service card



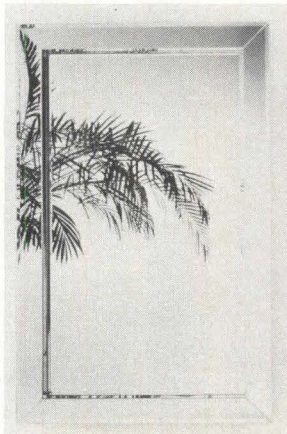
**Contemporary modular wall unit, "Lisbon" (above),** has six basic cabinet styles. The black ash, white-front arrangement shown features three full-size and one half-width module. Trianon, New York City. Circle 222 on reader service card



**Unfinished wood furniture (above)** is good for economy model homes. Lightweight KD bookshelves and storage cabinets are easy to store and assemble. American Forest, Stockton, PA. Circle 226 on reader service card



**Macrame shade (above)** is constructed of hemp and twine woven with natural-colored yarns. Part of the "Classic Collection" line, the shade is also available in standard decorating colors. Joanna, Chicago, IL. Circle 223 on reader service card



**Parsons-style mirror (left)** features a reflective bevel frame. Mirror is high-quality plate glass with polished, chip-resistant edges. Unit measures 30'' x 48''. Reale, New York City. Circle 225 on reader service card



## A Hotpoint Clean-up Center can help you wrap up a sale.

Your customers are looking for convenience in the kitchen. And you can offer them a lot of it when you install Hotpoint Clean-Up Centers. They're an ideal sales clincher.

**1 Hotpoint dishwashers can help save time and energy.** Our built-in dishwashers are full of the kind of features buyers are looking for. We have models with Power Saver and Short Wash cycles. And Dish-Potwasher cycles on two models as well. Most Hotpoint dishwashers are wrapped with a thick blanket of sound insulation to cut down on operating noise. And they have a soft food disposer and Rinse-Away drain which helps eliminate hand pre-rinsing.

**2 The Trash Compactor — a neat solution to a messy job.** Add a Hotpoint trash compactor to your kitchen appliance package and you're adding convenience most people never had before. It compresses the average weekly trash of a family of four into one handy carry-out bag. Hotpoint compactors have reversible color panels to match the color scheme buyers decide on. A sleek black front panel is also available as an optional extra.

**3 A complete line of dependable disposers.** Hotpoint's food waste disposers grind up scraps, including bones. All have stainless steel blades that resist corrosion.

**4 If you'd like to be filled in on even more reasons why Hotpoint Clean-Up Centers make sense today, fill in this coupon.**

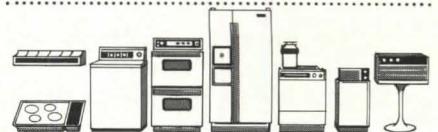
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**We hustle for your business. And it shows.**



# Hotpoint

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# Your remodeling customers want to save energy.



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People who heat, cook and dry clothes with gas are using the most efficient of all the major energies to start with. Studies by the U.S. Council on Environmental Quality show gas appliances use considerably less of our country's energy resources than other comparable types of appliances. And they cost much less to operate.

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maximum heat from the gas burned—with improved insulation to keep in more of that heat.

- Gas ranges with automatic pilotless ignition that does away with standing pilots in top burners, broiler and oven. They use up to 30% less gas.
- Gas dryers with automatic pilotless ignition that eliminate the pilot light and cut gas use.

### Homes will keep on getting gas.

The Federal Power Commission has specified that the gas industry's first priority must be to keep on supplying homes that now have gas. So your gas customers can expect to have continued service. Now more than ever, it pays to stay with gas.

Conserve gas.  American Gas Association 





**"Loafer Sofa"** (above) doubles as a bed when the side bolsters and back cushions are removed. Economical couch is easy to assemble. Stratford, Chicago, IL. Circle 230 on reader service card

**Contemporary tables and seating group** (below) are constructed of molded plastic. The furniture is heat and chip resistant. Syroco, Syracuse, NY. Circle 234 on reader service card



**Folding wall table** (above) provides table space where there is no room for a stationary fixture. Unit, which locks in a cantilevered position, requires two hands to release. SICO, Minneapolis, MN. Circle 232 on reader service card

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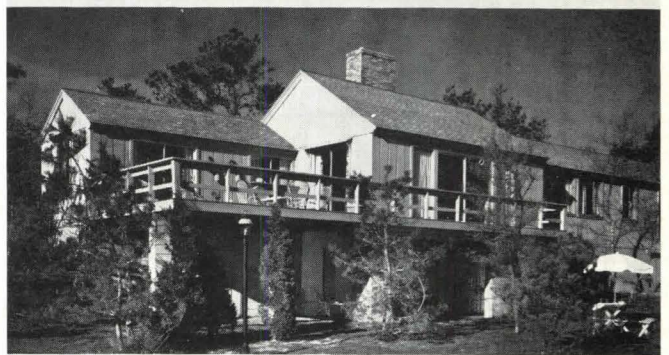
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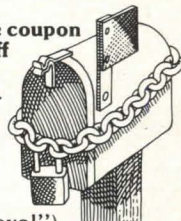


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But when you do, you could be missing out on some pleasant surprises... like discount coupons, money-saving subscription offers, sweepstakes offers, or valuable free gifts. And chances are that most of your advertising comes directly from manufacturers, publishers, or retailers you've long trusted, who offer you top-brand products, many times with free-trial offers and money-back guarantees that you don't often get in stores.

2. Or you can mail the coupon below and get taken off many mailing lists.

You can stop most advertising mail from ever reaching your mailbox simply by mailing the coupon below (check the box marked "Name-Removal").



The Direct Mail Marketing Association, which represents 1700 companies who advertise and sell by mail, has set up a Mail Preference Service for your convenience. Send in the coupon, and we'll promptly mail you a simple form. When it's completed and returned, the companies participating in this program will remove your name from their mailing lists. Within 90 days, you'll notice what will become a substantial reduction in the amount of advertising mail in your mailbox. There's no way we can stop *all* advertising mail from reaching you—but we will do our best. Participating companies are glad to extend this courtesy.



3. Or you may decide for yourself which mail to read, which offers to accept.

Shopping by mail is like being in a big department store with many items on display. Some you pass by quickly, some look more interesting, so you stop to look and perhaps to buy—but the choice is always yours. You may even want to receive more mail about certain hobbies or interests of yours. The Mail Preference Service can help you get more mail in areas from cooking and gardening to books, travel, sports, and many others. Simply check the box marked "Add-On" below, and soon, you can begin taking even greater advantage of the extra opportunities you find only in mail advertising.

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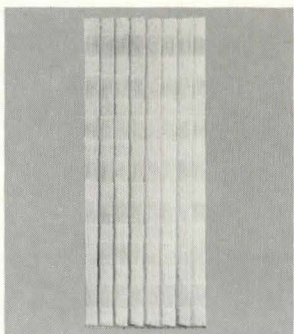
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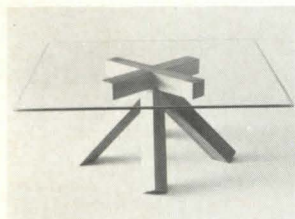
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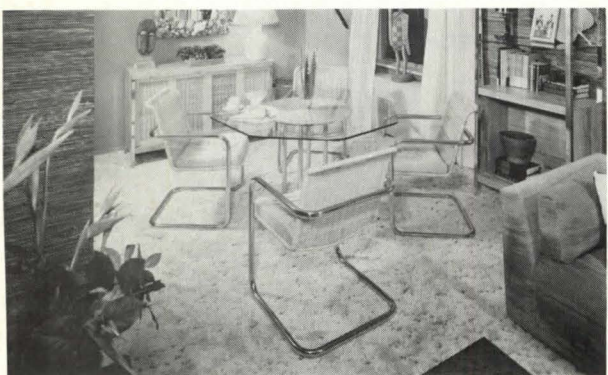
**Armchair** (above) has a natural beech frame with wood pegs and dovetail joints and an upholstered seat and back. Designed by Gerhard Berg, a tablet arm version is also available. Westnofa, Evanston, IL. Circle 227 on reader service card



**Vertical shade** (above) comes in a natural or bleached white yarn. Custom-made shade can be ordered free flowing with top track or with both top and bottom tracks. Window Modes, New York City. Circle 228 on reader service card



**Contemporary square table** (left) is shown with a natural ash base and glass top. Mario Bellini's "La Corte" line is also available with walnut bases and walnut or glass tops. Atelier, New York City. Circle 229 on reader service card



**Contemporary dining group** (above) includes wicker seated chairs and an octagonal table. Both have polished chrome bases. Chromcraft, Senatobia, MS. Circle 233 on reader service card

**Velvet love seat and crewel wing chairs** (below) are part of the traditionally-styled "Carriage House" collection of upholstered furniture. Trend Line, Hickory, NC. Circle 231 on reader service card



Harwood K. Smith, Architect

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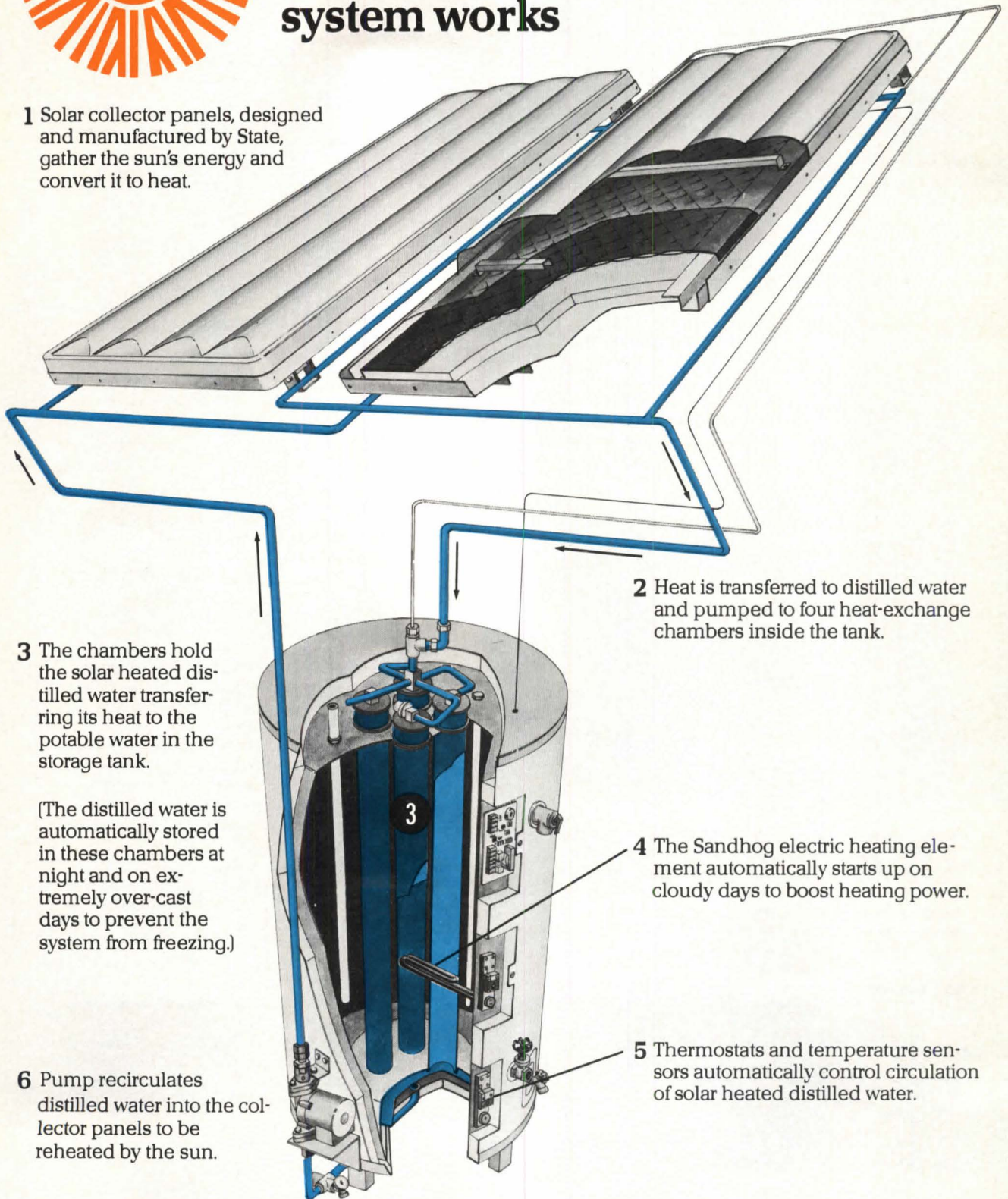
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## Here's how the new Solarcraft system works

# State

- 1** Solar collector panels, designed and manufactured by State, gather the sun's energy and convert it to heat.



- 2** Heat is transferred to distilled water and pumped to four heat-exchange chambers inside the tank.

- 3** The chambers hold the solar heated distilled water transferring its heat to the potable water in the storage tank.

(The distilled water is automatically stored in these chambers at night and on extremely over-cast days to prevent the system from freezing.)

- 4** The Sandhog electric heating element automatically starts up on cloudy days to boost heating power.

- 5** Thermostats and temperature sensors automatically control circulation of solar heated distilled water.

- 6** Pump recirculates distilled water into the collector panels to be reheated by the sun.

# simplifies solar water heating

**Second generation system incorporates new heat transfer design; uses distilled water as transfer medium.**

The new Solarcraft system from State abandons the wrap around grid as a heat exchanger. Instead, an advanced design of four internal channels does the job more efficiently. Distilled water is used as the transfer fluid which carries the heat from the collector panels to the potable water.

With this second generation of Solarcraft models State has kept its *complete* system design concept. Solarcraft is not merely an auxiliary or booster package. It has just *one* tank. The highly regarded Sandhog™ electric heating element is incorporated as a stand-by power source.

State moves confidently ahead with this second generation of solar water heaters. We have sold Solarcraft systems in 34 states from Maine to California and Washington to Florida. The rising awareness and demand for sun-powered water heaters has dictated our building a new plant solely for Solarcraft at our Ashland City complex. It is now in full production.

State Industries is sponsoring a series of 2-1/2 day educational workshops that will show you how to sell, size and install Solarcraft water heating systems. Become a part of tomorrow's solar water heating industry. Start by clipping the coupon below, today.

Yes, I'm interested in Solarcraft water heating systems.

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- I'm interested in your Solar training school.  
Please tell me how to enroll.

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Clip and mail to: State Industries Inc. Ashland City, Tenn. 37015

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**"DURO Seal Patch"** (above) is a strong mineral rubber in easy-to-use form which seals holes, cracks and leaks. It is weather-resistant, odorless, non-toxic and non-staining. Woodhill Permatex, Cleveland, OH. Circle 235 on reader service card



**"All Acrylic" solid color latex stains** (above) have a water base. Easy-to-apply and maintain stains are fast drying and mildew-resistant. No priming or sanding is necessary. A choice of 17 colors is available. Cabot, Boston, MA. Circle 236 on reader service card



**Aluminum paint and roof coating** (above), part of the "Spruce Up" line, may be brushed or sprayed on all types of surfaces. Available in five-gallon cans, the roof coating acts as an aluminized sealant and insulant. Foy-Johnston, Cincinnati, OH. Circle 237 on reader service card



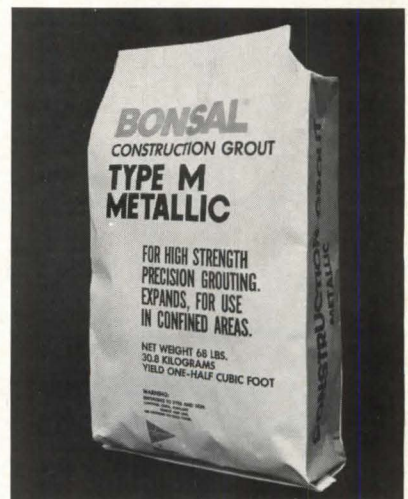
**Contact cement** (left) is a smooth spreading substance that bonds instantly and dries between 20 and 30 minutes with a bond strength of over 350 psi. Cement is heat resistant to 230°F. Wilhold Glues, Santa Fe Springs, CA. Circle 238 on reader service card



**Latex adhesive for ceiling tiles** (below) is specifically formulated for use with wood fiber, acoustical and polystyrene tiles. Off-white, water-based adhesive is easy to install, and can be wiped clean with a damp cloth before it dries. Elmer's, Borden, Columbus, OH. Circle 239 on reader service card



**Latex paint** (above) produces a sand-textured surface while simultaneously covering minor wall imperfections. A variety of textures can be achieved. White paint may be tinted with universal colorants. UGL, Scranton, PA. Circle 240 on reader service card



**Non-shrinking metallic grout** (above) for high-strength applications contains corrosive iron shavings. The substance has high early strength. Preblended grout requires only the addition of water on site. Bonsal, Lilesville, NC. Circle 241 on reader service card

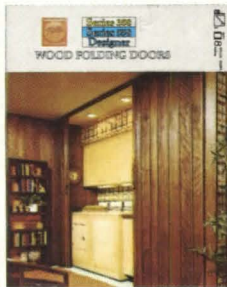


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The fact that Pella Wood Folding Doors can help you save money on building materials and labor is worth thinking about in today's economy. For example . . . by using Pella folding doors as closures or partitions, you eliminate the expense of dropped headers and stub walls. And to add even more sales appeal to closets, you can build additional shelves closer to the ceiling. Your customers are pleased because they have gained extra storage space, plus the equivalent of an attractively paneled wall. Choose from genuine wood veneers (factory-finished or ready-to-finish) or vinyl. Stable wood core construction keeps panels straight and true. Use Pella Wood Folding Doors for that extra sales feature in the homes you build.



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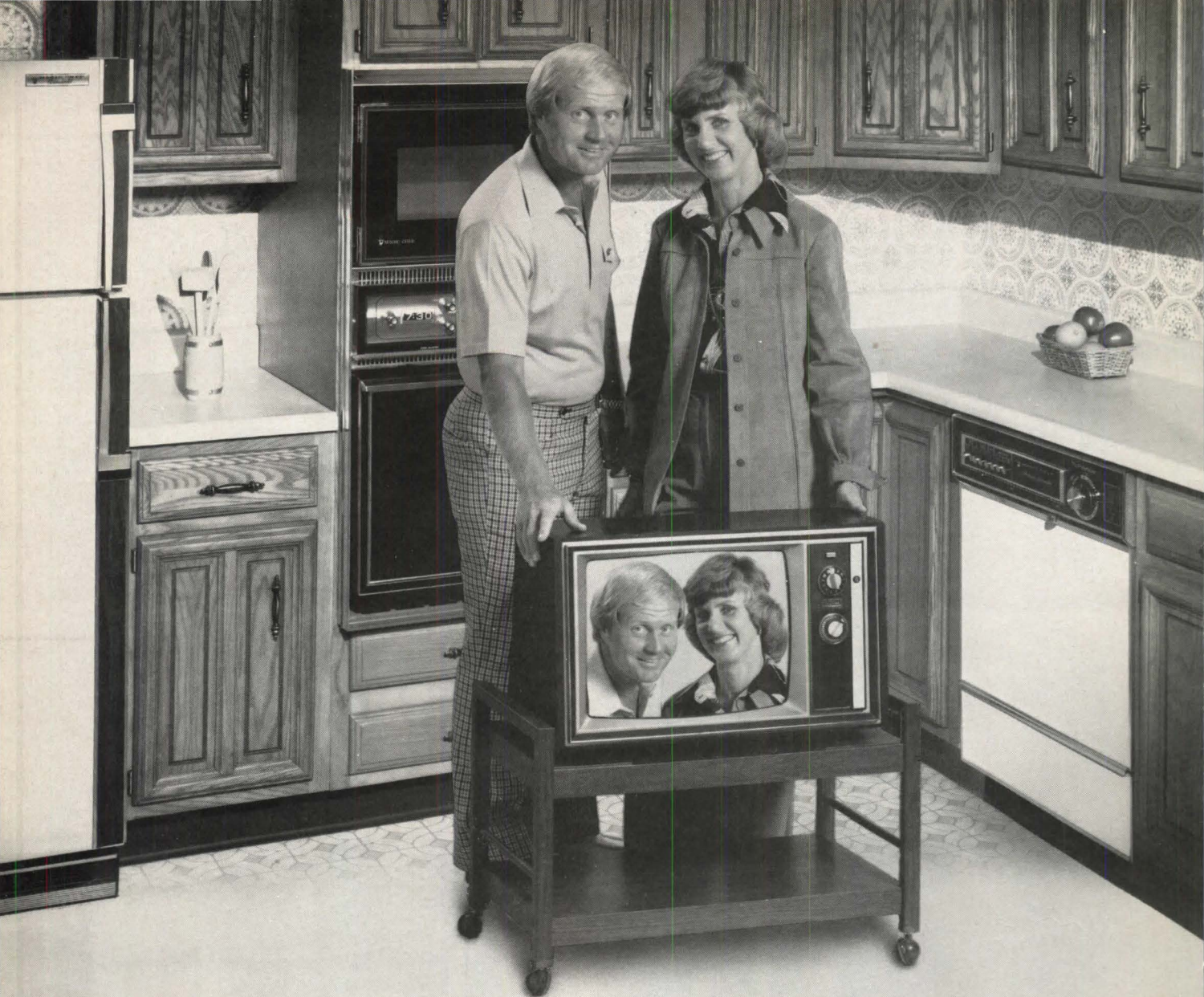
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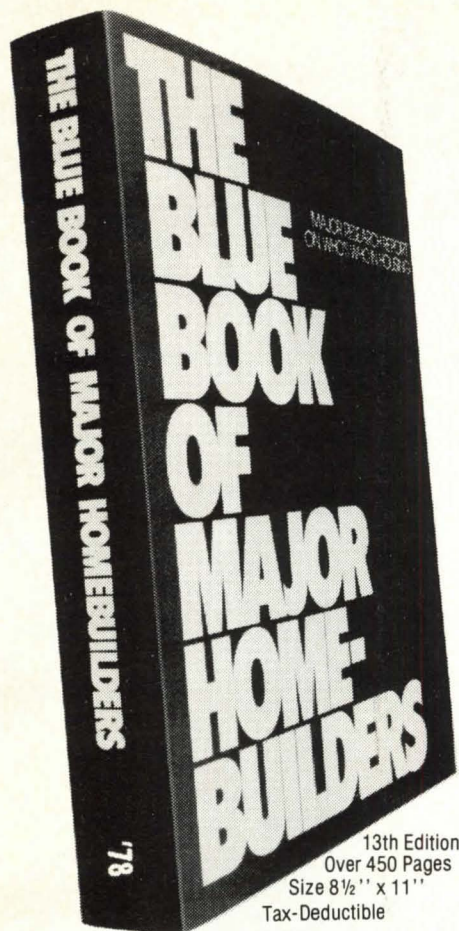
*Third*, a pre-sold name isn't all you get. Because our electric and gas cooking appliances install interchangeably.

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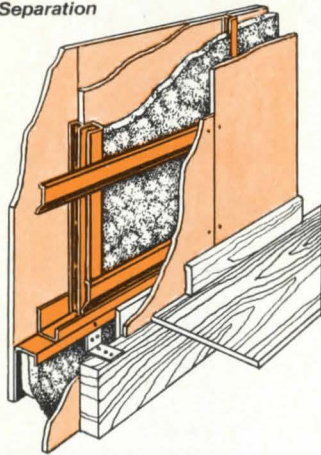
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### Area Separation



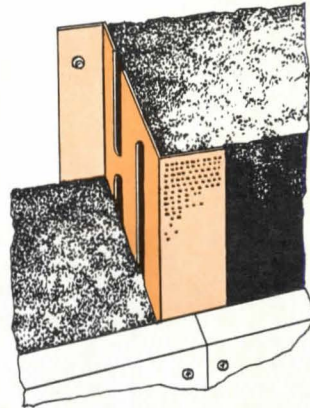
#### COST-SAVING AREA SEPARATION WALL!

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Fire: up to 2 hours  
 Sound: 47 to 57 STC  
 Weight: 9 to 13.7 lb/ft<sup>2</sup>  
 (43.9 to 66.9 kg/m<sup>2</sup>)  
 Thickness: 3.5 to 10.25 in.  
 (88.9 to 206.4 mm)

Circle 92 on reader service card H28A

### Masonry Furring

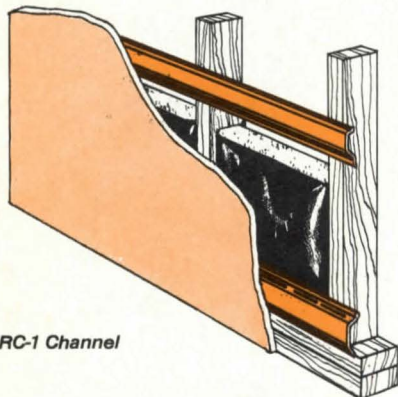


**MORE "R" FACTOR PER DOLLAR!** New USG® Z-Furring Channels provide a highly effective, low cost way to attach mineral fiber or other insulating materials to masonry interiors and to the underside of flat or Cathedral ceilings. Reduces heat loss by boosting thermal resistance "R" for:

Wall-Masonry: up to 25 °F•h•ft<sup>2</sup>/Btu  
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Ceiling-Flat/Cathedral: up to 47 °F•h•ft<sup>2</sup>/Btu  
 (8.2 K•m<sup>2</sup>/W)

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RC-1 Channel

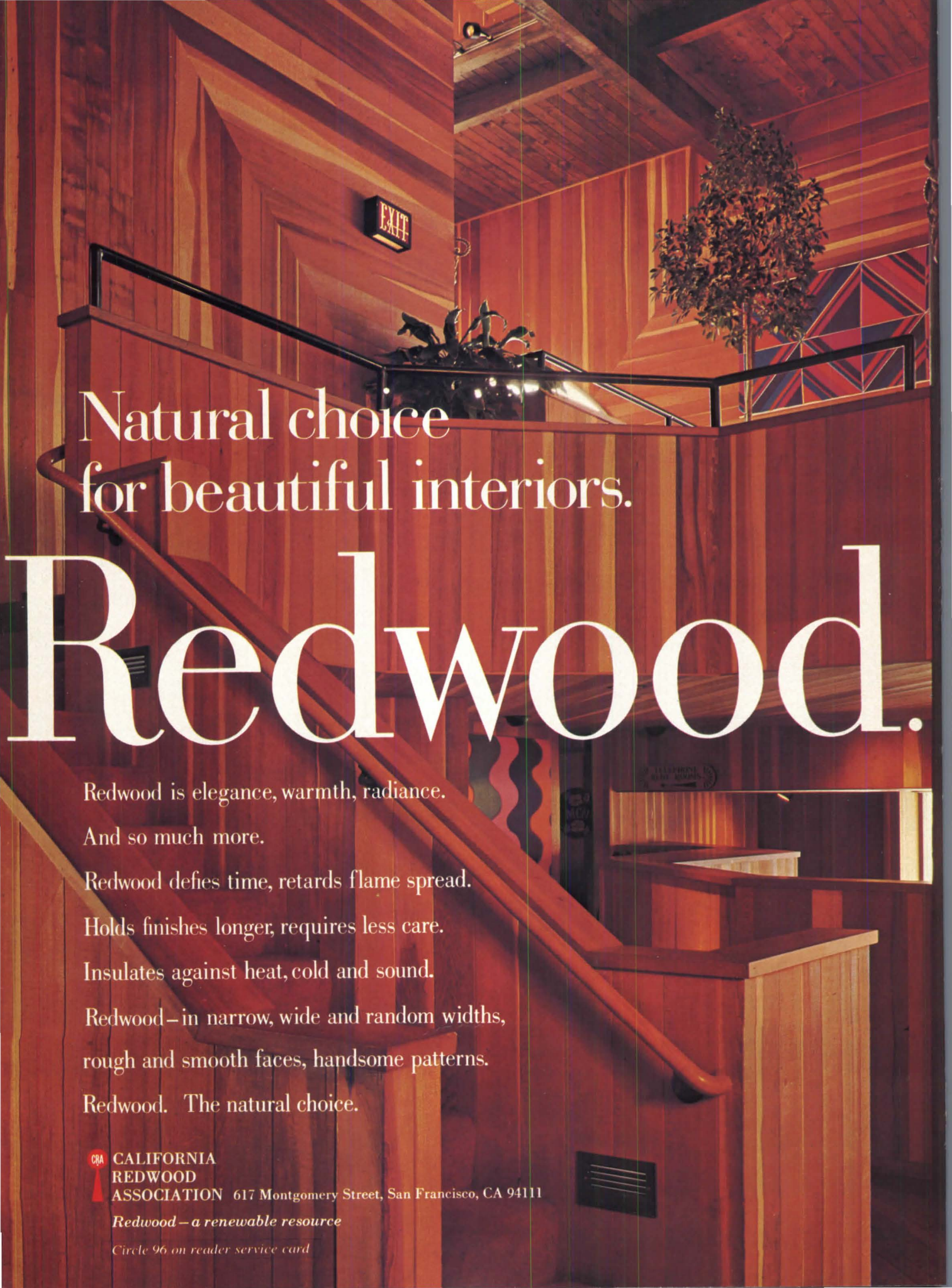
#### HIGHER STC AT LOWER IN-PLACE COST!

RC-1 SHEETROCK Resilient Channel System isolates gypsum board from wood studs, provides partition rating of 50 STC. That's 1 to 6 points higher than other commonly used sound control partitions—at from 9 to 16% lower in-place cost. Also works effectively with veneer plaster interiors.

SYSTEM	Partition Thickness	STC
• Staggered stud	7½ in. (190.5 mm)	49
• Gypsum Sound Deadening Board	5½ in. (143.0 mm)	50
• Wood Fiber Sound Deadening Board	5½ in. (130.3 mm)	45
• RC-1 Channel	5½ in. (136.7 mm)	50

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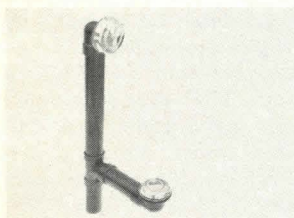
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*Redwood—a renewable resource*

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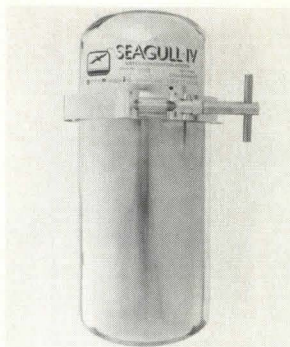
**Solar water heating system, "Sun Set" (above),** consists of two lightweight solar collectors and a "Hydrocore" water heater. Steel portable water tank is glass-lined. Rheem/Ruud, Chicago. *Circle 242 on reader service card*



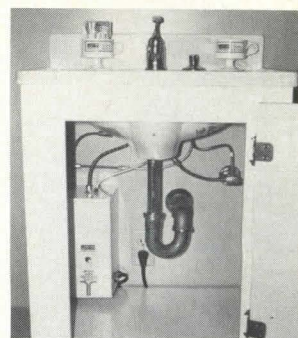
**Waste and overflow system (left)** is designed to fit all tubs and special installations. Plastic unit eliminates the need for linkage hookup. Unit has a push-button control drain. Graning, El Monte, CA. *Circle 243 on reader service card*



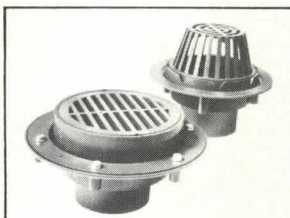
**Drinking filter water system, "Aqua-Clear" (above),** combines the process of fine filtration, membrane impurity rejection, and activated carbon absorption to provide high-quality, cleaner water. Culligan, Northbrook, IL. *Circle 244 on reader service card*



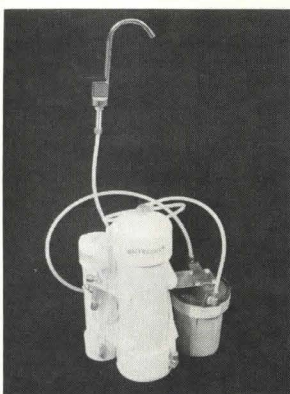
**Water purification device, Seagull® IV (above),** removes 99.75% or more of bacteria from polluted water. It also filters out bad tastes and chemical contaminants. General Ecology, Paoli, PA. *Circle 245 on reader service card*



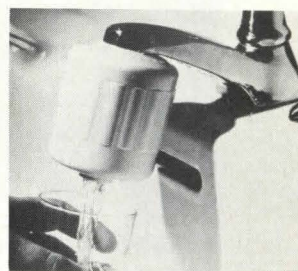
**Hot water dispenser, "Ultra-Hot" (above),** produces instant 190°F water from a cold water line. Water is heated at point of use. Water flow is limited to one gallon per minute. In-Sink-Erator, Racine, WI. *Circle 246 on reader service card*



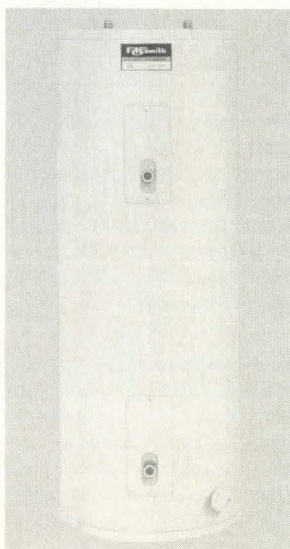
**Plastic roof and floor drains (left)** can be used in commercial or residential applications. Raised-dome roof drain prevents clogging and allows for high volume runoff. R & G Sloane, Sun Valley, CA. *Circle 247 on reader service card*



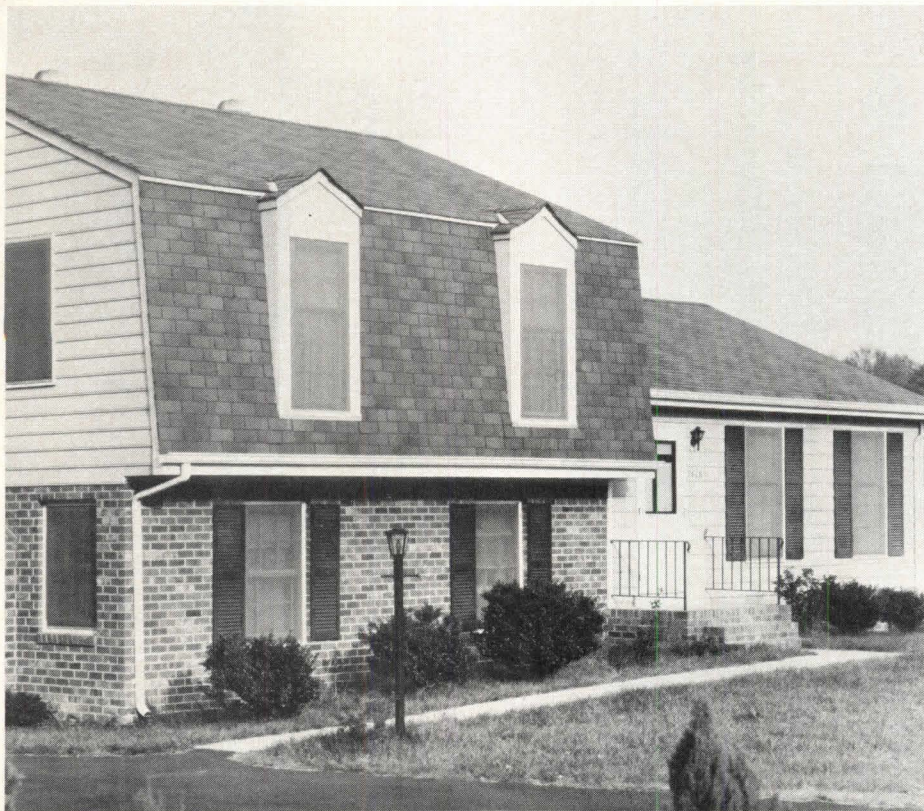
**Water system, Waterscreen™ (left),** removes impurities. Treated water is supplied through a separate faucet which is easily mounted on an existing sink. Westco, Barrington, IL. *Circle 248 on reader service card*



**Compact water filter (above)** easily attaches to any faucet without the use of tools. The unit filters out impurities, thereby improving the taste of water. Hunter, Bridgewater, NJ. *Circle 249 on reader service card*

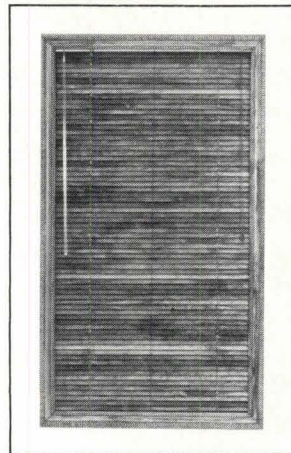
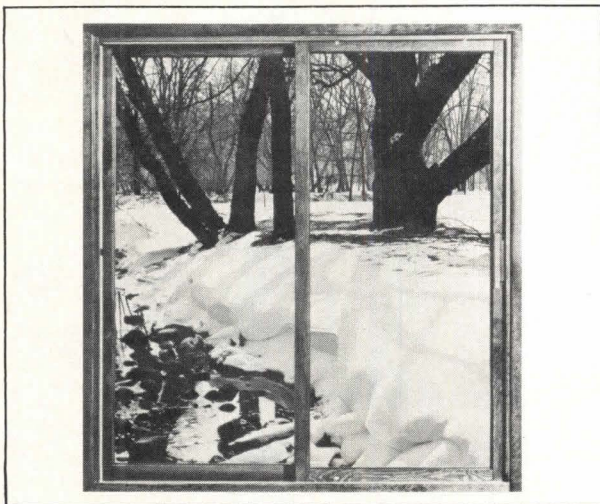


**Solar hot water storage tank (left),** with double density insulation, comes in 30-120 gal. capacities. Tank features two 3/4" tappings for fast hookup to solar piping. A.O. Smith, Kankakee, IL. *Circle 250 on reader service card*



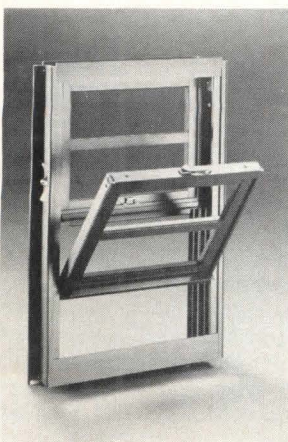
**Insulating window panels** (above) are for interior installation. Aluminum-framed clear PVC sheets are held in place with self-adhering foam tape for an airtight seal. Reynolds, New York City. Circle 202 on reader service card

**Solar shields for windows** (left) block approximately 75% of the sun's heat but allow fresh air to enter. Fiber glass screens also stop insects and provide daytime privacy. Vimco, Laurel, VA. Circle 201 on reader service card



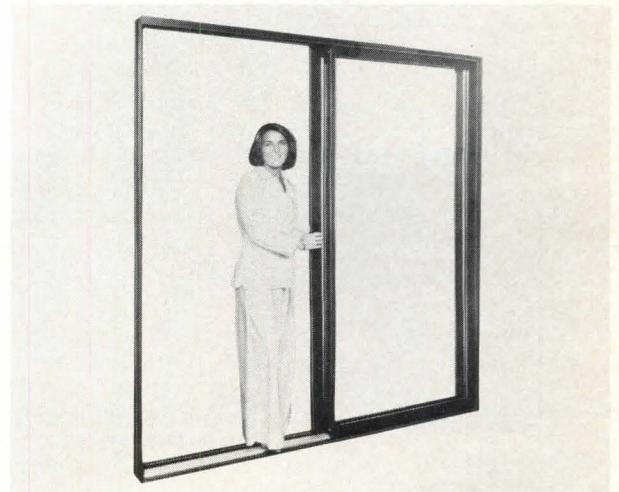
**Slatted wood shade** (left) controls light and provides privacy as well as an additional insulating layer. Unit is available in 30 shades with a choice of 45 decorative frame styles. Nanik, Wasau, WI. Circle 204 on reader service card

**Sliding aluminum door, "Temp Master"** (below), features laminated thermal insulators and fin-seal weatherstripping. The 7/8"-thick tempered insulating glass has a 1/2" air space. Continental, McHenry, IL. Circle 206 on reader service card



**Sliding patio door, "Celsius 22"** (above), features 1" tempered insulating glass. Double weatherstripping is used at the bottom of the door, at the interlock and around operable sash. Ideal, Waco, TX. Circle 203 on reader service card

**Double-hung window** (left) for replacement application features easy-to-clean tilt-in design. Factory-assembled, double-weatherstripped unit can accommodate insulating glass. Graham, York, PA. Circle 205 on reader service card





# “Carrier’s CLIC computer gives us a competitive edge by saving half a ton of air conditioning per house.”



Jerry Nelson (left) and Benny Lakey are building energy-conserving homes in the community of Weatherby Lake, Missouri, near Kansas City.

The Carrier Load Information Center (CLIC) uses a computer program to calculate heating and cooling loads for new housing. Nelson/Lakey Builders put CLIC to work on each of the 10 models they offer in Weatherby Lake.

“Until we started using CLIC, we were putting in half a ton larger air conditioning units across the board on all our models,” reports Benny Lakey, an officer of the company. “Now that we’re not buying that extra half a ton, it gives us a cushion to build in more profit, or we can split it with the customer, or give him all of it.”

The CLIC computer does a fast and accurate job for Nelson/Lakey. “Now we can get sizes overnight if we want them,” says Lakey. “And the sizes have proven themselves to be right. We’ve been through a pretty tough summer with no complaints whatsoever.”

As builders of quality, energy-conserving homes, Nelson/Lakey Builders, Inc., are sold on the Carrier line. They’re sold on the service they get from Midwest Heating & Cooling, their local Carrier Dealer. And they’re sold on

the competitive edge they get from Carrier’s CLIC computer.

To find out what CLIC can do for you, just complete and mail this coupon. Or write us: Carrier Air Conditioning, Dept. RNC, Carrier Parkway, Syracuse, New York 13221.

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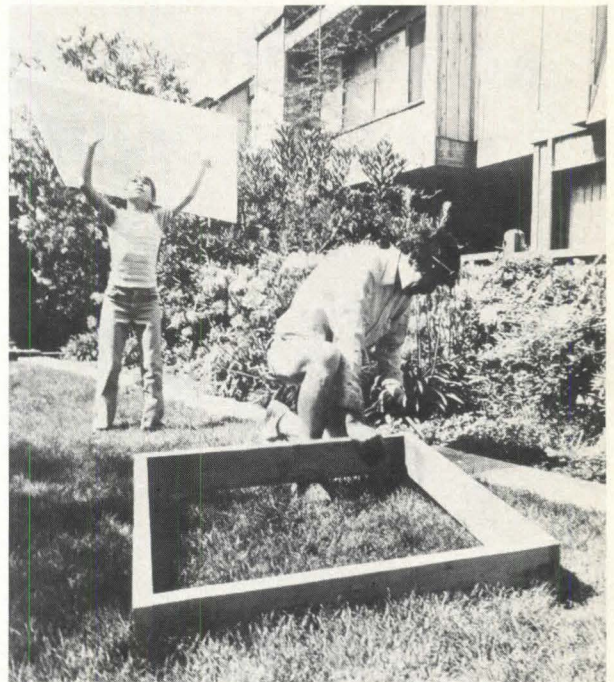


Division of Carrier Corporation





**"Skymaster" skylights** (above) consist of two layers of Eastman Uvex plastic sheeting separated by an insulating air space. Upper dome and lower diffuser sheet are electronically sealed. Tub-Master, Orlando, FL. *Circle 207 on reader service card*



**Translucent skylight** (above) is constructed of fiber glass reinforced plastic and a polyester resin. Skylight can be easily installed with a box-type wood frame. PPG, Pittsburgh, PA. *Circle 210 on reader service card*



**Thermalized aluminum window** (left) for replacement use features PVC vinyl breaks. Fully weatherstripped, condensation-resistant unit is offered with double or triple insulating glass. Season-All, Indiana, PA. *Circle 211 on reader service card*

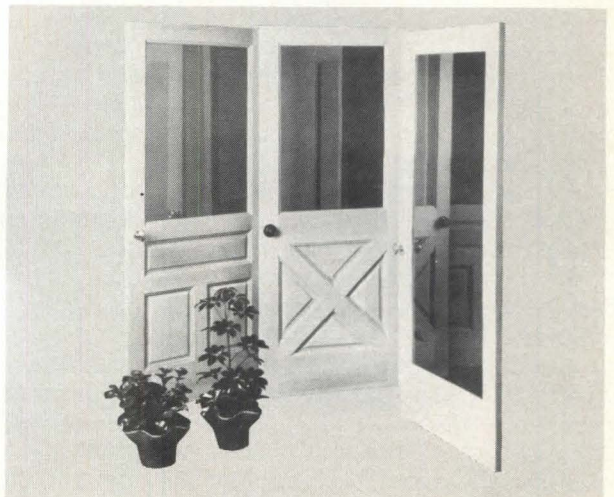


**"Energy-Guard" fir doors** (below) feature tempered insulating glass. Double-thickness wood panels add insulation. Cross-buck, French rim and sash styles are offered. Nicolai, Portland OR. *Circle 212 on reader service card*



**"Perma-Sheild II" sliding door** (above) features low-maintenance vinyl sheathing over a preservative-treated wood frame. Double-pane safety insulating glass is standard. Andersen, Bayport, MN. *Circle 208 on reader service card*

**Double-hung wood window** (left) features a built-in triple-track aluminum storm and screen combination. Unit with a factory-installed lock is prefinished and weatherstripped. Malta, Malta, OH. *Circle 209 on reader service card*



# Put in a General Electric model with the features women really want.

Your apartment house investment will pay bigger returns when the building is fully tenanted. And one way that helps to get and keep tenants is to give them a refrigerator with the features they really want. The features that the ladies like are: No Frost, Larger Capacity and the Automatic Ice Maker.

General Electric has three new models you can choose from to give your tenants 1, 2 or all 3 of these features.

First, there's GE's TBF-14S, a 14.2 cu. ft. No Frost refrigerator/freezer. Both the freezer and fresh food sections are no-frost with separate temperature

controls for each section.

Second is the TBF-16S which adds to the preceding features a larger capacity of 15.6 cu. ft. and a power saver switch to conserve energy.

Third is the TBF-16A that adds the Automatic Ice Maker, along with the power saver switch.

With each, comes General Electric Customer Care<sup>®</sup> service which means we have Factory Service Centers covering over 800 cities plus more than 5,000 franchised servicers across the country. Many of them are listed in the Yellow Pages.

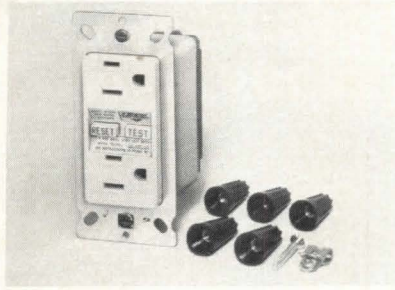


TBF-14S

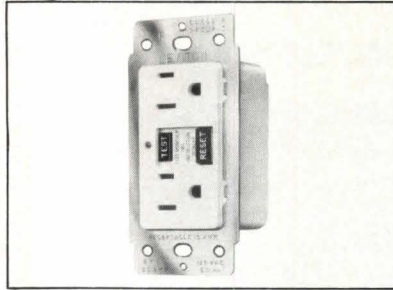
TBF-16S

TBF-16A

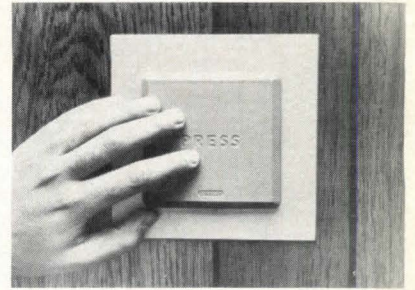
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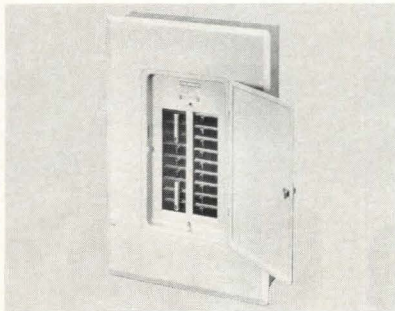
**Ground fault interrupter receptacle** (above) is available in 15 and 20 amp, 125v ratings. Designed for use indoors or out, the unit can be easily installed in standard single-gang outlet boxes. A test circuit is built-in. Receptacle comes in brown, white or ivory. Slater, Glen Cove, NY. *Circle 252 on reader service card*



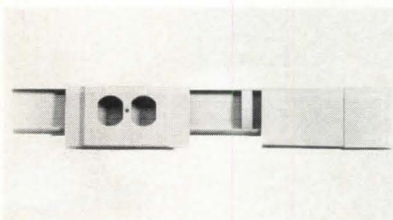
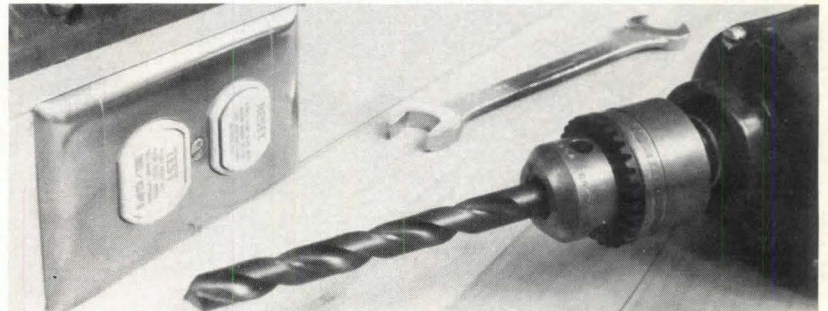
**Ground fault interrupter receptacle, "Sure-Gard III"** (above), is a thin nylon unit designed to fit standard size wall boxes without spacer plates. An indicator light signals when the duplex receptacle is powered. UL-listed unit comes in white, ivory or brown. Leviton, Little Neck, NY. *Circle 255 on reader service card*



**Electric momentary contact switch** (above) can be used to activate an automatic garage door opener, or for any household use requiring a low voltage switch. Four-inch square vinyl push plate with a two-conductor lead cord is easy to install. Stanley, New Britain, CT. *Circle 256 on reader service card*



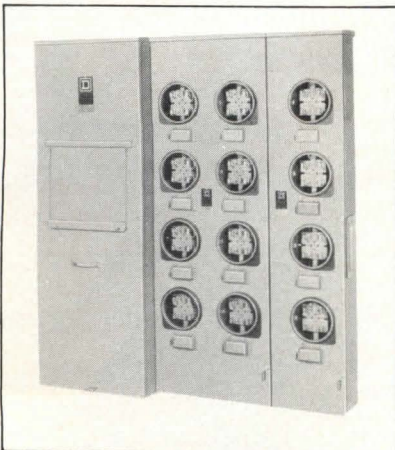
**Three-phase load center** (above) features 1'' or 1/2'' module plug-in branch circuit breakers for maximum flexibility. A neutral bus bar can be moved to either side of the enclosure to meet varying requirements. Panels have sub-feed capability. GTE Electrical, Stamford, CT. *Circle 253 on reader service card*



**Baseway™ raceway** (above) provides electrical outlets anywhere in a room. PVC enclosures conceal and protect exposed wires. Baseway™ strips come in 10'' and 12'' lengths and can be easily cut to size. Accessories include end caps, corner pieces and outlet covers. Carlon, Cleveland, OH. *Circle 258 on reader service card*

**Ground fault interrupter safety control** (above) can be used as a feed-through device to provide on-site protection of a series of 15 or 20 amp 125v receptacles regardless of their configuration. Large, easy-to-read control buttons make the UL-listed unit easy to identify. 3M, St. Paul, MN. *Circle 257 on reader service card*

**Rain-proof group metering device, EZ METER-PAR®** (below), features a one-piece sliding joint stack and a VISI-TITE® joint bolt. Equipment ground terminals are factory installed in the top wiring gutter and are field movable. A mounting channel is permanent. Square D, Lexington, KY. *Circle 254 on reader service card*

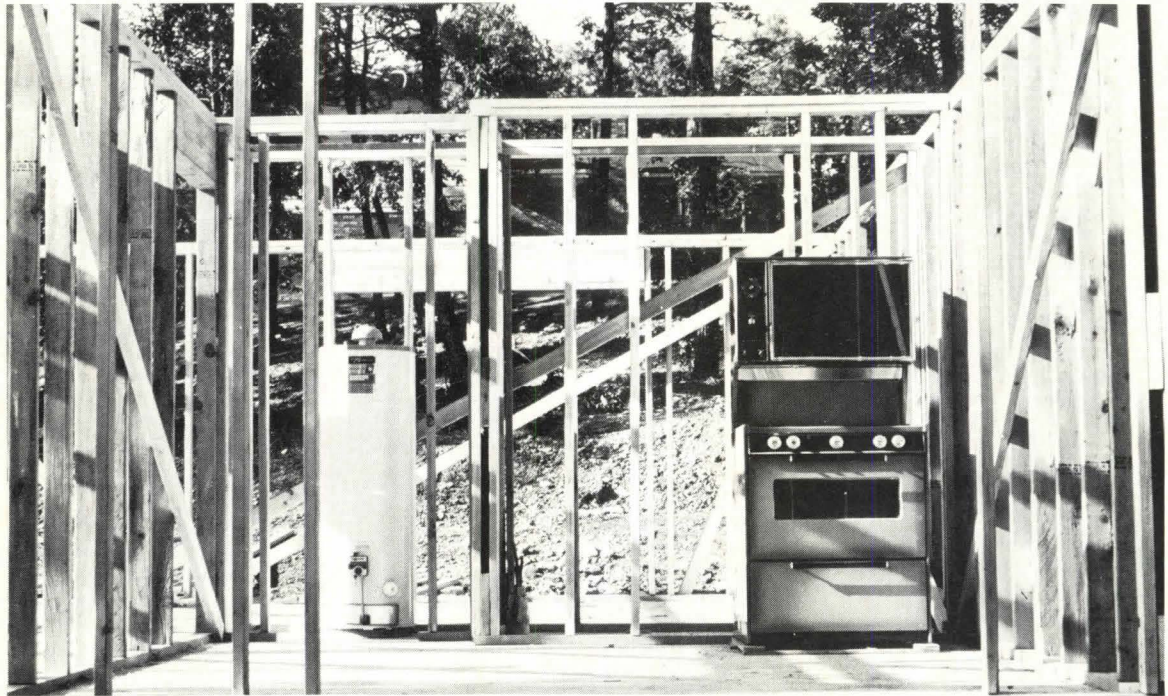


**Hair dryer** (above) for use in pool locker rooms is a modification of a standard semi-recessed hand blower. The 3-minute timed, high-velocity warm-air unit has a stainless steel housing, all-metal construction, vandal-resistant design and is UL-listed. Electric-Aire, South Holland, IL. *Circle 259 on reader service card*



**Central cleaning power unit, "Husky"** (above), is the base of an economy-priced built-in vacuum system designed for the builder. Available with large disposable paper or washable cloth bags, unit has a 110 cu. ft. per minute air flow. Vacu-Maid, Ponca City, OK. *Circle 260 on reader service card*

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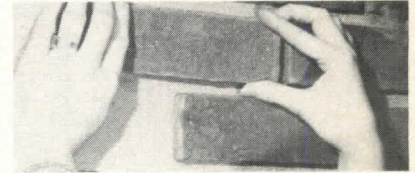
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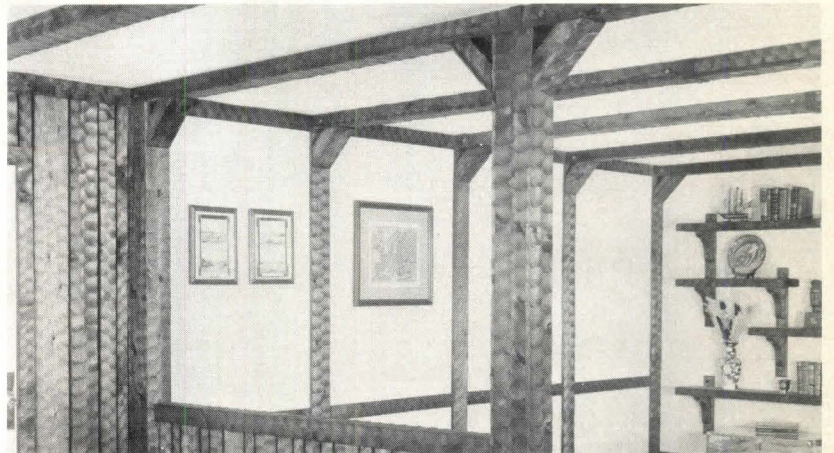
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## INTERIORS



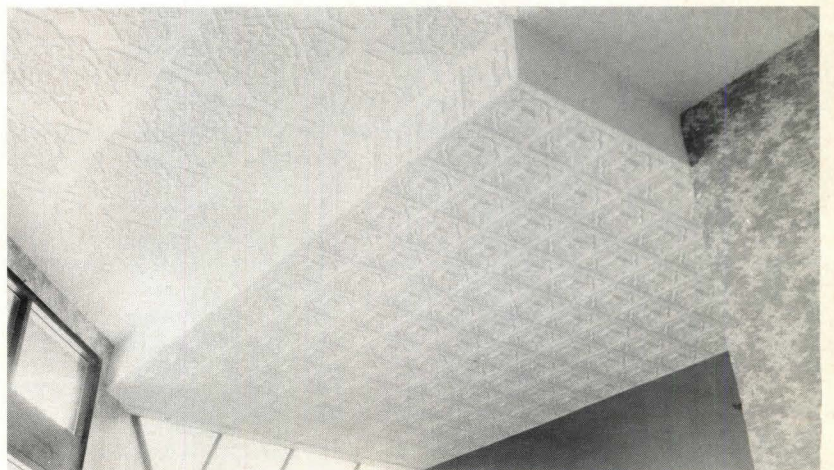
**Kiln-fired Brickettes®** (above) have a natural rustic look. Easy-to-install, fireproof bricks are 1/2" thick. In addition to the "Heritage" blend (shown), twelve varying color blends are available. Modern Methods, Owensboro, KY. Circle 217 on reader service card

**Ventilated closet shelving, "Finishing Touch"** (left), comes in lengths up to 12 ft. The line includes shelving for storage, linen, clothes hangers and shoe racks. Units are constructed of vinyl-bonded steel rods. Diston, Hialeah, FL. Circle 216 on reader service card



**Hand-hewn wood interior accents** (above) give an Early American look to this living room. The hand-rubbed, walnut-finished line includes posts, beams, braces and door and window trim pieces which can be installed in a variety of ways. Touchwood, Maxton, NC. Circle 218 on reader service card

**Molded plaster ceiling tiles** (below), are cast in intricate three dimensional patterns. Highly decorative traditionally-styled tiles provide an old-world look. "Provincial" (shown) and "Starlite" designs are available. Each tile measures 2' square. Poudrier Ceiling Tiles, Orange, CA. Circle 219 on reader service card





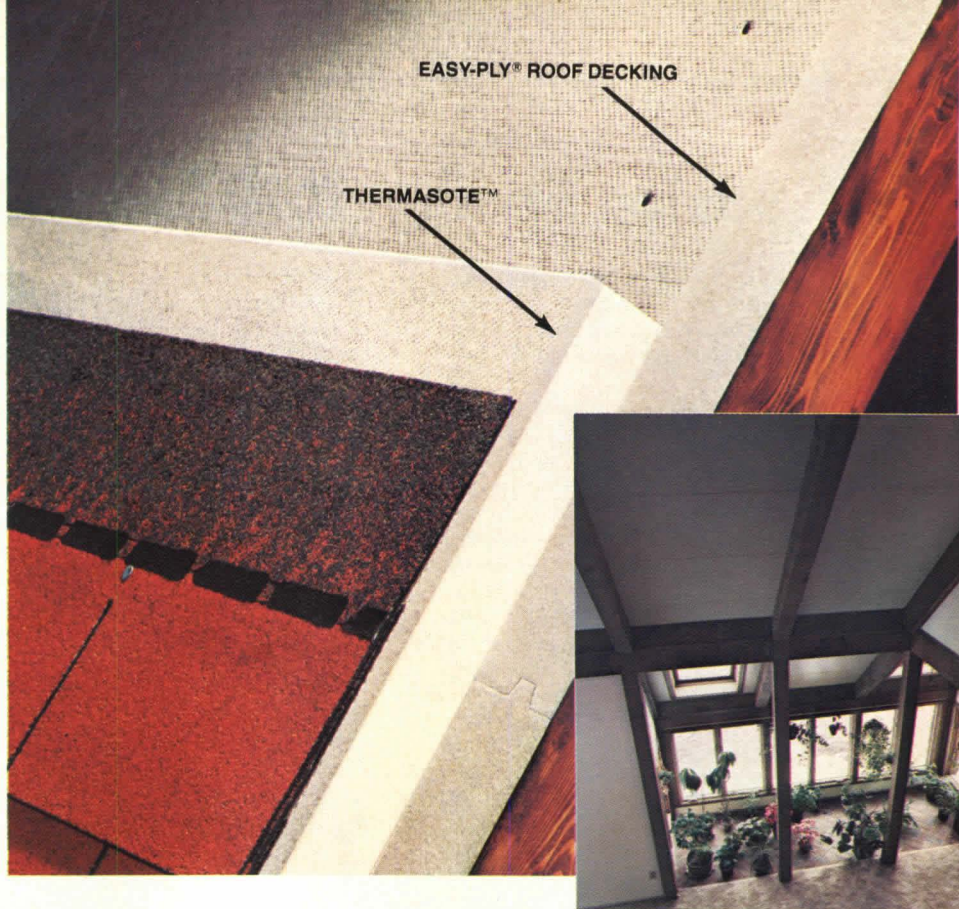
Decorative wood strips of California redwood (above) are rough on one side and smooth on the other. The reversible strips are 3 7/16" wide, and are available in one, two, three and four foot lengths. Pope & Talbot, Portland, OR. Circle 213 on reader service card



Decorative wall panels, "Mark V and Mark X" (above), have real wood veneers. The 7/16"-thick panels, manufactured in a variety of colors and species, are accented by wide, contrasting grooves for a random-width wood-plank effect. Roseburg Lumber, Roseburg, IL. Circle 214 on reader service card



Architectural ceiling dome (above), molded of lightweight polymers, visually expands a room. Factory-primed units, which can be finished as desired, are available in 3' and 5' diameters. A choice of three interchangeable decorative rims is offered. Focal Point, Smyrna, GA. Circle 215 on reader service card



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More than 70 years  
of technology for  
building and ecology.

# Saving Energy: Booklets tell you how

The booklets described below deal with one theme: energy conservation. The first five discuss windows; they *all* can help you gain valuable information on a timely topic.

**Window design** is a significant factor in determining a building's energy consumption, according to a study from the Commerce Department's National Bureau of Standards. *Window Design Strategies to Conserve Energy* analyzes the effects of windows on energy consumption. Advantages, disadvantages, costs and potential energy savings for 33 design factors are included. This 209-page book is available for \$3.75 a copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

"**The Window Book**" deals with such problems as condensation, drafts and conduction heat losses. Complete with diagrams, the publication includes a summary of the essentials of a good new window. The 135-page book may be obtained by sending \$1.00 to "The Window Book," Season-all Industries, Indiana, PA. 15701.

**Windows and energy saving** is discussed in a pamphlet prepared by The Federal Energy Administration. "Energy Conservation with Windows" explains how properly designed windows can actually reduce heating and air conditioning costs. A list of references and sources is also included. Andersen, Bayport, MN. *Circle 300 on reader service card*

**Special glazing material** is the subject of a 12-page cost study brochure. The booklet compares the potential fuel cost savings and heat loss differences of Tuffak-Twinwal™ glazing versus conventional glass installations. Actual case studies for nine U.S. cities with widely differing climates are presented. Rohm and Haas, Philadelphia, PA. *Circle 301 on reader service card*

**Windows and energy conservation** is discussed in a question-and-answer format. A glossary of terms related to the energy savings potential of windows is included with illustrations to help clarify them. Charts are shown which can be used to help

determine dollar savings on utility bills for heating and air conditioning. Capitol, Mechanicsburg, PA. *Circle 302 on reader service card*

**Energy-efficient house plan** is shown in an issue of Georgia Pacific's *Design Newsletter*, the first of a series of such plans. Three exterior versions are shown: one applicable to the Pacific Northwest, one to the upper Midwest and the third to the Southeast region of the U.S. Each is designed to be energy-efficient in its own geographical area. Georgia-Pacific, Portland, OR. *Circle 303 on reader service card*

**Fireplaces** is the subject of a 36-page in-depth report. An improved fireplace design, suggested by the author, is depicted. The booklet includes a section on how to use a unit's warmth to its fullest potential. A copy of *The Norwich Laboratory Report on fireplaces and how to use them to conserve energy* may be obtained by sending \$2.00 to Fireplace Report, Norwich Laboratory Inc., 14 Prentice Street, Norwich, NY. 13815.

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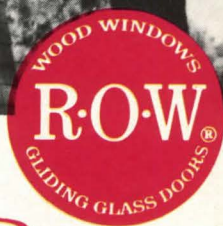
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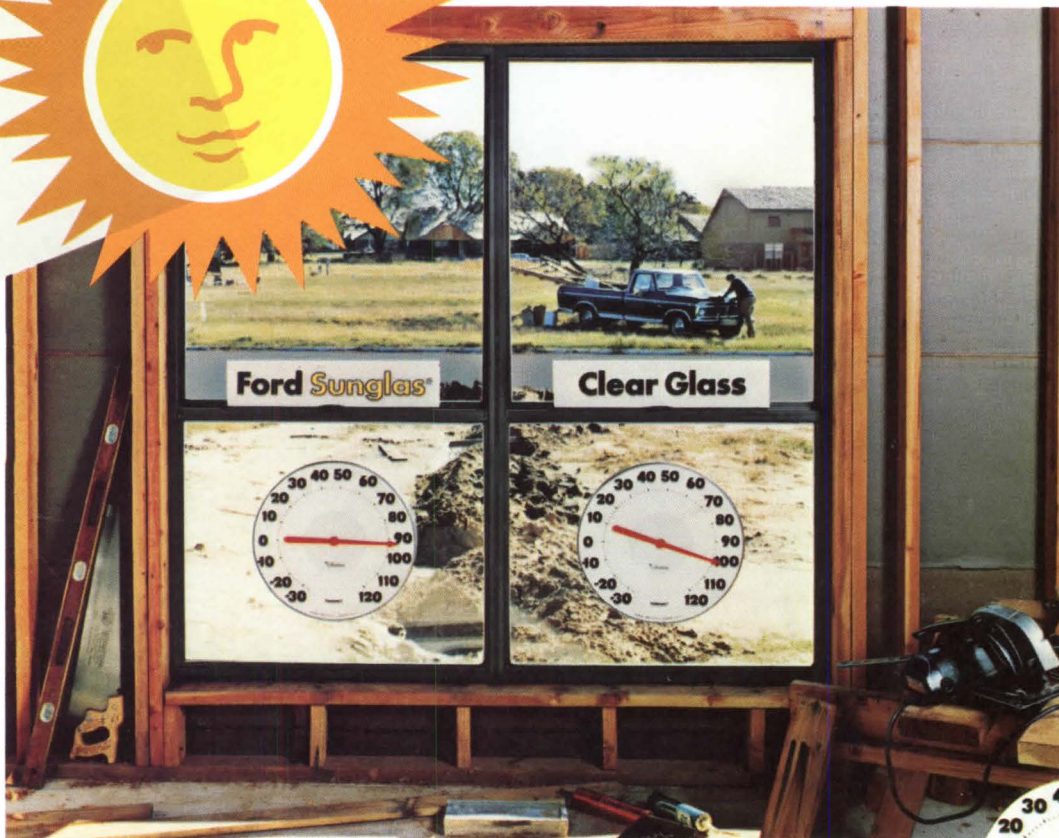
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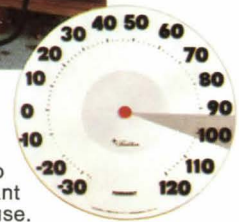
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**Eight Degree Difference!** The demonstration pictured took place in Tulsa, Oklahoma. Regular dial thermometers were attached to the inside of two insulated glass windows, one with the outside lite glazed with Sunglas. The windows were side by side, on the same plane. The thermometer attached to the Sunglas window registered eight degrees cooler than the thermometer attached to the clear glass window after being exposed to the sun for nine minutes. The thermometers measured primarily the difference in radiant energy passing through the glass, not the average ambient temperature in the house.



## Sunglas... the new low-cost energy saving glass.

Sunglas stops 24% of the sun's heat by absorbing and reflecting the sun's rays. This means your customer's air conditioner won't have to work as long or as hard as with clear glass. Single-strength Sunglas, with its 0.87 shading coefficient, has a relative heat gain value almost equal to thicker  $\frac{1}{8}$ " bronze. Yet single-strength Sunglas is 43% cheaper based on a comparison of glass manufacturers' published trade prices. Double-strength Sunglas has a slightly better heat gain value than  $\frac{1}{8}$ " bronze, and is 28% cheaper!

**Sunglas lets the daylight in.** Single-strength Sunglas lets in 23% more daylight than  $\frac{1}{8}$ " bronze glass, so artificial lighting costs could be reduced. And because Sunglas looks like clear glass, customers enjoy natural outdoor colors. That "clear glass look" also makes Sunglas aesthetically right for any residential design.

Sunglas is a registered trademark of Ford Motor Company.

## Single-strength Sunglas cuts ultra violet rays 22%.

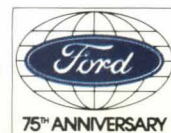
This reduction over clear glass is important in protecting carpets and draperies from the sun's fading effects. And Sunglas is the *only* solar control glass available in the traditional single-strength window glazing thickness. For patio doors and non-residential applications, Sunglas is also available in thicknesses up to  $\frac{1}{4}$ ".

## Double-glazed Sunglas... even more efficient.

Use Sunglas in an insulated unit or as hang-on type sun panels and the shading coefficient is reduced to only 0.77—cutting heat gain by 26% versus single-glazed clear glass.

A complete Sunglas brochure is available. Write: Ford Glass Division, Sales and Marketing Office, One Parklane Blvd., Dearborn, MI 48126.

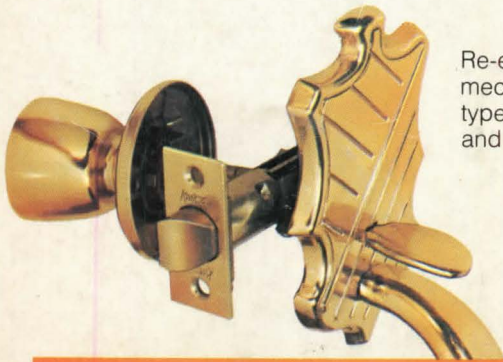
**FORD GLASS**  
FORD GLASS DIVISION



# Kwikset entrance handlesets. The eye-opening door-openers.

Kwikset entrance handlesets are elegant and beautiful, rugged and secure. They offer the protection of an extra-security cylinder deadlock with 1-inch deadbolt, plus a completely re-designed rack-and-pinion latch interior mechanism. This new engineering feature makes Kwikset handlesets easier to install, easier to operate. If you're building good-looking, quality homes or apartments, install these eye-opening door-openers and make a lasting first impression on your prospects.

Re-engineered latch interior mechanism is rack-and-pinion type for faster, easier installation and smoother operation.

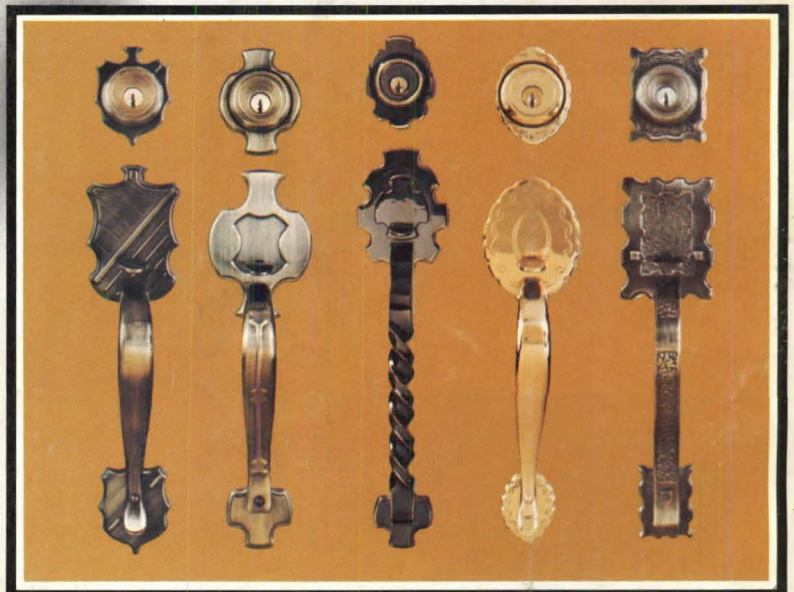


Ebony Brass (seen here on Tampico design and also available on Malta) is the newest of a variety of distinctive and durable handleset finishes.

A little something  
Kwikset's  
done  
for you  
lately.

Interior of new latch interior mechanism shows spindle, which is easily reversed for right- or left-hand doors.

With five designs from which to choose, there is a Kwikset entrance handleset to enhance every style of architecture and interior decor.



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America's Largest Selling Residential Locksets