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**Election '66: tighter purse strings ahead for subsidies**

The surge of Republican strength in the November Congressional elections spells trouble for housing subsidy programs into which the Johnson Administration had carefully breathed life the past two years. The GOP gained 47 seats in the House, where the crucial votes on housing legislation have taken place. The gain more than made up the 38-seat Republican loss in the Goldwater debacle of 1964. Although Democrats retain a 61-seat majority in the House, the balance of power now shifts to a renewed Republican-Southern Democrat coalition which frustrated many previous Administration plans.

**Non-spenders.** One certainty is that new spending proposals will be almost impossible in the new House, and some recent subsidy programs, such as rent supplements and demonstration cities, may have trouble coming up with enough money to make any kind of a showing.

In 1966 Republicans sought to pare these items, claiming they added to the inflationary fires. They almost won their point too:

Rent-supplement appropriations, never popular even in a House with two Democrats for every one Republican, won two approvals in 1966 by the narrowest margins of any issue—eight votes in March and four votes in May. Sixty-five Democrats voted with the GOP in the first test, 69 in the second.

Demonstration cities legislation cleared the House on two separate occasions by 37 votes and 6 votes, and 22 of the men who contributed to the 37-vote margin will not return in January. Republicans had aimed especially at stripping authority to spend $900 million for model cities and came within 31 votes of winning. But Congress did not appropriate the actual dollars to cover the authorizations, and the expanded Republican contingent guarantees a tough fight for the money.

The Administration is already digging in. "This is not a partisan issue," Housing Secretary Robert Weaver asserted at HUD's first birthday celebration two days after the election. "The program is now part of the law of the land and usually when a program is the law, it is funded."

**Goldwaterites.** The election indicates that the backoff from liberalism which ironically sprang to life in the wake of the Goldwater defeat has reached Congress. But it also is clear that the new GOP representatives and senators are not knee-jerk disciples of Goldwater policies.

For instance, the most widely-known new GOP senators are all moderate to liberal on social legislation: Charles Percy of Illinois who was cool to Goldwater in 1964, former Gov. Mark Hatfield of Oregon, and Edward W. Brooke of Massachusetts, first Negro elected to the Senate in 95 years.

**Backlash '66: a "go slow" but no "stop" sign for bias laws**

Don't push hard either way. That's the clear message politicians are reading into the November elections. The white backlash against anti-bias laws aimed at housing was not as strong as touted neither was the demand for open housing.

As a result any drive against housing bias may take entirely different forms in 1967. Informed observers believe that President Johnson will again ask Congress to enact an open housing bill next year, but that the measure will receive much less lobbying muscle from either the Administration or civil rights groups. Congress' reaction is bound to be different, too. In 1966, a watered-down bill banning race bias in new apartments and homes passed the House by a 222-to-190 vote, but 41 of the 220 who supported the bill will not return to Congress. The vote on open housing did not play a large part in defeat or victory for the bill's supporters. The narrow victory margins of Rep. Roman Pucinski and some fellow Democrats from Chicago neighborhoods where riots occurred last summer were the most noticeable impact.

**Sophistication.** In fact, outside the deep South voters clearly demonstrated enough sophistication to reject gut appeals to race prejudice. The prime example was defeat of Maryland paving contractor George Mahoney and his "Your home is your castle" slogan. (News, Nov.) Mahoney's single argument caved in under a bombardment of votes. Likewise the frank racial appeal of Justice Jim Johnson in Arkansas was repudiated by election of the state's first Republican governor, Winfield Matthews.

And in California, a belated appeal to defeat three Supreme Court justices who had upheld the Rumford anti-bias law failed. Assemblyman Byron Rumford, Negro author of the law, failed by 805 votes to win a state Senate seat.

But in Florida Republican Claude R. Kirk Jr. picked up the Mahoney appeal and upset Democrat Robert King High. And an undertone of unrest about open housing laws proved a factor of unknown strength in the victories of Ronald Reagan for California governor and Charles Percy for a Senate seat in Illinois. Other results:

Lower assessments for farmland were passed in California and Texas.

Public housing funds were defeated for the third time in three years in New York State. A measure would have let cities issue bonds based on the full value of property instead of the assessed value.

A housing code failed in Phoenix for the second time in three years by a 67,327 to 57,148 count. The issue has become a cause celebre in renewal and housing circles. The defeat continues Phoenix's status as one of the few major U. S. cities without federally financed renewal.

Mayor Milton Graham, despite support from the Chamber of Commerce and the Real Estate Board, couldn't convince citizens their housing laws couldn't be improved. A Baptist minister, the Rev. Aubrey Moore, led the fight and pleaded with voters to "defend our rights."

On the other hand, the few Alabama Republicans who sought office under a Goldwater label all lost. In the rest of the country those who had supported Goldwater in 1964 didn't brag about it during their 1966 campaigns.

This indicates that if the Johnson Administration can convince the new Republicans that the money for social objectives in the housing area would be well spent, passage would be possible.

**Old and new faces.** Sen. John Sparkman, the Alabama Democrat who has headed the housing subcommittee for years, emerges from the election as one of the strongest men in the Senate and hence an even more potent force in shaping future housing legislation.

With the defeat of Sen. Willis Robertson of Virginia, Sparkman now has his choice of three powerful Senate committees: banking and currency, joint economic, or small business. He is likely to pick the first two while retaining chairmanship of the housing subcommittee.

Larry Winn Jr. of Overland Park, Kan., won his election race (News, Oct.), to become the third homebuilder in Congress. Joel T. Broyhill Jr. won his eight term from a northern Virginia district with a record number of votes, and James Scheuer, the former New York City real estate developer, a second term. Scheuer is a Democrat, the others Republicans.
Mortgages in '67—Housing must go on a treasure hunt

One clear warning for homebuilding has just come from the mortgage banking industry.

Find yourself some new sources for funds. Your old friends are short of cash.

Vice President Richard W. Baker Jr., in charge of New York Life's real estate and mortgage-loan department, described the funds shortage this way in a speech to the Mortgage Bankers Assn.'s convention in Philadelphia:

"There is going to be a real shortage of money next year. Its main effect will be on the residential market."

But the picture may not be so bleak if homebuilding can tap a source of money that it has virtually ignored—the $133-billion pool of capital in the nation's pension funds (News, July et seq.). And this year's money shortage re-emphasizes the need for selling the funds on the advantages of buying mortgages.

Declining savings. The bar graph on this page shows how severe that money shortage has already become for three of the four traditional mortgage-fund sources. Of the fourth, insurance companies, Research Director James J. O'Leary of the Life Insurance Assn. says: "Cash flow for long-term investment has been considerably reduced (from the $18 billion in 1965) due largely to an increase in policy loans and a lower volume of mortgage repayments."

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Depositors. The facts confronting the nation's 6,320 savings and loan associations are also discouraging. By far the largest mortgage lenders, the S&Ls hold 44% of all mortgage debt on one-to-four-family, nonfarm homes. When these funds have drained back, building suffers widely and quickly. From World War II to '64 the S&Ls had only two years when savings inflow fell: by $12 million in 1948 and $235 million in 1957 (line graph). Even during the money squeeze of 1960, the S&Ls gained deposits. But net inflow fell $475 million in 1965, then $2 billion in 1965 and $5 billion this year.

The net inflow of $3.4 billion in 1966 is the lowest since 1952. The S&Ls are lending only $18 billion this year, off 25% from 1965. More important, the net credit extended to the mortgage market—that is, new loans made minus mortgage repayments—will be only $4.5 billion compared with $8.9 billion in 1965.

And experts now doubt whether savings gains will be large in 1967, particularly under federal controls limiting S&Ls' passbook dividends to 4 1/2% in an economy where 6% is available to investors on several government instruments.

'Trickle-down sophistication.' A change in philosophy seems to have over-
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DECEMBER 1966

Circle 51 on Reader Service Card
Discounts charged to builders on FHA-VA new-house loans have reached a plateau for the first time since the great rate escalation set in last December.

While many mortgage centers report some slight downward adjustments in brutally steep discounts on FHA's new Sec. 203b 6% loan, these quotations include the sensitive barometer cities of Houston and Dallas. In five other centers, including Los Angeles and San Francisco, current rates at least $2 to $3 per $1000 small increases persist in only six cities.

Conventional-loan interest rates appear to have peaked, at least temporarily.

Average yields demanded by Eastern investors in the national secondary market ran steady at 6.5 to 6.6% into mid-November, although some light downward pressure seemed to be developing. It was the second straight month that yields had failed to climb (News, Nov.).

The moderation in mortgage rates was in part a reaction to the Sept. 1 turnaround in general interest rates.

Good news. Two other developments dominated the news at the Mortgage Bankers Assn. convention in Philadelphia, and both provide short-term encouragement for builders and lenders.

1. The Federal National Mortgage Assn. raised the ceiling on used-home mortgages that it purchases from $17,500 to $20,000. FNMA thus hoped to revitalize the staled used-home market and also ease the way for homeowners to trade up to new houses. Used homes account for 80% of residential sales.

2. The California State Employees Retirement System committed $66 million to buy home loans in the first half of 1967 at the FNMA price of 94. The $11-million-a-month purchase holds equal to last year's buying rate, and the price provides some support for the 93-94 generally demanded by California mortgage bankers in the private secondary market. This in turn militates against any immediate increase in the current 6 3/4% mortgage interest rate.

Warnings. There is scarcely any other good news for builders. Chief Economist Saul Klamann of the National Association of Mutual Savings Banks painted a dimly seen silver lining for the mortgage bankers' convention, emphasizing that mortgage money would be more readily available in the next six months because of a decline in housing starts and the resulting drop in builders' demands for loans. Klamann's thesis was only moderately comforting to mortgage moderation in itself, but for builders it was like telling a dog he would not go hungry if he ate his own tail.

Klamann was the most hopeful of four economists at the mortgage convention, and even he predicted starts in 1967 would fall well under the 1.2 million projected for 1966. Commissioner Thomas R. Atfall well under the 1.2 million projected and even he predicted starts in 1967 would equal 1.1 million, economists at the mortgage convention, emphasizing that mortgage money would be more readily available in the next six months because of a decline in housing starts and the resulting drop in builders' demands for loans. Klamann's thesis was only moderately comforting to mortgage moderation in itself, but for builders it was like telling a dog he would not go hungry if he ate his own tail.

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The question remained: Where is the money coming from, particularly for construction loans?

"Four of the nation's major commercial banks estimate construction loans will resume no sooner than June 1967," said Vice President King Upton of Boston's First National Bank. And one of New York's major commercial banks disclosed it had turned down $545 million in construction-loan applications in the first nine months of 1966.

Virtually no economist foresaw any real downturn in mortgage rates. "We may have hit bottom, but we are not on the way up," said the Boston 5c Savings Bank's Robert M. Morgan, describing mortgage prices.

It was left for an expert long absent from New York's mortgaging war to sum up the Philadelphia convention with detachment worthy of a spectator. Said Charles G. Haynsworth, who left the mortgage-buying desk at New York's Greens Savings Bank a year ago to become vice president of the Maryland National in placid Baltimore:

"You have topped out on yield and bottomed out on money supply, but there is no improvement visible at either end."

Another California S&L is rescued by the merger route

The brokerage concept that seems to extend throughout the California savings and loan industry has just brought the 53-million Gardena sat. in under the sheltering arms of Union Federal sat. of Los Angeles (assets: $88 million).

The merger is the first instance of a direct purchase of a state-chartered, stockholder sat. by a federally chartered mutual.

Gardena had scheduled items—foreclosed reality and slow loans—of nearly 23% on March 31. The average for the state's 205 state-chartered S&Ls was 5.65% on that date, 5.60% on June 30.

**Mortgage rates take a breather in their run for the money**

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How 106 builders view 1967

12% say 'NO CHANGE'

'We suspect that 'tight money' is going to stymie what might have been a significant increase, due in part to buyers being frightened of the money market'.—Massachusetts

38% say 'UP'

'There does appear to be some conventional money available for first-rate, high-income homebuyers, and I am aiming a subdivision toward this group'.—Florida

'Some easing of tight money at mid-year'.—Minnesota

'Supply will be short due to smaller builders restricting starts'.—California

'We are hopeful that our product and sales technique are improved'.—Florida

'We expect a much better market'.—Texas

50% say 'DOWN'

'Lack of consumer confidence is a much greater problem than tight money'.—Virginia

'I have no money for 1967'.—Kentucky

'Consumer uncertainty about economic conditions and consumer reaction to increased prices'.—Michigan

'Lack of confidence in the economy and foreign policy and cost of financing resale house'.—California

'Almost complete lack of buyer interest—'spooked' is a good way to say it'.—California

'The prevailing attitude among the public that now is not a good time to buy. . . Perhaps 90% of us are building for the same market caused mainly by the price and zoning difficulties of land'.—Maryland

'Manpower shortage'.—Pennsylvania

'Costs are getting out of line. We are being priced out of the market'.—Michigan

Builders' off-the-record outlook: peril and potential

Both the statistics and the quotations above come from 106 homebuilders who responded to a House & Home invitation to discuss privately their 1967 production plans.

The replies were so at variance with the almost-universal bearishness being cranked out by many industry forecasters that NAHB asked—and received permission—to print a sampling of the replies.

Surprisingly, tight money is ranked only as one negative factor by builders expecting to reduce production. Almost as many cite the fact that tight money talk in newspapers and general circulation magazines, along with a declining stock market and forecasts of a 1967 business recession, has eroded consumer confidence.

The optimists are stressing a better product and more sophisticated sales methods, and many are tying in with NAHB's "Buy now" advertising campaign.

NAHB's fall survey of its 450-member Builders' Economic Council found members planning to cut back their own starts by 10% in 1967, the first lower production prediction reported in several years. The BEC expects overall starts to fall 17% in 1967 to about 1 million units, with apartments making the biggest decline.

Demonstration cities act: more housing than meets the eye

In the frantic fight to get President Johnson's controversial "demonstration cities" act through Congress, just about every housing proposal alive was tacked onto the bill to improve its chances.

Many of these special-interest clauses became law. Some change the rules for homebuilders; others affect the cities' capital spending plans—which in turn can aid homebuilders.

New towns. Most significant is "new towns," a legislative proposal that has been pending for several years. Actually, the so-called "new communities" section does little more than increase dollar amounts from $10 to $25 million for the existing FHA Title 10 insurance for land development loans.

The new $25 million-limit program, which must be renewed in 1972, was fought by lobbyists for the cities.

But to give powerful mayors the chance to politic, the site of any new town must be approved by the governor, or the locality if it has self-government.

The politically explosive issue about providing an adequate economic [i.e., racial] mix of housing in new towns was watered down to require only that "adequate housing [must] be provided for those who would be employed in the community or the surrounding area." And new towns now must have "maximum accessibility to any major central city in the area."

Fannie Mae changes. Two amendments of benefit to builders were made in FNSA operations, largely thanks to the lobbying of lawyers hired by Ross Cortese, whose Leisure Worlds from New Jersey to California make him the biggest U.S. builder of Sec. 213 coop housing.

One change lets Fannie Mae make construction advances up to 95% of committed loan value for Sec. 213, Sec. 220, and Sec. 221-d3 units. The administration is cool to putting this into effect but builders are expected to press for quick activation.

The other change knocks out of Fannie Mae's law the requirement that its standby commitments must be offered at prices "substantially below" the market. Housing experts on Capitol Hill presume Fannie Mae will increase its standby fees to keep from being engulfed with commitments.

Mid-income aid. Several minor changes in the sub-market Sec. 221-d3 program could make builder-sponsored projects more feasible. In the past, the d3 units had to be aimed at families or single elderly people. Now the elderly requirement has been lifted so that sponsors can rent up to 10% of the units to non-elderly single persons.

A new program was approved to let non-profit sponsors rehabilitate more than five units with d3 sub-market loans and then sell the units to low-income families with 3% mortgages. This new program, not suggested by the Administration, will get a slow start because of questions over what happens when the buyer wants to resell the renovated unit. Also, it's the only multi-family FHA program not covered by Davis-Bacon minimum wage provisions.

Sec. 221-d3 projects may now incorporate commercial facilities for more than just project residents, a provision first extended to Sec. 220 renewal projects last year. However, builder-sponsored d3s must waive dividends on the equity used for such enlargement.

Urban renewal. Rep. William Widnall (R., N.J.) pushed into law a provision requiring most renewal projects to contain "a substantial number of units" for low- and moderate-income families. The Administration now must decide by regulation exactly how this will be done.

Still another provision allows HUD to probe methods and materials of building to see how "advances in technology" can be applied. But this new program isn't likely to get much money.
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Soaring sales outdate new mobile-home emblem: Would you believe ... 1 of every 5 ... Or even 4?

The brand-new emblem above looms larger than ever in homebuilding's rear-view mirror.

It is the symbol of the most dynamic sector of the housing industry, a part whose sales keep rising, tight money or no. The numbers mean, in the words of the Mobile Homes Manufacturers' Assn., that "one of every six single-family, nonfarm housing starts in 1965 was a mobile home."

But even before the emblem was unveiled last month, mobile-home sales had risen enough to guarantee that the last number will soon be changed—from six to five. Mobile home shipments through September are running 2% ahead of last year. Customer purchases of all units including travel trailers are up 5%.

Starting record. As the politicians say, let's look at the record since 1959:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ONE-FAMILY HOUSES</th>
<th>MOBILE HOMES</th>
<th>TOTAL HOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>1,212</td>
<td>121</td>
<td>1,333</td>
</tr>
<tr>
<td>1960</td>
<td>972</td>
<td>104</td>
<td>1,076</td>
</tr>
<tr>
<td>1961</td>
<td>946</td>
<td>90</td>
<td>1,036</td>
</tr>
<tr>
<td>1962</td>
<td>967</td>
<td>118</td>
<td>1,085</td>
</tr>
<tr>
<td>1963</td>
<td>993</td>
<td>151</td>
<td>1,144</td>
</tr>
<tr>
<td>1964</td>
<td>946</td>
<td>191</td>
<td>1,135</td>
</tr>
<tr>
<td>1965</td>
<td>940</td>
<td>216</td>
<td>1,156</td>
</tr>
<tr>
<td>1966</td>
<td>(est.)</td>
<td>225</td>
<td>1,075</td>
</tr>
</tbody>
</table>

The right hand column shows that annual sales of single-family dwelling units have been virtually static since 1960. But conventionally built houses have sagged while mobile homes have taken a bigger share of the market. This year, for example, mobile homes will pick up 20.4% of total one-family sales, compared to only 8.7% in 1961.

But despite this record, the mobile-home manufacturers do not see themselves in real competition with the conventional-house builder. They have done elaborate market studies which show that their real competitor is the apartment builder. And they are well aware of facts ascribed to Econo-mist George Christie pinpointed last month: In the years just ahead, the number of young marrieds will surge ahead two and one-half times faster than the U.S. population as a whole. Says the MHMA: "About two-thirds of the mobile-home residents considered an apartment building as an alternative form of housing before moving into their first mobile home."

The mobile-home makers are also aiming at the retiree market, which, they say, will double by 1970.

Builder weaknesses. In the MHMA view, conventional-house builders are beset by two handicaps: labor, whose output per man hour is below the national average, and building codes, which often stymie technological innovation. Says MHMA: "There are tremendous opportunities for this industry to take advantage of these competitive weaknesses."

One approach, notes MHMA, is the factory-erected, sectionalized house, which has grown as a kissin' cousin of the mobile-home industry (see p. 86).

The sectionalized house must be re-appraised as part of the mobile-home industry's total marketing strategy, MHMA tells its members. And, the association says, "If our industry elects to ignore the manufactured [sectionalized] home, we suspect other people will pick up the ball and run with it."

Over 800 dealers and mobile home park operators recently organized a separate division and, following homebuilders, are stressing better land planning and adherence to new standards of the U.S. Public Health Service in new parks. They hope the changes attract better financing.

Housing start rate falls to 20-year low in October

Housing activity slowed to an annual rate of 848,000 units in October, off 40% from a year ago and the lowest reading on this volatile indicator since November 1946. NAHB economists expect even worse year-to-year comparisons in November and December, months of high activity in 1965. Some indication the decline may be bottoming comes from a fall of only 2% in the rate of building permits.

Formula to tap 1985 market: regional zoning, subsidies

The New York State Homebuilders Assn. has just urged state officials to do a sharp about-face in government housing policies if private builders are to house the 5.8 million new residents expected by 1985.

The builder committee, headed by Larry Simons of Staten Island, concluded that "an unbreakable mold of outmoded planning and development techniques" was forcing builders to leave lower-priced markets and urged the state to:

1. Broaden regional control of planning and zoning because "there is an almost complete lack of professional solutions to problems of high-velocity growth."
2. Establish individual subsidies for rents (similar to the federal rent-supplement program), and set up state agencies to insure and buy low-cost home loans.

Robert Lautman

Vice President Humphrey elects a co-op apartment

The vice president has sold his suburban Washington house and bought a two-bedroom apartment in Harbour Square, a new co-op complex (above) in Washington's Southwest renewal area. Humphrey's move was expected. Congress considered building an official vice presidential residence this year but deferred plans to hold down inflationary spending.

Since taking office in 1964, Humphrey has chafed at the 45-minute drive from his suburban home to the Capitol. The move slices his travel time to five minutes.

The Humphrey apartment contains a 40-ft. living and dining area and a library with fireplace. Price: about $75,000.
You've got a strong selling point with Safety Shield patio doors. They're made with PPG Herculite® K Safety Glass.

And they're backed by heavy advertising in national publications reaching your best home-buying prospects. Four-color, full-page advertisements in Reader's Digest, Life and other important magazines are getting the word to the home-buying public.

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See us at space 865, National Association of Home Builders Show—December 5-8—McCormick Place, Chicago, Illinois.
When President Johnson gets around to naming members of his Temporary National Committee on Codes, Zoning and Development Standards, he would do well to include a copy of Richard Babcock's "The Zoning Game"* with each appointment.

Babcock, a lawyer and a veteran of Chicago's zoning wars, has turned out a delightful and provocative book that is must reading for every homeowner, developer, real estate man and mortgage lender who has the slightest bit of interest in the nation's urban revolution.

Babcock sees the game thus: "Stripped of all planning jargon, zoning administration is exposed as a process under which multitudes of isolated social and political units engage in highly emotional altercations over the use of land, most of which are settled by crude tribal adaptations of medieval trial by fire, and a few of which are concluded by confused ad hoc injunctions of bewildered courts."

The players. Aided by a Ford Foundation grant, Babcock toured the U.S. and England to find out how the zoning game is really played today. He returned from his travels with these pungent observations about the players:

Lay members of zoning bodies "are still making decisions without the slightest concern for the outside world."

The community "always suspects the residential developer of a secret desire to cater to the 'mass market,' defined as all social levels below that of the person using the term."

The homebuilder "cannot understand why his efforts to provide a supply for a new and obvious demand should be subject to such widespread and emotional criticism. . . . The builder agrees with the critics of his older models because what was done 20 years ago will not sell today."

"The housebuyers of the 1950s are still suspicious of these new ideas and as a practical matter cannot switch their brand."

The developer "now finds himself aligned with professionals whom he formerly regarded as nuts (and who looked upon him as some form of vermin), and he adds a down-to-earth quality to the attack on the absolute presumption of municipal sovereignty in land-use planning."

The planner "would much prefer not to be bothered with zoning."

The lawyer "compounds his own perplexity by his inability or unwillingness to understand the planner's value judgments."

Higher courts "genuinely dislike zoning litigation."

New rules. With such quotable quotes and such eye-catching promotion as the book jacket (see cut), the clear logic of Babcock's suggestions has trouble getting through the sparkle. Even such a capable critic as Wolf Von Eckardt seems bewildered, for he writes that "Babcock all but dismisses the core of the problem: the need for a comprehensive master plan on which rational land use can be based."

In fact, Babcock takes about half the book to point out that a major part of zoning's harm results from a proliferation of municipal master plans—all trying to further the "general welfare." Babcock comments: "The municipal plan may be just as arbitrary and irresponsible as the municipal zoning ordinance if that plan reflects no more than the municipality's arbitrary desires. . . . The trouble with the planning theory is that it enshrines the municipality at a moment in our history when every social and economic consideration demands that past emphasis on the municipality as the repository of the 'general welfare' be rejected."

Ironically, Babcock says this point has never been tested in court. To solve it he suggests that states and regional authorities review zoning decisions when questions of area-wide import are involved, such as transportation and air pollution. He is bored with talk of metropolitan government, and predicts this future for players of The Zoning Game:

"The suburban resident will eventually lose out in his struggle, if not by the illogic of his legal and social position, then by the seduction of federal funds that extract a metropolitan price. The builder will find himself on every side with an inexplicable array of friends and enemies, depending on the needs of the market place."

More new towns enter housing's frosty market

Despite a nationwide housing slowdown, three American companies have begun construction of new towns encompassing 28,000 acres. Their eventual population: 250,000.

After taking on well-paid staffs and heavy financing, the developers can't afford to wait for optimal market conditions. But the three developers point out that transient market conditions are not so critical when weighed against a new town's 15-year life. (A fourth company, General Electric, has compromised by delaying its new town—but only until the spring.)

Here are the three newest new towns:

- A Victor Gruen master plan for Litchfield Park, a 13,000-acre project south of Phoenix, was unveiled last month by the Goodyear Tire and Rubber Company.
- True to the Gruen philosophy, partner Edgardo Contini's plan cuts the desert-like land into 12 villages ringed by sand-belts.
- Versatile Bernard B. Weissbourd of Chicago—nuclear chemist, attorney, and developer—has started an urban project on leased land called Nuns' Island, 10 minutes from Montreal. There will be no home ownership; residents will rent in middle-income high-rises or townhouses. Despite population projections of 50,000, a third of Nuns' 1,000 acres will be open space.

Suburban Verdun annexed the island and is cooperating with Weissbourd to bring utilities to the former Catholic retreat. The first houses will be finished in late spring.

- Ground was broken without fanfare in July at Developer James Rouse's Columbia, a 14,000-acre project between Baltimore and Washington (May, June '66). Completed already: two man-made lakes covering 55 acres, a 288-foot high dam, and a horse center. Soon construction will begin on twelve projects, including high-rise and garden-type apartments. As Rouse aims for a summer opening, his worst-kept secret is that Ryan Homes of Pittsburgh (and points east) is negotiating to become Columbia's major housebuilder.
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DECEMBER 1966
Are U.S. rehabilitation programs working backwards?

Traditionally, landlords have insisted that the quickest way to wipe out slums is to make them more profitable. And, traditionally, the proposition has seemed so absurdly self-interested that housing officials have scornfully ignored it.

But now comes a new voice in defense of higher profits for tenement landlords. And what makes the argument worth listening to for the first time is that it comes not from the legions of the pariahs—the landlords themselves—but from an authority on urban housing problems.

Says Roger Starr: The critics "seem un­willing to understand why rehabilitation programs are so difficult to plan. Just take the profits out of the slums, they say. A better slogan might be: put profits into slums for decent owners so that they will have the means and the incentive to fix them up and keep them fixed."

Starr is the executive director of the Citizens' Housing and Planning Council of New York and one of the most formidable and astute critics of metropolitan housing policies. His lever for upsetting several basic assumptions of federal and municipal housing policies is a newly published book, The Living End: the city and its critics.*

Well-meaning landlords. If Starr is right, then major aspects of federal anti­slum policies are wrong and housing officials are right. Here's why that is:

1. A national program of financial aid is indispensable to help well-meaning landlords of rundown housing.

2. Strict housing codes, enforced with­out regard to the particular situation, are sometimes worse than the disease they were designed to cure.

3. Some sections of a city may always remain slums. Reason: Starr distinguishes between the "economic poor" and the "disorganized poor." The former have some job skills, ambition, and the discipline to rise to middle-class affluence. But the latter, because of patterns of family disorganization, will always remain misfits and will always create new slums.

Starr's acerbic and iconoclastic writing has already outraged at least one important critic—Wolf Von Eckardt—who, in a review of Starr's book, vented his own displeasure and largely overlooked the sub­stance of Starr's proposals. But even Von Eckardt reluctantly agrees on the need for restoring the profit incentive to cure the disease of the slums.

Myopic myth-makers. One reason that urban critics like Von Eckardt are so defensively scornful is that their own objectives—abolishing slums—aren't precise. Searching deeply for causes, Starr blames not planners and housing men for obfuscating the problems of slum housing, but urban critics and journalists.

The simple, galling burden of The Living End is that—despite obfuscation of true principle—man lives for profit: Regulate the profit motive and you regulate both the man and the problem. Since only the government can provide the profit motive in the case of slum housing, cooperation between government and business is indis­pensable.

Yet, Starr contends, the journalists—carrying with them the urban critics—have never been able to get over the archaic notion that the use of public powers for private gain is anything but a form of collusion, favoritism, and dis­honesty. (He likes one housing reporter's writing to "a call to violent revolution penned by an astrolger."

The suggestion that a single cause—dishonesty, as the writers define it—is responsible for problems of low-cost housing confirms the easy notion that a single culprit can be found and pilloried. But at the same time, says Starr, this idea has "confused housing, one of the city's most troublesome problems, in a flood of moral oversimplification."

It has obscured a pragmatic, economic solution by wrongly shifting the problem to the happy hands of aesthetes, abstract egalitarians, and social workers.

And foremost among the myths that journalists have propagated, says Starr, is the myth of the profitable slum.

An "assumption basic to almost all jour­nalistic exploration of the slums is that they are highly profitable to somebody, and that if this person can only be found and forced to reinvest his swollen profits in his starving buildings," decent housing for the poor can be provided.

'Slumlord' Starr. "To this assump­tion," says Starr, "is added the implication that municipal government corruptly pro­tects the profits of the slum owner by not enforcing the laws controlling the condi­tions in such buildings."

Starr's authority for calling these as­sumptions wrong is his own experience, exclusive among urban critics, as a "slum­lord." He was a member of a now-defunct foundation organized to buy and repair slum buildings. The group—called the Conservation, Rehabilitation and Renewal Foundation—was financed by a $250,000 grant from Laurance S. Rockefeller. It purchased two buildings in New York City and deeded them to the Citizen's Housing and Planning Council. And Starr, as the executive director of the council, saw the project through.

"Now he says: "My own experience . . . leads me to think that legal operation is financially impossible."

Starr now believes that such policies as strict code enforcement and rent-escrow programs simply drive the honorable, large-scale real estate operators out of the slums, leaving only small investors and explo­itive cartels who ignore the rules.

His reasoning:

• Most low-rent tenement houses fail to meet code requirements to begin with. Exploitive syndicates simply milk them: the means of bringing them up to standard are beyond the means of the small owner.

• Rent rolls are small; a single un­budgeted major repair can change an annual profit into a loss.

• Rent arrears are common because workers living in slum housing are most likely to be laid off first and rehired last.

• Monthly costs of mortgage service are high, because interest rates are steep and amortization periods short.

• Rate of return on investment is poor. High cash margins limit the profit­expanding leverage of the mortgage.

Realities and renovators. How then, can government administrators get the honest large-scale investors back into the business of slum rehabilitation, help the small owners improve their properties, and simultaneously drive out the major and minor charlatans?

Starr's solutions:

1. Place less emphasis on rehabilitation by nonprofit foundations and church groups. Without the profit incentive, these groups will overlook rental arrears at the expense of maintenance budgets and will eventually run down the projects.

2. Introduce a system of low-low cost, long-term loans to help the honorable land­lord refurbish his buildings.

3. Liberalize code enforcement for the landlord undertaking rehabilitation.

4. Restrict federal rent supplements to tenants of rehabilitated buildings, since rents will have to be raised to pay renova­tion costs, and since most tenants could not bear increased rents.

5. Compel every landlord to sign an agreement to repay and live up to the condi­tions of the loan. If the owner defaults in any way, his property should be expropriated. In this indirect way, exploitive owners, large and small, would be driven out of business.

6. Set up a federal program to break the cycle of disorganized families by plac­ing their children in an "intimate and hu­mane" institution. Starr admits such a plan might be political suicide now, but says the alternative is resignation to the fact that some parts of the city will always re­main a slum.

* Coward-McCann, New York City, $5.95.
Ashley Oaks Apartments, Atlanta, Georgia. This 228-unit garden type apartment is comfort conditioned by individual York Flex-O-Matic® air conditioners, combined with Borg-Warner electric furnaces. Owner and General Contractor, C and A Land Company; Architect, Van Fraser, A.I.A.; Mechanical Contractor, General Heating and Air Conditioning Company; Plumbing Contractor, General Mechanical Corporation.

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For more facts, contact your nearby York Dealer. Or write York Corporation, subsidiary of Borg-Warner Corporation, York, Pennsylvania. In Canada, contact National-Shipley Ltd., Rexdale Boulevard, Rexdale, Ontario.
Housing on skids? Kaufman & Broad ups earnings 300%

Despite a generally distressed housing market, this national producer of $10,000 to $20,000 dwellings has just announced record earnings of $1.2 million, or $2.01 a share, on peak sales of $31 million for the nine months ended Aug. 31.

The company takes full title to the house and lot. **Back on the up staircase.** This year's performance represents a spectacular turnaround for K&B, one of housing's fastest growing companies since its organization in 1957. A sales decline set in during 1964, and 1965 was just a hard-luck year. Bad weather halted construction in the Midwest for months, and the heaviest rains in 60 years made building impossible for three weeks in California. Detroit ran into labor shortages, and strikes retarded building in Phoenix.

But amid all the troubles listed in President Broad's annual report of 1965, there appeared one note that explained much of the success that would come in 1966: "The company's working capital, supplemented by established unsecured commercial bank loan arrangements, is considered adequate for planned operations. The company does not anticipate the need for any additional major financing at this time."

**Housing stock index posts first advance since April**

Kaufman & Broad's common stock, which gained 1%, to $11, on favorable earnings news last month (see story above), led house & home's index of 72 housing issues in its first gain in eight months. Savings and loan shares advanced generally despite poor earnings. Averages:

- **Sept. 6 Oct. 7 Nov. 4**
  - Building ...... 4.60 4.37 4.56
  - Prefabrication . 1.75 1.71 1.63
  - S&Ls ...... 5.67 5.59 5.71
  - Mortgage banking. 8.60 8.58 8.76
  - Land development. 5.13 4.99 5.04

**Average** ...... 5.25 5.20 5.29

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**Florida's Gulf American buys 55,000-acre ranch in Arizona**

The nation's biggest land developer, riding on record earnings for fiscal '66, has pulled off one of its most successful purchases. Miami-based Gulf American gets the old Baca Float Ranch, prime valley land off one of its most successful purchases. The company has plenty of what it calls "investment acreage"—i.e., lots for sales until it gets its money and the owner associations for construction money but gets mortgage companies for any additional major financing at this time.

The company avoids an accounting practice common to many builders: It does not account for sales or earnings on dwellings until it gets its money and the owner takes full title to the house and lot.

**Short-term business loan rates**

<table>
<thead>
<tr>
<th>Loan Size</th>
<th>New York City</th>
<th>7 other Northern &amp; Eastern cities</th>
<th>11 Southern &amp; Western cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500-1,000</td>
<td>6.57+ (1.30)</td>
<td>6.57+ (1.30)</td>
<td>6.57+ (1.30)</td>
</tr>
<tr>
<td>$1,000-2,000</td>
<td>6.57+ (1.30)</td>
<td>6.57+ (1.30)</td>
<td>6.57+ (1.30)</td>
</tr>
<tr>
<td>$2,000-5,000</td>
<td>6.57+ (1.30)</td>
<td>6.57+ (1.30)</td>
<td>6.57+ (1.30)</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Board, September 1966.
BUSINESS IN THE MAKING

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


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MIDWESTERN MODEL has 1,988 sq. ft. of indoor living plus 300-sq.-ft. atrium, viewed above from dining room. Price: $32,900 in St. Louis.

WEST-COAST MODEL has 1,790-sq.-ft. indoor area plus 360-sq.-ft. atrium, seen here from family room. Price: $32,950 in Huntington Beach, Calif.

Here are two approaches to the atrium plan—and both appeal to buyers

Any idea that today's homebuyer won't accept an offbeat floor plan is dispelled by the two atrium houses shown here. Each is selling as well as conventionally planned houses in the same subdivision, according to the builders.

But even though both atriums provide outdoor privacy and bring extra daylight into the houses, they are hardly similar. In Fischer & Frichtel's St. Louis model (above), the atrium is primarily an extension (physical in warm weather, visual in cold weather) of the indoor living areas. By contrast, the atrium in Robert H. Grant & Co.'s Huntington Beach model (below) also serves as a large entry courtyard and as an outdoor hallway between the bedrooms and family room. Double paneled doors at the rear of the court open into an entry gallery and the formal living and dining area.
"We're not going to louse up our reputation for 50 bucks."

'Competition in Chicago is so tough a good reputation can make the difference in making or losing a sale," says Fred Allen (left).

"So we worked hard at building a good reputation. We chose the best locations we could find for our condominiums, designed them carefully and used the best of everything."

"And we're not about to risk our good name by installing a cheap dishwasher. We use KitchenAid."

"Sure, KitchenAid costs more," Jack Stone says, "but it's worth it. Our customers know the KitchenAid name. They know KitchenAid quality. When they see a KitchenAid dishwasher, it's another sign that we build in quality."

"I was a custom builder—homes in the $40,000 to $80,000 class—before Fred and I became partners 4 years ago," Jack adds, "and I never used anything but KitchenAid dishwashers."

"By mid-1967, we'll have six condominium projects completed in the Chicago area, and each apartment will have a KitchenAid dishwasher."

So if you're the kind of builder who wants to make—and keep—a good reputation, pay a little more and get KitchenAid. It pays off for Fred Allen and Jack Stone. And probably will for you, too.

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Where should you go first with real money problems?
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Armstrong Cork
Barclay Paneling
Behr Process
Black & Decker
Borg-Warner
E. L. Bruce
Carrier

Chemstrand
Cook Paint
DAP
Daubert Chemical
Devoe & Raynolds
Dow Corning
DuPont Paint
Edison Electric Institute
Empire Oil
Flecto
Formica
Frontier Fence
W. P. Fuller Paint
GBH Way Homes
General Electric
Georgia-Pacific
B.F.Goodrich
Harrison Paint
Homestead Corp.
Honeywell
International Mill & Timber

Knape & Vogt
Krylon
Lennox
Libbey-Owens-Ford
Lowe Bros. Paint
Magicolor Paint
Marsh Wall Products
Martin Senour Paint
Masonite
Minwax
Miratile
Benjamin Moore Paint
Mosaic Tile
National Lead
National Oak Flooring
B. F. Nelson
Owens-Corning Fiberglas
Paragon Paint
Reynolds Metals
Rolscreen
Ruberoid

Ryan Homes
St. Charles Kitchens
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LETTERS

The better sell

H&H: We were especially impressed with your October editorial ["If retailers can sell color TV sets at 36% interest, why can’t we sell more houses at 7% interest?"] We feel that the philosophy of the real-estate industry is almost as much to blame for the current crisis as the money situation.

JAMES C. VANDERMILLER, assistant branch manager Mortage Investments Co. Colorado Springs

The investment sell

H&H: Every so often we encounter a prospect who rationalizes himself out of buying a home by arriving at some astronomical total price for the house after adding up all the payments he will make over a period of 25 or 30 years. Usually he comes up with a figure that’s about twice the purchase price of the house. Almost always his erroneous arithmetic includes taxes and insurance, which, of course, are not a part of the purchase price except in his reasoning.

Often this person is upset by simple interest rates of 6%, 7%, or even 8%. In reality, even 8% simple interest is a bargain compared to what he is paying on his car, furniture, or TV set. On these chattels he is paying discount interest which amounts to 12% to 20% simple interest. Strung out year after year, these principal and interest payments will aggregate many times the original price.

What’s more, eventually all these chattel purchases generally wind up on the junk heap in far less than 25 or 30 years.

Over a 25-year period, a home is a great investment. Not only does it tend to increase in value in our inflating economy, but it may have actually cost nothing when the individual sells it. And in millions of cases, the original buyer will even make a profit when he finally decides to sell.

Community swim clubs

H&H: My compliments on your attractive article about community recreation centers and swimming pools [Sept.]. In planning the EdenWood Swim Club [shown right], we faced the usual problem: the design freedom of the free-form pool versus the popularity of the competitive (25-meter) pool, and I believe we have come up with one of the most attractive and unique designs ever created. The pool has six racing lanes, separate 5-meter and 1-meter diving wells, a king-size slide area, and a separate kiddie pool.

A covered patio [see plan] has worked out very satisfactorily as an area for bridge games, dancing, and other community functions.

The club was planned to accommodate 400 families. We expect it will be the first of several at Edenwood, which will ultimately have more than 2,000 lots. Edenwood houses are in the medium-price bracket—from $20,000 to $35,000.

W. C. HOWLEY, secretary-treasurer Edenwood Developers Cayce, S. C.

The average American homebuyer today takes out a mortgage of nearly $20,000 on a $25,000 house. At 7% interest, he will pay $42,408 principal and interest in 25 years. Income-tax deductions of $22,408 (for the interest) will give him an effective rebate of $6,722. Together with his downpayment, the $25,000 house will actually cost him $40,880. By using the most conservative estimates of increasing real estate values, he can figure that the house will be worth no less than $40,000 after 25 years.

Now let’s assume the same individual buys the average number of new or used cars during this same period. This would be 8 new cars or 12 to 14 used ones for a total of $23,000 (considering trade-in values). This does not take into consideration that new-car costs increase each year, but is based on present costs. Altogether, with interest at the lowest possible discount rate, the total cost is $44,000. And after 25 years Mr. Average American Buyer winds up with a car worth $1,600.

JOE WILSON Happiness Homes Clute, Tex.

A newsman’s view

H&H: HOUSE & HOME is still the best business publication in the shelter field. I would make one suggestion, and it applies to almost every magazine, whether consumer or professional: Somehow make it possible for us to find the editorial content and to distinguish it visually from the advertising.

This, I think, is especially important in a magazine such as yours that has a completely independent editorial policy. I’m sure the majority of your readers, though sophisticated, are not expert enough to fathom the makeup.

GLENN C. FOWLER, real estate editor The New York Times New York City
Only Westinghouse gives you the No Turn Speed-Broil® Range: broils both sides at once.

For faster steaks and sales.
The exclusive Westinghouse No Turn Speed-Broil Range makes broiling faster and easier. Makes your sales easier, too. Why? It's got an advantage you can show...that your prospective customers can see.

And where do they see it? In the kitchen. Where most of your sales are clinched. So it makes sense to spend a few more dollars in the kitchen. And you can always save a bit on construction costs to do it. Exclusives like the No Turn Speed-Broil really make your kitchens stand out. And your sales.

You can be sure if it's Westinghouse.
The Q BLOCK® Program

stacks everything in your favor

When you’re working with quality, things just naturally fall into place. Take the new Q BLOCK program for example. It wasn’t long after block producers across the country adopted this national quality control program that building professionals were also eyeing its advantages.

These new standards, set forth by the block industry itself, give architects and builders the opportunity to design and build with maximum assurance of product quality. They have demonstrated their acceptance by specifying concrete block produced under the Q BLOCK quality control program—as it reflects all the high standards that modern research and technical development can provide, backed up by regular product testing to guarantee that these standards are consistently maintained.

Concrete block, made to Q BLOCK specifications, is concrete block at its best. And better concrete block will always mean wider opportunities and more confidence for the modern user of building products.

Members of the National Q BLOCK program are identified by this registered mark. Look for it wherever you specify or use concrete block.

National Concrete Masonry Association • 2009 14th Street, North • Arlington, Virginia 22201
Only Westinghouse gives you a washer and dryer in the space of the washer alone.

The Laundry Twins.
You can put the Laundry Twins most anywhere. In a linen closet, bathroom, or kitchen, for instance. Or set side-by-side under countertops. Or even built right into a vanity table. They’ll show up well, no matter where you put them. And they’ll help you sell. Because they have advantages your prospective customers can see...features you can show.

Exclusives like the Laundry Twins make your homes a real standout. And you can always save a bit on construction costs to put them in. We call it Westinghouse ‘showmanship.’

You can be sure if it’s Westinghouse.
NEW "STRUCTURE PACKAGE" GIVES TENANTS QUIET PRIVACY AND SECURITY IN HIGH RISE APARTMENTS

If you’ve had any thoughts about building a high rise or medium rise apartment, you’ll want to know more about this package.

It is a combination of design, construction and tenant benefits that accrue from the use of new structural units. These include a new lightweight steel frame, a new combination concrete and steel frame, and new approaches to wall-bearing construction, along with new Flexicore precast concrete decks.

With any combination of these systems you get a first class structure, yet the cost is low because the decks are prefabricated and go up fast. You can get a one to three month earlier occupancy and this means money in the bank to you.

But best of all you will have happy tenants who keep your place filled. Why happy? Well, they will have floor-to-floor quiet, and a feeling of substantial security. Their insurance will be low and so will be yours.

All in all your building is one that will continue to bring in a substantial return for years and years to come.

I’m sure you would like a 12-page report on an outstanding Baltimore development using this type of construction. Just write for Americana Report, and show it to your architect. The Flexicore Co., Inc., P.O. Box 825, Dayton, Ohio 45401

Robert E. Smith
Vice-President and Manager

YOU ARE CORDIALLY INVITED TO ENTER THE TWELFTH ANNUAL HOMES FOR BETTER LIVING NATIONAL AWARDS FOR ARCHITECTS, BUILDERS AND HOMEOWNERS

Sponsored by The American Institute of Architects in cooperation with HOUSE & HOME and American Home. All the honor award winners and a selection of other winners will be published in HOUSE & HOME. A selection of the winning entries will be published by American Home. All the winning entries will be displayed at the AIA convention in New York and at the Octagon in Washington, D.C.

Houses and apartments must be designed by a registered architect and built and completed since January 1, 1964 in any of the 50 states. Outstanding architects, housing industry leaders, and the editors of HOUSE & HOME and American Home will judge the entries. Awards will be made on the basis of outstanding contributions to better living through residential design, site planning, and construction. Winners will be displayed at the AIA convention May 14-18, 1967. Awards will be made in three categories: CUSTOM HOUSES designed specifically for an individual owner, in three classes according to size: a) Under 1,600 sq. ft. of living space. b) 1,600 sq. ft. 2,800 sq. ft. c) Over 2,800 sq. ft. MERCHANT-BUILT HOUSES designed for a merchant builder and sold speculatively, in three classes according to sales price, including land. d) Under $25,000 e) $25,000 to $40,000 f) Over $40,000, and one-of-a-kind prototypes. GARDEN APARTMENTS AND TOWNHOUSES built for rent or sale. Apartments shall not be over three stories in height from grade, must comprise four or more living units, and may be single buildings or one of a group: g) Single apartment buildings. h) Multi-building apartment groups. i) Town houses (single or in blocks).

Pertinent information shall be submitted on the registration blank below by February 5, 1967, accompanied by a payment of $10 for each house or apartment entered. Any number may be entered. A separate registration blank must be submitted for each. Upon receipt of registration blank and fee, each entrant will be sent for each house or apartment entered, an 8½” x 11” binder and full instructions for preparation. It must be completed and postmarked no later than March 5, 1967. It is imperative that the appropriate category be designated on your original registration slip so that you receive the correct color binder for your entry.

This registration slip and entry fee must be submitted by February 5, 1967. Make checks payable to: Homes for Better Living and mail to: Homes for Better Living Awards, House & Home, McGraw-Hill Building, New York City, N. Y. 10036.

Enclosed is check □ money order □ in the amount of $10 covering the entry below.

category: □ CUSTOM BUILT HOUSE □ MERCHANT-BUILT HOUSE □ GARDEN APARTMENT/TOWNHOUSE

desired □
location: □
architect: □
address: □
builder: □
address: □
owner: □
address: □
submitted by: □
address: □
Even old bottles don't leak.

That's why we make insulating glass like a bottle.

Bottles don't leak because they're made of glass. Thermopane® insulating glass (with the GlasSeal® edge) is, in effect, a bottle.

A skinny, flat one.

It's made of glass fused to glass. It's filled with dry air. It's sealed to keep the dry air in and the dirt and moisture out.

Then we etch the name Thermopane in the corner where you can see it.

This is the only kind of bottle Libbey-Owens-Ford makes. And as an insulating window it makes storm windows old-fashioned.

Thermopane is available in practically every size and style of window you may need. (Leading wood window manufacturers already offer their standard sash with GlasSeal.)

Get Thermopane with the GlasSeal edge. It gives your homes a bit of an edge, as well.

Libbey-Owens-Ford Co., Toledo, Ohio 43624

Thermopane® by LOF GLASS
Now prospects can "see" nature's freshness indoors

This is the Lennox "Living Air" inlet. It keys one of today's most successful home promotions.

What makes it so great? Low cost. High promotability.

Prospects can see the feature. It wears a colorful decal that reads, "Your Living Air Inlet."

And they can feel it. "Living Air" feels fresher. It smells fresher. It is fresher.

Lennox literally brings Nature's Freshness indoors.

Lots of builders offer air conditioning these days. But how many also can fill their homes with "Living Air"?

You can with Lennox. Be the first builder in your area to offer it.

Write for information on this low-cost feature, and the high-impact promotion materials that back it.

Write Lennox Industries Inc., 610 S. 12th Avenue, Marshalltown, la.
Modern Southern Pine Dimension...

Wanted more than any other framing because...

No other lumber can match all of these modern values:
- Pre-shrunk to full American Lumber Standard sizes.
- High stress values for maximum spans and loads.
- Graded under rigid standards—the most exacting in the lumber industry.
- All-purpose grading permits use of standard grades for trussed rafters, cantilevered and continuous beams without special grading.
- Greater ability to hold nails and other fastenings.
- Straightness for easier wall framing...assured by improvements in lumber manufacture.
- Unlimited forest supply—well managed, increasingly abundant, vastly improved in quality.
- Volume of Southern Pine Dimension moving to major Northern markets has increased by 64 percent during the last four years...impressive evidence of its growing acceptance by satisfied customers.

Specify Southern Pine
From the Member Mills of the Southern Pine Association
P. O. Box 52468, New Orleans, La. 70150
Give homes a "more for the money" look with outdoor features in Decorative Concrete

Pebbled-top concrete—driveways that keynote landscaping. Here, the builder achieved striking curb appeal. His driveway also doubles as entry walk and play area. Its color and texture give character to the entire home setting. Mexican beach pebbles are exposed, treated with a sealer to enhance color and sheen. Dividers form irregular modules, bring driveway into scale. Decorative concrete puts your money where it shows—sets your homes apart from competition.
Today’s new, modern ideas in concrete bring builders a truly fresh opportunity to offer extra value that shows... value that home buyers look for. Driveways, patios, walks and other features of Decorative Concrete can give a real competitive edge and stimulate sales.

Decorative Concrete works wonders. The outdoor-feature ideas that impress buyers of custom showplaces can readily be adapted by builders of medium-priced and modest homes.

Concrete’s versatility makes ideas come easy—with textures, colors, patterns, shapes limited only by your imagination. Get more information: ask your ready mix or concrete masonry suppliers, or contact the PCA office nearest you. Portland Cement Association, 33 W. Grand Ave., Chicago, Ill. 60610. (An organization of cement manufacturers to improve and extend the uses of portland cement and concrete.)

New-style concrete masonry—simple way to give patios extra charm. The builder offered not just a patio but a “people pleaser.” Decorative concrete made it easy to be different. The central planter is of painted concrete slump block. This contrasts with the simple box pattern of the patio itself, achieved with redwood headers which also act as control joints. Flatwork surfacing is lightly textured. Decorative treatments with concrete can be adapted to fit any building budget.

Stairway of rocks—steps to a reputation for originality. The “front steps,” leading all the way to the main sidewalk, are given dramatic prominence with a surface patterned with embedded flat-faced rocks in a range of natural colors. Adding the decorative touch to concrete costs-out reasonably—especially when you consider that bold ideas like this win valuable buyer attention and approval.

Free-form patio—concrete shapes up to elegance. A little special form work is worth the effort when the result is the gracefully flowing lines seen in this patio. It’s done in natural white concrete, with simple surface scoring. Contours can follow the terrain, or preplanned planting arrangements. Actually, concrete is the one exterior material that meets basic decorating needs—form, color and texture. And this is what gives it such limitless potential.
Let-in corner bracing?

... heavy fiberboard?

1/2" fiberboard with let-in bracing, 1-1/2" roofing nails 4" o.c. at perimeter, 8" o.c. at intermediate supports.

25/32" fiberboard, 1-3/4" roofing nails 3" o.c. at perimeter, 6" o.c. at intermediate supports.
...or plywood corner bracing?

Which costs least?
Which is easiest to install?
Which is strongest?

If you now use sheathing that requires let-in corner bracing, you can probably save money with plywood corner bracing instead. It goes in place faster, saves labor.

If you're getting away from let-in bracing with 25/32-in. fiberboard, you'll get a stiffer, stronger wall, with half the nailing cost, by reducing to 1/2-in. fiberboard and plywood corner bracing. (Or, for the very strongest wall, use plywood all the way around. For example: 1/2-in. plywood provides up to 60 per cent greater bracing strength than 25/32-in. fiberboard.)

Either way, labor costs are less. You avoid double nailing, you can reduce studs to 24 in. o.c., and you still have adequate insulation value with batt or blanket insulation.

Take a minute to figure in-place costs—based on prices in your area. Send coupon for facts to help in the figuring. Or if you like, get in touch with us in Tacoma, or at one of our regional offices: Atlanta, Chicago, Dallas, Detroit, Los Angeles, Minneapolis, New York, San Francisco, Washington, D.C.

Circle 78 on Reader Service Card
Care to know the price in your area?

Take a look at VALUE! This is Kingsberry's hot-selling "Franklin" model, a 1701 square foot Colonial skillfully designed for impressive curb appeal and amazing build-out cost. For example, the "Franklin" sells in Atlanta, Georgia for $22,000 (including a $3,500 lot) with a substantial profit for the builder.

This fast mover is just one of over 100 models in the Kingsberry "individualized" line. Your buyers get wide variety of exterior choices, options and interior appointments. You get professional marketing help, Kingsberry's liberal co-op advertising allowance, competitive construction financing ... and faster sales.

Find out more about Kingsberry VALUE today. For a starter, send in the coupon below and we'll have our local Kingsberry representative give you an approximate sales price on the "Franklin" model shown above for your area. In your location, it may be more than $22,000 ... and it may be less.

Kingsberry serves leading builders in 29 mid-Atlantic, Midwestern and Southeastern states.

MAIL THE COUPON BELOW TODAY

Mr. Robert C. Smith, General Sales Manager / Kingsberry Homes / Dept. HH-6, 5096 Peachtree Road / Chamblee, Georgia
Please have your local Kingsberry representative call on me with price information on the "Franklin" for my area and details about Kingsberry. I have____ lots ready to build on. In 1965 I built_____ houses in the $_______ price range.

☐ I am interested in construction financing.

Your Name_________________________Firm_________________________Phone_________________________
Address______________________________State______________________Zip Code #____________________
City_______________________________
The moment of truth

You just might be interested in who is doing all the great marketing we keep talking about on this page

Occasionally, friends of ours in the housing industry call us up and vent a little irritation in our left ear like this: "Okay wise guy, you keep harping on the theme that tight money is not anywhere near as big a problem as the way we market, which, you imply, is hurting our business more than tight money is. Maybe you would be so good as to tell us who's selling houses and how come, if he doesn't own the Chase Manhattan."

We always manage to interject the mild demurrer that there is no question about the shortage of mortgage money and that interest rates are higher than a cat's back. Thus calmed down, our friend listens with great attention. So we thought one of the better services we could do the industry would be to tell who is selling houses, how come, and why all this is so important to builders who have no commitments now and perhaps no money either. What's important about it is that now is the time to look past our present problems to the long-range problem of building and selling all the houses Americans are going to need in the years immediately ahead. By the end of 1967 we're sure to have a severe housing shortage, with buyers and renters far in excess of housing units for sale or for rent. Doubt that? See our Market Memo, p. 92.

More important, though, than the obvious buildup of a huge demand are the techniques that the most successful builders, marketing managers, and salesmen are using to sell housing against all other bidders for the consumer dollar.

The top sales managers, and not a few motivational researchers, have pinned down five basic motivations to buy or rent. Those motivations, not necessarily in order of importance, are the desires for 1) privacy, 2) convenience, 3) romance, 4) identity, 5) security. Interpretations of all five are the basis of all good marketing programs, and a good marketing program will help dictate the choice of land, type of housing, land plan, model-area layout, model-house decoration and landscaping, brochures and advertisements, sales-area presentation, salesmen's techniques.

We know sales managers report that the usual considerations of most buyers center on the following in order of importance: price, floor plan (to fit the family), schools, taxes, water, sewage, and location (convenience to work as well as neighborhood status). But assume that four builders selling in the same neighborhood and in the same price range rank equally in all these things. The builder who will outsell the others is the one who knows how to interpret the five basic motivations in a total marketing program. Take a good look at each one of them:

Privacy. "Togetherness" is a great slogan, but "apartness" appeals to more people. The privacy urge of both house buyers and apartment renters is essentially the same in family activities. When you talk soundproofing in an apartment, or the screened patio in a house, you're talking privacy. When you talk extra baths, master bedroom suites, separate activity areas, you're talking privacy, and you're talking your potential buyer's or renter's language.

But privacy today is a lot more than thick walls and heavy drapes across the windows, more than the anonymity of apartment-house doors. Privacy can also be the kind of housing that encourages any kind of human activity your buyer thinks is important to the inner man, whether it's oboe playing, clay sculpture, swinging parties, or even just a quiet nook where he or she can read a book. Create that particular feeling of privacy, and you've sold a house.

For instance, instead of enlarging the master bedroom suite, provide it with an enclosed private patio that allows the owner his own communion with nature. Instead of a huge family room, use part of the space for a small paneled study that's off limits to children.

Convenience. This, of course, is easy access to work, shopping, schools, transportation, and the like. And every good sales presentation will show these assets visually and dramatically. But young buyers, consciously or unconsciously, are also looking for convenience to fun and games. So a good project will offer as many recreational or entertainment facilities as economics will permit. If a family can buy a house or rent an apartment and get the convenient use of a golf course, or swimming pool, or clubhouse, or riding trail, why should they buy or rent where they get none of these? Not because it's cheaper. People want, and can pay for, leisure activities.

Convenience is also freedom from maintenance chores. The young owners of the red Mustang with the ski-rack on top take a pretty dim view of cutting grass, or shoveling snow, or

continued on p. 105
The changing face of prefabrication

Somewhere between this ...and this

CONVENTIONAL FRAMING CREW tilts up wall on a custom-house deck.

ASSEMBLY-LINE CREW installs
...the prefab industry is struggling
for faster growth

The struggle is a confused one, and you can't really understand it without a scorecard. The contestants include:

1. **Old-line home manufacturers**, who as late as 1959 accounted for the bulk of prefab starts—about 100,000 units, or 10% of the total housing market. As a group, these companies have fared poorly over the past eight years: Many have merged, closed, or gone bankrupt; others have watched their production shrink; and only a handful have managed a healthy growth.

2. **Lumberyards that have gone into prefabrication.** Thousands of these have sprung up in the past few years, some of them very large operations. Each has bitten off a little piece of the old-line home manufacturers' market.

3. **Sectional-home manufacturers**, most of them mobile-home companies. This relatively new branch of the prefab industry is quietly booming; some 60 companies will produce close to 18,000 units this year—a 20% increase over 1965.

(Watching contentedly from the sidelines is the giant mobile-home industry which, strictly speaking, doesn't build houses but will nevertheless turn out nearly a quarter of a million units for the under $10,000-market this year.)

No longer is the object of the struggle to sell a packaged house. With the exception of the sectional house, today's prefab package is seldom more than sheathed walls (often with doors and windows installed), partition frames, and trusses. It's a rare package that costs more than 25% of the final house price.

This means that from the point of view of materials, the typical prefabber is now little more than a lumber dealer. And since he has to add to his price the cost of overhead, profit, and shipping, his prices can usually be beaten by a conventional builder with an efficient on-site operation.

So to be successful, a prefabber must offer the builder something more than a package of components. Too often in the past this something was lavish financial and merchandising aid which tended to attract weak builder-dealers, and thus proved disastrous to the prefabbers' profits. Today, the all-important extras are more salable design, more precise engineering, and better service at the site.

To see why prefabbers have had to struggle, and why some of them are slowly but surely gaining ground, turn the page.
The old-line home manufacturers no longer have the big post-war shelter market they grew up on

Low-cost tract houses like these used to represent the bulk of the prefab industry's production

For the booming post-war shelter market, these models couldn't be built fast enough. National Homes turned out the one shown above—$7,500 without land—by the thousands. A builder needed just one sales theme: "It's a lot of space for the money."

But when the shelter market and cheap land vanished at the end of the '50s, these low-cost tract houses had run their course. Not all the old-line prefabbers gave up on them right away; National Homes reported as late as 1962 that 80% of its production was still in $15,000-and-under houses. Two years later, however, that share had fallen to 40%, and it has dropped steadily ever since. Many old-line prefabbers refused to face up to the disappearing low-cost tract market; they began disappearing themselves.

The new market demanded things that most of the big prefabbers were in no position to offer. In addition to space, the buyer wanted his house to have glamour and individuality. To survive in this market, prefabbers had to learn how to manufacture custom houses. But this required drastic changes in production and engineering methods. And the changes hurt: They cut the prefabbers' profits, shrunk their markets, and made their assembly lines so inefficient that today they can't begin to compete with the new king of low-cost housing.
Today the mobile home gets the biggest slice of the low-cost market

And that slice is almost the whole market. Mobile homes accounted for 76% of all new single-family houses selling for $12,500 or less in 1965. (The total number of houses sold in that category last year was 285,470, according to a report issued by the Mobile Homes Manufacturers Assn.)

Mobile homes offer the low-income buyer much more than prefab houses ever did. They're lower priced, easier to finance, and easier to trade in, and they come furnished and decorated. Also, if the models of Phoenix Builder John Long are any indication (photo above), their design is improving.

But most important, a mobile home is perfectly adapted to the assembly line. It can be produced in less than 30 minutes, and the manufacturer controls 100% of the construction cost.

And tomorrow, the sectional house—a mobile-home offspring—will probably take what's left of low-cost housing

The sectional house is what the mobile-home manufacturers are using to capture the remaining 24% of the low-cost market—buyers who don't want a house on wheels. It is a house designed for a permanent foundation, but manufacturers produce it just like a mobile home—in two prefinished halves which are shipped separately and put together at the site.

The sectional house gives mobile-home manufacturers two additional footholds in the low-cost market. It gets them into conventional home areas, and it takes them into a higher price range—$10,000 to $17,000 with land—compared with mobile homes' effective selling range of $4,000 to $10,000.

Sectional houses are not entirely the domain of mobile-home manufacturers. One successful producer—Continental Homes of Boones Mill, Va.—is a prefabbrer that also makes components for high-priced custom houses. But the prefabbrer needs a completely different assembly line for sectional houses, while the mobile-home maker already has the line. Most prefabbrers find the sectional house market too limited to warrant a new and separate operation.

So old-line prefabbrers still geared to low-cost housing are in trouble
Highly mechanized assembly lines—built for the shelter market—are a hindrance in today’s higher-priced market.

In fact, most prefab machines that were hand-tailored to the shelter market are literally useless today; they were designed to fire out one-story houses with one kind of siding and one kind of window. For example: Two of the expensive machines shown above do nothing but turn wall panels upside down so workmen can apply prefinished drywall to one side and prefinished aluminum to the other.

But the majority of today’s buyers want all kinds of siding, all kinds of windows, and all kinds of colors, and they want houses so big that drywall has to be eliminated from the prefabbrer’s package to keep the shipping weight down.

A highly mechanized assembly line hinders prefabbrers in other ways, too. Overhead is so high that if business stops, the prefabbrer can’t afford to cut back. He must cut prices and make unprofitable deals to keep operating.

Furthermore, tight standardization handicaps designers and engineers by making it difficult for prefabbrers to diversify into non-house markets like apartments and commercial construction.

So the big prefabbrers have had to reduce their efficiency in order to survive.
Simpler and less-expensive machinery offers adequate efficiency, plus almost unlimited flexibility

Machines like Hodgson Houses’ truss-assembler (above) and conveyor jig (right) represent a compromise between automatic machine-power and men with hand tools. They can prefab almost anything. But their flexibility is not free. A custom house can cost a prefabber several hundred dollars in engineering. So even with a flexible assembly line, a prefabber still sells standard models to one-shot customers and offers true custom work only to builders who take substantial orders.

But a high-volume builder’s assembly line—with minimum overhead—can beat the cost of any prefab package

And that is why, except in extraordinary marketing situations, high-volume builders don’t buy prefab packages. The package appeals only to small builders, particularly those with scattered-lot operations, who don’t have the volume to justify equipment, big crews, and supervisors.

Tract builders have practiced all degrees of prefabrication both on-site and off, and with prefab specialists becoming less rather than more efficient, builders’ assembly lines make more sense than ever. Some builders have become such proficient prefabbers that they have gone into the house-package business for themselves.

A builder’s crew can prefabricate trusses and wall panels so close to the house site that they can be picked off the jig, carried to the site on a crude trailer, and set in place—all in a couple of hours (photos, right). The shop can be as big as the one shown (it is run by Place Homes, South Bend—H&H, Feb. ’64) or as small as a truss press on a flatbed trailer.

Today’s assembly lines are simpler because today’s package is smaller

DECEMBER 1966
Shipping costs limit the size of the package, the degree to which it’s finished, and the distance it can go

Prefabbers used to think the way to higher profits lay in shipping as complete a package as possible

While this is certainly true of the mobile home and the sectional house, it has proved to be poor logic for higher-cost prefab packages.

Old-line prefabbers used to think in terms of the kind of system shown in the three photos on this page: prefinished and prewired wall panels, floors and roofs, and a plumbing core containing bath and kitchen fixtures. This would let the prefabber package—and take a profit out of—everything but the foundation and furnishings.

Even further in that direction was the dream some prefabbers had of automated presses molding a prefinished sandwich wall out of plastic and simply punching out the door and window openings.

But not only did the plastic-wall dream fade, so did the completely closed conventional panel. As buyers began demanding bigger and bigger houses, the weight of the drywall made it too costly to ship.

Prefabbers had to resign themselves to shipping open framing. They also stopped trying to ship roof panels, floor panels, mechanicals, and so many other parts of the house that today they often sell even less than a complete house shell. And even the shell itself is getting skimpier.
Big components are so expensive to handle that less-finished panels usually make more sense today

Not only have prefabbers given up on applying interior wall finishes, many have given up on applying exterior finishes as well.

A wall with factory-applied siding can present problems. Horizontal-sided panels must be produced in full-house lengths if seams are to be avoided. They require extra shipping space because they must be carried upright to avoid damage. It takes trolleys and cranes to load and unload them (photo, left). And they have to be erected directly from the delivery truck, so a crew must be on hand when they arrive.

Except in scattered-lot markets, where pre-sided walls offer a significant advantage to builders, the prefabbrer’s panel today is simply studs, sheathing, and sometimes windows and doors.

And tomorrow a still smaller and less-finished package may prove the most practical of all

The package may be just a truckload of precut and sub-nailed framing parts (photo, right). A small builder would put them together on the house deck and tilt them up; a big builder would assemble them in a shop.

Most prefab packages—aside from their trusses and stud-and-skin wall panels—are no more than precut lumber right now. In fact, some prefabbrers, like Presidential Homes of New Jersey, sometimes ship trusses knocked down to cut handling costs.

If prefabbrers ever decide that bare wall panels aren’t worth the trouble (they never constitute more than 10% of house cost), a knocked-down precut package would probably be the replacement.

That’s why lumberyards have become such a big factor in prefabbing
Lumberyards have become successful prefabbers because they can concentrate on one local housing market

Lumberyards can give builders much better delivery service than a big regional prefabber offers

That’s the chief reason so many small lumberyard-prefabbers are keeping big prefab specialists out of metropolitan areas, despite the latter’s much greater edge in design, engineering, merchandising and financing aids.

Lumberyards can provide better delivery service because their shipping problem is simpler. In metropolitan areas, most of them draw the bulk of their business from a 50-mile radius (some prefab specialists ship their packages more than 300 miles). So instead of squeezing a house package onto one or two trucks and forcing the builder to take everything at once, a lumberyard-prefabber can ship the package on four or more trucks, delivering each portion of the package when the builder calls for it. If a load is short or a panel won’t fit, the lumberyard can make an emergency delivery in a few hours instead of days.

For a volume apartment builder, a lumberyard can be virtually a shop-in-the-field. For instance, Davidson’s Lumber Co. of Indianapolis builds the apartment components shown on this page, and also provides crane trucks to deliver trusses to the top of a three-story building (below). Delivery cycles are so short that trailers loaded with wall panels are left at apartment sites to be unloaded as construction progresses (upper right), then picked up empty by the tractor that delivers the next load. And delivery schedules may be revised hourly.
Small lumberyard-prefabbers can give builders 100% custom design

Unlike the big specialist, a small prefab shop isn't forced into standardization to cope with high overhead. Its equipment is simple, its crews are small, and its management needs are minimal because its volume is limited.

This kind of supplier can offer shop-in-the-field convenience for a high-volume custom builder. Example: Hoffner Rosner Corp. of Chicago, which is building 300 to 400 houses in three tracts ranging from $22,000 to $52,000 (above and right), turned to prefabrication a few months ago to speed production. Instead of considering a prefab specialist, the builder persuaded a truss supplier and a lumberyard to invest in panel-making equipment. Says president Robert Rosner: "We want the builder to run the show, not the prefabber."

Precut packages may well be the best prefab method of all for lumberyards because they eliminate overhead

The lumber supplier who buys the kind of subcomponents now becoming available from some West Coast suppliers needs only storage sheds to make up a house package. Yard men simply assemble a truckload of interchangeable parts. And the load can be winched off at the site, simplifying delivery.

Subcomponents are more than just precut lumber. For example, Wood Components Co. of Eugene, Ore., supplies prenailed headers, jack studs, and corner and partition posts as well as precut studs and truss members. Plates are premarked at the yard to simplify on-site assembly. The only standardization required is a set stud length and a general limit on the variety of rough window openings.

This sort of package appeals particularly to larger builders in metropolitan areas (Levitt & Sons and Ryan Homes, for example). By reducing nailing as well as cutting, it lets crews build at the site faster than they could conventionally and cheaper than they could by buying panels from a prefabber.

But some old-line prefabbers have answers to this competition...
Scholz Homes is growing because it offers a wide range of glamorous designs that have tremendous sales appeal. And that, rather than production speed or cost savings, is the main reason builders have been buying Scholz packages in increasing numbers for 15 years. Scholz offers just an average degree of prefabrication, and its production facilities seem almost primitive.

Yet Scholz attracts builders who are as far as 900 miles from its Toledo, Ohio, plant, shipping to them economically by using piggyback transportation — truck-trailers on railroad flatcars — for 70% of its packages. And its sales growth continues strong even in tight-money times: $6-million for the first six months of 1966 compared with $4.5-million for the first six months of 1965.

Scholz concentrates on upper-middle-income buyers, giving them dramatic entryways, circular foyers, sweeping stairways, and classic facades. Its average package retails for $36,000 to $40,000 without land (photos and plans opposite), so its share of house cost averages more than $9,000.

Scholz has tried other marketing approaches, but with disastrous results. Several years ago it offered a sectional house in three as well as two parts, and acquired a half-dozen branch plants. But it has returned to its forte: stand-out design and the rigid quality control of a single plant.

GLAMOROUS EXTERIORS, always a trademark of Scholz houses (above), are applied just as effectively to Scholz apartment designs (right). About 25% of the company's sales volume is in apartment and townhouse packages. This two-story project is in Toledo.

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EARLY AMERICAN DESIGN retails for $44,000 to $48,000 without land. But Scholz offers four plan sizes, permitting a price as low as $32,000.

CHATEAU DESIGN incorporates a variation of the Early American plan shown at the left. Retail price, minus land, ranges from $46,000 to $50,000.

CONTEMPORARY DESIGN, called the Mark '65, has all the Scholz earmarks, from dramatic entry to angular plan. Retail price: $47,000-$55,000.

MODERN DESIGN, called the New Englander, comes in five plan sizes retailing for $23,000 to $40,000. Scholz L-shaped floor plans are popular.
Deck House is growing because it offers a distinct contemporary style plus custom design service

Here is strong evidence that design is more important than the degree of prefabrication. The Deck House package consists of little more than wall panels, pre-cut beams, uncut T&G planking, some millwork, studs, and roofing (photos, right): it costs about $12,000. Yet the company is shipping houses from its plant in Acton, Mass., to as far away as Wisconsin and the Carolinas. Last year's volume was 120 houses (average price: $35,000); this year, despite tight money, it will be about 160.

Deck House has standard models, but most buyers make custom interior changes. A company architect works out a plan and a budget with the buyer, then moves temporarily to the area and acts as a general contractor while the house is built. One house usually produces other local contracts, and when a carpentry sub proves he can produce the level of quality Deck House demands, he becomes the company's contractor for the region.
The Deck House package has so few components it's practically a load of lumber

PRECUT ROOF BEAMS are set up on post-and-beam ridge. Wall panels are built in the shop so that quality of window millwork can be maintained.

SECOND-LEVEL DECK is 3x6 iac over precut beams set 8' o.c. Decking is strong enough to cantilever out 2' front and rear without bracing.

T&G ROOF DECK is laid over beams. On jobs far from plant, decking is shipped to site from the lumber manufacturer's nearest regional warehouse.

COMPLETED SHELL is ready for partition walls. Only limit on interior layout is the position of ridge posts, which are spaced 8' o.c.

DECEMBER 1966
Presidentional is growing because it offers good
bread-and-butter design plus thorough engineering

And because of its 10- to 15-man engineering department, Presidential Homes' many standard designs, like the one above, can be as flexible as the prefabber wants to make them. In fact 80% of Presidential's packages are either revised or custom plans.

Most of Presidential's packages are just bare house shells (no siding) worth $2,000 to $5,000. The company offers no financing aid, no easy credit, no cooperative merchandising programs—and even encourages builders to buy materials from local sources when it makes economic sense.

Yet Presidential is competing successfully with local prefabricators in towns 300 miles from its single plant in Pemberton, N.J. And its volume has grown 25% in each of the last three years, to 1,300 units in 1965. Some 500 of these were apartments (left), a market Presidential developed in only three years, thanks to its engineering strength.

Says executive Joseph Grasso: "Our engineering is what separates us from the lumberyard."
Stanmar is growing because it specializes in exciting design for the second-home market.

Because its design is so popular, Stanmar Inc. ships its packages to market as much as 700 miles away from its Sudbury, Mass., plant. One-third of its production goes into New England, one-third down the Atlantic Coast to the Carolinas, and the remaining third to inland Middle Atlantic states and as far west as St. Louis. Piggyback rail shipping (see p. 80) accounts for 15% of the longest hauls.

Because Stanmar's package is so special, the average package cost is $6,500—close to half of completed house cost. Stanmar's high-style second homes (above and left) have massive glass walls, soaring roof lines, and big outdoor decks. Two-thirds of them are winterized for use in ski areas and as year-round retirement homes.

Stanmar prefabs as much of the package as possible because most of its houses are built on remote, scattered sites. But most of its designs are post-and-beam, so prefабbing is limited to the walls.
Sectional houses look like the prefabber’s best approach to what’s left of the lower-cost detached-house market

Even though most of them are made by mobile-home companies, the prefabber’s traditional enemies, sectional houses are now very much a part of the prefab industry.

Sectionals didn’t always look so promising. The early ones were little more than mobile homes on block walls. They had unattractive roof lines and finishes, and had to be handled by cranes.

Today, however, sectionals can be as attractive as the one on the facing page, sold by Capital Industries of Avis, Pa. The interior is finished with gypsumboard; bathrooms are ceramic-tiled; and the package includes all decorating, appliances, and a hot-water heating system. Typical price tag, including land and septic tank: under $17,000 for a 24’x57’ house with four bedrooms.

Sectional-house manufacturers have upgraded their structural materials to meet FHA standards and have found ways to reduce design and shipping limitations (see below). They still face local code problems, but now that sectionals look like houses instead of trailers, the problems are less severe.

All these improvements are making sectional houses more attractive to homebuilders. Not only is the product better, its potential profits are higher. Capital reports that builders in its marketing area—Pennsylvania, Maryland, New York, and New England—are making $1,500 to $2,000 on its sectionals.

Better engineering gives sectional-house buyers a bigger choice of exterior design ...

Low roof pitch has always been one of the toughest design problems for sectional houses. It was forced on manufacturers by state highway regulations that limit truck-load heights to 13’6”.

But at least one manufacturer now has a way to beat that restriction, and it’s so simple that any sectional maker can easily follow suit. The manufacturer, Capital Industries, simply pins rafters to ceiling joists so that the roof of each house section can be jacked up when the sections are combined at the site. The builder inserts prefabricated kneewall sections (far left) which are shipped flat (left).

The system lets Capital offer a 4/12 pitch, and may eventually permit 9/12.
Simpler handling methods have proved an important breakthrough for sectional houses. Early models were handled by heavy cranes—costly, hard to schedule. Today manufacturers use systems like the one developed by Continental Homes (photos, left), which eliminate the crane, and still get the house together fast.

Continental lays steel channel beams into slots in the foundation and rolls house sections across them. A section is towed up to the beam ends (far left) and jacked clear of its trailer. Then beams and rollers are placed under it. The section is dropped on the rollers, pushed onto the foundation, then jacked up and down again to remove the hardware (left).
What ever became of

the big noise about the Quiet Home?

Few merchandising ideas ever looked more promising than did the Quiet Home in 1963. A leading southwestern builder—Fox & Jacobs of Dallas—built a major promotion around the assumption that buyers would pay more for a house in which the inevitable noise of living was cut to a minimum. Two subsequent NAHB Parades of Homes used the Quiet Home as their central theme. And manufacturers and associations backed the promotions with both money and talent.

Yet today all the noise about the Quiet Home has dropped to a whisper. What happened? Is the Quite Home dead and buried?

With the clarity of hindsight, most of the parties concerned with the early Quiet-Home promotions now agree that while the idea was sound, its execution was unrealistic. So they have taken a deep breath and—much more quietly—started to put the Quiet-Home concept into a form that will make equal sense to both buyers and builders.

To understand why the original Quiet-Home promotions failed, and why the new promotions hold much more promise of success, start on the next page.
The first builders to promote the Quiet Home were disillusioned with the results

Three builders who pulled all stops in their promotional efforts in 1962-3 now say it just wasn’t worth it. Reason: The public wouldn’t pay the extra cost.

St. Petersburg Builder Charles Cheezem tried merchandising an optional $850 sound-conditioning package. Planned for houses in the $16,000-to-$20,000 price range, the package included staggered-stud wall construction with woven insulation ($205), a ceiling of non-hardening acoustical plaster ($100), fiberglass-insulated bathroom walls ($10), a sound-proofed disposer ($27), and carpeting ($500).

Cheezem’s houses also included these standard sound-conditioning features at no extra cost: a sound-conditioned dishwasher, fiberglass ductwork, siphon-jet toilets, and a fiberglass partition between the house and garage walls.

Cheezem displayed a sound-conditioned house in a 1963 Parade of Homes and promoted it in his advertising. Specially trained salesmen demonstrated sound-conditioning features room by room and took prospects into a partly built house to show hidden sound-conditioning features.

But although the houses sold, the sound-conditioning extras didn’t—even after Cheezem scaled them down to about $300.

Says Cheezem today: “Fiberglass ducts, quiet disposers, and better plumbing fixtures are now standard in our houses. But they don’t add much to the cost. If you put an extra $250 or $300 into a house and get no increase in sales, you obviously spend your money on something else.”

The Dallas firm of Fox & Jacobs spent “many thousands” promoting sound conditioning but sold only four Quiet Houses. The late I.P. (Ike) Jacobs was the first builder in the country to build an experimental sound-conditioned house in 1962 (H&H, Nov. ’62, June ’63); from this experience, he made up a sound-conditioning package costing roughly $500 for houses in the $13,000-to-$35,000 price range.

The package included acoustical ceiling tile in the kitchen, the master bath, and one bedroom; weather-stripped acoustical doors in the master bedroom and second bath; and insulated, double-stud walls in bedrooms and baths.

Less-costy sound-conditioning items were an oversized, slow-turning furnace circulation fan; sound-absorbing lining in the return-air plenum; a separate air-return system for acoustically sealed rooms; low-noise-level grilles; sound-absorbing lining in the furnace room; acoustical glass fiber around the furnace fan; an attic exhaust unit for ventilating bathrooms; a quiet garbage disposer with double trapping; a quiet dishwaher; a quiet kitchen vent hood; no-slam gasketing on passage doors; and sound-absorbing material in the washer-dryer area.

Jacobs and his partner, David Fox, went all out in their merchandising. They sent 14 salesmen to a psychologist to explore motivations for buying sound-conditioning and to develop a sales approach that would find the best buyer response. They created dramatic sound-conditioning displays (H&H, Jan. ’64). They advertised heavily that “sound conditioning will someday be as much of a necessity as air conditioning.”

And finally, to overcome the problem of extra cost, they tried to merchandise it as standard construction.

But despite great public interest, few people bought houses with the full sound-conditioning package. Says Fox: “We gave it a real college try, promoted it hot and heavy. But the extra cost made the houses non-competitive in the market. People think their $500 can be better spent elsewhere. We still use quiet disposers, quiet dishwashers, fiberglass ducts, and door gaskets—the things that people recognize the dollar value of. But we’re no longer promoting sound conditioning separately; we’re selling it as part of a better total package.”

Later Quiet Home promotions had more muscle but also failed to generate sales

NAHB stepped into the promotion of sound conditioning in 1965 on the premise that it could help generate more new-home sales. Subsequent Quiet Home Parades did draw heavy traffic, but the sales results were again disappointing.

Two pilot Parades were beefed up by the participation of Owens-Corning, U.S. Steel, and the Insulation Board Institute. Owens-Corning and U.S. Steel joined forces to promote the Monocoustic ceiling—fiberglass panels laid in steel channels. Representatives of 14 manufacturers of acoustical tile and sound-deadening board, including National Gypsum and U.S. Gypsum.

These manufacturers brought in lots of promotional money.

At the first Parade, in San Antonio, public response seemed favorable, but sound conditioning fell dead when the promotion ended. Twenty Quiet-Home models were displayed, all in the $18,000-to-$22,000 price range. The extent of sound conditioning varied from home to home, but in most instances it conformed to the standards set by Cheezem, Dodge, and Fox & Jacobs. The extra cost ran from $400 to $600 (although the manufacturers estimated that a complete sound conditioning job should cost about $1,200).

More than 200,000 people paid 50¢ each to see the show, despite almost constant rain and a brief visit by a tornado. The most successful feature was a two-room demonstrator model: One room was sound proofed, and one wasn’t; and the obvious difference in noise levels impressed visitors.

People were so impressed with the Quiet-Home show that in hundreds of personal interviews 81% said they would be willing to pay up to $500 extra for a new home with sound conditioning features.

But now, 18 months later, only one builder is promoting sound conditioning, and on a very modest scale at that.

continued.
NAHB's director of marketing, John C. Pollock, says the cost of whole-house sound conditioning was too high. In the $18,000-to-$22,000 price range, an added cost of $500 was a major and discouraging extra expense to buyers, no matter what the consumer surveys said.

The second Quiet Home Parade, held in Birmingham, also generated excitement but no sales. It followed the San Antonio pattern, with nearly identical results. Seventeen models, priced from $15,000 to almost $30,000, were sound conditioned according to NAHB guide-lines. In at least one, built by Vondal S. Gravelle (chairman of the National Housing Center Board of Trustees), the cost of an adequate sound conditioning job came to $1,483.96.

"Quiet Home," as "Quiet Home Week" was announced in Birmingham, and some 30,000 prospects trooped through a two-room demonstrator identical to the one at the San Antonio show. And again, a survey of 500 families indicated that 75% of them would "definitely" or "probably" buy a Quiet Home if the features cost about $500 extra.

At first the Parade chairman, Floyd B. Berman of the Floyd Development Co., was enthusiastic about the results. He felt the three chief benefits of the Quiet-Home promotion were increased traffic, great amounts of free publicity, and considerable enthusiasm for sound conditioning.

But a year later Berman had this to say: "The industry was unprepared, the market was uneducated. Some sound-conditioned houses were sold, but there was no follow-up. The program wasn't a success. As far as I'm concerned, sound conditioning has gone down the drain in Birmingham."

Builders say the Quiet Home's market failure is only partly due to its extra cost

They point out that the consumer surveys in San Antonio and Birmingham were meaningful and that buyers would readily have spent $500 extra for a Quiet Home— if manufacturers had followed through with better support. Specifically, builders list these criticisms:

1. Manufacturers have provided no clear definition of just what a Quiet Home is and how much it should cost. Both builders and buyers are confused; neither knows whether, say, $500 is enough, too little, or too much for a sound-conditioning package. As a result, they'd rather forget the whole thing.

"There are many problems in establishing feasible standards," says Builder Leon Weiner, NAHB first vice president. "What is quiet to one is not quiet to another. And various agencies have complicated the situation by establishing unrealistic standards."

So there is still no agreement on costs. For example, although Builder Gravelle figured the cost of whole-house sound conditioning at $1,400, tn's executive officer, Charles M. Gray, estimated it to be "4% to 5% of house cost—$800 to $1,000 for a $20,000 house." Owens-Corning sets the figure at about $1,500. NAHB's Pollock says it could run anywhere from $100 to $3,000. And San Antonio Builder Jim Uptmore says that through a combination of design and substitute materials, he can effectively sound-condition a one-story house for as little as $50 extra and a twostory house for $150. (Uptmore was chairman of the San Antonio Quiet Home show.)

2. Manufacturers have made no attempt to scale the cost and size of the sound-conditioning package to what the market will bear. The lesson of the Quiet-House promotions is that an added cost of roughly $1,000 might be tolerable in a $40,000 house, but it will price a $15,000-to-$22,000 house right out of the market. Builders feel that manufacturers who push for more costly packages are interested only in promoting their own products and not in helping to sell houses.

3. Manufacturers have failed to follow up the Quiet Home Week promotion. "You have to promote on a year-round basis; you can't just announce sound conditioning and then drop the subject," says Builder Berman. He suggests a joint promotional effort by manufacturers and builders to convince both builders and consumers that sound conditioning is desirable. And Pollock has been recommending a theme concept, with manufacturers tying their national advertising efforts to new-house sales and builders promoting the same theme locally. The national advertising would show the product's use in a Quiet Home, while local advertising would feature the home itself.

4. Manufacturers have neglected the necessary coordination with builders.

"There was a great lack of communication between the sound-conditioning industry, its distributors, and dealers, on the one hand, and builders on the other," says Berman. "I was very surprised. I thought they'd be knocking our doors down, and instead we had to call them."

Berman cites three basic reasons for the lack of communication: little manufacturer enthusiasm; rarely reachable and poorly trained local sales representatives; and too long a time lag between the national announcement of products and their local availability.

In reply, manufacturers say the criticisms are premature. They point out that the concept of sound conditioning is still very new and that it takes a while to create a smooth merchandising program and build up demand. They point with some pride to the considerable interest that has been aroused by sound-conditioning promotions in just the past two years.

Builder Dodge backs them up: "We still don't have a well-informed housebuyer. The sound-conditioning promotions are necessary and essential, although they are primarily educational and don't generate many sales immediately. Sooner or later the best sound-conditioning features will find their way into better homes."

Quiet-Home promotions have influenced builders to make major changes in the installation of air-conditioning equipment.

"All the builders became aware of noisy air conditioning," says San Antonio Parade Chairman Uptmore. "By isolating the machinery and using acoustics, we've cut noise levels by 80%. If we don't do anything more, we're happy."

Uptmore has, in fact, been sound-conditioning his cooling system for five years. He isolates the unit in the garage and insulates it with soundboard; he builds the return-air system into the slab; he uses fiberglass distribution ducts; and he puts all openings in the return-air system at least 10' from the cooling unit.

"This combination of planning and materials virtually eliminates all noise," says Uptmore.

But the overriding question is how much sound conditioning a Quiet House really needs. "There is some question," one manufacturer admits, "about whether people mind the noises of their own home; it's not the same as apartment living."

NAHB's Weiner wonders how far sound conditioning should be carried in a house.

"A home with strident and unnecessary noises is not the most desirable one. But all noise is not equally bad. It's basically an ecological problem—the study of man and the environment he lives best in."

And Builder Uptmore points out that a house can be adequately sound conditioned primarily through good design:

"You can design a house poorly and spend $1,000 to sound-condition it properly. We start sound-conditioning with design; then the rest of the job is less expensive."

Uptmore's design techniques include keeping sleeping areas well separated from noise centers, never putting baths next to activity centers, and eliminating back-to-back electrical boxes and registers.

He also uses such low-cost sound-conditioning ideas as these:

1. Second-story floors have ½" soundboard and a 30-lb. felt blanket in addition
Today's more realistic promotion has been narrowed down to the Quiet Room

There are two indications of this shift in the marketing of sound conditioning:

1. Owens-Corning, the leading manufacturer in Quiet-Home promotion, has switched to the Quiet-Room concept. "In the Parades of Quiet Homes," says an Owens-Corning spokesman, "people were hesitant to pay an additional $1,500 for the Parades of Quiet Homes." says an Owens-Corning spokesman, "people were hesitant to pay an additional $1,500 for whole-house sound conditioning. So we decided to drop back; the Quiet Room can be built for $200 or less, and we feel it can be a good promotional feature for builders." The Owens-Corning design of such a room calls for staggered-stud construction and insulation of the three interior walls, a Monocoustic ceiling, and gasketed doors with weatherstripping.

2. NAHB promotions have changed from whole-house to zonal and one-room sound-conditioning. IBI has worked closely with NAHB in its promotions, and an IBI official affirms the shift: "We still promote the concept of whole-house sound conditioning, but because of costs, there is now more emphasis on specialized areas of the house."

This year, NAHB's "Quiet Home" slogan was quietly dropped and replaced by "Quiet Living"—a subtle but significant change. Twelve home parades were held around the country in 1966, and the average extra price of sound conditioning was toned down to between $250 and $350.

While some of the promotions failed for lack of organization, most were successful within their limited scope. For example, Robert P. Flath, executive officer of the Homebuilders Association of Greater Columbus, Ohio, reported:

"We had the largest public response in years. Twenty-four builders put up houses ranging in price from $31,500 to $47,000. They weren't enthusiastic about whole-house sound conditioning, but there was no resistance to $350 extra per house."

NAHB and IBI have also begun spicing up the sales appeal of sound conditioning by introducing specialized rooms in which sound conditioning rides piggyback. Instead of selling sound conditioning by itself, the promoters are now offering it as part of a larger concept of living.

Specifically, several rooms have been designed for specialized functions—a study and learning center, a teen room, a preschooler room, a party room, a home gym, and an arts and crafts room.

The promoters hope these rooms will be distinctive-enough emblems of newness and status to entice prospects. And only when prospects show interest in a room will they be told of the indispensability of sound conditioning to its successful function. (Builder Uptmore is already promoting one of these specialized rooms in San Antonio.)

So far there have been two major Quiet-Room promotions:

1. The Tulsa Parade of Homes, held in November, featured the IBI-NAHB version of the quiet-specialized room. Seventeen builders participated, with houses priced from $21,000 to $40,000. Eight builders installed one or more specialized rooms; one went all the way with a $2,000 fully-conditioned demonstration package, provided by U. S. Gypsum. For the most part, however, according to NAHB President Don Harrington, builders kept sound-conditioning costs down around $200.

NAHB has always said that sound conditioning should begin with good design, but it emphasized this with extra care at the Tulsa show. With NAHB backing, IBI and American Standard contributed a building coordinator who spent an hour or two with each builder to help him design-in good sound conditioning.

2. The Ryan Projection '70 home, introduced in 12 northeastern cities in September (IBI, Oct.), features Owens-Corning's version of the Quiet Room. The house sells for upwards of $40,000 without land. It features two areas with Monocoustic ceilings—the family room and breakfast area—and a fully sound-conditioned family bathroom with staggered-stud wall construction and fiberglass insulation. Although it's too early to gauge the public reaction, Owens-Corning says 15 to 20 other builders are displaying Quiet Rooms or will shortly do so.

Will the Quiet Room catch on? It stands a good chance—and here's why

Both the NAHB-IBI and the Owens-Corning versions of the Quiet Room are a realistic attempt to scale sound conditioning to what buyers will pay. Lower price tags on the new packages give a house with some sound conditioning a competitive advantage over houses without it, and the manufacturers hope, will unlock the demand created by recent promotions.

Furthermore, say the manufacturers, the next time Quiet-Room purchasers buy a new house, they'll be apt to ask for a larger sound-conditioning package. Says an IBI spokesman: "It's a case of starting with the specialized room and gradually moving up to the Quiet Home."

And here are two other encouraging signs:

1. There is promise of more promotional follow-through by manufacturers. "We've still got a big job of publicity to do," says IBI's Gordon Lawler. "Public acceptance of sound conditioning is a matter of education and money."

No manufacturer has yet stepped forth with an offer to tie in his advertising with the Quiet Living theme. But in 1967 IBI alone will spend $70,000 to promote residential sound conditioning, plus $30,000 on technical research.

2. Communication and coordination between builders and manufacturers is improving. "We know some of our salesmen have been doing a bad job," says Lawler. "But we're now taking steps to correct that. We've learned a lot in the past two years. We're going to prime our men to help the builders in every way possible."

Builders, too, have learned that sound conditioning alone will never sell a house. Early promotional efforts stressed sound conditioning to the exclusion of all other features; now builders realize it can only be one factor in a merchandising plan. Says Builder Dodge: "The public isn't interested in a piecemeal approach. They'll buy sound conditioning in a better house, but they won't buy the house because of the sound conditioning."

Says Builder Uptmore: "In ten years, sound conditioning will be as important in new homes as air conditioning is today. But it has to be sold only as a part of a totally better package."
To: All House & Home readers,

From: Senior Editors Ken Campbell and Jim Gallagher
Assistant Editors Mike Baybakh and Frank Lalli, and 45 McGraw-Hill local reporters

Subject: Today's housing market in 49 cities

Sources: 600 builders, mortgage lenders, real estate men, and other industry leaders

Date: November 1, 1966

"It was the best of times, it was the worst of times."

Few quotations sum up so well the state of the housing industry at the end of 1966. In almost every city, unsold houses and unrented apartments are disappearing like last summer's tan; new families are being formed at the highest rate in years; employment is high and wages even higher; housing promotions like Parades of Homes and Grand Openings are attracting thousands of interested families; transferees—living in motels or out of suitcases—are begging for immediate delivery of a house.

Yet in the face of all of these bullish indicators, actual housing production is down sharply in the second half of the year after a record-breaking first half; money ranges from difficult to almost unavailable; a constant stream of publicity—local and national—about "tight money" has given the public the false impression that mortgages are not to be had at any price; in many areas, building labor is scarce, not very productive, and very belligerent.

All in all, homebuilding is in the position of a storekeeper with thousands of customers who need his wares and can pay for them, but who finds that the city has torn up the street in front of his door, his employees are on strike, and he is getting excuses instead of deliveries from his suppliers. The right word for the situation is frustrating.

Our most important discovery: All signs point to a severe housing shortage, both for sale and for rent, before the end of 1967. "Shortage" is a strong word—it brings back memories of 1947, when buyers stood in lines to give down payments—but it is the only word for what's coming. In San Diego, where there has been a backlog of unsold houses and unrented apartments for more than five years, Stanley Scott, executive VP of the HBA, now says, "A seller's market is already here." Jackson, Miss., has had "no significant number of vacant houses or apartments because speculative building has been cut to almost nothing." Builder Larry Weinberg in Los Angeles is predicting a housing shortage early in 1967 even in that overbuilt area, and he is echoed by Bill Lyons, of Luxury Homes: "Housing starts are off so dramatically that I predict a shortage of new packages by late spring, though some of the old ones will linger on."

The coming housing deficit is not confined to a few boom towns, but seems universal. Some examples: Des Moines' A.E. Rothchild: "We will be short of houses in April and May because starts are down. I think every builder should start a few more houses this fall"; Philadelphia: "Demand is pent up—almost a war situation"; Memphis' HBA executive officer J.B. Bell: "Memphis is virtually certain to face a serious shortage of new housing by the end of this year"; Oklahoma City HBA: "The vacancy rate is the lowest in a long time. There is only a 30 to 45 day supply available today"; Phoenix: "The town is running out of houses—and filling up with people. Something has to give."

Small cities, too, will be feeling the pinch. In Lansing, Mich., Bruce Blackall,
of the local HBA, mourns, "There will not be enough housing to meet our 1967 demand. We have no surplus." Similar predictions come from Cincinnati, Houston, Portland, Ore., Milwaukee, and Denver.

One market relatively unaffected by the vagaries of mortgage rates is the higher priced house. Lenders give preference to upper-income, high-down-payment executive and professional buyers, and these families are not discouraged from buying housing they want because of a 1% or $1/4 increase in interest rates ("it’s deductible, anyway"). One drawback: the 1966 stockmarket slump left many of these families with vanished paper profits or not-so-valuable stock options, and this sometimes makes them postpone their decisions.

Oklahoma City builder Ralph Green says, "Business is bad in secondary areas, but good in prime locations. People are still buying quality and location." In Chicago, Kennedy Development Co. opened their new Charlemagne subdivision near Deerfield and in three months sold 18 houses in the $44,000–$580,000 price range. In three subdivisions in prime suburbs, Kennedy expects to sell over 200 houses this year. The company tries to have about five speculative houses on hand for the "must have immediate possession" buyer, and their landscaped, furnished, lighted model area has as much excitement and stage setting as the best of California’s low priced built-for-sale subdivisions.

Custom Builder Gordon Elwell, Buffalo, N.Y., says, "Things will be up in 1967. We never seem to run out of customers". The customers he never seems to run out of are well able to put down 33-1/3% on his up-to-$35,000 houses, even though he lost a few who only had 20%-25%. In Cleveland, Past HBA President Sparky DiBenedetto has just put together (from 15 different land owners) a 162-lot subdivision in exclusive Bay Village. Houses will be from $50,000 up, and Early American in design.

Builders in Jackson, Miss. are in general agreement that "most homes being sold are on firm pre-sale contracts, and range from $20,000 to $30,000 and upwards." In Columbus, Ohio, Executive Officer Bob Flath says new houses now average $22,500, with the prime demand closer to $30,000. "Only higher income groups can qualify for mortgage loans now," he says. In nearby Cincinnati, Builder George Zuckman notes, "the only market that seems to be going is $25,000 and up". In Indianapolis, builders report that "financing of higher priced houses has not been hurt. People building such houses pay more for money, but they’re getting it." And in one of the nation’s authentic boom cities, Seattle, Boeing’s director of industrial relations says, "There is no problem for the highly-skilled professional who wants a house. Even in the face of the mortgage money shortage, they are able to buy".

The rental market is especially strong. In cities which were overbuilt to the tune of 20% and higher vacancy rates there may still be a few marginal buildings not doing well, but most multi-family projects in good locations are approaching full occupancy. More than half the markets surveyed emphasized the strength of demand for rentals, and not one claimed serious citywide vacancies.

In Ft. Worth, where an FHA vacancy survey shows a 7% rate, builders and lenders agree that all newer projects are 100% rented and have waiting lists. Sales Manager Dave Ritz notes, "Only the shoddy apartments are hurting." In the upper midwest, cities like Detroit, Milwaukee and Cleveland have almost too few vacant apartments to bother counting, especially in suburban locations. Los Angeles’ once frightening percentage is dropping a full percentage point each month.

Middle-sized cities, too, are feeling an unfamiliar demand for rental units. In Jackson, Miss., Realtor W. Merle Mann says, "A few months ago, the normal vacancy rate ranged from 12% to 15%. Now it is 3% to 5%, and there is a tremendous demand for apartments." Mortgage Lender M.F. Haight, in Oklahoma City, says, "People here are more apartment-minded, and we are becoming more of an apartment
MARKET

house town". The vacancy rate in Sacramento dropped from a bankrupting 20% in 1965 to 8% this fall; Indianapolis saw a 41% rise in apartment building the first nine months of this year; and in Lansing, Mich., Edward G. Hacker, Sr., who manages 1,000 apartment units, showed a .005% vacancy rate in his Sept. 17 report. Part of the strength of the multi-family market is coming from the reluctance of lenders to provide the big-chunk financing for new projects. In city after city, apartment building is slowing to a halt, even in the face of an overpowering demand. With a vacancy rate of 3%, Buffalo, N.Y., lenders are still reluctant to finance apartments (they consider them "speculative"). Executive Officer Jack Donovan says, "We could use another 1,000 apartments in Buffalo right now. I'm surprised that outside money hasn't come in to supply them." Western Savings Bank has almost entirely stopped multi-family loans, preferring to save the limited available funds in order to help single family homebuilders.

Even when money is available for apartments, the new stiff terms have builders agonizing over the decision to build or not build. One Detroit builder, who owns a prime suburban location zoned for apartments and sees almost limitless demand for the luxury units he plans to build, told of the financing he had been offered: "Last year, the rate would have been 5 1/2%, this year it's 7%. Last year, I could have gotten $20,000 per unit, today they offer $16,000. The term has been cut by five years, and they have added a stand-by fee of 3% per quarter which is bound to total between 1% and 1 1/2% before I can get the project built. The funny thing is, I may be nuts not to take it."

Cleveland Builder Andrew Rosenfeld and his son, Ronnie, own or operate 6,000 rental apartments, either by themselves or in syndicate. They have practically no vacancies, but are hesitating about starting new buildings. Says Ronnie: "An increase in interest of 1% means an increase in rentals of 7% or 8%. Lenders can't ask a higher interest and more equity at the same time without builders having some serious second thoughts. If these rates are permanent, there is little danger in going ahead, but we don't want to have 7% mortgages and have to compete with older units financed at 6% and maybe newer ones at say, 6 1/4%." In Memphis, HBA Executive Officer Bell notes: "Apartment construction has almost stopped. Usury laws permit lenders to charge up to 7 1/4% on long term loans over $50,000. What's more, they're discounting loans two points. It's too much."

Apartments and townhouses are moving out of the cities into the suburbs, because suburbs today are the nation's prime growth areas.

Reasons:
1) The fastest-growing employers are the service industries, many of which prefer suburban locations not open to heavy industry.
2) Land costs are lower, permitting more-economic rent levels.
3) Zoning and planning boards are coming to realize that multi-family projects are an economic asset, not a liability.
4) A generation raised in suburbia still has a strong attachment to grass and trees in a garden apartment setting, instead of the center city high rise.

Wallace Boothby, a Birmingham, Ala., specialist in apartment rentals, told us: "Birmingham was late in getting into the apartment house boom and hasn't caught up yet. Some high-rise apartments have been built but the trend now is to the garden type, complete with swimming pool." And 750 miles north, in the Detroit suburb of Oak Park, Edward Rose & Sons rented out the 200 units of their new Chateau Riviera development as fast as they could complete them. Sheldon Rose told us that they are building apartments in Peoria, Wichita, Indianapolis and Dayton, as well. In another Detroit suburb, Farmington, B.L. Smokler is still going great guns with Farmington Village, an FHA Sec 213 co-operative of townhouses. Buyers like the combination of suburban location and community maintenance, and
have bought 155 of the 250 scheduled units since the late spring opening. Market item: The most expensive units ($1,500 down and $172 per month) were by far the most popular, and they are going to have to program more of these two and three-bedroom, 1½-bath apartments into succeeding sections.

Townhouses are being seen in areas where they have never before been built. Bell & Valdez brought the first ones to Seattle in their Rolling Hills development, and Quality Pacific Homes is starting a 267-unit development just east of the city. Three townhouse and apartment complexes have gone up in the outskirts of Minneapolis-St. Paul: Wayzata Wood, Interlachan Hills, and Georgetown Park. (By the way, if there is a town in the nation that doesn't have a "Georgetown," I have yet to see it. The name is by far the most popular single project designation.)

Without minimizing the effects of tight money, the psychological impact on potential buyers has been as devastating as the actual money shortage. Builders complain that many families who should be out house-hunting think that mortgages are completely unavailable. So they aren't even looking.

But interest rates went up so fast and so often in 1966 that there is much real resistance. Builder Frank D. Evans says that his Portland, Ore. model house traffic has dropped 50% this year, and is only 10% of what it was a decade ago.

Wisconsin HBA President Frank Randal of Racine says, "When I get a buyer today he is still thinking of last year's price, and he walks away shocked at the price I quote. After a few months of looking he returns and tells me he couldn't do better and will take my house. Then I have to tell him that costs have gone up again, and I have to raise my price again. At this, he really gets mad, and he winds up not buying."

But to get back to the psychological spooking that is making things worse than they are; builders attribute it to several sources, particularly

1) Newspaper stories that play up horror stories about tight money, and
2) the difficulties many families have in readjusting to higher money prices, despite their acceptance of price increases in consumer goods.

Some reactions: Subdivision Developer Floyd Berman, in Birmingham, Ala.; "People have money, but there is too much talk about tight money. The real villain is the publicity given today's conditions." And Market Researcher Edwin A. Coleman (of Houston's Independent Research Associates) says, "Both Houston papers spent months talking about how hard it was to get a loan. They bad-mouthed it until people thought they couldn't buy if they wanted to."

In San Jose, Calif., the local HBA executive officer, Ernest Ornellas, was also bitter about news coverage: "I've seen buyers who had the money back down because of articles in the press. The demand is there, but the public's confidence is shaky. We have to overcome this pessimism." And Los Angeles Builder Jerry Snyder adds: "I believe that negative thinking, talking, and writing about the subject has enlarged the problem." Des Moines Builder Harold Teater complains, "The newspapers have scared the good buyers." And in Charlotte, N.C., HBA President Ralph Howey reports, "We've had people who look at our houses tell us they knew they couldn't buy, and we've been able to show them that they could. They seemed to think that no one was making loans any more."

Builders are throwing money and advertising into campaigns to give homebuyers the real facts about money in their local markets. They are putting strong emphasis on the investment value of a home, and how rising construction costs will offset any possible plateauing of interest rates.

One of the first—and biggest—programs was started by the Los Angeles home-builders, with a $25,000 program of "A new home is your best buy today." Mayor Sam Yorty backed the builders' efforts with a "Buy-a-home month" proclamation, and Title Insurance & Trust Co. put on a city-wide effort of their own, saying,
"Don't pay the price of waiting for the right price." Minneapolis builders joined with realtors, utilities and materials suppliers to raise and spend $30,000 in newspaper and radio appeals that say "It's a good day for buying a home." And Milwaukee builder campaigns remind buyers that a 1% increase on an $18,000 loan costs them only $10.98 per month.

Albuquerque ads point out that price increases are coming, and that buyers will never get as much for their money as right now. And in Norfolk, Va., where the market has been made extra soft because of Naval personnel transfers to Vietnam, builders' ads stress the value of a house as a hedge against inflation. Charlotte, N.C., builders are doing the same. Denver builders are running a newspaper, radio-TV, bumper-sticker "Buy a home now" campaign, and have spent $10,000 of their own money to get it started. Says Lauren Cahill, HBA executive director: "We must educate buyers that new interest rates are here to stay, but that a house is still their best investment."

Wherever builders and associations put on exciting promotional events, crowds and interest are high, even though closings are harder to make. Kansas City may be the outstanding example. Under Executive Officer Leo Mullin, the annual Parade of Homes offered the public 145 model houses to look at in the six-county K.C. area, and the crowds that turned out weekdays and weekends forced an extra week's extension of the closing date. Said Mullin: "The Parade did a lot to restore the interest that had weakened during the summer's tight-money publicity." In Albuquerque, the homebuilders built an experimental house that brought out 22,000 families and was then sold at auction. Said one builder: "It hit at a bad time, but with better timing it would have been a real market stimulant." And in the well-promoted Mission Viejo development south of Los Angeles, Builders Ben Deane and Donald Bren brought out catering trucks to feed buyers who turned up a day before the opening to pick out their lot and model. Even in 1966, the excitement reminds you of 1947. And another new town—Westlake Village—up near the Ventura County border, brought out 10,000 persons the first two weekends it was opened; $4 million worth of houses were sold.

Pittsburgh's Ryan Homes has had a reputation for strong promotion, and claims that its Project 70 model houses brought out 35,000 people in four states (and sold four of the new houses, priced about $45,000). Denver's Wood Bros. has a "preview," then a "grand opening" a week or so later, gets double mileage out of new models. And a competitor, W.H. "Bill" Francis, is coming out with a whole new line of model houses with a lushly landscaped model-house area. "We can sell if we get buyers out, and we're going to get them out."

One-site Parades of Homes are getting more thought, thanks to outstanding examples like Cincinnati, Houston, and Birmingham. Even big cities like Chicago are planning similar efforts. Despite problems of coordination and selling in an area away from builders' own subdivisions, the public interest that is created by a dozen or more new houses in one location sends ripples of excitement throughout an entire metropolitan area.

But builders aren't doing enough in new design, new plans, new materials and new products to make the new house excitingly different from the old house. If there is one thread running through the editors' and correspondents' reports, it is disappointment in not finding enough new ideas. Even in Cincinnati's terrific Homemakers promotion, 12 of 13 houses were French Provincial or Colonial—safe but familiar. From San Juan: "No innovations in plan, style or materials that can be called runaway successes." From Little Rock: "Houses seem to use the same materials and features, ad infinitum." From Hawaii: "No innovations of style, plans or materials." From Pittsburgh: "Innovations are nil here." From Lansing, Mich.: "Builders are in a rut. This (tight money) may force them into new styles and
materials to attract their customers'.

There are exceptions, of course. In Kansas City, Carson Cowherd (land developer) has asked his builders to replace all bedroom ceiling fixtures with recessed "top-hat" lighting that illuminates the closets and the room in front of them, and also to panel the garage with wood-grain sheetrock to give the look of a finished room. In the same city, Alex Bascom now has washbasins and countertops made from the same marble-pattern plastic.

Generally, we missed seeing the many new plastic laminate colors and patterns, the newest in floorings, wood panelings and lighting fixtures—all of the products and materials we knew were being marketed. Said one editor: "The best way for a builder to spend a few hours each week would be with magazines, catalogues, brochures, visits to showrooms, and just plain seeing salesmen."

This year promises to be one of high mortality for the "hip-pocket" builder. But well-managed companies should weather the crisis well, and come out prepared to take advantage of the boom that has to be coming.

When construction loans went to 7% plus 2 points, Buffalo Builder Richard Kraus decided to set and keep a 45-day building schedule that would permit him to forgo borrowing. Since most of his buyers can make high-down payments, he uses this money, plus quick completions, to save the cost of interim financing (and incidentally, to improve his entire operation). Boston's John Guluzian, executive vice president of the Home Savings Bank, notes: "We've all learned some hard lessons from this. Builders must know their costs better and watch them closer. They can't go on living from building loan to building loan." And Builder Mort Weiner adds, "Builders who are successful now were successful before, and the ones who are failing now, were failing in good times, too."

A boom-and-gloom prediction was made by Richard Owen, executive vice president for Robert H. Grant & Co., in Anaheim, Calif.: "For builders still in business, 1967 will be great. Those of us left with the right product at the right location will enjoy better sales than in 1965 and 1966." And says Houston's Ed Coleman: "Many builders who went out of business were hobby type builders. Many have been in trouble for a long time with marginal operations, and when this hit them, it was another story. The guy who can continue to build and pick up a little land will be on one of the greatest gravy trains that ever rolled."

Because conventional building is hamstrung by today's conditions, many builders are diversifying into other building fields that promise easier immediate conditions and long-term opportunity.

Even though new-house sales for Detroit's Thompson-Brown Co. dropped from 360 in 1965 to a nine-months figure of 220 this year, Sales Manager Robert Carey is adding to his sales and management staff. What are they selling? A brand-new "office subdivision," 40 acres located off an expressway in the far northwest Detroit suburbs. They will build some office space for rentals, will sell other land for companies to build their own offices on, and are thinking of a condominium office building. First client: A major insurance company bought 12 of the 40 acres and is putting up a regional office. Big advantages: 1) the limited streets and improvements needed will give Thompson-Brown 33 salable acres out of 40, and 2) the community loves the tax return of offices which need no schools and few services. Zoning was easy.

Builders have always been known for being light on their business feet, and 1966 is proving it. In every city, they are skipping from opportunity to opportunity like Liza crossing the ice. Out in Los Angeles, public works agencies report a substantial boost in the number of contractors bidding their smaller jobs—and getting them. Example: a garden-apartment specialist who recently was awarded a school contract.
Office buildings on suburban main streets look good to Detroit builder Mark T. Jacobson, who is just finishing his second complex on busy Southfield Road. He builds them exactly like garden apartments, and his office module is set by the length of his wood joists. Says he: "With mortgage money this tight, I like the low costs of conventional construction." Lawyers, doctors and other professionals are the target for Cleveland Builder Sparky DiBenedetto. He has six small office buildings in the western suburbs, and counts on their depreciation allowances to give him the cash flow he needs for his land-development operation.

In Milwaukee, builders have bought up well-located hotels which have fallen on evil times (50% or less occupancy) and turned them to upper-income apartments which rent for from $150-$450 per month. Biggest tenant attractions: lots of space in the remodeled units, and the full list of hotel services they get (maid service, beauty shop, tailor, food, bar, etc.). Other Milwaukee builders are looking to home modernization until homebuilding gets stronger.

Chicago's Bruce Blietz is also catering to the office space market in fashionable Evanston. He offers a turn-key rental to commercial tenants which gives them a custom office complete with drapes, carpeting, paneling, light fixtures, etc., at a flat pre-determined rental. Big advantage to the tenant: no loss of executive time to make the hundreds of decisions that go with moving into a new office. Said one: "This has saved us a solid month of top-echelon time."

For builders looking for a ray of sunshine, a trend to stabilized land prices seems to be resulting from this year’s drop in housing production.

"Maybe it's just supply and demand taking over," says Cleveland's Ronnie Rosenfeld, "but I think that land is becoming slightly more available at better prices." And in St. Louis, Builder Fred Kemp warily notes, "Land has leveled off at about $4,000-$5,000 per acre. If it weren't for the downturn this year, land prices would have continued their upward spiral."

In New Orleans, land developers who went all out during 1965's optimism, now find themselves with slow-moving land developments (but with the same crushing carrying charges), and builders can take their choice from among many eager sellers. And in Milwaukee, Gurnee Cape, chairman of the land value study committee of the Society of Real Estate Appraisers, estimates that raw land prices in the metropolitan area went up 8% in 1965, but not at all this year. However, increasing development requirements still bring today's finished lot up above last year's price.

In Detroit, Builder Ted Jacobson says he sees no real sign of land prices dropping. "If you find such a situation, I think you will find that it's just a case of a particular land owner in a personal financial bind."

Builder-Realtor Arthur Levin thinks that Buffalo land prices will come down during 1967 because existing lots were not taken up this fall at the expected rate, and he predicts that the saving may be passed on to homebuyers. Boston's Jerry Levin feels somewhat the same way about his area: "Good land in this area is scarce, and we might be able to buy some nice pieces next spring—some of it partially developed—at cheap prices. There might be some mortalities among developers."

But housing costs—labor and materials—are up at least 10% this year, and it looks like they're going up again next year.

Why?
1) Most labor contracts have annual wage reopeners or negotiated annual increases. 1967 is no exception.
2) Higher manufacturing costs will be reflected in higher building material costs.
3) Buyers are asking more in amenities in the housing they buy: bigger rooms and more of them, more luxuries, more recreation facilities.

Detroit's Bob Carey says that costs have risen almost 25% in the past two years,
and he sees no sign of the trend slackening. "The house we sold for $30,000 will now be close to $37,500. The trouble is that it's impossible to disguise the fact that it is essentially the same house, just more expensive. More house the buyer will pay for, but not just more cost."

Apartment Builder Harvey K. Huie, Jr. estimates that the cost of skilled labor has risen 20% in Dallas during the last 18 months, and that material costs have risen 10%. "Of course I've raised my rents to keep pace, but my profit is down."

In St. Louis, Fred Kemp estimates that his $26,000 house has gone up $1,200 during the past year. In Wisconsin, a survey of ten builders showed that their costs had increased from 7% to 15%, with most of the gains coming this year. Milwaukee builders have had three price rises this year, reflecting new gains in labor contracts with automatic wage increases.

Even single items can hurt. In Atlanta, Builder Alfred M. Carlsen (10-20 houses per year) complained that plumbing costs (mostly scarce copper) were up 27%, and his total costs were up 15%.

Where the local economy is booming, building labor is scarce and expensive and not very productive. Erratic housing employment has driven many workmen out of our industry, and those who do stay don't encourage their sons to follow in their footsteps.

No city is booming more than Chicago, with new factories going up daily throughout the metropolitan area. Competition for labor is fierce, and it has been reflected in building costs. Lynn Krause, sales manager for Builder Robert Alexander, says, "It takes us an extra week to finish a house compared to two years ago. If you yell at a man for dogging it he'll quit on the spot, knowing he can get another job by morning." And Bruce Blietz notes that not one of his three carpenter supers has brought a son into the trade. Says Bruce: "These men have had steady employment and always earned good wages, but the next generation wants to go into factories and offices."

In New Orleans, two successive weeks brought 55 and 66 columns of Help Wanted (Male) ads, many of them from out of town firms. Says Builder Olen Freese: "When they leave town, they rarely come back." Denver Builder Thomas Nevin says, "One subcontractor crew of 11 men quit en masse to take jobs at the new IBM plant in Boulder, where they will be assured of continuous employment." HBA executive officer Sidney Davidoff fears that the current slowdown will cost housing many of its skilled craftsmen. "This means higher start-up costs when we get moving again."

Through his tears, a Pittsburgh homebuilder told us of losing 12 bricklayers during one lunch hour. A union man walked up, said, "Who wants to work seven days a week, with plenty of overtime?" The men asked when they could start, and he replied, "How about after you finish your lunch?" At 1 p.m., they were all gone.

Des Moines' Bob Erickson notes: "Labor is tight and it is tough to get good men. Carpenters are going into overtime job situations, and may never return as carpenters. Subcontractors in Ft. Worth are being especially hard hit, according to Builder Dave Ritz, noting that both skilled and unskilled men have gone into factories."

That's the market story at the end of the year. It took a lot of digging, but we think it gives a clear picture of how and where housing stands.

For all our editors and reporters,

Jim Gallagher
Senior Editor
To Company Presidents:

Can you really afford the time it takes to read this publication?

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House & Home

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wearing windows. And, by the way, their feeling is strongly shared by the middle-aged or older couple, who have found that there are a lot better things to do in life than chores. One of the strongest appeals of the townhouse and the apartment has been the assurance that somebody else will do the work, and the cost of doing it will be included in the monthly charges.

**Romance.** A great many feelings on the part of the consumer are wrapped up in this motivation. Sex, sure. But also glamour, opulence, sensual satisfaction, youth, "go-go", all the appeals that other industries use to sell soap, cigarettes, girdles, and diamond rings. Let's face it, privacy is not the only reason why today's homebuyer loves the opulent master bedroom suite with its own bath and dressing area, its space for easy chairs, and its lock on the inside. The husband and wife won't be able to lock out the family and the world for a week or two, but they can dream about it.

You've seen the almost sensual way people run their hands over wood paneling, rich fabrics, deep pile carpeting, and heavy hardware. Take door knobs—one of the few things in a house that prospects may touch: Be sure they're solid, rich and opulent. Or bathrooms: Don't use the old 5'x7' floor plan; make an effort at better layout; and then use good fixtures and good trim. The master bath, at least, should look like what your prospect would expect to see only in an expensive custom house.

Floor, wall, and counter materials offer an unlimited choice of exciting colors and patterns, and the builder who goes along with the "any color as long as it's off-white" is throwing away one of his strongest appeals. All in all, too many model houses today have no pizzazz. Take a hard, objective look at what you are offering your buyers. If it doesn't excite you, it won't excite them. You cannot bid for any part of the consumer's dollar today with merchandise that doesn't have pizzazz.

**Identity.** To the single-family house buyer, his home is an expression of himself. Most people want to be different, but not too different. They don't want to be "way out", but they do want individuality. This desire is behind the trend to customizing houses, to make any change that the buyer wants and will pay for. Even Bill Levitt, who practically invented mass production of the standard house, today advertises "15 different homes, at 18 different prices, in four different communities".

People may flock through a good modern model with a flat roof, but they will buy traditionalists, and some contemporaries, that have design touches that seem to put their own signature of identity right there for the rest of the world to see. They will pick designs that have substance, that seem to say to the neighbors, "Here is a family with roots." Identity is also a matter of neighborhood, the right place to live. If you are building where there is no established neighborhood, you must create one, along with the impression that it will have status and individuality. Finally, identity is involvement—involving the prospect with the choice of what goes into his house or apartment—colors, textures, extras, floor-plan changes, and the like.

**Security.** This, like romance, can mean a number of things to different people, but in an insecure age, many families place high emphasis on anything that promises to lessen their fears and their doubts.

It may be family security, the feeling that the community is physically safe, that the school system will adequately prepare their children for life's demands (and stringent college-entrance requirements), that there will be good playmates, good schoolmates, and finally, good sons-in-law and daughters-in-law when that time comes.

It may be social security. Prospects want a home where they can settle down for a lifetime, even though experience tells us that the average family won't live in any one place longer than five to seven years. They want communities whose very name says "stability", "security", "success".

It may be financial security. In today's time of higher mortgage costs, dozens of builders' associations and hundreds of individual builders are emphasizing the economic advantages of home ownership, even at current prices. Normal price appreciation, tax advantages, and ease of resale are powerful appeals to today's financially sophisticated buyers.

There they are, the five most important motivations people have for buying the things they buy. Although you know what grabs a consumer when he is thinking of buying or renting, knowing what grabs him is only half the battle; using that knowledge is the other half.

Now we come down to the moment of truth, the person-to-person, belly-to-belly selling that is the only way that anything gets transferred from seller to buyer. You, and the men who work in your model houses and sales offices, have to know these motivations, have to recognize the hundreds of variations of the five basic themes, have to know how to demonstrate how your housing will satisfy each potential buyer's most important needs and wants.

In boom times, nobody can find a minute to learn how to sell effectively and thoroughly, and you'll never convince your salesmen that they don't know everything there is to know. They're too busy taking orders. Right now—when people aren't flocking to buy houses—is the time to prepare your sales force for the decade ahead.

And finally, remember that you will never sell the consumer by asking him what he wants because he either doesn't know, or doesn't know how to tell you, or can't afford it. You have to be the innovator—out of your knowledge of his needs and motivations. You have to create better housing and better neighborhoods. You have to lead the consumer to the marketplace—not the opposite.

No major industry ever established itself by following its customers. Each succeeded by leading the market, creating desire for its product, telling the public what they should have, should want, and why. Every good marketing program should do the same thing.

—RICHARD W. O'NEILL
New Jersey builder Richard Goodwin develops

Richard C. Goodwin, President, Goodwin Homes, Inc.

Upgrading is an important factor as a new home community grows. As long as Alcoa can keep giving us the kind of improved flexibility that we're looking for, they'll continue to be an important part of our package.

To Richard Goodwin, president of Goodwin Homes, Inc., business is more than a matter of books and records. "It takes energy, a competitive drive and an ability to roll with the punches."

And it is exactly that sort of enthusiastic spirit that pervades the entire Goodwin organization, from its founder and chairman of the board, Harry J. Goodwin, through the executive and sales force to its important suppliers like Alcoa Building Products, Inc.
**TECHNOLOGY**

**PREFABRICATED CHIMNEY- TOP** made of plywood and fiberglass brick fits over old masonry chimney and doubles its size. Metal cap completes job.

**Fiberglass wrap-around lets remodeler enlarge an old chimney-top**

It's a low-cost way to keep an exposed chimney-top in proportion to a newly enlarged house. It avoids the unfeasible alternative of adding new masonry at the roofline. And it permits the application of any masonry pattern to an old chimney.

The wrap-around—as used by Builder Gene Michaud of Hartford, Conn.—consists of a plywood shell covered with fiberglass masonry. Michaud prefabricated it, cut the bottom edges to conform to the roof pitch, and set it over the old chimney-top (photo above). This doubled the apparent size of the chimney.

To conform to colonial house style, Michaud topped off the shell with a black metal cap bonded to the walls of the chimney flue (drawing). For fire protection, the shell is insulated from the existing brick by a liner of fiberglass batt.

Michaud used a fiberglass masonry simulating white colonial brick, but could just as easily have used a stone pattern. The fiberglass is bonded to the plywood.

**New latex enamel permits all-water-base paint system**

Instead of using two kinds of interior paint—water-based latex for walls and oil or alkyd enamel for wood trim—a painter may now use one. By adopting 100% acrylic latex enamel, he can apply the advantages of water-based paint—soap-and-water cleanup and fast drying—to trim as well as walls.

The new semi-gloss finish is not the first water-based enamel to be offered to painters. But it is the first one with no problems. Earlier latex enamels dried so rapidly and had such poor leveling ability that they produced brush and lap marks.

Acrylic latex enamel, developed by Rohm and Haas Co. of Philadelphia and manufactured by some 25 paint companies, compares favorably with oil and alkyd enamels and even surpasses them on some counts, as the table below indicates.

**How white semi-gloss paints compare**

<table>
<thead>
<tr>
<th>Paint Type</th>
<th>Old Latex</th>
<th><em>Acri</em> Semi-Glass</th>
<th>Solvent Alkyd Semi-Glass</th>
<th><em>Acri</em> Semi-Glass</th>
<th>Water clean-up</th>
<th>100% Acrylic Semiglass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Drying-time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15 min.</td>
<td>15-20 min.</td>
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<td></td>
<td>15-20 min.</td>
<td>15-20 min.</td>
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<tr>
<td>Flow and leveling</td>
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<td></td>
<td></td>
<td></td>
<td>4</td>
<td>5</td>
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<td>Sagging</td>
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<td>Very slight</td>
<td>Fair amount</td>
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<td>Fair</td>
<td>Fair plus</td>
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<td>Hiding</td>
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<td>Fair</td>
<td>Fair plus</td>
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<tr>
<td>Resistance</td>
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<td>Good</td>
<td>Good</td>
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<td>to yellowing</td>
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<td>Good</td>
<td>Good</td>
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<tr>
<td>Task-free time</td>
<td></td>
<td>4 to 5 hr.</td>
<td>3 to 5 hr.</td>
<td></td>
<td>4 to 5 hr.</td>
<td>20-30 min.</td>
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<td></td>
<td>4 to 5 hr.</td>
<td>20-30 min.</td>
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<tr>
<td>Resist. time</td>
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<td>4 to 5 hr.</td>
<td>7 to 16 hr.</td>
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<td>4 to 5 hr.</td>
<td>7 to 16 hr.</td>
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<td>7 to 16 hr.</td>
<td>7 to 16 hr.</td>
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<td>Fire hazard</td>
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<td>No</td>
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<td>No</td>
<td>No</td>
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<tr>
<td>Stain removal</td>
<td></td>
<td>Good</td>
<td>Fair</td>
<td></td>
<td>Good</td>
<td>Fair</td>
</tr>
</tbody>
</table>

^1 Length of time a coat of paint remains unswellable to brushing
^2 80°F, 50% RH, after 7 days

New products start on p. 115

**Movable walls simplify apartment planning**

Not only can a tenant select any room layout he wants, but he can change it any time after moving in. This is how apartment builder Ohlsson & Skarne of Stockholm, Sweden, makes it possible to house tenants of many different income levels in one four-story building.

Every interior partition can be moved except one—the kitchen-bathroom plumbing wall. The only other limits on where the partitions can be placed are window locations and the entry door. All closets are free-standing storage units, and interior loadbearing walls were eliminated by the use of columns.

Partitions are so easy to move that husbands and wives often do the work themselves. No special tools are needed.

The partitions consist of a 2"-thick straw material—for thermal and acoustical insulation—laminated between gypsumboard (drawing). They are constructed about 2" shorter than ceiling height to leave room for a plastic molding seal on top of the wall (photos, above) and a wood plate plus expansion bolts at the bottom. The bolts are used to jack up the wall and tighten it against the plastic. A wiring channel at the bottom of the wall is concealed by plastic baseboard, which snaps into a groove in the wood plate.

All the partitions are set on top of a monolithic plastic floor covering, which is laid before any walls are brought in.
Now in every part of the country are selling faster with modern

Across the nation, new electrically heated homes are going up at the rate of over 800 a day. And that means they’re selling just as fast.

For example, the builder of a new Texas subdivision featuring electric heat moved all thirty-eight homes (like the one shown at upper left) within one month. And in a new Southern California development of 104 electrically heated homes (upper right), fifty-five were sold in the four months before construction was completed—many before the ground was even broken.

Whatever size, style or price home (or apartment) you build, you add a major selling feature with recognized sales appeal when you install modern flameless electric heat. And you’ll speed construction in the bargain.

Find out now how you too can profit more by taking advantage of the growing demand for electric heat. Sometime soon, talk it over with your electric utility company.
Warren County, Ohio: 1600 sq. ft. Ranch.

Tappan, N.Y.: 1320 sq. ft. Bi-Level.

Redondo Beach, Cal.: 1750 sq. ft. Provincial.

Connellsville, Pa.: 3062 sq. ft. Split-Level.


Denver, Colo.: 3000 sq. ft. Bi-Level.

Lexington, Ky.: 3020 sq. ft. Colonial.


Woodbridge, Conn.: 3000 sq. ft. Ranch.

Marion, Ohio: 3200 sq. ft. Ranch.

Zion, Ill.: 2426 sq. ft. Ranch.


houses of every size and style
flameless electric home heating

Only flameless electric home heating offers you so many different types of equipment to choose from:

- Baseboard units take up little space, permit room-by-room temperature control. Two types are available: radiant or convective.
- Radiant ceiling heat uses small wires concealed within ceilings, ceilingboard or wallpaper. Each room has individual temperature control.
- Heat pump: heats home in winter, cools it in summer. One thermostat setting maintains any desired year-round temperature.
- Well panel heaters, with heating coils behind decorative grilles, provide radiant heat with natural or fan-forced convection.
- Central systems are available for either hot water or warm air heating in which flameless electric units supply the heat.

LIVE BETTER ELECTRICALLY
Edison Electric Institute, 750 Third Avenue, New York, N.Y. 10017

DECEMBER 1966

Circle 84 on Reader Service Card
Are you getting full profit

People want window insulation—they know it’s necessary. That’s why it’s easy to sell PPG Tindow® Insulating Glass—and make extra profit with no added labor costs.

Point out to your customer that his only chance to get insulating glass is when the house is being built. And that the cost of insulating glass can be included in the mortgage, with only a few dollars down. Otherwise, he’ll probably spend $200 to $400 out of pocket to insulate the windows later.

Tell your customer about the added convenience that only insulating glass provides—no putting up, no taking down or
from the windows you install?

storing; only two surfaces to wash. Plus lower heating bills, reduced fogging and frosting, no down drafts. The big difference is you’ll pocket extra profit. And your customer will get lasting satisfaction.

PPG makes the glass that makes the difference.

Pittsburgh Plate Glass Company, One Gateway Center, Pittsburgh, Pennsylvania 15222.

See us at space 865, National Association of Home Builders Show—December 5-8—McCormick Place, Chicago, Illinois.
NAHB's Research House VI near Washington, D.C., is a compendium of the latest and best ideas for making homes better, and more salable. Its most prominent exterior and interior material is brick.

The front elevation of the Research House is dominated by unusual, four-inch-thick loadbearing brick wall enclosing the carport. It gives approach to house distinction and elegance.

Designed as series of "U" shapes, wall provides utility, economy, and great visual interest. Wall supports roof; interiors of "U's" furnish handy storage space inside carport. Portions of wall are pierced-brick screens whose openings and projecting header courses create dramatic beauty and interest. A single wythe of brick was used in this extremely simple wall which needs no interior or exterior finish: Economy, in both materials and construction, is the result.

Other unusual brick usages: Reinforced Brick Masonry (RBM) retaining wall across front of house on lower level.

Wall is exposed on interior; above fireplace in living room a decorative pattern is created by projecting brick four inches from wall and then alternately projecting and recessing header and stretcher courses one inch. Brick wall flows out from both sides of fireplace, unifying living room, atrium, den, and patio. A 20-inch-wide brick bench is cantilevered from wall.

These are unusual brick usages, yet they are easy to plan, simple to execute, and inexpensive to build. Any home builder can use brick in the same ways, or adapt these ideas to his own needs. Write for drawings of these details in NAHB Research House VI.

Structural Clay Products Institute
1520 18th St., N.W., Washington, D.C.
These ovens can bake a potato in only eight minutes

They can also bake a two-layer cake in six minutes, roast a 12-lb. turkey in 75 minutes, and defrost a 3-lb. frozen roast in five minutes.

Reason: Instead of cooking with conventional radiant heat, they cook with high-frequency radio waves which heat only the food itself. The microwaves pass through materials like glass, plastic, and even paper but are reflected by metal, so oven manufacturers recommend the use of non-metallic utensils for best results.

Microwave cooking also offers these advantages:
1. It’s cool—throws off no heat because oven interiors and utensils are no more than lukewarm to the touch.
2. It’s clean. Food spatter can be wiped off in a few seconds because it isn’t baked onto the oven surfaces.
3. It’s safe—not only because there are no hot surfaces but also because cooking stops automatically when the oven door is opened.

A new idea for kitchens? Hardly. Microwave ovens have been on the market since the mid-1950s. But largely because of their high price—as much as $1,495 for some units—their use was limited to a handful of expensive custom houses.

Now there are signs that the electronic ovens may become a sales asset in built-for-sale models.

Item: Two manufacturers—Tappan and General Electric—are marketing the more modestly priced units shown here. Tappan offers a built-in microwave oven for $795, and also offers a freestanding unit—combining a microwave oven, conventional oven, and cooktop—for $998. GE offers a comparable freestanding unit, plus self-cleaning, for $895.

Both manufacturers have overcome a drawback of some earlier electronic ovens—their failure to brown food while cooking it. Tappan’s solution is a patented browning element. GE solved the problem by installing its microwave unit in a standard electric oven.

Item: A Cleveland-area builder—Manny Barenholtz—is offering Tappan’s $998 freestanding unit in houses ranging from $25,000 to $34,000. Of 60 buyers since March, 55 have taken the microwave oven.

Item: Ryan Homes, the Pittsburgh-based, multi-city builder, included GE’s microwave unit in its Projection ’70 model, which opened in 12 cities in October (H&H, Oct.).

For more information from Tappan, circle 255 on Reader Service card.

For more information from GE, circle 256 on Reader Service card.

TAPPAN'S COMBINATION UNIT has eye-level microwave oven and lower-level oven for conventional cooking. It sells for $998.

GE'S COMBINATION UNIT has upper conventional oven and lower oven for microwave and/or conventional cooking. Price (with self cleaning): $895.
NEW PRODUCTS

Baths

Wall-to-wall carpet of nylon tweed bonded to 3/16" sponge-rubber backing is cemented directly to floor with a waterproof adhesive. Moisture barrier between pile and backing prevents wet carpet from buckling. Viking, New York. Circle 210 on Reader Service card

Wall-to-wall carpet

Oval lavatory that features gold-tone pattern measures 19" x 16". A smaller model measures 17" x 14". Matching lavatory faucet is finished in satin gold. Other styles and finishes are available in both sizes. Gerber, Chicago. Circle 212 on Reader Service card

Oval lavatory

Wide-spread fittings of corrugated tubing can be bent to fit any sink drilling from 8" to 15" centers to eliminate measuring and cutting. Fittings come with choice of chrome or diamond-cut lucite handles. Price Pfister, Pacoima, Calif. Circle 213 on Reader Service card

Wide-spread fittings

Sliding door cabinet has antique picture frame (also offered with hinged door models). Frame is kiln-dried hardwood in antique charcoal with silver highlights. Overall dimensions: 29" wide, 18½" high, 5¾" deep. Miami-Carey, Cincinnati. Circle 215 on Reader Service card

Sliding door cabinet

Push-pull faucet in solid brass with chromium finish has color-keyed, temperature-control insert in acrylic dial. The dial indicator turns to full red for hottest water and to full blue for coldest. Speakman, Wilmington, Del. Circle 216 on Reader Service card

Push-pull faucet

One-piece shower stall in fiberglass incorporates integral corner seat. Unit is 60" wide, with 7½" high walls, and strong flanging edges that simplify installation. Available in choice of pastels or white. Universal, Rundle, New Castle, Pa. Circle 211 on Reader Service card

One-piece shower stall

Self-rimming lavatory in vitreous china incorporates two color tones: A contrast color on the lavatory's outer rim blends with a pastel color in the bowl area. Available combinations: brown with tan or olive with pale green. Eljer, Pittsburgh. Circle 260 on Reader Service card

Self-rimming lavatory

Valance rod conceals unsightly curtain hooks and allows shower curtain to hang in full folds for neater appearance. Rods—a potential sales feature—are available in either gold or silver anodized colors. Kinkhead, Chicago. Circle 214 on Reader Service card

Valance rod

Concealed fastening system offered with triple chrome-plated brass accessories provides protection against vandalism on job site. Fittings require no special screws or tools, yet have no visible signs of attachment. G. M. Ketcham, Glendale, N.Y. Circle 218 on Reader Service card

Concealed fastening system

New products continued on p. 120
No house today is totally up to date without total air conditioning!

A strong statement? Consider this: Many people today want more than heating and cooling in their homes. They also want humidification and air cleaning. If not at the time they buy, later. We've taken this into consideration and designed a total air conditioning package.

Four Carrier components that work together efficiently. Using all four, you can offer prospects a superior total system. Or with fewer than four, a superior partial system.

The heart of the package? A Carrier Weathermaker® Furnace with the reserve capacity in air power to handle the other components. Let's look at them individually:

1. To heat the air—your choice of a full line of dependable, economical, quiet and long-lived Carrier Furnaces. Shown here: the top of our line—the new Home Weathermaker with Two-Stage Heating.

2. To cool the air—your choice of a complete line of Carrier equipment that cools and dehumidifies. All types and sizes.

3. To humidify the air—Carrier Humidifiers for homes of any size. They have no moving parts, no fans, no motors, no pumps to wear out.

4. To clean the air—Carrier Electronic Air Cleaners, which remove particles as small as one-millionth of an inch from the air—process all the air several times an hour.

* * *

This combination of products is exclusive with your Carrier Dealer. Call him—he's in the Yellow Pages. Carrier Air Conditioning Company, Syracuse, New York 13201.
Now you can have true freedom of choice... Hotpoint’s Single-Source Builder Program offers every kind of builder appliance, plus an almost unlimited selection of models to fit your cost, size and style requirements perfectly. It’s the fullest line in the business! And it’s backed by Hotpoint’s 90-Day Replacement Guarantee of Satisfaction, in addition to the standard parts and labor warranties.
...the best in professional builder services

And Hotpoint helps you keep costs low with a full range of expert technical and building services. Example? A builder was planning to install a U-shaped kitchen in the homes of one of his major subdivisions; he called in Hotpoint early and our Kitchen Planners showed him how a corridor-kitchen plan could be substituted. This eliminated costly corners and more than 100" of countertop, saving the builder more than $45.00 on each unit.

You'll sell better with Hotpoint, too. Because it's a name customers know and respect. Over a million dollars in dramatic TV and magazine advertising is pre-selling prospects on Hotpoint's outstanding features—like Teflon-coated oven walls, No-frost refrigerators on wheels, and an automatic washer that does hand-washing better than hands.

Your local Hotpoint distributor stocks the full-line. So, call him today to get the full story on our Single-Source Builder Program. He wants your business, and can deliver the products and services to earn it!

Hotpoint
first with the features women want most
Hotpoint—General Electric Company • Chicago, Illinois 60644

See the Hotpoint Display at the NAHB Convention in Chicago, December 4-8. Booth numbers 834, 836, 935, 936.
NEW PRODUCTS

Office equipment

**High-speed files** — 36" wide and 17¾" deep — combine the advantages of lateral filing with full suspension roll-out shelves. Files are available in three-, five-, and six-compartment heights, in several color combinations. Tab, San Francisco. Circle 201 on Reader Service card

**Adding machine** incorporates tape punch to record simultaneously on punched paper tape all or any data that appear on printed adding machine tape. Model is suggested to simplify complicated job-cost accounting. Friden, San Leandro, Calif. Circle 202 on Reader Service card

**Dry diazo whiteprinter** in medium price range makes prints up to 43" wide at speeds synchronized up to 65' per minute. Machine, which can process plastics and films, is wired for 220 volts and requires 50 amperes. General Aniline, New York. Circle 203 on Reader Service card

**Magnetic control board** framed in extruded aluminum has three separate panels that can be removed and interchanged. Board — 23" x 48" — is white steel with black grid lines. System includes 90 accessories. Magnagraph, New York. Circle 204 on Reader Service card

**Vertical print files** allow each sheet to hang flat with up to 100 sheets clamped in each print hanger. Model can be mounted on any vertical surface and hinged arms fold flat when not in use. Widths from 18" to 42". Lewbill, Scottsdale, Pa. Circle 205 on Reader Service card

**Filing-cabinet series** includes heights of up to five drawers (left) in legal and letter sizes. Cabinets are available in choice of colors, with plastic laminate top. Double-action drawer pulls can be operated with either hand. Steelcase, Grand Rapids. Circle 206 on Reader Service card


**Modular stack roll files** incorporate reinforced-aluminum square tubes that will not bind rolled drawings. Units can be combined easily and will stack together with round-tube files which they replace. Plan Hold, Torrance, Calif. Circle 208 on Reader Service card

New products continued on p. 122
Solve 4 biggest double-door problems

1. Warping. Made of steel, Pease Ever-Strait Doors end costly, bothersome call-backs, because they just don't warp.
2. Drafts. Magnetic weather-stripping like on modern refrigerators gives a positive weather-seal ... shuts out drafts, snow and cold air.
3. Swelling. No worry about sticking due to temperature and humidity changes. Once Pease Ever-Strait Double-Doors are properly installed they'll always open and close—easily.
4. Storm doors. Pease Ever-Straits give the greatest weather-barrier ever built into a door. Ever-Strait doors have a solid foam insulating core. There's also a thermal break between the two galvanized steel facings, that eliminates condensation and frosting.

Like to know more? See your nearest distributor listed, or write for free brochure and full details.

Pease Ever-Strait Doors
Dept. H-12, 900 Laurel Ave., Hamilton, Ohio

Edward Mines Lumber Company
Chicago, Illinois
Springfield Builders Supply Co., Inc.
Springfield, Illinois
Imperial Components, Inc.
St. Charles, Illinois
Components, Inc.
Hammond, Indiana
Home Lumber Co.
New Haven, Indiana

Western Mill & Lumber Co.
Baltimore, Maryland
Alico Structures, Inc.
Easton, Maryland
L. Grassman Sons, Inc.
Brantford, Massachusetts
O'Conner Lumber Co., Inc.
Westfield, Massachusetts
Johnson Door & Specialties, Inc.
Kalamazoo, Michigan

Acom Distributing Co.
Walled Lake, Michigan
Minnesota Wood Specialties, Inc.
St. Paul Park, Minnesota
Rust Sash & Door Company, Inc.
Kansas City, Missouri
Sealrite Mfg. Co.
Lincoln, Nebraska
Shar Door Corporation
Bound Brook, New Jersey

Gerry Company, Inc.
Albany & Syracuse, N. Y.
Inn City Whit笑脸 Co.
Lancaster & Rochester, N. Y.
Sam Plevsky Hardware Co., Inc.
Bedford Heights, Ohio
Iron City Whit笑脸 Co.
Cleveland, Massillon & Lima, O.
Pease Woodwork Co., Inc.
Hamilton, Ohio

Keystone Alum. Window Company
Lancaster, Pennsylvania
Iron City Whit笑脸 Co.
Pittsburgh & Johnstown, Pa.
Timber Trust, Inc.
Romina, Va.
Marling Lumber Company
Jenewein, Wisconsin
CANADA: Whit笑脸 Ltd.
Montreal North, P. Q.

DECEMBER 1966
**NEW PRODUCTS**

**start on p. 115**

**Adhesives, sealants, & paints**

**Joint estimator** in the form of a slide rule calculates thermal expansion of common building materials and comes up with the optimum joint dimensions required for various sealants. Single units free. Thiokol Chemical, Trenton, N.J. Circle 230 on Reader Service card

**Latex rust-inhibitor** permits prime-coating over tight rust and old paint to provide a base for a variety of finishes. Advantages: Rapid drying permits re-coating in one hour, and water-thinned composition presents no fire hazard. Luminall, North Bergen, N.J. Circle 237 on Reader Service card

**Compact siphon paint pump** is lightweight yet can supply up to three gallons per minute. It is designed to handle all conventional lacquer and enamel finishing products and will operate directly from any original container. Spee-Flo, Houston. Circle 238 on Reader Service card

**Non-flammable epoxy** is designed for exterior or interior use on any surface including wallboard, plaster, wood, metal, ceramic, glass, and concrete. Coating comes in a variety of colors and spatter effects. Preco, Plainview, N.Y. Circle 239 on Reader Service card

**Waterproof white adhesive** is recommended for bonding linoleum, vinyl and vinyl asbestos, rubber, cork, and asphalt. Designed to permit maximum translucence, adhesive can be spread with trowel or roller. Evans Adhesive, Columbus, Ohio. Circle 233 on Reader Service card

**Electric hydraulic sprayer** delivers up to 100 fluid ounces per minute in a pressure range from 50 to 2,700 psi. It can be used with a five-gallon pail or a 55-gallon drum. Unit is convertible to gasoline power. Hydrocraft, Cleveland. Circle 240 on Reader Service card

**Waterproof adhesive,** in cartridge ejected by a standard caulking gun, is suitable for bonding wall panels to studs, furring strips, and solid backing. One cartridge of the rubber-based adhesive can bond five to six 4'x8' panels. Barclite, Burbank, Calif. Circle 234 on Reader Service card

**Flexible sealant**—designed for seam and crack sealing where waterproofing is required—is suggested for down spouts and rain troughs. It requires no mixing, can be applied under water, and withstands temperature extremes. Ruscoe, Akron. Circle 231 on Reader Service card

**Caulking jelly** with bentonite mineral base lubricates construction joints and seals against moisture. It prevents leaks in concrete pipe and fills cracks in expansion joints. Won't freeze in cold or soften under heat. American Colloid, Skokie, Ill. Circle 232 on Reader Service card

**Masonry paste** for smoothing float- and sand-finished walls to permit paperhanging or painting can be applied with brush or trowel. It fills in irregularities and dries to a smooth, fiberboard finish. Standard Chemical, Hoboken, N.J. Circle 236 on Reader Service card

*New products continued on p. 124*
Want soilproof walls with authentic texture?

Marlite has the touch.

One touch tells you that Marlite Textured Paneling is a decorating idea with unlimited possibilities.

This complete new line of wall paneling has texture you can actually feel. And soilproof beauty you can wash.


All four have Marlite’s exclusive baked plastic finish that wipes clean with a damp cloth. Marlite resists heat, moisture, stains and dents—stays like new for years.

Add the sales appeal of Marlite Textured Paneling to your interiors. Consult Sweet’s File or write Marlite Division of Masonite Corporation, Dept. 1222, Dover, Ohio 44622.
IS THERE A BOTTLENECK
IN YOUR BLUEPRINT DEPARTMENT?

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Circle 90 on Reader Service Card

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of October 23, 1962; Section 3689, Title 39, United States Code)

1. Date of Filing: October 1, 1966
2. Title of Publication: HOUSE & HOME
3. Frequency of Issue: Monthly
5. Location of known office of Publication: 330 West 42nd St., City, County and State of New York (10036)
8. Known bondholders, mortgagees, and other security holders owning or holding one percent or more of total amount of bonds, mortgage or other securities: None
9. Paragraphs 7 and 8 include in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs above the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.
10. This form must be completed for all publications except those which do not carry advertising other than the publisher's own and which are listed in Sections 122.231, 122.232, and 122.233, Postal Manual (Sections 6354a, 6355, and 6356 of Title 39, United States Code)

Average No. Copies Sold Each Issue During Preceding 12 Months

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(Signature of owner)

Eugene H. McGraw
Vice President & Secretary

NEW PRODUCTS

start on p. 115

Lighting

Hand-carved chandelier with six candelabra lamps has fruitwood center column decorated with antique solid brass and brass arms. Fixture is 28" wide, with a 24" body height, and an overall height of 42". Progress, Philadelphia. Circle 242 on Reader Service card

Recessed fixtures designed for lobbies and corridors come with 100-watt mercury vapor or 60-watt incandescent lamp. Choice of four lens patterns in both round and square models, in white, aluminum, and brass. Art Metal, Cleveland. Circle 243 on Reader Service card

Rectangular floodlight for building facades comes in 400- and 1000-watt mercury-vapor models with one-piece mounting yoke and two-piece cast aluminum housing. Removable top allows access to lamp and ballast. Landmark, Southaven, Miss. Circle 244 on Reader Service card

One-lamp pendant is available with two sizes of crystal in a variety of styles. Fixtures can be spread across ceilings, or mounted on matching wall brackets. Metal parts are polished or brass-finish aluminum. Prescolite, Sun Leandro, Calif. Circle 245 on Reader Service card

New England lanterns of cast aluminum are available in a variety of post, pier base, bracket, ceiling, and hanging fixture models. Choice of finishes includes ebony, white, hand-rubbed bronze, Swedish iron, and patina. Hadco, New York. Circle 246 on Reader Service card

New products continued on p. 133

Circle 91 on Reader Service Card
The USO is a marine’s chance to unwind over a cup of coffee 200 yards from the barbed wire edge of trouble. If you care.
The USO is a warm American greeting for a lonely sailor away from the teeming streets of a foreign port. If you care.
The USO is a smile lighting up a soldier’s tension-creased face as Bob Hope entertains on a Southeast Asian battleground. If you care.
The USO is there, only if you care. Only your donations enable the USO to bring a little touch of home into the lives of our 2,300,000 citizens in uniform—lives they are pledged to risk wherever freedom is threatened. Someone you know needs the USO. Someone you know wants a choice of conduct during his off-duty hours. Someone you know wants a haven in a hostile world. Someone you know needs a reminder that folks back home really care. Show him you care. Give to the civilian-supported USO through your local United Fund or Community Chest.

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You won’t find a Rangaire heating and air conditioning dealer rushing off to his next job—not until he’s sure your installation job is complete, and everything is working perfectly. Even though Rangaire systems are among the finest available, we don’t have the biggest name in the business—yet. So Rangaire dealers work harder and longer to make sure each installation is perfect. And, builders appreciate this extra care and service...they get a great peace of mind when our quality product is backed by our dealers’ quality installations. Why not call your Rangaire dealer for heating and air conditioning systems...from 15,000 to 220,000 BTU capacities. Ask him about good-looking Rangaire COLOR/blend condensers, too, that harmonize with your homes' exteriors to beautify rather than detract. You’ll find his price competitive, his products equal or better. And his eagerness to do your job right a refreshing change.

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COBELL INDUSTRIES DIVISION • CLEBURNE, TEXAS 76031
**NEW PRODUCTS**

start on p. 115

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**Hardware**

Jamb-type overhead garage hardware available pre-loaded to simplify installation is compatible with electric operators. The low-overhead hardware requires only 1/2" clearance. Michel & Pfeffer, San Francisco. Circle 248 on Reader Service card

Drawer pull and knob of zinc die-cast construction are finished in bright brass. Pull dimensions: 4.4" overall length; 13/16" high, with 3" hole centers. Knob is 1 15/16" long, 1 3/32" wide, and 5/8" high. Amerock, Rockford, Ill. Circle 249 on Reader Service card

Custom line designed to complement Provincial or Early American includes a selection of pulls, knobs, backplates, and knob and plate combinations. Choice of finishes: smoky-black antique, or white-and-gold. Belwith, Los Angeles. Circle 250 on Reader Service card

Grecian-design lockset features permanently embossed Greek key motif that encircles knob face. Trim rosette, which fits behind the lockset, repeats the pattern. Available in antique-finished brass, bronze, or nickel. Kwikset, Anaheim, Calif. Circle 251 on Reader Service card

Entrance handles, fashioned in three designs, are available in choice of two finishes: antique brass or antique silver. Each design complements a wide range of architectural styles. Matching interior trim is available. Dexter, Grand Rapids. Circle 252 on Reader Service card

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- Thai-Teak (authentic Tectona Grandis, imported from Thailand) is genuine teakwood... lustrous, warm-grained... supremely beautiful.
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- Thai-Teak is “lifetime” flooring... withstands the hardest wear... resists termites, rot and decay.
- Thai-Teak costs now compare to medium priced carpet and vinyl.
- Thai-Teak comes in 85 different patterns, available for delivery... send for our Trade Bulletin 200 today.

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KNOSBS FOR FINE FURNITURE AND CABINETS

Each EPCO knob is carefully designed for beauty, durability and easy installation. Each is machined from aluminum or brass bar stock. Brass is in all standard hardware finishes. Aluminum is anodized clear, brass bronze or black.

Free 44-page catalog on all EPCO Knobs, Pulls, Magnetic Catches and sliding door hardware available on request. See Sweet’s Catalog under Arch. file 19g-En and Light Const, file 7b-En.

THE ENGINEERED PRODUCTS CO.
P.O. BOX 108 FLINT, MICHIGAN

Circle 93 on Reader Service Card
Flooring

Vinyl-fiber floor covering manufactured in 6'6" widths is composed of a heavy layer of polyvinyl chloride bonded to a resilient fiber base. Flooring is offered in 33 colors and patterns. Above: red brick and "palma". Tapiflex, Millbury, Mass. Circle 222 on Reader Service card

Vinyl asbestos tile incorporates subtle color flecks uniformly distributed throughout the tile’s depth. Offered in 12" squares, in sixteen colors. Azrock, San Antonio, Tex. Circle 223 on Reader Service card

Textured vinyl tile in moderate price range comes in two sizes: 9" and 12" square. Tile features an embossed surface in four colors: blue, coral, green, and white. Goodyear, Akron, Ohio. Circle 224 on Reader Service card

Solid vinyl tile—in 12" squares and .050" gauge—features handcrafted mosaic effect in choice of four colors: red, pale beige, off-white, and green. Contrasting grout lines conceal seams. Armstrong, Lancaster, Pa. Circle 221 on Reader Service card

What’s so new about a new fiber-glass garage door?

1 NEW MARVEL-LUCENT SUPER SEAL FORMULATION that defies ultra-violet light and wind-driven rain and grit (the arch enemies of older materials), never blisters, never peels, never checks, never blotches, never needs painting, and is so color-fast that it is covered by a 15-year warranty.

2 NEW 15-YEAR WARRANTY ON THE MARVEL-LUCENT PANELS—no finer warranty on any fiber-glass.

3 NEW 2-INCH THICK BOX-SECTION DESIGN for strength and rigidity in the Marvel-Lucent panels.

4 NEW RIGID EXTRUDED ALUMINUM WRAP-AROUND FRAME, the only such frame on any residential fiber-glass door. Compare this with any old-fashioned rolled sheet metal frame; the contrast is dramatic. This frame is solid, rugged, rigid, strong, like an industrial door frame.
Solid hardwood flooring for installation over concrete or wood subfloors comes in panels of individual slats held together by removable face paper. Produced in red oak, hard maple, beech, walnut, cherry, and teak. Harris, Johnson City, Tenn. Circle 225 on Reader Service card

Sheet vinyl simulates antique brick—in choice of natural, white, terra cotta, or pink—set in staggered rows. Grout lines in pattern conceal seams. Amlico, Trenton, N.J. Circle 226 on Reader Service card

Inlaid sheet vinyl with nubby texture incorporates several layers of colored chips in clear vinyl. Perma-shield backing permits installation below grade. In 6' widths. Mannington, Salem, N.J. Circle 227 on Reader Service card

Sheet vinyl flooring in 6' widths features an antique mosaic stone pattern in five weathered tones: tan, beige, green, pale gray, and brick. Flooring has a vinyl-foam interlayer for sound deadening. Ruberoid, New York. Circle 228 on Reader Service card

NEW WEATHERPROOF CONSTRUCTION. Marvel-Lucent panels are set into section frames with ends pressed into one-piece sponge neoprene pads which fill the end of the wrap-around frame and seal out rain, wind, snow, dust, and dirt. Ever seen construction like this? You’ll see it in Crawford Marvel-Lucent.

NEW SHIP-LAP JOINTS BETWEEN SECTIONS with an air-lock in the middle prevent moisture from seeping to the inside.

NEW MOLDED NYLON ROLLERS for practically soundless operation; not metal rollers in a metal track.

NEW DOUBLE LOCKING MECHANISM that snaps locked at both sides when the door is tight against the floor and holds it there to seal out wind, dirt, weather. The double-locking action holds the door down evenly, clear across its width, yet, opens easily at a pull on the chain.

NEW BUYER APPEAL because the Crawford Marvel-Lucent has more and does more for the home owner than any fiber-glass door has ever done before.

All these new features in addition to beautiful, glamorous translucency; three sparkling colors and white; light weight for easy operation and the all-important appeal of newness—the newest door that anyone can offer.

More information from your local Crawford Distributor listed in the Yellow Pages under DOORS or get bulletin CD-3981 from Crawford Door Co., 4720-29 High Street, Ecorse, Mich. 48229. A subsidiary of Jim Walter Corporation.
Plywood has grown so fast it takes a Philadelphia lawyer to understand all the grades, types and species.
All that’s being changed with a new system so simple that your mother-in-law can understand it.

The new consolidated Product Standard, PS 1-66, places the emphasis where it belongs: on plywood’s end-use, rather than on its species.

The new system permits easier specification. Grades are simpler. Panel markings are more informative. And, with the new Identification Index, you get greater construction economy, because you can buy or specify the exact thickness for the job—cutting in-place cost. Recommended support spacings are shown right on the stamp. (See example at right.)

The consolidated Standard is simple, but you’ll still need new grade charts, some explanation of the new terms, and new plywood use data. We’ve prepared four key booklets that tell the whole story. Send the coupon today. Or contact us in Tacoma or any regional office: Atlanta, Chicago, Dallas, Detroit, Los Angeles, Minneapolis, New York, San Francisco, Washington, D. C.
NEW LITERATURE

For copies of free literature, circle the indicated number on the Reader Service card, page 131.

LAMINATED LUMBER. Structural glulam laminated Southern pine is discussed in a technical bulletin containing design data, specifications, and appearance grades. Several types of arches and beams are illustrated. Two-page spread in Northern Pine, New Orleans. Circle 355 on Reader Service card.

BRASS AND CRYSTAL FIXTURES. Four-color product folder describes and illustrates four-chandelier, two-bathing fixtures, and wall sconces in an installed series that features hand-cut crystal prisms and antique gold-finished brass casings. All are shown installed in typical settings. The Institute for Lighting, E-Line, New York. Circle 356 on Reader Service card.

ANTIQUE CERAMIC TILE. Certified for use in both interior and exterior applications, tile features smooth or rough glazed surfaces and a weather-resistant double glaze. Fourteen basic colors are illustrated in a product folder. Hogan, Bollert, N. J. Circle 357 on Reader Service card.

FACTORY-FINISHED MOLDINGS. Hardwood moldings—in ten patterns—to match or complement 80 different hardwood and softwood paneling and trim lines. Moldings are individually packaged in polyethylene bags. Georgia-Pacific, Pacific, Ore. Circle 358 on Reader Service card.

MASONRY BLOCKS. A new concept in sound control makes use of sound-absorbing, structural masonry blocks. Brochure includes general information, technical data, tables and graphs on material and characteristics. Proudfoot, Greenwich, Conn. Circle 360 on Reader Service card.

HARDBOARD PANELING. The grain patterns and color tones of hardwood are reproduced on random V-grooved panels described in a four-color brochure. Photos show paneling in a variety of room settings in six wood tones: teak, rosewood, butternut, walnut, cherry, and birch. Weyerhaeuser, Tacoma, Wash. Circle 361 on Reader Service card.

GROUND SLAB MANUAL. Twenty-eight-page brochure in full color contains seven outstanding bathroom plans. Proudfoot, Greenwich, Conn. Circle 362 on Reader Service card.

TOTAL COMFORT SYSTEM. Leaflet describes an air separator for large hot- and chilled-water systems. Model is guaranteed to let in air trapped in heating and cooling units and prevent noises caused by entrapped air in piping. Bell & Gossett, Morton Grove, Ill. Circle 355 on Reader Service card.

COLOR-MATCHED MOLDINGS. Vinyl-clad wood and metal moldings that match manufacturer's woodgrained and marble-like panels are covered in a four-page folder in full-color. Masonite, Chicago. Circle 356 on Reader Service card.

COLOR MATCHED FIXTURES. Full-line illustrated catalog provides complete technical descriptions and specifications for hardwood fixtures in walnut, teak, cherry, maple, and oak—all satin oil finished. Also: construction details and diagrams. Litecontrol, Watertown, Mass. Circle 354 on Reader Service card.

TOOL AND EQUIPMENT. Twenty-four-page catalog of 19 products includes a new traveling arbor saw and tapered plastic trimmers. Price & Ratzberge, Hayward, Calif. Circle 359 on Reader Service card.

DECORATIVE HARDWOOD SCREENS. Characteristics, architectural specifications, and ordering information for modular hardwood units in eight see-through and two solid designs are discussed in a four-page full-color brochure. Penberthy, Los Angeles. Circle 360 on Reader Service card.

VINYL-GROUTED CERAMIC FLOORING. Fully illustrated information sheet tells how to install tile sheets with dry set mortar, cement mortar, or adhesive. Covered: how to prepare subfloor, prepare and apply bonding material, and cut and place tile sheets. Ceramic Tile, Canton, Ohio. Circle 352 on Reader Service card.

PLASTIC PIPE FITTINGS. Full-line catalog shows complete pattern selection and includes sizes, descriptions, and ordering information. Also: four-page brochure on plastic fittings. R.G. Sloan, Sun Valley, Calif. Circle 358 on Reader Service card.


CUSTOM CARPETS. Twenty-nine-page catalog in full color contains 100+ wool-pile carpets made to order in any size and color pattern. Designs can be modified to meet individual requirements.癌as of colors and types are listed. Bigelow-Sanford, New York. Circle 379 on Reader Service card.

CABINET DOOR CLOSER. Product sheet describes features and applications of door closer that can be installed inside kitchen cabinet out of way. Closer works on all lipped doors. Grant Pulley & Hardware, West Nyack, N.Y. Circle 372 on Reader Service card.

STEEL-SECTION GARAGE DOORS. Specifications and advantages of steel-section residential doors are contained in a product sheet that also includes construction details. Three styles are pictured. Morrow Steel, Buffalo, N.Y. Circle 374 on Reader Service card.

SCULPTURED STONE FACINGS. Complete facings section—45 pages in all—is available in both cast concrete and Nova-Stone. Four-page brochure includes photographs of exterior and interior installations—along with complete size, weight, finish, installation, and price details. Arts for Architecture, Garden City, N.Y. Circle 375 on Reader Service card.

ALL-WEATHER CEMENT. Roofing cement is intended for installing and repairing flashings and counter-flashings on built-up asphalt composition roofs. It bonds equally well to wet or dry surfaces and is available in temperatures as low as 110° F. Four-page folder details uses and characteristics. Philip Carey, Cincinnati. Circle 376 on Reader Service card.

WALL PANELING ADHESIVE. Data sheet tells what to use adhesive with prefinished or unfinished plywood, tempered or untempered pressed board, fiberboard, chipboard, and corkboard—and how to bond studs, masonry blocks, or masonry. Other uses covered: flooring, corner and cove molding, steps, fiberglass, shingles. B.F. Goodrich, Akron, Ohio. Circle 377 on Reader Service card.

RANGE HOODS. Ventilating range hoods finished in woodgrained vinyl get the spotlight in a four-color product brochure that includes complete line. Berks Air King, Chicago. Circle 378 on Reader Service card.

DIRECT EXPANSION COOLING. Guide covers design of cooling systems—for either new or existing homes—that incorporate cool air introduced at high levels along with a baseboard heating system. For copy send $1.25 to: The Institute of Boiler and Radiator Manufacturers, 397 Seventh Avenue, New York, N.Y. 10001. Workbooks developed for use with the guide are available at $7.5 for a pack of 50 sheets.

SASH DOORS. Nine standard models—the first of a complete door line made of toxic-treated western pine—are described in a product folder. These doors have glazed or prefinished or un­finished glazed or open. Jessup Door Co, Dowagiac, Mich. Circle 380 on Reader Service card.


FURRING ON MASONRY. Information bulletin tells how to fasten furring strips to concrete and masonry block using an actuated tool. Imitated: proper fasteners, tools, and powder cartridge. Ammo Fastening Systems, Shelton, Conn. Circle 382 on Reader Service card.

ROOF TRUSSES. The design, fabrication, and shipping of split-floor roof trusses—2½" and 4" rings—are described in a factory folder. Included: two typical truss designs and a listing of other designs available on request. Timber Engineering, Washington, D.C. Circle 383 on Reader Service card.

TWO-WAY RADIO. Handbook tells how to obtain an examination-free license, select transmitter-receivers, and set up the proper antenna. Twenty pages. Amphenol, Bridgeport, Conn. Circle 384 on Reader Service card.

HOUSING & HOME

100
sell more homes with a genuine Genie®

AUTOMATIC GARAGE DOOR OPENER SYSTEM by ALLIANCE

Genie is an easily demonstrated, desirable convenience that helps builders sell homes. Your prospects can operate it themselves and immediately recognize its many benefits without leaving the comfort and safety of their car. Whatever the weather, a touch of a button opens the door... turns on the light... closes the door... locks up tight.

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"LET GENIE DO IT!"

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- Easy installation
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ALLIANCE MANUFACTURING CO. INC. ALLIANCE, OHIO Subsidiary of Consolidated Electronics Industries Corp.

Maker of famous Alliance Tenna-Rotor®
New X-act Wood Mold Shutters are 100% abs polymer, utilized by H C Products Co. for both shutter face and frame.

U-channel box frame, also of abs polymer, provides rigid construction with uniform coefficient of expansion . . . temperature changes can’t cause twist, buckle or bend.

The abs polymer also means a lightweight shutter that installs in minutes with simple metal clips. Clips are furnished on a spacer-band that quickly fastens to wood or aluminum siding — or in mortar joints in brick construction . . . then shutter snaps on.

These beautiful new shutters are dent-resistant — stay flat and straight . . . never warp, rot, peel or crack. Color choice is white, dark green or black — and is not just a surface coat but is pigmented throughout the polymer for a fade-resistant finish. Deep-louvered pattern is formed on mold made from wood shutter pattern . . . looks amazingly like wood but with no seams, cracks or rivets showing . . . and louvers can’t fall out. Mail coupon for complete facts and nearest source.

Available with or without mullion.
Don't let the wrong water pipe system dilute your profits

You’re in the home building business, but more and more you’re being drawn into other activities . . . water systems, community TV antennas, golf courses, home maintenance . . . to sell your houses and keep them sold.

The profits you make on home building could be diluted when you sell your water system . . . unless you install cast iron pipe.

Consider this: A cast iron pipe system is instantly acceptable—assures you top resale value. It’s proved itself to be dependable, economical and practically maintenance-free. And it is the pipe most frequently specified for municipal water systems.

But that’s just the beginning. Sturdy, shock resistant cast iron pipe cuts installation costs. No coddling on the job—speeds the installation. And its watertight joints make start-up pressure tests a breeze.

Now, let us help you solve some of your other problems. Our new 48-page book “Tract Development, Volume 2” is free. Containing a collection of articles written by some of the most successful land planners and developers in the industry, the book speaks with authority and insight on today’s problems. Fill out the coupon for your copy today.

Wallace T. Miller, Managing Director
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Please send me a free copy of “Tract Development, Volume 2...
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THE MARK OF PIPE THAT LASTS OVER 100 YEARS
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AN ASSOCIATION OF QUALITY PRODUCERS DEDICATED TO HIGHEST PIPE STANDARDS
DECEMBER 1966
New for '67! A full line of through-the-wall air conditioners to build in. Cooling capacities from 8,500 to 14,000 BTU. 208- and 230-volt models available. Cabinet and unit are packaged separately, with temporary exterior and interior front panels for preinstallation use included with each model.

New for '67! Perfect partner for an RCA WHIRLPOOL dishwasher, the food waste disposer is one of the most welcome appliances you can install in any home. Extra quiet, extra dependable. Continuous and batch feed models.

Whirlpool's Full-Line Concept is saving builders the country over time and trouble. Here's why. With the Full-Line Concept, you get a full line of color-coordinated gas or electric appliances from one dependable source. You deal with one man instead of three or four ... sign one order, get undivided responsibility and service. You can offer an unrestricted choice of fuel ... there are complete lines of RCA WHIRLPOOL ranges for both gas and electricity. And you offer a brand name your prospects know and respect. Your distributor can tell you how these appliances and the Whirlpool Full-Line Concept can benefit you.
RCA WHIRLPOOL APPLIANCES
GIVE YOU THE EDGE WITH A

wide choice of models and fuels

Model RRE2800
New for '67! New RCA WHIRLPOOL set-in ranges provide a complete cooking center in a single compact unit that's simplicity itself to install. Just slide the range into position... it actually hangs from the countertop so no pedestals or bracing are needed. Six electric set-ins... five 30" models and one 24"... and three 30" gas set-in ranges to choose from. Common cut out dimensions make 30" gas and electric models fully interchangeable.

Model RRG295
New for '67! This oven will stop traffic in your kitchens! Its Panoramic full-width smoked-glass doors are framed in gleaming chrome... stunning styling few women can resist. Seven electric ovens... three of them double-oven models. Five gas ovens with exclusive BLANKET-O-FLAME® oven and broiler. Choose from white, brushed chrome or any of four edged decorator colors.

Model RRG(U)825
New for '67! Four electric cooktops offer a full range of features and prices. There's a model for every kitchen. All are designed with a full ¾-inch overhang all around to make installation easy and their shallow 3-inch depth means there's no sacrifice of valuable drawer space. Cleanup's easier than ever with the new Swish-clean gas cooktops. Just lift off the trivets and entire cooktop can be cleaned with a swish of a sponge or cloth... a convenience that could sell a home. Three models available (two with Swish-clean cooktops).

Your RCA WHIRLPOOL distributor can show you all the new 1967 RCA WHIRLPOOL gas and electric appliances... the ones with real appeal for today's young market. Call him today.
IF YOU HAVE THE LEAST DOUBT THAT BUILDERS PREFER HOUSE & HOME, RUN YOUR OWN TEST. WE'LL PAY FOR IT.

All we ask is that the following conditions be met: Maximum mailing of 1,000 to any unbiased list of active builders. In the interests of good research, advertiser or agency must participate in preparing the questionnaire. A magazine preference question must be included; tabulation to be done by the client or an outside agency. The client will write House & Home a letter detailing the results and give House & Home permission to use it in selling. Interested? Contact your House & Home representative.
build four times as many houses

And buy four times as many building products!

In 15 recent marketing studies sponsored by producers of building products and their advertising agencies, active builders were asked how many one-or-two-family houses they built in the past year as well as which magazines they preferred.

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Why this steady pattern of preference for HOUSE & HOME by active builders in independently sponsored studies?

Because HOUSE & HOME alone provides them with balanced, consistent and thorough information on every vital aspect of their business—from initial land planning and finance through final construction and sale.

In so doing, it also serves the men builders work with—architects, engineers, dealers, distributors, lenders, realtors and sub-contractors. And these builder-support groups also vote HOUSE & HOME their #1 magazine in its field.

Because HOUSE & HOME is preferred by active builders and the men who work with them at every stage of the building process, it is also the preferred magazine of building product manufacturers. Again in 1965, they placed more pages of building product advertising in HOUSE & HOME than in any other publication in its field.

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Mirror-Vanities with the

luxury marble look
at the price of
plain painted boxes

Here's more sales appeal for the money than has ever been concentrated in a single bathroom product:

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- A one-piece surface-mounted assembly to save on installation cost
- New high-style "Fantasy" light fixture, a delectable option
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Send coupon for Decorator Catalog Supplement C-366 parading Grote's dazzling new line of bathroom cabinets to complement any decor, to let you cash in on the bathroom as the great new frontier for adding glamor . . . glamor that can sell or rent your home or apartment weeks earlier.

THE GROTE MANUFACTURING CO.
P.O. Box EG-766, Madison, Indiana 47250

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DECEMBER 1966

Circle 100 on Reader Service Card
Here's guaranteed housewife appeal.

The floor that's tough on the top, great on the feet:

Feature new Cambrian Vinyl Corlon floors in your homes and you move ahead of competition. Cambrian Corlon is the most talked about, most advertised flooring in the country today. Nothing like it has ever been available before.

Excitingly different. When those weekend home shoppers take their first few steps on Cambrian Corlon in your model homes, they'll immediately know you offer something special, something different. That's because Cambrian Corlon has a thick vinyl foam back called Cushioncord. Cambrian Corlon with Cushioncord Back feels surprisingly soft and comfortable underfoot. It effectively quiets the sound of footsteps in the room in which it's installed and reduces the transmission of noise to rooms below.

With all these plus features, Cambrian Corlon is as tough and durable as any floor Armstrong has made for the home.

Even spike heels won't leave dents in it. It gives underfoot, then comes right back. Guaranteed in writing. Cambrian Vinyl Corlon is installed in 6-foot-wide rolls. Seams are minimized. And where there is a seam, it's sealed by a special installation technique. Spilled water can't seep in. Over 5,000 flooring contractors and mechanics have been schooled by Armstrong in this process, developed exclusively for Cambrian Corlon. When installed by these specially trained craftsmen, your Cambrian floors are backed by an Armstrong guarantee that covers both the material and the installation—an important selling extra for your homes.

Biggest advertising program in flooring industry. Many potential home buyers already know about Cambrian Corlon. Between last May and this December, 90 million homemakers will have seen an average of four Cambrian ads now running in 14 top magazines.

Cambrian Corlon is also being featured in commercials on weekly ABC-TV shows in color—The Big Valley and The Monroes. And on October 15, some 25 million viewers heard about Cambrian Corlon on Armstrong's 90-minute TV spectacular, "Brigadoon."

Merchandising aids. Home buyers will be looking for Cambrian Vinyl Corlon. We'll help you cash in on this interest with an impressive array of Cambrian sales aids—floor identification signs, wall plaques, and Cambrian Corlon literature.

Your Armstrong Architect-Builder-Contractor Representative can give you complete details about Cambrian Vinyl Corlon and help you get the most sales value from Armstrong floors. For information, write Armstrong, 312 Sixth Street, Lancaster, Pennsylvania 17604.