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Lab-tested components, and glass printed-circuit boards for ‘no-drift’ stability in FM tuner section.
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Cover: Model foyer composed of products from the building-materials industry—casement window wall, Andersen Corp.; vinyl floor and embossed-hardboard wall paneling, Armstrong Cork; plastic-brick veneer, Dacor Mfg.; concrete-masonry wall paneling, American Business Press; and Nitterhouse Concrete Products; door chime, Schlage Lock. Photo by Frank S. Errigo, set design supervised by Margaret Gordon Dana, courtesy of Armstrong Cork Co. For New Products 1968, see page 66.

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House & Home
A McGRAW-HILL PUBLICATION
VOL. 32 NO. 5
NOVEMBER 1967
For the better homes in any neighborhood it's wood windows.

Why wood windows?

First, let's take condensation. When warm interior humidity hits a cold metal frame in winter, condensation takes place. Water drops form, drip over sills and down walls or wallpaper. Homeowners can't do anything about this problem. It's just the nature of metal—what heating engineers call excessive Thermal Conductivity. With quality wood windows, troublesome condensation cannot happen—the chart at right tells you why.

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From every standpoint, it's wood windows! Wood windows blend with any architectural style—they're available in every type, style and size imaginable. And they give homes a warmth and beauty unmatched by any other type of window.

Free Window Condensation Calculator. Based on ASHRAE data, our exclusive Condensation Calculator helps you determine condensation problems so you can select the correct windows for the homes you design and build. It's free. Send requests on your business letterhead.
Housing the poor: Gen. Grantsmanship bows to Pvt. Enterprise

"It may be," says a Washington lobbyist, "that we're nearing the end of the New Deal. There's no denying that there's a trend away from big grant programs and toward involving private resources."

This trend toward bringing in the private sector, both for funds and for management, is especially evident in Washington's approach to the massive housing needs of the nation's urban cores. It is one of the two major elements of the ferment over housing in the White House and in Congress. The other is a surge of interest in the years-old idea of extending home ownership to low-income (though not, in reality, poverty-stricken) segments of the population.

The two trends have been gathering momentum since early this year, when Fresh­man Sen. Charles Percy (R., Ill.) introduced his National Home Ownership Foundation bill with 36 co-sponsors, including every Republican in the Senate, and when President Johnson, in his urban and rural poverty message, announced plans and a special commission "to encourage the development of a large-scale efficient rehabilitation industry... to tap the enormous market that exists in rebuilding our cities."

Rent supplements. Spurred by a riot­turn summer, both trends are reaching a peak this fall.

The most immediate impact has been on two high-priority administration programs, rent supplements and model cities. Rent supplements were denied funds for any new projects by the House on May 17, by a 232 to 171 roll-call vote that gave the bill its first major Congressional victory of 1967. The Senate got down to considering the HUD appropriations bill in September, Sen. Everett M. Dirksen switched sides. The Republican minority leader lined up for rent supplements as a program aimed at—and supported by—the business community; and the Senate voted 59 to 31 on Sept. 20 to provide the full $40 million sought by the President.

The vote, combined with the life insurance industry's pledge a week earlier of $1 billion in investment funds for city-core and rent-sup projects, raised administration hopes for at least a partial retreat by the House when a compromise version was worked out. Earlier this year, administra­tion lobbyists had been ready to write off rent supplements as dead.

Model cities. The Senate also restored almost all the funds President Johnson sought for model cities. In a 62 to 28 roll call, with Dirksen opposed this time, the upper house approved a total of $537 million for 1) planning grants ($12 million), 2) supplemental grants ($400 million), and 3) special urban renewal funds for project neighborhoods ($125 million) over two years.

The only Senate dispute with the House over model cities was in the price tag. The House had approved only $237 million. For the low-income, the Congress could off its own to fill the vacuum left by the Presi­dent's failure to propose any major new housing legislation this year.

Percy's bill led the way, and the phrase "Percy Plan" is now the Washington shorthand for the idea of issuing special bonds to raise low-interest mortgage money for low-income home buyers. But when Sen. John Sparkman's housing and urban affairs subcommittee got down to trying to write a committee version in October, more than 50 proposed measures were on the table. In addition, the Senate Finance Committee had an ambitious pro­posal by Robert F. Kennedy (D., N.Y.) for tax credits and speeded-up depreciation rules to attract big business investment in low-income multifamily housing. The Kennedy bill was expected to stay on the back burner at least for the rest of this session.

The compromise. Whatever the home ownership program, it was certain to face a better chance if the Sparkman sub­committee could somehow iron out tech­nical problems.

"The housing hearings emphasized," says Sparkman, "that it is not so much the general shortage [of mortgage funds] as it is the lack of any mortgage credit at prices the lower-income people can afford."

Percy and Sen. Walter F. Mondale (D., Minn.) shaped a compromise that would provide a federal interest rate subsidy to give a low-income homeowner the equivalent of a 3% mortgage, or would insure that his housing cost—including principal, interest, taxes and insurance—would not exceed 20% of his income.

The program would be limited to families with incomes qualifying for section 221(d3) below-market-interest programs, which vary throughout the country. The cost of the housing generally would be limited to $15,000, with higher ceilings in high-cost areas, and the tentative target would be to cover 200,000 units in three years.

Percy's National Home Ownership Foundation would be retained chiefly to provide "technical assistance"—in other words, advice and counsel—to the low-income target families.

Informing History. In 1968, President Johnson is expected to make his own hous­ing move. The White House this year has been concentrating more on giving a new spin to current programs and eliminating HUD's red tape.

Johnson has lost few opportunities since last summer's big urban aid package for his massive department. And the pressure bore fruit in a flurry of announcements starting in late summer.

Low-income housing construction, Weaver announced, would be nearly doubled in the next year simply by imposing new priorities for processing plans.

Orders went out from Washington in Sep­tember to concentrate on projects that could be begun within nine months. As a result, Weaver said, 70,000 low-income housing units should open within the next 12 months, twice the normal pace.

The turnkey approach, under which private developers in effect "sell" housing authoritie s a completed project and so avoid the red tape of step-by-step government supervision, is being pushed hard.

The FHA criteria for economic soundness of projects were quietly liberalized in August—a move permitted by legislation last year. This made it possible for the agency to insure investments in blighted core areas for the first time.

Private industry's help. This in turn made possible the first big coup in the administration drive to involve private industry—the September pledge by life insurance companies of $1 billion in investment funds for housing, and later for job-creating industrial projects, in central­city areas.

The pledge had been nearly a year in the making. Its seeds had been planted in a casual cocktail party conversation be­tween Weaver and Gilbert Fitzhugh, board chairman of the Metropolitan Life Insur­ance Co. Fitzhugh became head of the industry's joint committee on urban problems, set up in May to hammer out the details.

—Bruce Agnew
Washington Bureau.
Cash drain threatens Ross Cortese's Leisure World empire

His sales are halted and his land is up for sale—yet supporters insist that the worst may now be over.

In just three years Ross William Cortese has seen the best of times—and the worst of times. The self-made man, the son of an immigrant fruit peddler, was the nation's biggest homebuilder in 1964 on sales of $89.3 million. By himself Cortese had created an entirely new housing concept—planned communities with medical care for persons of 52 years and older (H&H, Apr. '64).

The market seemed boundless. And Cortese, a driving force for good design in homebuilding, bubbled with plans to expand his California-based operation to the East Coast—and beyond to Switzerland (H&H, Nov. '64).

Those were his golden days. Today he faces his darkest hour.

The long-delayed decision was made by Robert W. Carithers, then president of Leisure World Foundation, an autonomous, nonprofit management and sales corporation that sponsors Cortese's Leisure Worlds. Says Carithers: "In late June spokesmen for United California Bank—Cortese's chief lender—couldn't assure us that Cortese would deliver new units we were pre-selling. The bankers made it clear that for the time being they wouldn't lend for any units that weren't already pre-sold. In a subsequent Foundation board meeting, the bank's board chairman, Frank L. King (also a Foundation board member), explained Cortese's need for additional cash. He said Cortese should sell some land to get in a better cash position.

"Under the Federal Housing Administration's Section 213, I might have been personally liable for any debts accrued during the selling period—if Cortese didn't deliver the units. So I stopped sales."

Sources inside and outside the company—they asked that their names be withheld—now agree that the operations have resulted in a drain on cash. Cortese contends that his only problem is the high cost of mortgage money.

In a letter to residents of Cortese's New Jersey community, T. Howard Waldron of Leisure World Foundation wrote that the problems that led to the sales halt were the high cost of mortgage money and the "pattern of sales"—a euphemism for disappointing sales. Both problems, plus some recent difficulty in being bonded in New Jersey, indicate a cash squeeze for Cortese.

What's more, Section 213, under which Cortese built his Leisure Worlds, requires heavy front money. FHA doesn't extend mortgage insurance until cooperative units are 90% sold.

When sales halted in New Jersey, 115 deposits valued at $63,250 were returned to buyers by Leisure World Foundation.

**Treading water.** With sales halted and two-thirds of his former 560-man staff gone, Cortese's building company, Rossmoor Corp., is completing about 1,000 pre-sold units. In at least one cooperative mutual—Mutual 3 in New Jersey—Rossmoor wasn't bonded until United California Bank (UCB) extended a letter of credit.

To pump some cash back into Rossmoor, Cortese's land and other assets, such as shopping centers, have been put up for sale. Rossmoor's General Counsel Robert E. Rosenwald says, "Mr. Cortese has always been willing to sell anything if the price is right. Right now he has some surplus land—in New Jersey, for example."

In New Jersey Cortese has title to 3,435 acres, with another 230 under option, a local source says.

**No sale—so far.** Company sources say a score of firms have shopped the five Cortese sites in Laguna Hills and Walnut Creek, Calif.; Cranbury, N.J.; Olney, Md.; and Chicago. On at least one occasion Cortese himself tried personally to sell land to a major builder.

But the problem has been Cortese's prices. He reportedly wants $15,000 an acre for Laguna Hills land mortgaged at $11,000, and $12,000 for Walnut Creek acres mortgaged at $5,500. His latest prospect: Kaiser Industries.

---

**LOCATION** | **TOTAL UNITS** | **TOTAL UNITS SOLD OUT** | **PLANNED** | **1964** | **65** | **66** | **67** | **SOLD OUT** | **ALL SALES Halted**
---|---|---|---|---|---|---|---|---|---
SEAL BEACH, CALIFORNIA | 6441 | 6441 | | | | | | | 
LAGUNA HILLS, CALIFORNIA | 6000 | 18,000 | | | | | | | 
WALNUT CREEK, CALIFORNIA | 2946 | 10,000 | | | | | | | 
OLNEY, MARYLAND | 899 | 10,000 | | | | | | | 
CATARACT, NEW JERSEY | 629 | 30,000 | | | | | | | 

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JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC
---|---|---|---|---|---|---|---|---|---|---|---
---|---|---|---|---|---|---|---|---|---|---|---

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**Cortese's empire at a glance: from sales start to sales halt**

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**NEWS**

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**NEW JERSEY'S LEISURE WORLD,** acclaimed for house design and land use, inspired better land planning in state. Model area is shown above.
This year Cortese seemed close to selling 60% of his 3,300 undeveloped acres near Chicago to builder William J. Levitt. But Cortese held out for $5,000 an acre (mortgage per acre: $3,000) and Levitt never put his offer in writing. An ex-employee quotes Cortese as asking during the negotiations: "Why should I sell for less than my price? I wouldn't have cash to work with after I paid my bills."

Now the Cook County, Ill., Forest Preserve District has taken preliminary steps to acquire about 3,000 of the Chicago acres. A Forest Preserve spokesman says, "Every time we have gotten this far with a site, we have acquired it—either by sale or by condemnation."

Earlier this year, Westinghouse nearly acquired Rossmoor Corp. and its Leisure World empire. But Cortese sources now say the deal is dead. Westinghouse is saying nothing at all (its public relations staff even withheld the name of the executive who refused comment).

At least one financial analyst who follows the company agrees with UCB's contention that Cortese's assets exceed liabilities by $10 million. And more important, UCB—which has done business with Cortese for about 15 years—has pledged to see him through his present troubles.

Says UCB Vice President Hal Mendon: "He could be back selling in 90 days."

As the bank has pushed its investment past $32 million, Cortese has caught up with his debts. His payments are current on land mortgages of $25.3 million held by Metropolitan Life, though the Met has postponed some payments (mortgage breakdown: $9.3 million in Chicago; $8.2 million in New Jersey and $7.7 million in Maryland). A UCB executive says, "All of Cortese's bills are 30-days current."

The bank acknowledges that this summer three small liens were filed against Cortese, and a reliable source says they were immediately paid off. (Three other liens totaling $51,949 are pending in Maryland.) Even a spokesman for a Philadelphia advertising agency that has a large account with Cortese says, "We aren't worried. The United California Bank won't allow a delay in payments."

The bankers look at the bright side of the sales halt. They say it gives Cortese time to sell assets, and allows Cortese, the bankers and the Met to study new unit-financing plans and marketing concepts to revive Leisure World sales.

Mortgage woes. The bankers and Cortese insist that the 5 1/2% interest ceiling on FHA's Section 213 mortgages is the root of Cortese's problems. The rate hasn't changed since he began his first Leisure World in 1960. In this tight-money market, 213 mortgages are discounted up to 12 points.

Ross Cortese told HOUSE & HOME: "With that kind of discount, I can't afford to build."

As the builder, he must absorb most of the discount; attempts to pass part of it on to buyers through higher house prices and higher downpayments tend to depress sales. In New Jersey downpayments jumped from $3,817 to $6,030 in two years.

Cortese and the bankers insist they want to stand pat for a while in hopes that the mortgage market will loosen. Indeed, the Johnson Administration has asked Congress to lift the 5 1/2% ceiling.

One-man management. Behind Cortese's current pot of trouble is the story of a strong-willed builder who had reason to believe in his own infallibility. After all, he was two years ahead of his fellow builders in 1960 when he innovated the small-scale planned community of Seal Beach, Calif. (541 acres; 10,000 population).

Like most pioneers, he did not second-guess himself. Nor did he allow any one on his staff to second-guess him. When Seal Beach sold out 6,541 units in 17 months, Cortese logically concluded that he personally held the secret to a never-ending fountain of sales.

"After that money was no object," an ex-employee says. A man with lavish tastes, Cortese built a $2.5-million office building in 1964, hired his own chef and bought a helicopter.

He poured money into community facilities and upgraded units in his next two Leisure Worlds—Laguna Hills and Walnut Creek—which opened in 1964. So Laguna units, at $11,000 to $16,300, were priced about $2,000 higher than Seal Beach units. And Walnut Creek units, claimed for their architecture, were priced continued on p. 8

NOVEMBER 1967
The interest ceiling jumps from 7 1/4% to 8 1/4% on mortgages insured by the Central Mortgage & Housing Corp., the Canadian government's equivalent of the FHA. The maximum rate is usually set quarterly at 1 3/4% higher than the average of long-term bonds. The rate was thus scheduled to go to 7 1/2% Sept. 30, but that was regarded as too low to attract substantial sums of private money into the cash-starved homebuilding industry. Conventional mortgages at 8 1/2%, and investors are seldom willing to pay more than 0.75% for insurance.

Economists expect the new 8 1/4% rate on National Housing Act (NHA) loans to attract funds, particularly for apartments. A depressed industry. Before the government moved, it had been 1966 all over again. Homebuilding was declining despite rising demand for shelter. CMHC had just dropped a direct-lending program that rescued residential building last winter and spring. President W. G. Connelly of the National House BuildersAssoc. had said the result would be a total shutdown of private housing construction this fall. Residential building is a $2-billion-a-year business in the Dominion.

The government had, in recent years, stimulated winter construction by direct lending and had pumped $300 million more into such loans last spring to avert a housing shortage. But Prime Minister Lester Pearson felt that raising money for the land rose to $2.5 million a year, and stockpiled 7,355 acres-enough land and New Jersey almost simultaneously, and the percentage has continued

Cortese's Leisure World empire... continued

from $15,000 to $18,000.

In the process of upgrading, he shifted away from the low-cost retirement market that provided instant sales in Seal Beach. At Seal Beach 79% of the buyers were 65 years or older, but at Walnut Creek only 60% were 65—and the percentage has been falling. Asked to explain the Seal Beach success, a former sales executive said, "The units were cheap, the concept was novel, and we were lucky."

After a strong start at Laguna and Walnut Creek, sales leveled to the point where, as another former executive says, Walnut Creek remained a drain on cash until the spring. President W. G. Connelly of the National House Builders Assoc. had said the result would be a total shutdown of private housing construction this fall. Residential building is a $2-billion-a-year business in the Dominion.

The government had, in recent years, stimulated winter construction by direct lending and had pumped $300 million more into such loans last spring to avert a housing shortage. But Prime Minister Lester Pearson felt that raising money for another winter incentive program was impossible in today's drum-tight bond markets.

And private money was scarce. Insurance companies are still beset by policy borrowing. Trust companies, the Canadian equivalent of this country's savings, are short of deposits, and banks want consumer loans rather than mortgages.

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Unsatisfied demand. A nationwide survey by Connelly's association indicates wide-building-craft layoffs this fall and a major housing shortage by midwinter unless financing relief arrives quickly. Canada's Economic Council says the nation needs 170,000 new homes this year, but starts plummeted 11% to an annual rate of 151,000 in July and ran at 146,300 in August. Connelly now predicts the year's total will not exceed 135,000, only

the year's total will not exceed 135,000, only a shade above last year's 134,500.

"The industry will fall far short of producing the desired starts to meet market requirements both this year and next," he says.

"Immigration jumped 50% in the first quarter this year compared to the same period of 1966," says Connelly. "By 1970 a half-million immigrants a year will establish new homes in Canada. By then we will require 300,000 houses a year—double this year's production."

Others explain that Canada's population of 20 million is increasing 7.0% faster than the population of the U.S.

Toronto's big squeeze. The housing shortage will hit hardest in Toronto, which claims to be the world's fastest growing metropolitan area. Its population of 2 million is increasing by 4.5% to 5% a year, and the Real Estate Board's Don Kirkup laments that visitors already describe his city this way:

"... a great place to visit but you could never find a place to live there."

Toronto's house prices have risen 50% in seven years, and new homes list at an average $30,000. That's beyond the reach of nine out of ten families. Apartments offer only a dubious alternative, and financing is scarce for such multifamily projects also.

By year's end, says Kirkup, Toronto's housing supply will be 20,000 units short of demand.

Executive parade. As problems mounted, particularly the rising Section II discounts, executive heads rolled at Cortese's Laguna Hill headquarters.

Since 1965 Cortese's dissatisfaction with sales at Laguna and Walnut Creek remained a drain on cash until the spring. President W. G. Connelly of the National House Builders Assoc. had said the result would be a total shutdown of private housing construction this fall. Residential building is a $2-billion-a-year business in the Dominion.

The unanswered question. With sales halted temporarily, one question stands out: Do residents face possible higher monthly payments to help support existing community facilities built for maximum populations?

Says Robert Carithers: "No one can say. Services might have to be curbed at some Leisure Worlds. What we think monthly payments can be kept level through 1968. We should be selling again long before then."

The residents themselves show the least concern. "The citizen group in Laguna-Golden Rain Foundation—is talking about financing a new mutual," says Carithers. "And residents in Walnut Creek are underwriting the cost of retaining some salesmen for a few weeks or so."

FRANK LALLI
Would a built-in warming shelf make your kitchens sell faster?

Put a new Tappan Gallery electric range in your kitchens, and you add a bonus appliance without spending an extra cent. A spacious, shatterproof electric warming shelf—just like the ones you can build into a counter for about fifty bucks.

What do your customers get for free? A handy serving center that keeps food at perfect temperature, warms plates, makes everything "come out even," and ends complaints that "My food's cold."

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While you're talking to your Tappan Distributor about Gallery, see his complete line of dishwashers, disposers, refrigerators, hoods and cabinets, too. He sells convenience—by the kitchenful.

Get one from Tappan at no extra cost.

See Tappan at the Show! Stop in our NAHB Exhibit Booths 1116-1123, and visit our Hospitality Suite on the Mezzanine at the Continental Plaza.

Send for full-color literature and specs on Tappan's great new Gallery range. Just clip off this corner and mail with your letterhead.
Building labor shortage may worsen before it improves

Craft labor is getting tighter. Rising manpower needs—ranging from laborer to lather, from carpenter to cement mason—become clearly evident in a combination of on-the-spot surveys with contractors and an analysis of the programs and policies designed to relieve the craft-worker shortages.

Put another way, if the homebuilder has had difficulties in rounding up employees, the other problems are not headed for a quick solution. They could get worse.

Contractors in Atlanta, Detroit, Chicago, Indianapolis, Pittsburgh and Portland, Ore., already report severe problems, and a host of other cities are not far behind.

Small rays of hope. There is an occasional exception. Contractors in some cities report manpower problems are no worse and, indeed, some cases show improvement.

For one thing, the pace of homebuilding has eased pressure on the manpower market. But a pick-up is under way, and builders say this could cause a strain, particularly on journeymen electricians and plumbers.

Generally, the labor supply is limited. For one thing, the pace of homebuilding has picked up appreciably in most places since midyear. And by contrast, the programs designed to ease the perennial shortages of construction labor and to open craft unions to Negroes and other minorities are moving slowly.

The shortages run the gamut of construction jobs. Among the skilled crafts, carpenters and electricians are the most scarce.

Builders' size-up. Contractors across the country report in much the same way to questions about a solution.

For instance, say they can enlarge work crews by 20% to 25% if manpower were available. President Herman Sarkowsky of United Homes stresses the need for plumbers and says carpenters, cement finishers and roofers are also in short supply. But he hopes for a manpower reprieve because booming industry is drawing construction labor into the region.

Contractors in and around Seattle, as elsewhere, are actively recruiting labor from other areas or stepping up apprentice-ship programs. But Joe Martineau, executive director of the Seattle Master Builders, says this is little evidence that the unemployed could readily fit into the construction jobs that are going begging. This is the challenge facing both the federal manpower training program and the apprentice training programs.

Heavy attrition. The National Association of Homebuilders, in an analysis of federal training programs for construction workers, points to a total of only 14,700 construction workers trained in the four years from 1962 to 1966, an annual rate of 3,675. The survey contrasts this with the annual training of 282,000 workers in construction, so that the government is providing by training only 1.59% of the need.

About 760 Negroes are trained each year. Even with the current problem of shortages, the long-range need is even greater. With 3.7 million employed in the entire construction field, the employment need is expected to grow by 2% a year over the next 10 years. That would mean 758,000 more jobs in the next decade. On top of this, 2 million new jobs will be created by attrition, retirement, death and those leaving the industry.

Bleak outlook. The prospects for any immediate solution appear slim. There will be a continuation of federal plans to move more Negroes into apprentice programs, but that will be complicated because the numbers of apprentices are small compared with the demand.

There is some prospect—in view of the explosiveness surrounding the civil rights movement—that there will eventually be substantial changes in the current system of employment and apprentice training in the construction industry. But these are long-range.

The extensive qualifications and extended training required in apprentice training will in time be modified, possibly by setting up separate levels or classes of training to meet the varying job needs.

But for the time being, the construction manpower problem will remain.
A company that leads its industry must stay constantly on its toes. Otherwise, it won't lead its industry very long.

Kwikset is the leader in residential locksets, and we intend to keep things that way. Here are some reasons why doing business with the leader may be profitable for you:

**Kwikset is the name brand.** Since Kwikset is the nation's largest-selling residential lockset, it is logical to assume that your prospective buyers will recognize the brand name that appears in national trade and consumer publications more frequently than any other residential lockset.

And when a prospect realizes that you use top-brand products for door hardware, he will be assured of total quality throughout your development.

**Kwikset keeps pace with today's trends.** Homebuyers today are insisting on more flair in such areas as doorway decor. To answer this demand, Kwikset in the last year alone has introduced five new knob designs — the Copa, the Delta, the Epic, the Facet and the Grecian — and the rich new etched and antique finishes of brass, bronze and nickel.

Each new design, each new finish represents the kind of tasteful styling that dramatically enhances the architecture of the homes you build.

**Kwikset puts a premium on performance.** While stylists search for new designs, Kwikset's technicians are constantly striving to find new ways to make the best lockset even better.

As a result of research and development over the past few years, the Kwikset "400" Line locking mechanism has been completely re-designed for greater reliability and more perfect performance. This new locking mechanism solves the worrisome and costly callback problem.

**Kwikset helps you sell!** Extensive national consumer advertising plus such on-the-spot sales aids as presentation key sets and attractive, informative literature give your salesmen just that many more selling points when you use Kwikset. And in the current market, every little bit helps.

Don't overlook Kwikset's exclusive Protectokey® safety system, either. With today's security-conscious homebuyers, it is a strong selling tool.

**Kwikset saves you money.** The time spent installing locksets mounts up. The more homes you build, the more time it takes, the more money it costs. Because Kwikset locksets can be installed faster and easier, you save on overall construction costs. Nothing spectacular, true. But again, every little bit helps.

And when you use Kwikset, you use the lockset that is guaranteed against any defects in the materials that go into it, or the careful craftsmanship that creates it.

Frankly, nobody is going to buy one of your houses just because you feature Kwikset locksets. Nor is anybody not going to buy one because you don't. But if you build a well-designed, quality home with quality building products, it makes sense to use the quality lockset — Kwikset.

The name on the box is Kwikset, the best-selling residential lockset. A major factor in Kwikset's sales success is the popular Bel Air design lockset, shown here in satin bronze. Since their introduction, more than 60,000,000 Bel Air design knobs have been used on homes throughout the world.

**Kwikset Locksets**

*America's Largest Selling Residential Lockset*

Kwikset Sales and Service Company
Anaheim, California
A Subsidiary of Emhart Corporation

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Opportunity for builders: a housing shortage in 'snuburbs'

Houses are in shortest supply in the bedroom communities around New York and Detroit, but the scarcity extends through the Midwest to the West and South.

Because the suburbs are also the "snuburbs," most of the demand is for higher-priced housing. But there is also a shortage of moderately priced homes in some areas.

The used-house market cannot now supply the demand. So there's a wide-open opportunity for new-house builders—if they can get at it.

The New York area. Westchester's shortage extends to all price ranges, and there are few offerings below $35,000. Nearby Connecticut's scarcity is in the higher brackets, notably in Stamford and Westport. Long Island, too, is short of higher-priced houses near New York City. And New Jersey's supply of housing is generally tight in the metropolitan area, with prices rising sharply.

The reasons. A broad range of factors explain the suburban shortages.

Construction has eased off in many upper- and middle-income communities because of severely restrictive zoning. Costs of land, materials and labor all have jumped in the last year, and the mortgage squeeze of 1966 discouraged building. What's more, riots have added to pressures on the suburbs, encouraging a new exodus from city centers.

Here's the suburban picture in several other metropolitan areas:

Chicago—the exception to the rule. "Our suburbs have plenty of houses," one tract builder says, "but where are the customers? The market is quiet—not asleep, mind you, but just taking a half-snooze."

St. Louis—few homes for immediate delivery in the $20,000-plus bracket. Land zoned for 7,500 to 15,000-sq.-ft.-lots is simply disappearing.

Cleveland—the HBA reports no houses are being built under $25,000. Bad weather slowed work in April, and strikes halted building in May. When construction resumed, the cost of housing was up at least 8%.

Los Angeles—the shortage extends down into the $17,500-to-$22,500 range. Builders say a profit is next to impossible on homes in that bracket, and they are not building.

Atlanta—the shortage among cheaper houses is sharpest in Atlanta's suburbs, and it extends down to $12,500 homes. Within five years, 15,000 to 20,000 homes in the $10,000 class will be needed in Atlanta, but few builders are left in that bracket.

A zoning problem. The shortages now developing in the upper price ranges merely emphasize the almost complete lack of moderately priced new housing in the suburbs. Restrictive zoning is widely blamed, not only for keeping such housing out of the suburbs but also for discouraging it everywhere. Says California's William J. Leonard, executive vice president of the HBA of Greater Eastbay:

"The majority of local governments simply don't want modest cost housing and under their local autonomy laws have, by policy, eliminated the average American from being able to exercise his free choice in the purchase of a modest-priced home he can afford." NEWS continued on p. 16
The truth about kitchen carpet

Viking really works—better than tile—like no carpet can. That egg up there sponges off without leaving a trace. So do grease, grape juice, catsup, milk—you name it. Viking is the original kitchen carpet—invented, engineered, constructed especially for hard kitchen wear. Made of our exclusive premium-grade, super-dense nylon, woven super tight, and bonded to a thick slab of B. F. Goodrich sponge (not foam!) rubber, guaranteed without time limit.

Viking sells the kitchen that sells the house. Put it in your model homes and watch their faces when they enter the kitchen! Instead of the clatter and noise of hard flooring—a hushed, cushioned atmosphere... like no kitchen they ever saw before. The built-in extra luxury feature she's looking for. And it can be the deciding factor that cuts weeks off your "for sale" or "for rent" time.

Viking gives you an "extra" profit opportunity. You know the kitchen is the one place where they'll pay for extra luxury. You can ring up a lot of extra big business with Viking—not only in residential contracts but in restaurants, supermarkets, schools, hospitals, libraries, and drugstores.

In today's building market you need every competitive edge and all the extra business and extra profit dollars. Viking is runaway sales. Let us show you how to cash in. Mail coupon today.

VIKING CARPETS, INC.
10 West 33rd Street
New York, New York 10001
You bet I want to know all about it!

Name________________________
Firm Name____________________
Address_______________________
State______Zip_________________

Circle 36 on Reader Service card

Powerful full-page, full-color Viking advertising—sells for you in America's leading mass-consumer and home-furnishings magazines.
FLOW-MATIC, THE ULTIMATE IN SINGLE HANDLE WATER CONTROLLING DEVICES.
TOMORROW'S DESIGN TODAY
Mortgage men close ranks against ‘anti-windfall’ bill

The controversial measure would require FHA to deduct the amount of any discount originally received by a mortgagee if the agency had paid any claim for insurance within three years of the insuring date.

Sen. Frank J. Lausche (D., Ohio) introduced the bill (S. 560), which he announced was the monumental intention of barring windfalls to mortgage houses that lend to poor risks and then foreclose. Theoretically, redemption of the loan at par would then give the lender a windfall amounting to the discount he had charged when he made the mortgage.

The measure has been tied down in the housing subcommittee. It has picked up unexpected support from Sen. Harrison A. Williams Jr. (D., N.J.), but its fate remains highly uncertain.

Mortgage group’s stand. The Mortgage Bankers Assn., representing 2,000 mortgage-banking and insurance firms, is leading the assault on the Lausche measure. The association claims the bill would:

- Preclude the development of a secondary market for FHA mortgages because investors would shy away from buying mortgages with undeterminable yields.
- Be administratively unworkable because mortgages are often sold several times at differing discounts.
- Place a premium on excessively severe underwriting standards, thus penalizing the low-income groups FHA is supposed to help.

The MBA also insists there is no evidence that discounts have encouraged rapid or unduly burdensome foreclosure, an assertion made by a great many of the suppliers of the Lausche bill.

Opposition. The Johnson administration has taken a cautious stand teetering toward opposition.

Secretary Robert C. Weaver of HUD testified last July that the ‘‘HFA windfall objection’’ to the windfall bill, but he was careful to warn against possible negative effects. Philip J. Maloney, deputy commissioner of HUD in charge of FHA, also said he had no objection—and then proceeded to warn the subcommittee that ‘‘administrative changes’’ would probably have to be made if the bill was passed.

And President Ray Lapin of the Federal National Mortgage Assn. spoke in outright opposition. He said the Lausche bill would discourage investors in the mortgage market. But he also said an amendment permitting investors to receive the same amount they would have gained if the mortgage had matured (and there had been no foreclosure) might provide a workable compromise.

Letter campaign. To win over uncommitted senators on the subcommittee—all members except Williams—the MBA has rallied its legislators and its membership in a letter-writing campaign. The committee, headed by John Sparkman (D., Ala.), includes such housing leaders as Walter F. Mondale (D., Minn.) and Charles H. Percy (R., Ill.).

Vice President Clarke Stayman of the Franklin National Bank Co., San Francisco, already written Sen. Percy to cite his own bank’s figures as proof that windfalls seldom follow disclosures.

‘‘During the foreclosure period,’’ he pointed out, ‘‘the interest paid by FHA is less than the face interest on the note. In addition, certain expenses are not covered by FHA.’’

‘‘We have calculated that we need a discount of 0.7% to 1.2% to cover out-of-pocket expenses on foreclosures in California.’’

‘‘And because of the extremely long [mortgage] redemption period in Illinois, we need in excess of 2 points to cover out-of-pocket expenses. This does not even take into account the loss of interest because of the differential.’’

The Lausche bill’s result, said Stayman, ‘‘would be a complete withdrawal of investors’ funds from the guaranteed markets, leaving only FNMA to support the home-building industry and to provide for pent-up home demand.’’

Bill Levitt Jr. originates a little FNMA in land loans

The new company will lend money against land mortgages or buy the mortgages in much the same way Fanny May buys land mortgages or buy the mortgages in much the same way Fanny May buys Fannie Mae bonds. It’s a mortgage in return for loans to buy land.

Levitt’s company will hold the mortgage (mortgagee) up to 80% of fair value for a mortgage with a term of three years or less. When the mortgage is satisfied, there will be a negotiated rebate of up to 15% more, which could bring payment up to 95%. The mortgage must arise from a sale of land to its ultimate developer and must be a first lien. The loan can be for no more than 80% of the cost of the land.

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"Long hours designing plans and high labor costs in conventional building put the pressure on my time and my profits," says Lloyd Hardy.

"Now, with Kingsberry, I've eliminated my design time and cut on-site labor costs 50%!"

That's how one veteran builder used the Kingsberry package and our 100 designs to break the grip of his biggest problems. And he did it in a market of rising costs.

You can do the same with Kingsberry's advantages, proved in over 50,000 houses. Fast build-out. Tight cost control. Built-in curb appeal. Mr. Hardy now turns his money over twice as fast! And a prime advantage is Kingsberry's Sales Representatives, ready to put their training and experience to work on your problems...from market analysis to sales promotion.

Learn how building with Kingsberry can help you break the grip on your problems, profitably. Send in the coupon and you're on your way.

Start your profit story today with this coupon.

Mr. Robert C. Smith, General Sales Manager/Kingsberry Homes/Department HH-6 / 5096 Peachtree Road / Chamblee, Georgia 30005 / (404) 457-4301.

Please send more information on the Kingsberry program. Please have your representative call on me.

My interest in Kingsberry Homes is [ ] immediate [ ] future planning. I have [ ] lots developed and [ ] lots available for development. During the past 12 months I have built and sold [ ] homes and/or [ ] apartments.

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Firm
Mail Address                      Phone
City                               State   Zip Code

Kingsberry serves leading builders in 29 Midwestern, mid-Atlantic and Southeastern states.
Housing stocks: a good month for all but the S&L issues

HOUSE & HOME's building stock index has been climbing, with mild setbacks, since 1966. Most issues rose again last month.

But the composite index of 25 issues, five from each of homebuilding's major categories, slid from 158.49 to 155.69 on a poor performance among S&Ls. Indexes are figured from a base of 100, representing share value in 1965. Dots (.) identify the 25 issues in the price list below. Here's the housing stock index:

Most of the S&Ls slipped. The index was off nearly 17 points at 113.62 to 116.90, Stock values, the Toledo-based custom-house maker, took big gains, off nearly 17 points at 113.90. First Charter, the nation's largest S&L, dropped to 113.62 from 113.90 four months ago. Here's the composite picture of five prefab issues:

HOUSING'S STOCK PRICES

The five leading prefab stocks edged up from 113.62 to 116.90. Stock values, the nation's largest S&L, dropped to 113.62 from 113.90 four months ago. Here's the index:

 shortest-term business loan rates

Average per cent per year

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<th>North-east</th>
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The mortgage bankers had a great month. Mortgage Guaranty of Milwaukee jumped 10% points to 59% on a healthy history (News, June), and now seems to have caught fire. It sold at 38% four months ago. Here's the index:
basement door adds value to the home
(but it's gotta be steel)

You might say a house without a basement door is a "limited-access house."
Basement doors made of steel offer the most in customer satisfaction and goodwill.

Steel basement doors feature easy installation, neat and trim appearance, effortless operation, and hold-open safety catches. Steel doors won't warp, stick, or rot. They last a lifetime.

Bethlehem doesn't manufacture steel doors, but we have some good friends who make the best in the business. We'll be glad to put you in touch with them. The coupon is for your convenience.

BETHLEHEM STEEL

BETHLEHEM STEEL CORPORATION
SHEET AND STRIP SALES, ROOM 333E
BETHLEHEM, PENNSYLVANIA 18016

Please see that I get descriptive literature on steel basement access doors, at no obligation.

Name
Firm
Address
City and State
California S&Ls leading a big homebuilding comeback

California's savings and loan business has made the sharpest turnabout in its history. It's not only breathing easier—it's in a bullish mood.

Top S&L executives, in San Francisco for California Savings & Loan League's 77th convention, heard the good news: 1967 should be one of the best years for a net-savings gain. Now at $1.75 billion, it may hit $2.25 billion by Dec. 31 for an impressive improvement over last year's $221 million.

The cash buildup puts California's 265 associations in a position to fill the surging home-financing need, now reaching proportions of the boom of two decades past. Reported League President Robert S. Fuller: "Some months ago I said that California would soon face the greatest pent-up demand for housing it has seen since World War II. I believed it would come toward the middle of 1968. I have changed my mind. The time is now—not later. That demand has arrived, and we are seeing what almost amounts to a real scarcity in many areas. Vacancy ratios have skidded."

Big things in '68. Home construction, says Fuller, has picked up to a point where he predicts at least 115,000 units this year. During the dark days of 1966 only 90,000 went up, a 46% drop from 1965. (Multiples alone dipped 60%.) Out of necessity, Fuller feels, 175,000 units will be a reality next year and 200,000 a possibility.

The S&Ls are ready to move the mortgage money, says Fuller, who is also president of San Fernando Valley Federal Savings in Van Nuys. "Savings flows have been heavy; withdrawals are significantly low. The state's S&Ls have paid back over $1 billion in loans to the Federal Home Loan Bank this year—plus nearly $100 million in other borrowings. Liquidity and reserve ratios are up, and we are in a healthy position."

Fuller feels that inflow figures add up to at least $3.5 billion worth of S&L lending in California this year and conceivably $3.75 billion. "And this is definitely the last year we'll be in the $3-billion category. The question, as far as 1968 is concerned, is how close to $5.5 billion we will come."

This could be counted as plenty of progress from 1966, when new loan activity fell to $2.9 billion, down 49% from 1965 and the lowest point in six years. (The lending record of $7.7 billion was set in 1963.)

The bad news. But convention delegates heard a warning that their troubles are not over. The associations cannot be complacent, cautioned the league's executive vice-president, Franklin Hardinge Jr. "We face a very crucial time in competition for savings," he warned. "There are a number of complicating factors that affect our ability to compete. First—greater competition from commercial banks than we have ever seen before. Further, banks seem to have better tools."

Hardinge would like to see:

- Both federal and state associations guaranteeing their savings interest rates for at least a year, and banks restricted to the same time period. Federals now can't make a specific guarantee of rates, but banks can—for six months or a year and, in some cases, for as long as ten years.

- S&L marketing mutual funds and acting as trustees in self-employed persons' pensions funds.

- S&Ls setting up mechanisms that would permit them to tap pension funds.

—Barbara Lamb
EXTRA CHARM IN LOW-COST WALL PANELING

Look what's happened to Philippine Mahogany paneling! BrucePly has added wide accent grooves to this warm tropical hardwood, thus combining natural charm and smart design . . . at a bargain price. Home builders and remodelers have a choice of three lovely shades of finish—light Mindoro, medium Laguna, dark Bacarra. All have Bruce's patented factory-applied finish that's baked in the wood . . . won't chip, crack or wear away. Home owners will like the expensive plank effect, and the low cost! E. L. Bruce Co., Memphis, Tenn. 38101.
Now, from Grote

million-$ bathrooms for only $5 more

Yes, for about two days' interest on a building loan, builders can get a Grote "Decorator" Bathroom Cabinet. Just $5 for magnificence that sells homes or rents apartments faster — weeks faster!

Besides saving many times its cost in interest, this $5 helps you hold your price, or even ask a higher price. After all, a "deal" often hinges on the bath, the one room that, along with the kitchen, comes completely furnished. And the difference between an ordinary-looking bath and a "Decorator" bath is as little as $5 when you use Grote cabinets.

Matter of fact, Grote even offers one of its "million-$" accents for nothing more. You can buy a fancy new Grote "Florentine" Mirror-Vanity — a one-piece wall mirror and exquisite cosmetic cabinet vinyl-clad in rich, realistic marble-tone — for no more than the cost of a plain enameled box.

Join the parade of smart builders who are choosing Grote for faster sales and rentals. Send coupon for new full color Catalog-Supplement.

Also in popular swing-door model. Reversible — switch door swing left or right simply by inverting cabinet. Both models available with either white or wood-tone frame, both with elegant gold-brushed detailing.

THE GROTE MANUFACTURING CO.
P.O. Box EA-766, Madison, Ind. 47250

Why should we miss out on Grote Decorator styling when we can get it for little or nothing? Send new Catalog-Supplement C-366 of Decorator Bathroom Cabinets.

Gal Grote

world's largest supplier of bathroom cabinets to the building industry

New frontier for another land rush: Would you believe—Las Vegas?

Howard Hughes apparently believes it—and he has wrought miracles before. He stuffed an unknown girl into a sweater and brought forth a million-dollar motion picture property named Jane Russell.

Now the nation's most bashful billionaire (he has refused to appear in public for years) is laying a long parlay on a bright future for Las Vegas. He would like to develop the great American desert's fun city into an industrial complex to rival Houston.

"No reason in the world why this city should not be as large," he has just said in one of his rare public statements.

Hughes has chips down. He has purchased $100 million worth of property in or near Las Vegas and has moved in 15 executives and their families. His acquisitions already include the Desert Inn, Frontier and Sands Hotels on the famed Strip (straight title: Las Vegas Boulevard), and he has options on at least two more hotels and four motels.

But a Hughes source says, "We didn't come in just to buy a couple of hotels," and a look at Hughes's private land bank emphasizes the point. Before becoming a Vegas resident six months ago, he owned 27,000 acres west of town, making him Nevada's largest individual landholder. He has added the 518-acre Krupp Ranch out that way and has an option to buy North Las Vegas' air terminal and 12,000 nearby acres. He is also trying to buy or lease McCarran Airport in the center of town.

So far it is principally a one-man boom, but Las Vegas property values have already responded sympathetically—up 10% after two years in the doldrums.

As to the future, Hughes's admirers say, remember how flat the sweater must have been before Hughes inflated it with Miss Russell.

Builders name new sales leaders

One of Southern California's biggest building companies, Deane Bros. of Newport Beach, has just appointed W. E. (Bill) Mitchell general sales manager. He was marketing director of Walker & Lee, a California realty firm.

Deane Bros. is operated by Jim and Ben Deane and owned by Occidental Petroleum Corp. of Los Angeles. The builders reported a loss of $314,000 for the first quarter (News, Sept.), but Vice President Robert E. Hardesty has now raised his 1967 sales prediction from 1,000 units to 2,000. Deane earned $420,000 on sales of 1,200 houses last year. Its current and projected communities are Huntington Beach, Mission Viejo, Diamond Bar, Newhall, El Toro and Weavilake.

In Dallas, Fox & Jacobs has named Jack Valentine as marketing manager of the company's franchise division. He will supervise 20 dealers building the F&J's line of homes in the South and Southwest. Valentine was general manager of F&J's Houston sales division from 1963 through 1965.

The company is now headed by David G. Fox (News, April '66). It offers its dealers market research, sales training, architectural service and merchandising data, and it maintains its own truck fleet to expedite shipments.

PRODUCERS: John K. Bowersox, director of the building contractors division of the Associated General Contractors, succeeds John L. Haynes as managing director of the Producers Council, national organization of manufacturers of building products. Haynes, 65, is retiring. The council re-elected its president, Earl F. Bennett, architectural sales manager for the Koppers Co., Pittsburgh, at its 46th annual meeting in Houston. About 300 marketing executives attended the sessions.

LAND RUSH: Howard Hughes, the nation's most bashful billionaire, is laying a long parlay on a bright future for Las Vegas. His acquisitions already include the Desert Inn, Frontier and Sands Hotels on the famed Strip (straight title: Las Vegas Boulevard), and he has options on at least two more hotels and four motels.

BILLS FROM LAS VEGAS: Today, for about two days' interest on a building loan, builders can get a Grote "Decorator" Bathroom Cabinet. Just $5 for magnificence that sells homes or rents apartments faster — weeks faster!

Join the parade of smart builders who are choosing Grote for faster sales and rentals. Send coupon for new full color Catalog-Supplement.

**Add this irresistible touch: New Tanglewood Tile!**

It’s unique with Kentile™. The versatile, irresistible look of new Tanglewood. Goes anywhere in the home and goes there beautifully. Tanglewood—the model floor for your model home! Ask your flooring man about new Tanglewood Tile.

**KENTILE FLOORS**
Outdoor features of Decorative Concrete mean increased sales for your homes

Decorative concrete features are providing additional sales impact for home builders across the country. They’re an easy method of adding a special touch to the exterior setting of your homes. With more and more home buyers interested in outdoor living, the creative use of these basic features can be the deciding factor in the final purchase. Read on the opposite page how this attractive driveway was built combining an exposed aggregate finish with ribbons of brick.
Here's how it was done

These on-the-job photos show how the attractive driveway on the opposite page was built.

1. When forming is completed, concrete is delivered to the site by ready mix truck. As concrete is discharged, one man positions the chute while two others begin screeding immediately.

2. After screeding and tamping, the surface is smoothed with wooden floats. Final smoothing is done with this bull float. The surface is then ready for the aggregate to be seeded.

3. Colorful aggregate of uniform size (¾- to ½-inch on this job) is seeded from shovel. In background two finishers have already begun tamping in aggregate with wooden hand floats.

4. As aggregate embedment is completed along the edges one finisher uses a wood bull float to cover the center. Floating is continued until all aggregate is completely embedded.

5. An edging tool is then used to secure the aggregate at the edges. This is final step before concrete sets up enough to begin the hosing and brushing operations.

6. Medium-bristle push brooms are used for major brushing. The man with the hose touches up areas missed by the large brooms. This is the final step in producing the exposed aggregate finish.

Forms were removed the following day and the ribbons of brick laid in a mortar bed over 4 inches of concrete. Curing of the concrete may be done using a variety of non-staining materials such as water-tight paper, polyethylene film or a sprayed-on membrane compound.

Summary of labor and materials:
Concrete work: 61 man-hrs., including 16 of forming
Area: 949 sq. ft.
Concrete: 4" thick
Amount of concrete: 12 yds.
Aggregate surface: 16 sacks of Mexican Pebbles

---

PORTLAND CEMENT ASSOCIATION
Dept. A11-94
33 West Grand Ave., Chicago, Illinois 60610
An organization of cement manufacturers to improve and extend the uses of portland cement and concrete

I would like to know more about installing decorative concrete. Please send me a free copy of the "Cement Mason's Manual." (U.S. and Canada only)

Name
Address
City
State
Zip

---

NOVEMBER 1967

Circle 42 on Reader Service card
The new Diazit® “Century-21” is the most advanced 42” fluorescent lamp whiteprinter in the world...yet it costs far less!

The brand new Diazit® “Century-21” is technologically so far ahead of anything in its field that it literally makes all competition obsolete! For the first time, a full 42”-capacity non-vented compact fluorescent lamp whiteprinter that costs far-less (less than $850. & about $10. ea. for lamp!) and will actually print faster (up to 21 ft. per minute!) than high-pressure mercury vapor lamp machines that cost about twice as much to purchase per minute!) than high-pressure mercury vapor lamp ea. for lamps!) and will actually print faster (up to 21 ft.

The new Diazit® “Century-21” is the most advanced 42” fluorescent lamp whiteprinter in the world...yet it costs far less!

Hans Gehrke Jr., president of Detroit’s $630-million First Federal S&L, steps into the presidency of the U.S. Savings & Loan League at its 75th anniversary convention in San Francisco this month (12th to 14th).

Gehrke was chairman of the league’s Blue Ribbon Committee, which is studying ways to expand the S&L industry’s lending activities. He has headed the Detroit Real Estate Board and the Detroit and Michigan Mortgage Bankers associations.

Gehrke succeeds Otto L. Priesler as head of the U.S. League, which represents 5,100 of the 6,300 associations. Tom B. Scott Jr., president of First Federal of Jackson, Miss., replaces Gehrke as league vice president.

The other major S&L trade association, the National League of Insured Savings Associations, has elected William J. McKeever as president. He took over from Rex G. Baker, Jr. when the group convened its own convention in San Francisco. The meeting was held last month.


The National League has 450 member associations.

Mortgage house gets new president

Fred B. Morrison has left the Metropolitan Life Insurance Co. after ten years to become president of the Lomas & Nettleton Co. in New Haven, Conn.

Morrison, 40, was Met’s executive vice president in charge of mortgaging activity in 18 Western states. He succeeds Albert N. Roehnstedt, who becomes chairman of the L&N Co. and remains its chief executive.

The Lomas & Nettleton Co. is the sixth largest mortgage banking concern in the country, servicing $800 million in loans in 25 states. It is the mortgaging subsidiary of Lomas & Nettleton Corp., which changed its name from Wallace Investments in 1965. The L&N Co. earned $802,180 in the fiscal year ended June 30; it was L&N’s best performance in its 73-year history.

GOVERNMENT: Roy H. Pinkerton, director of the FHA insuring office in Sacramento, Calif., since 1961, is returning to the agency’s San Francisco office as director. He began his FHA career there in 1934, the year the agency was created. John F. Pendergast, office director since 1962, died last summer (News, July).

LENERS: William S. Reiling, 34, is the new executive vice president of the Eberhardt Co., the big Minneapolis mortgaging banking house. He succeeds Kenneth C. Young, 54, who retires.

ASSOCIATIONS: Dale C. Bottom has been elected executive vice president of the American Savings & Loan Institute, educational arm of the U.S. S&L League. He had been a staff vice president.

ARCHITECTS: Willard L. Thorsten of Wayzata succeeds Clark D. Wold as president of the Minnesota Society of Architects. He heads Thorson & Thorskov Inc., architects, Minneapolis.

NEWs continued from p. 22
You put it up, we back it up.

Weyerhaeuser Panel 15 has a finish you won’t have to touch for 15 years.

Use for curtain walls, siding, soffits, balcony facing, interior walls, partitions and ceilings.

Your choice of 8 baked-enamel colors on prefinished 10-mil textured aluminum sheet.

5/16" exterior grade plywood core.

A complete modular system. Color matched hardware, moldings, battens, nails, aerosol paint available.

Your choice of 2-mil insulating foil back or double-faced with 10-mil prefinished aluminum.

All glue lines are exterior type thermostet phenolic, guaranteed for the life of the installation.

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Tacoma, Washington 98401

Please send more information on Weyerhaeuser Prefinished Siding/Panel 15 guaranteed not to need refinishing for 15 years.

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Firm

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City  state  Zip

Weyerhaeuser

NOVEMBER 1967

Circle 45 on Reader Service card
"What kind of dishwasher would you want in your home?"

"I asked myself this question before I chose the dishwashers for my houses," said Pat Luciano, Erie, Pennsylvania, builder. "And the answer was KitchenAid. You see, I've had a KitchenAid in my own home for years. I wouldn't have any other because it performs well and it's dependable."

"And since I pride myself on giving my customers quality homes, I always recommend the quality dishwasher—KitchenAid."

Pat, who owns and operates Luciano Builders with his brother, Paul, specializes in new home construction.

Their current project is White Hall Village, a community of custom homes in the $30,000-and-up price bracket, just outside Erie, Pennsylvania.

Standard with each home are features such as fireplaces, garbage disposers, double-oven ranges, and of course, KitchenAid dishwashers.

So if you believe that quality pays, be sure to install the quality dishwasher, KitchenAid. It's another way to trade expensive callbacks for satisfied owner referrals.

For all the details, see your distributor. Or contact KitchenAid Dishwashers, Dept. 7DS-11, The Hobart Manufacturing Co., Troy, Ohio 45373.

By the makers of Hobart commercial dishwashers and food waste disposers.
Ruberoid glorifies today's floors with high fashion...

in Luran® Airtred "100 Plus" foam-cushioned vinyl!

This is Carmel...a Ruberoid sheet vinyl pattern inspired by the rocky shores of California. Adds prestige and value to residential and many commercial situations.

Carmel is richly embossed for beauty and to help hide indentations. Heavier vinyl wear surface. Quiet-Cor™ foam interlayer for warmth, quiet and comfort underfoot. Aquaflex™ back for installation on, above or below grade. (See magnified cross-section of 3 layers).

Carmel is richly embossed for beauty and to help hide indentations. Heavier vinyl wear surface. Quiet-Cor™ foam interlayer for warmth, quiet and comfort underfoot. Aquaflex™ back for installation on, above or below grade. (See magnified cross-section of 3 layers).

Luran vinyl is as carefree and scrubfree as a floor can be. Stain and grease-resistant! Comes in 6' wide rolls...easy to install with a seamless look. In Canada, too.

See Carmel and other high style patterns in sheet vinyl and vinyl asbestos floor tile at your Ruberoid flooring dealer. (His name is in the Yellow Pages under "Floors.") Want more details? Write to The Ruberoid Co., a division of General Aniline & Film Corporation, Fullerton, Pennsylvania 18052, Dept. HH-117.

RUBEROID®
DISTINCTIVE FLOORING
another fine product from
gaf

Circle 47 on Reader Service card
from "hole-in-the-roof" to start-up (same day!)

Easy installation begins with roof-mounting frame to be flashed in place.

All ducts pierce roof within the frame.

All-weather unit bolts to frame, needs no other sealing.

New single-zone system heats, cools, ventilates.

Long-life aluminized steel heat exchanger; non-corroding.

Simple "plug-in" connections for fresh air intake.

Optional Power Saver™ cools free with outside air below 57°F.

Commercial quality, factory-assembled; prewired and precharged.

Low-silhouette, inconspicuous unit. Also adapts to grade-level installation.

Lennox brings you single-source responsibility with the easy-installing, versatile GCS3—available from 8 through 22 tons electric cooling, up to 500,000 Btu/h gas heating. For office, school, restaurant, plant, clinic, laboratory or other high-occupancy building. Write for details. Lennox Industries Inc., 244 S. 12th Avenue, Marshalltown, Iowa.

LENNOX
AIR CONDITIONING • HEATING
This five-bedroom model caught on fast with big families...

...so the builder added a sixth bedroom for even bigger families

And now these two big models account for almost half of 3H Building & Development Co.'s sales, although the company offers 4 three- and four-bedroom models at lower prices.

When the 800-house project first opened in Arlington Heights, Ill., two years ago, the five-bedroom, 2,726-sq.-ft. model was the top of the line at $29,750. It proved so popular with buyers, however, that the builder quickly decided to offer an even larger model to help meet the demand for space.

Architect Harry Shaxted drew up a plan that extended the upper level out over the garage and increased the size of the house to 3,152 sq. ft. Into the added space he put a sixth bedroom, plus a third full bath for the master bedroom. No new model was built; only the drawings and plan of the bigger house were shown to buyers. But within three months, 27 six-bedroom houses were sold.

Today, the five- and six-bedroom models are priced at $32,990 and $36,200 (the larger model has more brick veneer and a more expensive family room). Total sales have reached 375, including 42 six-bedroom houses, 131 five-bedroom houses, and 202 smaller models.
Ideas from Kemper

Successful builders list six good reasons for buying Kemper cabinets

Greater design originality, superior finish, more styles to choose from, consistent construction quality, fast dependable delivery and a good builder profit structure. That's the straight word from successful builders all over America when you ask them, "Why Kemper?"

Let's look at some of these exclusive Kemper product advantages more closely and see if they would benefit you and your customer.

Kemper's famous glue block and concealed mortise and tenon construction pays off in several ways. This extra step construction means cabinets arrive at your job site square and true. This means installation goes as it should ... no racking problems, and less fillers needed because of Kemper Engineering. This quality pays off for the buyer, too. You can turn over the keys with complete confidence that the most beautiful part of the home, your Kemper Kitchen, will remain that way for years and years.

With the introduction this year of Kemper English Oak, the most exciting Kitchen on the market today, builders have a tremendous selection of kitchen styles and finishes all readily available from one, convenient, dependable source. Kemper. As a builder you can choose such beautiful and popular kitchens as Traditional styled cabinets in both Fruitwood and French Walnut finishes, Provincial styling featuring the exclusive Kemper Varipanel® door in French Walnut finish, Colony Line V grooved door styling with genuine cherry veneers and now, the new, the superb Kemper English Oak ... an elegant Kitchen featuring full grained Oak, deep sculptured reversible doors and massive brass hardware.

Let's look at convenience features. All Kemper Kitchens offer such saleable conveniences as all metal, built-in bread-drawer inserts, handy cutlery drawers, sliding shelf kits, lazy susans and many, many others detailed in our full line, full color catalogs.

Finishing. That's a story we love to tell. The well known Kemper finish is truly a remarkable thing. No short cuts here. Special polyurethane dips, conveyorized finishing lines and baking ovens deliver a consistently high quality finish on all cabinets. Kemper cabinets successfully resist the effects of household soaps, alcohol, boiling water and coffee. Few cabinet manufacturers can back that claim with a guarantee. Kemper does. Kemper is the only Kitchen cabinet manufacturer licensed by the National Association of Furniture Manufacturers to offer the NAFM Warranty. That's your protection ... exclusively from Kemper.

Can any company offer all these superior product features and still be competitive? The answer is an emphatic yes! Kemper is one of the most competitively priced Kitchen Cabinets you can buy. Anywhere.

Don't you think it's time you stopped in to see your Kemper Distributor? He's in the Yellow pages. If you prefer, write Kemper for complete catalog information on the full line of Kemper Kitchens and bathroom vanities. Either way, you win.

Kemper
KEMPER BROTHERS, INC.
RICHMOND, INDIANA

November 1967
WHO NEEDS RIMS?
SAVE THE TIME, POCKET THE MONEY! INSTALL KOHLER SELF-RIMMING LAVATORIES AND SINKS.

Makes sense, makes money! With no metal rim to install, you save yourself a good chunk of time... a saving that results in a better deal for your customer, a better profit for you. As a happy plus, you'll have a more satisfied customer: the "no-rim" fixture looks better, it's easier to keep clean. Like we say, who needs rims?

SELF-RIMMING LAVATORY features Kohler's "go-with" color of the year: Avocado. Also five bold Accent Colors. New Flair fittings, acrylic and brass, now available in amber, white, charcoal and clear.

SELF-RIMMING SINK is the brand new Lakefield design. Note the "make-sense" proportions: a conveniently-sized basin for scrapings (into strainer or disposer), a king size basin for dishes. Available in the new Avocado, also Antique Red, Expresso, Coppertone, Blueberry, Citron and Jade accent colors as well as white and Kohler pastels.

KOHLER OF KOHLER
The Bold Look for '67/Kohler Co., Kohler, Wisconsin
Choose your own features with the tried-and-proven Hunter HEATLINER®

Flexibility is just one reason for the popularity of the Heatliner baseboard. Others are outstanding performance, handsome appearance, sturdy construction, ease of installation. Owners get fast warm-up, quiet operation, and clean, comfortable heat. Installers get convenient knockouts and easy-to-wire junction boxes at both ends. Beige finish blends with any decor, or unit can be painted to match walls. The Hunter Heatliner is electric heat at its best . . . for homes, apartments, offices, motels, stores, and schools. Send coupon today.

Hunter Electric Heat It's Matchless!
Hunter makes a complete line of electric heaters and fans of all types.

MAIL TODAY FOR DATA
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Please send Electric Heat catalog to:
Name
Company
Address

Circle 52 on Reader Service card
In the planning stages of any project...
Hotpoint gives you an almost unlimited selection of builder appliances to fit your cost, size and style requirements. Like 24 refrigerators, 19 ranges, 22 wall-ovens, 6 drop-in oven-ranges and 6 surface units, 5 dishwashers, 4 food waste disposers, 7 washers and 11 dryers, 10 air conditioners... plus a full line of cooling and heating products. All with Hotpoint's complete parts and labor warranties!

Hotpoint offers the fullest builder line...

and the best in professional builder services:

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Whatever the project, your Hotpoint consultant has the technical know-how available to help you cut costs and build in more salability. Remember, too, Hotpoint is a name customers know and respect... and there's prompt, professional Hotpoint service in almost every city in the country.

So take the fullest line in the industry, together with the best in professional builder services, and you've got—Hotpoint's Single-Source Builder Program. Call your local Hotpoint distributor, today, for the full story.

See Hotpoint's complete Builder line insert in Sweets Catalog.
Easy does it. You save both time AND money when you install quality-built aluminum windows and sliding glass doors. Installation is fast and easy because of the pre-engineered tolerances of warp-free, lightweight aluminum. Once properly installed, doors and windows of Alcoa® Aluminum will work smoothly and effortlessly for years. No costly call backs for you.
Easy does it. The trademark of aluminum windows and sliding glass doors is easy opening and closing, any time of the year. No warping. No sticking. No rotting. Strong, care-free aluminum is above all that. And quality aluminum units provide all-weather protection against wind, rain, sand and dust, because of complete encasement in self-adjusting weatherstripping.

Durable aluminum for better homes

Change for the better with Alcoa Aluminum
Beautiful.
Simple to install.

This is the practical luxury you get with Gerber Plumbing Fixtures.

See what Gerber does with plumbing fixture design and you'll see how you can add luxury appeal to your homes, motels, and apartments without adding excessive costs.

Look at Gerber's beautiful decorator line. Lustrous satin gold or satin chrome faucet ensembles with Crystalite™ or lead crystal handles. Luxurious, matching lavatory and bathtub fittings in Swan, Dolphin, Ribbon, or Floral styles. All gold, or exquisitely patterned countertop lavatories in a variety of popular colors and designs. And a host of matching decorator accessories to beautifully fulfill your bathroom designs.

See the practical features in all Gerber fixtures and you'll see savings in installation time. Features like the integral china rim on new countertop lavatories, "All-Tub"™ waste and overflow designs, and "All-Wall"™ shower diverter fittings. Features that speed and simplify installation. Features that eliminate call-back problems... make servicing easy when necessary. Write or call for full information on Gerber's complete line of quality plumbing fixtures.

You get practical luxury in the complete line of Gerber plumbing fixtures and brass.

Gerber Plumbing Fixtures Corp., 4656 W. Touhy Ave., Chicago, Ill. 60646, Phone (312) 675-6570
heating - humidification
cooling - dehumidification
electronic air cleaning

ALL IN ONE PACKAGE

WILLIAMSON'S

NEW "FIVE-IN-ONE"

Smartly styled and handsomely streamlined, the new "Five-In-One" is a furnace, humidifier, cooling/dehumidification unit and electronic air cleaner completely enclosed in a single casing. Best of all, the new "Five-In-One" costs less and takes less space than a combination of comparable capacity elements purchased as separate units and assembled into a total comfort package.

The WILLIAMSON "Five-In-One" is available for use with natural gas, L.P. gas or fuel oil. Heating capacities range from 80,000 BTU/H to 150,000 BTU/H. Cooling capacities available from 25,000 BTU/H to 57,000 BTU/H.

It will be well worth your effort to take a good "look-see" at WILLIAMSON—the broadest line of quality residential heating and cooling equipment in the industry.

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WILLIAMSON

Front and rear sections with panels removed.
Round-head Nailer—Drives 6d common to 16d sinkers. Plain, ring-shank or screw-shank. 5 times faster than hand nailing. Built-in safety. Portable and powerful. For any job that calls for round-head nails.

Staple Nailer—Drives heavy, coated Duo-Fast Staples up to 2" long. Portable, air-operated. For wall sheathing plywood subfloor, soffits, bridging.

Finish Nailer—Drives brads and finish nails ½" to 2" long. Countersinks automatically to eliminate costly nail setting. For trimwork, moldings, cabinets, face nailing.

Hammer Tacker—Drives ½" to ½" staples as fast as you can swing it. One hand always free. For insulation, building paper, moisture barriers.

Write today for the Duo-Fast FT-26 Builders Brochure. Your Duo-Fast man will be pleased to demonstrate these tools.

Hawaiian condominiums

H&H: I was very interested in the one-family condominium development in Florida [Sept.] and even more interested to read of Thomas M. Wohl's statement: "I can't understand why someone hasn't tried the condominiums for families."

Apart from Puerto Rico, Hawaii was first in the field of condominium development in the U.S. In fact the concept of single-family condominium development was being actively pursued in Hawaii as early as 1963.

The first single-family residential condominium project in Hawaii was conceived by me as president of Bradley-Wells Corp. and developed in association with Amity Developers Inc. After two years of planning and research, the final condominium public report was issued by the Real Estate Commission of Hawaii in December 1964, and ground breaking was held the following month. The project is now over half complete and the recreation center is in use.

Hawaii has been most progressive in its use of condominium laws, and a comprehensive zoning ordinance, shortly to become effective, will no doubt encourage more of this type of development.

PETER M. AMCOTTES, vice president Engineering and construction Millani Town Honolulu

Kiss of death

H&H: Hawaii, the pioneer state in condominium enabling legislation, relies on your reports on the problems and successes of horizontal property/condominium developments across the nation. The article titled "Condominium Comes of Age—but Fast" [Mar.] was most informative.

The periodic reports in your News section are of great value to real estate law-enforcement officers, who endeavor to keep the big picture in focus. Thanks for many small leads that help us to maintain a library of accurate and current information on land-development operations, schemes and people.

DICK H. OKAJI, licensing administrator Real Estate Commission State of Hawaii

H&H editorial index

A few copies of HOUSE & HOME's 1966 editorial index, an eight-page reference guide, are still available.

It includes a cross-reference listing of all subjects covered last year by H&H—115 in all, from acoustics to zoning—plus a combined, chronological table of contents of major articles.

If you'd like a copy of the index (there's no charge), write to: Reader Service Dept., HOUSE & HOME, 330 West 42 Street, New York, N.Y., 10036.

Circle 57 on Reader Service card

Circle 58 on Reader Service Card
SAVE LABOR BY APPLYING Shakertown® SHAKES in PANELS!

Consider the value of saving application time for sidewalls through the use of convenient, one-man cedar shake panels. The man hours of handling numerous individual pieces are eliminated and the panels can be applied in most any weather. Available in a choice of customer-pleasing textures and colors. You get a finished job faster by using the matching color nails and corners.

GIVE YOUR CUSTOMERS A CHOICE OF 4 DISTINCTIVE TEXTURES

1. HANDSPLIT CEDAR SHAKE PANELS
   Truly, the most rugged texture available to add dimension and charm to homes and apartments. Available in 2-ply construction, 46" long, either natural finish or a selection of weathered effects.

2. BARN SHAKE PANELS
   For your quality homes, use Shakertown Barn Shakes in panels. A charming appearance that will make your homes more desirable. 2-ply panels, 46%" long and 3-ply panels, 8' long. A good selection of colors in popular weathered effects for sidewall, Mansard or "A" frame construction.

3. GLUMAC SHAKE PANELS
   Cedar Shakes with a machine grooved, vertical texture have been a favorite with home owners for many years. Economical to buy and to apply! The panels are 2-ply with an insulation backer board in panels 46%" long with ship-lap edges for weather-tight sidewalls. 12 modern colors.

4. E-Z PLY SHAKE PANELS
   Panels of cedar shakes with a machine grooved face or a smooth surface are now available in 8' panels. 3-ply shake panels in natural cedar or grey primed. Note: All 8', 3-ply Panels are suitable for single wall (stud nailed) construction where code permits.

Shakertown®
"FIRST NAME IN CEDAR SHAKES"

Write for detailed brochure...

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P. O. Box 2042, Vancouver 3, B. C.

NOVEMBER 1967

Circle 59 on Reader Service card
Buy BARRETT building products.
It was a progressive move that resulted in a bigger-than-ever company, dedicated to giving you better-than-ever services.

And please set your mind at ease. There'll be no fooling around with the proven and respected Barrett line of roofing products. We’re not about to make willy-nilly changes. Not even to the name. It's still Barrett.

What does it mean to you? It means that the basic Celotex line of superior products has been nearly doubled; every facility of continuing research and development has been expanded; manufacturing capabilities have been vastly increased. And you'll still enjoy the benefits of the same efficient distribution network, see the same familiar faces on the job.

It was a big step for us. The way you’ve been responding makes us know that we were right.
What new appliance adds sales appeal to every room in the house...

and the basement, garage and patio, too?

The Jack-Vac

Every woman can quickly see the advantages of the Jack-Vac... Whirlpool's true central vacuum system which carries dirt through tubing in the walls down to a tank in the basement or garage. She likes the idea of having no machinery to pull around... no messy bags to empty... no dust redeposited around the room.

And the man of the house gets just as excited about the Jack-Vac as his wife does! Those Jack-Vac outlets in garage and basement are his!

With powerful Jack-Vac suction, he can pick up wood shavings in his workshop... whisk up dried mud from the garage floor or cigarette butts from his car ash trays... reach the hose out onto the patio to clean up stray grass clippings.

The Jack-Vac offers a choice of two systems... dry or wet pickup. The exclusive wet pickup system is self-cleaning. It flushes dirt down the drain, and can also pick up scrub water or spilled liquids.

Either system is easy to install in homes under construction. Even if a home is finished, you can still put in a Jack-Vac. It's a simple job to put the tubes in the walls of a completed home.

Find out about this true central vacuum system... backed by Whirlpool's nationally-known brand name and by national advertising.

Get details, too, on our special low-cost kit which lets you pre-condition homes for the Jack-Vac at minimum cost. Just mail the coupon.
Nearly everybody knows KV

...because we make and dependably deliver more easy-to-install drawer slides than anyone else.

Concentrate on KV. We make 17 different kinds for virtually every type of installation. The popular #1300 extension slide is a cinch to install and requires only 1/2" side clearance. Loaded to 75 lbs., it rolls easily on Nylon ball-bearing wheels. Nine lengths from 12" to 28", packed singly or in bulk. Standard finish is bright zinc plate.

The #1175 is a single-track slide that fits quickly to any drawer, any length or width. With extra-large Nylon rollers #1175 holds up to 50 lbs. Install it fast with staples or screws — no templates required. Standard length: 223/4"; packed singly or in bulk. Standard finish is bright zinc plate.

The other 15 slides? We have them in heavy-duty, medium-duty, self-closing, full-extension, under-drawer, single-track and double-track styles in a wide range of stock sizes. Emergency? Call us... your order will be shipped the same day!

One more point: We modify many drawer slides to meet our customers' specific requirements for special sizes, special finishes. Why not let a KV drawer slide specialist help you. He will be happy to work with you and will provide recommendations and prices. Call us or contact your nearest KV representative to get prompt action.

KNAPE & VOGT MANUFACTURING COMPANY
Grand Rapids, Michigan 49505

May we send you a copy of our new drawer slide catalog #167-DS? Write for your copy or ask your KV representative.

Circle 61 on Reader Service card
Look at **all** you get you can't get anywhere else!

**THE '68 CHEVROLET PICKUP:**

Only Chevrolet gives you all these truck features for '68!

**Truck-tough cab and body with double-strong construction.**
There's no stronger pickup anywhere. You get double thicknesses of sheet metal in critical areas. Like the cowl, windshield pillars, roof, door openings. And Fleetside body side panels and tailgate!

Road-balanced ride with rugged coil springs all around!
No other pickup gives you the smoothness of independent front suspension plus coil springs at all four wheels. Tough coil springs designed for rugged duty! Standard on ½ and ¾-ton models.

**Styling with a purpose that sets the pace!**
A Chevy pickup gives the newest truck styling—and the most practical! The low silhouette helps provide road-holding stability; the cab design lets you see more of the road ahead.

**Extra workpower with job-tailored engines!**
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EDITORIAL

New houses vs. not-so-new houses

If you want buyers for your 1968 houses, you’d better not offer them the same old 1967 models

If you took a fast trip around the country today to look at new models and new subdivisions, all too often you'd find that nothing in these quote, new, unquote models really grabbed you. Yet in every town, you would find one or two builders knocking the ears off the competition with really excellent merchandise and merchandising.

But your impression would probably be that too many builders—who should know better—are putting out a schlock product, using stale, dull, bottom-of-the-line components. You would ask yourself what happened to all the exciting new hardware, fixtures, appliances, equipment and materials that you were expecting to see?

Well, what happened is simple: Builders still underestimate the customers' desire for new and better products and materials. Builders forget that they are the consumers' purchasing agents when it comes to building materials. Too many of us are ordering Model T's for buyers who want Mustangs and Cougars.

There's a sort of moral here: If you want consumers to spend more on housing, you have to spend it for them first. If you don't spend it, why should they? You're their purchasing agent; maybe you're underbuying and underdesigning for them.

We know that builders care about new products. For example, we got 66,319 requests for more information about the 185 products shown in our November 1966 issue. But why do we see so few of those products in new houses and apartments?

“Well,” you might argue, “if I do buy all the hot new products, I'll price myself right out of the market.”

Three market factors make that overused crutch very weak:

First factor: You can't predict how warmly the consumer will receive a good new product. Manufacturers of color television, fiberglass boats and hi-fi systems never dreamed that those items would take off the way they did. Ford marketing men did thorough research before introducing the Mustang, but they had no idea they had such a barn-burner. In other words, if you design and build a hot house, one more exciting than any other in town, you just might have a barn-burner of your own. An item-by-item look at 1968's outstanding new products in this issue will show you the potential of your 1968 models.

Second factor: The market is growing faster than the industry's capacity to produce. Demand in 1968 will exceed anything we can reasonably produce next year (see p. 86). You'll be in a sellers' market, not a buyers' market. Housing shortages across the country will be second only to those we knew in the years right after World War II.

Third factor: Today's families have well over double the dollar income they had 15 years ago—and 60% more purchasing power. The need and the money are both there.

“But,” you say, “if I've got a sellers' market, why bother to sex up the product? Why not just knock 'em out and go like hell?” Answer: That's just what the ribbon clerks, who are going to pile into this market as they did during previous booms, are going to do.

And do you know what's going to happen to those ribbon clerks? They're going to have to compete with smart builders who will use what they've learned in the buyers' market of the '60s.

In that buyers' market, smart builders learned the full meaning of being in the retail business. They were retailing the biggest-ticket item the consumer would ever buy. In successful retailing, the best merchandising is the merchandise itself. If a house or an apartment doesn't grab the consumer, the builder takes a loss. And you know what happens to retailers who take too many losses.

Smart builders have learned how to put pizzaz into their houses. Pizzaz in housing excites people, makes them happy about their purchase and keeps them happy. Pizzaz, like beauty, is in the eye of the beholder; it's a state of mind. Exciting merchandise makes prospects react: They desire, and they want. Aspirations they can't define are made real. And they buy, because what people think (state of mind) controls what they do (“Sign right here, Mr. Jones, and press down hard so your signature comes through on all five copies”).

—RICHARD W. O'NEILL
Plastic door trim, applied with contact adhesive or nails, simulates hand-carved wood—including chisel marks—and can be stained like wood. Filon, Hawthorne, Calif. Circle 246 on Reader Service card. Lockset is by Weslock, Los Angeles. Circle 250 on Reader Service card.
Patterned Plexiglas in a choice of 17 colors can be used for exterior glazing as well as for interior translucent screens. Two panel sizes: 4'x6' and 4'x8'. Three thicknesses: 1/8", 3/16", and 1/4". Rohm and Haas, Philadelphia. Circle 248 on Reader Service card

Imitation parquet (left) with embossed woodgrain pattern comes in two wood tones—maple and teak—for use with contemporary or traditional decor. The 12"x12" tiles, 3/16" thick, are made of vinyl asbestos. Johns-Manville, New York. Circle 247 on Reader Service card

Looking for eye-catching ideas like these at left for next year's houses? They are just a sampling of the some 200 ideas you will find in the following 24-page catalog of new building products.

What can the new crop of products do for your merchandising? Take a look at some of the latest synthetic finishing materials—molded plastics, embossed hardboards and others—that look just like traditional materials but cost less and are easier to use.

Check the new combinations of modern and traditional materials—wood veneers laminated to vinyl, for example—which produce more striking finishes but mean lower installation costs for builders and fewer maintenance worries for buyers.

And on the subject of convenience for buyers, there are new attractions, like an easy-to-install electric traverse rod, and a wider selection of relatively new sales lures, like central humidifiers and electronic air cleaners for total-comfort heating/cooling systems.

Maybe you're more interested in faster building than in faster sales. Then see the latest power-tool developments, which emphasize compactness but greater speed.

Whatever your particular interest in new products, you'll find it covered in this listing:

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Chances are, you will be pleasantly surprised by the manufacturers' emphasis on striking-looking products like the three at left—the kind that get prospects talking about a house. For more of these talk-starters, turn the page.
Imported ceramic tiles for floors and walls are hand-painted in brilliantly colored antique designs. Wall tile (left) is 53/4” square, 3/8” thick; floor tile (right) is 73/4” square, 7/16” thick. Country Floors, New York City. Circle 209 on Reader Service card.

Two-tone kitchen cabinets are available in 21 natural finishes and 12 velvet enamels. Also: choice of door inserts in laminated plastic or standard colors to match countertop surfaces. Quaker Maid, Leesport, Pa. Circle 210 on Reader Service card.


One-piece bathtub and three 75”-high walls are molded of fiberglass as a single unit. A recess in the back wall houses grab bar and soap dish. Available in pastels and white. Ceiling top is optional. Universal-Rundle, New Castle, Pa. Circle 212 on Reader Service card.
Textured wall finishes come in natural cork (left) and simulated wormy chestnut (right). The cork is tissue-thin veneer on wallpaper. The chestnut planks are deeply embossed, 5/16"-thick hardboard. Armstrong Cork, Lancaster, Pa. Circle 213 on Reader Service card

Imitation leaded glass is hand-made of colored fiberglass and acrylic according to customer’s own design specifications. Construction is one-piece, and the 3/16"-thick panels may be used inside or out. Stainglas, Chicago. Circle 214 on Reader Service card

Soft-textured tiles are designed to blend with all color schemes. Fine vein lines are fused into the glaze and contrasting colors are glazed over basic colors. The glazes are suitable for counters and floors. Interpace, Los Angeles. Circle 215 on Reader Service card

"His and hers" bathroom cabinet is a three-piece ensemble consisting of two cabinets flanking a wall mirror that comes in three widths up to 36". Cabinets are finished in egg-shell with gold trim. Grote, Madison, Ind. Circle 216 on Reader Service card

Wood-plastic parquet is produced by nuclear energy. Wood is impregnated with liquid plastic which is then hardened by gamma radiation. Result: a solid-wood plastic composite promising unusual hardness and strength. Novawood, Lynchburg, Va. Circle 218 on Reader Service card

Bathroom lavatories fit below counter level or come with integral countertop. Left: recessed vitreous-china unit with built-in soap dishes by Eljer, Pittsburgh. Circle 438 on Reader Service card. Right: one-piece unit of cultured marble by Polykrystalon, Houston. Circle 219 on Reader Service card

Architectural plastic in 4'x 8' and 5'x 10' panels is made of high-impact polystyrene, .095" thick. It can be cut with shears and applied to walls, doors and cabinet fronts with the manufacturer's adhesive. Choice of four colors. K-Lux, St. Louis. Circle 217 on Reader Service card

NOVEMBER 1967
Folding shower door opens at center—double doors may be folded back jointly or separately and are held by hidden latches and magnets. Comes with silver or gold aluminum frame for 48” and 60” tubs or showers. Showerfold Door, Chicago. Circle 200 on Reader Service card

Fan-forced baseboard heater for remodeling work can be recessed in walls without cutting studs because the back contains stud-size indents on 16” centers. Beige finish blends with most decorating schemes. Emerson, St. Louis. Circle 201 on Reader Service card

Decorated ceramic tiles in over 40 designs and hundreds of color combinations can be used to form patterns, borders and random highlights. Standard size—4½”x4½”—conforms to that of most ceramic tiles. American Olean, Lansdale, Pa. Circle 202 on Reader Service card
Ceramic floor tile in old-world design is available in ten different colors with a reflective crystal finish that simplifies cleaning. Subtle shading simulates the appearance of handcrafted tile. Stylon, Boston. Circle 203 on Reader Service card

Carpet tiles of polypropylene olefin fiber with foam-rubber backing come in 16 colors featuring vivid reds, greens, blues and pastels. The 12" squares can be used to create checkerboards, stripes or random patterns. Ozite, Chicago. Circle 204 on Reader Service card

Double marble tub—a "his and hers" model—is made of 90% quarried marble combined with hardening agents. Unit incorporates two basic tub models, 70" and 55" long, and a combination of standard cap panels. Venetian Marble, Dallas. Circle 205 on Reader Service card

Embossed tile flooring simulates marble chips in a pattern that flows together to hide seams. The 12"x12" tiles are vinyl asbestos, 5/8" gauge, and may be installed on any grade-level floor. Six color combinations. Ruberoid, New York City. Circle 206 on Reader Service card

Foil wallcoverings, hand-decorated in 46 patterns, feature a tortoise-shell texture that looks three-dimensional. The metallic base promises low maintenance, and the no-repeat design reduces waste in hanging. Polyplastex, Union, N.J. Circle 207 on Reader Service card

Duplex freezer/refrigerator rides on rubber wheels to simplify servicing and floor-cleaning. Model shown is 35¾" wide, has 22 cu. ft. capacity, automatic door closers and optional decorator kit. Admiral, Chicago. Circle 208 on Reader Service card

continued
Colored mortar is factory-mixed, eliminating the need for mixing pigments on the job. Manufacturer offers 160 standard colors plus custom shades for blending (above) or contrasting with the color of brick. Medusa, Cleveland. Circle 233 on Reader Service card

Fire-retardant cedar shakes and shingles carry a Class C rating from Underwriters' Laboratories and—compared with the installed cost of untreated shakes and shingles—cost less than 50% more. Koppers, Pittsburgh. Circle 234 on Reader Service card

Masonry stain adds lasting color to concrete because it penetrates and reacts upon a calcium base. More than 50 shades can be created from eight basic colors for use on patios, pools, atriums and entries. Kemiko, Hollywood. Circle 235 on Reader Service card

Vertical plastic siding is made from rigid polyvinyl chloride, so it never needs painting and is impervious to dirt. Panels are extruded in 10' lengths with double 5" vertical clapboard exposure. Bird, East Walpole, Mass. Circle 236 on Reader Service card
Grained aluminum siding simulates newly painted rustic wood. Baked-acrylic finish in choice of five tones—white, fern green, colonial blue, sandstone and sierra tan—is guaranteed to last 20 years. Alcoa, Pittsburgh. Circle 237 on Reader Service card

Self-sealing shingles—said to be storm-tight in hurricanes—feature extra-large granules on asphalt. The granules are fungus-resistant to preserve colors longer. Shingle strips have two 18" tabs. Johns-Manville, New York City. Circle 238 on Reader Service card

Barn-shake panels—in natural finish or weathered-looking colors—are 8' long and consist of three plies with a plywood core. Allowing up to 14" exposure, they are designed especially for A-frames. Shakertown, Cleveland. Circle 239 on Reader Service card

Aluminum swimming pool combines extruded-panel sidewalls and a 20-gauge vinyl liner. Package also includes a flush wall skimmer and dual-suction manifold and filter. Photos above show a 16'x32' model. Cascade, Edison, N.J. Circle 240 on Reader Service card

Aluminum gate can be hung on round aluminum gate posts or on flat surfaces like stone walls and wood fences. It combines 2"x9-gauge chain link fabric in an extruded frame for openings up to 48" square. Nichols, Davenport, Iowa. Circle 241 on Reader Service card

One-piece skylight consists of two plastic sheets—a clear vacuum-formed dome and a translucent white diffuser—heat-welded together to eliminate tapes and glues. Dead-air space provides insulation. Kennedy & Son, Orlando, Fla. Circle 242 on Reader Service card

Clay-brick panels for exterior siding are premortared and siliconed. The panels—32"x14" with matching corners—are applied with nails, and the nailheads are covered with matching-color compound. RidgeRock Industries, Sebring, Ohio. Circle 243 on Reader Service card

Decorative concrete surfaces are produced by custom-made forms faced with molded-plastic linings. The forms can reproduce woodgrain as well as sculptured and geometric surfaces. Polyester Specialties, Summit, Ill. Circle 245 on Reader Service card

Sandwich-panel siding combines factory-enamelled aluminum, polystyrene insulating foam, aluminum foil and kraft paper. Panels can be applied directly to studs, and are vented by ¼" holes on 17" centers. Alsco, Akron, Ohio. Circle 244 on Reader Service card

continued
Textured ceiling panels for suspended grids display an embossed swirl pattern that simulates brushed plaster. Panels come in two sizes—2'x2' and 2'x4'—and the design is also available in 12"x12" tiles. Conwed, St. Paul, Minn. Circle 220 on Reader Service card

Particleboard underlayment, designed especially for floor remodeling, resists warping and denting because it has no grain. It comes in 4'x8' panels, 7/8" thick, and cuts with ordinary tools without flaking. Weyerhaeuser, Tacoma. Circle 222 on Reader Service card

Ceramic wall surfacing is hand-textured in modular panels for use indoors or out. Manufacturer custom-designs accent walls from over a hundred basic patterns with many color possibilities. Design-Technics, New York City. Circle 221 on Reader Service card

Sculptured hardwood—walnut, birch and poplar—comes in 2'-wide panels that are 2', 3' and 4' high, and 1/2" thick. The panels are designed for screening, and are supplied finish-sanded with or without frames. Penberthy, Los Angeles. Circle 223 on Reader Service card

Hardboard paneling in random-grooved woodgrains is plastic-coated and 5/32" thick. Panels are 4' wide, 4', 6' and 8' high. Also available: 16"-wide woodgrained planks in 8' and 10' lengths, 3/4" thick. Barclay, New York City. Circle 224 on Reader Service card
Fissured ceiling panels are ⅛" thick, rated Class A (incombustible), and weigh about .60 lbs. per sq. ft. Available in two sizes—2'x2' and 2'x4'—with a noise-reduction coefficient of .80. Celotex, Tampa, Fla. Circle 225 on Reader Service card.

Scenic wallpaper, showing a Japanese fishing village, covers 9' of lineal wall space and consists of four panels. Manufacturer's full line includes scenes as large as eight panels and as small as two. Albert Van Luit, Los Angeles. Circle 226 on Reader Service card.

Flakeboard-côre paneling, ¼" thick, offers wood veneers of pecan, elm, walnut, oak, cherry, birch, knotty cedar and knotty pine. The solid flakeboard backing has no defects to show through the panel face. Long-Bell, Longview, Wash. Circle 227 on Reader Service card.

Printed laminate offers contemporary floral pattern in a choice of four colors. The plastic surfacing is available in a wide range of other decorator designs and colors for countertops and cabinet fronts. Wilson Art, Temple, Tex. Circle 231 on Reader Service card.

Molded-plastic bifold doors are packed in two- or four-panel sets with hardware. They come in one color—off-white—but may be refinished to match room colors. Full line contains four designs. Tenneco, Arlington Heights, Ill. Circle 232 on Reader Service card.

Cork tile, 12"x12"x3/16", blends 1½"-wide strips at random in a composition of four different color tones. Installation requires no special matching. Tile can be laid over any floor, including concrete, without underlayment. Kentile, New York City. Circle 228 on Reader Service card.

Plastic window sill comes in marbles (above), woodgrains and solid colors. It can be milled, drilled and sawed with ordinary woodworking tools. Standard dimensions: ½" thick; 4½" to 9½" wide; 3' to 12' long. Kenmore, Lowell, Mass. Circle 229 on Reader Service card.

Vinyl wallpaper with flocked-grille pattern comes in a choice of four colors on white background. The vinyl-impregnated wallcovering is guaranteed for five years against wear, fading and staining, and can be scrubbed. Imperial, Cleveland. Circle 230 on Reader Service card.

More Interiors products p. 124 continued
**NEW PRODUCTS 1968**

**kitchens**

**Hot-food server** in stainless steel moves on drawer rollers, provides thermostatically controlled temperatures of up to 190°F, and can be installed with wood-paneled front. Contains a removable liner pan. Toastmaster, Algonquin, Ill. Circle 297 on Reader Service card

**Ceramic work surface** is extremely scratch-resistant and serves as a good cutting base for food preparation. Made of a glass-ceramic material called Pyroceram, the panel is also impervious to heat. Corning Glass, Corning, N.Y. Circle 286 on Reader Service card

**Island range hood** is 8” deep by 28” wide and comes in lengths of 30”, 36” and 42”. Aluminum mesh provides 200 sq. in. of filter area. Standard finishes are coppertone, white and stainless steel. Miami-Carey, Cincinnati. Circle 287 on Reader Service card

**Desk assembly** for a kitchen nook is constructed of hard maple in a fruitwood finish, and fitted with brass hardware. The desk surface is covered with Formica in a matching woodgrain pattern. Whitehall, East Rockaway, N.Y. Circle 292 on Reader Service card

**Gas cooktop**, 36” wide, permits more room for drawer space beneath because the burner box has been reduced to only 3” in depth. The top is hinged, lifting up or off for cleaning. Burner box is one-piece. O'Keefe & Merritt, Los Angeles. Circle 295 on Reader Service card

**Food-waste disposer** offers a heat-fused epoxy grind chamber, Teflon-coated drain chamber, and two sound-deadening features: 1) neoprene sink mounting, and 2) extra-thick blanket of styrene insulation. Two models. KitchenAid, Troy, Ohio. Circle 294 on Reader Service card

**Automatic dishwasher** features 16-place-setting capacity, two revolving-spray wash arms—one under each glide-out basket—and a miniature food grinder that eliminates the need for food-scrapping. Modern Maid, Chattanooga, Tenn. Circle 296 on Reader Service card

**Garbage disposer** features a detergent shield of polypropylene, which protects against detergent corrosion and electrolytic action. A “wrenchette” lets the homeowner free minor jams inside the unit, avoiding service calls. In-Sink-Erator, Racine, Wis. Circle 288 on Reader Service card
Undercounter washer-dryer is ideal for apartments because it takes only 30" of space and needs no venting. Handles all types of clothing and is available in shades of turquoise and avocado green. General Electric, Louisville. Circle 291 on Reader Service card.

Undercounter dishwasher offers a pushbutton cycle for regular and short washes, and a cycle for pots and pans. Outer front and base panels are interchangeable with optional panels in color or white. Frigidaire, Dayton, Ohio. Circle 283 on Reader Service card.

Set-on range fits in 30" of space and allows room for a standard 18" cabinet above. The electric eye-level cooking center has a glass control panel and a fog-free window. A counter trim kit and range hood are optional. Royal Chef, Nashville. Circle 289 on Reader Service card.

Decorator door for gas or electric ovens lets builders match any decor with wood or other materials. The key is a unique insulation process that keeps the oven-door surface cool despite cooking heat. Chambers, Cleburne, Tex. Circle 284 on Reader Service card.

Eye-level range with a self-cleaning lower oven also features a mirror-door eye-level oven for baking and broiling. Self-cleaning is accomplished by temperatures of 830° to 900° in cycles of one to four hours. Avocado, white, copperine. Roper, Kankakee, Ill. Circle 290 on Reader Service card.

Interchangeable door inserts, featured in a lower-priced cabinet line, provide a choice of eight panels. Inserts—plain-surface or perforated—lock in place with positive-holding thumb clips. I-XL Furniture, Goshen, Ind. Circle 262 on Reader Service card.

Triple-rack dispenser, designed to fit between wall and base cabinets, holds rolls of paper toweling, wax paper and aluminum foil or plastic wrap (right). When closed, it becomes a blackboard (left). Nautilus, Freeland, Pa. Circle 293 on Reader Service card.

Refrigerator-freezer on wheels provides 15 cu. ft. of fresh food space and 9 cu. ft. of freezer space in a two-door cabinet that is only 35¼" wide and 66½" high. It fits easily under overhead cabinets. Hotpoint, Chicago. Circle 285 on Reader Service card.

More Kitchen products on p. 123
Self-rimming lavatory—21”x19” and made of enameled cast iron—lends itself to bathroom remodeling work because it fits an existing countertop opening perfectly when replacing a standard-size 20”x18” lavatory. Kohler Co., Kohler, Wis. Circle 251 on Reader Service card

Wide vanity in white provincial style is impervious to moisture and stains because door and drawer fronts are coated with high-density melamine plastic. Available in a full range of sizes and types. Connor, Wausau, Wis. Circle 252 on Reader Service card

Whisper-quiet toilet contains a low-pressure flush valve that does away with refill noises. It also offers new design features: flush button instead of a handle, and a modern-looking pedestal and bowl. Norris Industries, Los Angeles. Circle 253 on Reader Service card

Easy-to-assemble vanity is made of ¾” stock and finished inside and out with laminated rigid vinyl in driftwood grain. Unit includes a top of marble-pattern, high-pressure laminate, and magnetic catches. Zell, McKeesport, Pa. Circle 254 on Reader Service card

Wood-framed cabinet in walnut finish is a recessed model with 1,566-cu.-in. capacity and frameless plate-glass mirrors in plastic tracks. Steel body, finished in white enamel, contains two glass shelves. Lawson, Cincinnati. Circle 255 on Reader Service card
Wood-grained vanity made of Formica is available in three sizes, each offering a choice of three different door styles. Unit shown above contains doors with reversible-panel inserts for change of decor. Villa Kitchen Cabinets. Rochester, N.Y. Circle 256 on Reader Service card

Adjustable shower head, with stainless-steel extension cable, allows children to control shower height by operating a patented slide-positioning clip. The head is made of unbreakable DuPont Delrin with stainless-steel screen. TubMaster, Orlando, Fla. Circle 257 on Reader Service card

Compact sauna can be adapted to apartments as well as houses because it requires only 24 sq. ft. Polyurethane insulation is poured between redwood interior walls and mahogany-veneered exterior walls. All controls included. AmFinn, Camden, N.J. Circle 258 on Reader Service card

Picture-frame cabinet with hinged door is designed for general-purpose storage space in hallways and bedrooms as well as bathrooms. Cabinet includes three glass shelves. Overall size: 26" high, 6" deep. Miami-Carey, Cincinnati. Circle 260 on Reader Service card

Hand shower—recommended by recent bathroom studies—is attached to a flexible metal hose so it may be used at adjustable heights or held in the hand. Permits tub cleansing, and showering without wetting hair. Alsons, Somerset, Mich. Circle 261 on Reader Service card

Compact lavatory—18" round and rimless—is ideal for limited space. Incorporates a fitting ledge, front overflow drain and integral soap dish. Available in a choice of pastel colors and white. Universal-Rundle, New Castle, Pa. Circle 262 on Reader Service card

Bathroom ensemble made of stock components combines two 24" vanity bases and one 24" single-drawer section, plus recessed wall cabinet. Hardwood doors are full-louvered; hardware is solid brass. Williams, Elkhart, Ind. Circle 263 on Reader Service card

High-style bidet, designed to coordinate with manufacturer's low-silhouette toilet, can be filled with tempered water like a lavatory. Includes fittings, pop-up drain and hydrostatic mixing valve. Borg-Warner, Mansfield, Ohio. Circle 259 on Reader Service card

continued
Automated backhoe in three sizes—10', 13' and 15'—speeds digging by allowing the operator to fill the bucket by pulling one lever instead of the three separate levers used in standard backhoes. Ford, Birmingham, Mich. Circle 281 on Reader Service card

Drill/breaker offers an 8"x8" rammer pad set at a 60° angle to the rammer stem. The design makes the tool move when ramming—an advantage for working on backfilled cable ducts and similar jobs. Weight: 56 lbs. Atlas, Hackensack, N.J. Circle 280 on Reader Service card

Speed-controlled drill in 1/4" and 3/8" sizes can be used on wood, metal, masonry, plastics and glass. Operator increases or reduces drilling speed by squeezing or releasing the trigger. Switch is solid-state. Milwaukee, Brookfield, Wis. Circle 279 on Reader Service card

Sizing tool re-shapes floor stub-ups or any 1/2" and 3/4" thin-wall conduit accidentally damaged during installation. It can also be used to make slight bends in conduit ends for final alignment after installation. Ridge Tool, Elyria, Ohio. Circle 278 on Reader Service card

Pneumatic nailer drives a range of nails from 6d common through 16d sinkers. It can be operated with one hand and has a built-in safety feature: operator must perform two separate actions to drive a nail. Duo-Fast, Franklin Park, Ill. Circle 277 on Reader Service card

Crawler tractor in the 75-hp class has a 302-cu.-in diesel engine and a hydraulic reversing transmission. Two models available: a dozer (shown) and a loader with 1 1/2-cu.-yd. capacity bucket, Massey-Ferguson, Des Moines. Circle 276 on Reader Service card
Concrete pump is actually two pumps in one because it has twin engines and dual hydraulic systems. If one stops, the other continues at half capacity. It pumps rough mixes with 1/4" aggregate at 1 yd. per minute. Whiteman, Pacoima, Calif. Circle 270 on Reader Service card

Diamond saw blades for masonry cutting use “blocky” shaped diamonds designed to withstand pressures of high-speed sawing better than diamond slivers used in conventional blades. Diamond segments are 1/4" deep. Clipper, Kansas City. Circle 274 on Reader Service card

Modernization work will cut masonry, wood, metal and composite materials. Contains a governor for engine control, and solid-state ignition. A dual spindle permits cuts close to walls. Homelite, Port Chester, N.Y. Circle 272 on Reader Service card

Half-track trencher—also a tractor—steers through the front wheels but can also steer itself when trenching. It digs hydraulically, from 4" to 14" wide, up to 58" deep, and runs on an 18-hp gasoline engine. Arps, New Holstein, Wis. Circle 271 on Reader Service card

Hand-held nailer for 16d nails weighs just 11 lbs. and is 14" high, 13 1/4" long. It can drive up to 5,000 nails an hour, using disposable plastic cartridges that hold about 125 nails, are just 7 1/4" long and weigh 2 lbs. when full. Paslode, Chicago. Circle 275 on Reader Service card

Air-powered caulking gun for 1/10-gallon paper cartridges provides adjustable pistol grip, and exhaust-ported air valve for fast shut-off. Plastic adapter accepts a wide range of nozzle configurations. Semco Aircaulk, Los Angeles. Circle 269 on Reader Service card

Pick-up truck in 1/2- and 3/4-ton capacities features car-like interior: custom carpeting, bucket seats, center console and bright-finish grille and moldings. Interiors are color-keyed to a choice of 13 exterior colors. Dodge, Detroit. Circle 267 on Reader Service card

Reinforced dome built of lightweight galvanized-steel tubing is covered by nylon-reinforced vinyl with translucent sections to let in daylight. It spans 30' to 45', can be any length, and bolts together. Versadome, Montgomeryville, Pa. Circle 268 on Reader Service card

Multi-purpose saw for demolition work will cut masonry, wood, metal and composite materials. Contains a governor for engine control, and solid-state ignition. A dual spindle permits cuts close to walls. Homelite, Port Chester, N.Y. Circle 272 on Reader Service card

Utility body designed especially for building contractors features outside tool compartments fitted with removable shelves and adjustable bins. Compartments are protected against vandalism and theft by slam-action locks. Reading Body, Reading, Pa. Circle 264 on Reader Service card

Two-speed sabre saw cuts soft wood, plastic and composition at 2200 strokes per minute; and cuts hardwood, mild steel and conduit at 1100 strokes per minute. Serrated blade clamp gives maximum holding power. Black & Decker, Towson, Md. Circle 265 on Reader Service card

Vibratory compactor—powered by an air-cooled, 8-hp gasoline engine—covers areas of up to 10,500 sq. ft. per working hour and delivers an impact force of 6,300 lbs. Base plate measures 32"x24" and is 1/2" thick. Wacker, Milwaukee. Circle 266 on Reader Service card

New products continued on p. 111
Who buys the house—and why? A new study turns up convincing evidence that . . .

You don’t sell to a family, you sell to a husband and wife—and they may not agree at all on what they want

How the study was made

The survey was conducted by the industrial design firm of Raymond Loewy/William Snaith, Inc. The sampling consisted of 2,515 families, selected to conform to over-all U.S. nonfarm households in terms of age, income, sex and family cycle. The study claims a margin of error of less than 3% in the sampling.

In addition, 586 respondents known to be in the market for new housing were interviewed for a full hour. These interviews took place in 20 different locations; they were conducted at model houses and apartments, and the responses before, during and after inspection of the model were charted.

The cost of the survey ($175,000) was borne by 28 major corporations (all but two of them manufacturers of building products) which formed the Project Home Committee.

The 323-page report, including 162 pages of tables and statistics, will be made available to the industry if tentative plans for publication go through.

That’s the most significant information that builders can glean from “The Motivations Toward Homes and Housing”, a 323-page report of a survey aimed at discovering why people buy—or don’t buy—new homes. Sponsored by The Project Home Committee (box, left), the study 1) explores the psychological aspects of husbands’ and wives’ approaches to homebuying and 2) measures their attitudes toward the model houses they see.

Most builders have long been aware that the wife is the prime mover in the decision to buy a new home. What they may not know is that the husband’s motivations can be very different (he may even be strongly opposed to buying), and unless these differences can be resolved, the result will probably be no sale.

There are, says the study, definite stages in the marriage cycle when a family is most likely to look for a new home, so it’s of prime importance to understand husbands’ and wives’ states of mind at these stages. Three of them can be said to identify basic housing markets:

1. The newly-wed market is, of course, primarily a renting market. But the study indicates that it also holds considerable promise as a buyer’s market.
2. The first-house market is made up of families with their first child or young children.
3. The up-grade market consists of homeowners with older children who can afford a bigger and better house.

There are, of course, other ways to categorize the total homebuying market: age, income, present type of housing, etc. But in the opinion of HOUSE & HOME’s editors, the three basic markets listed above are most meaningful in terms of husband-wife attitudes.

Finally, builders will be unpleasantly surprised at the study’s report of reactions to model houses. In a word, prospects liked the models much better before they went through them.

It should be pointed out that HOUSE & HOME’s editors were somewhat disappointed in the study itself. Much of the material is poorly organized and unclear; there is little indication of how a builder might act on the conclusions; and there are some downright contradictions (e.g., some first-house buyers are listed as already owning a home).

Nevertheless, the study does contain much valuable material. On the next three pages, HOUSE & HOME’s editors sum up what they consider its most important conclusions.
The newlywed market: He and she seem to agree on everything, but below the surface there are very different motivations

The first months, and sometimes years, of marriage are marked by 1) a common desire for privacy and independence and 2) the desire by both husband and wife to subscribe to motivations that actually originate with the other. Indeed, the wife makes so many concessions to her husband's values that it appears they feel the same way about everything. But this is deceptive; their real aims are quite different.

The husband's view of his home is static: He sees it as a private retreat for him and his bride.

The wife's view of her home is dynamic: She sees it in terms of her future role as a mother.

So if you're selling or renting to the newlywed market, consider these points:

A home of their own is an exciting new fact, and the new freedom from parental or school supervision is prized. Newlyweds respond very favorably to the idea of "being your own boss", and to the opportunity to furnish and/or decorate a home to their own tastes. Any sales approach should suggest independence and the freedom to do as they please in their own home.

Children, although nonexistent as yet, are a deep underlying motivation for both husband and wife. Their prime interest is in housing that meets their needs as a couple, and neither wants really to plan for the change in relationship that children will bring. But a subtle sales approach can encourage that habit of thinking about housing in terms of future, as well as present, needs.

Financial ignorance about housing costs is common. Newlyweds are confronted with a new and frightening responsibility of making money decisions, with little actual experience to guide them. Often they are not aware of how many other families with the same limited incomes have found it possible to buy or rent housing which seems to be too expensive. The concept of the house as an investment is unknown and newlyweds may be ignorant of the various tax deductions that accompany ownership. They particularly need reassurance that they will be able to resell the house any time it becomes necessary.

Privacy, expressed in terms of isolation from other people, has a very strong appeal to both partners. It implies little interest in community involvement, and also that the husband is not yet deeply committed to his job.

Maintenance chores and the responsibilities of house ownership are repugnant to newlyweds. They want to be free to do what they like, rather than what they have to do. This is part of the reason why such a large percentage of these families (70%) are renters. They are not yet interested in the pleasures of making over a home to suit their needs.

Pleasing each other is one of this group's strongest goals, and both husband and wife respond to the idea that the other "deserves nothing but the best". Both like the image of the house as a place to have fun together.

The first-house market: The honeymoon is over, and he and she have shifted their attention from each other to the kids

Of all homebuyers, the husband and wife in this group agree most closely in their motivations. The husband accepts the fact that his child, rather than himself, is now the center of his wife's concern and does not yet resent this. He himself has a new role to play—good father, husband and provider—and a suitable home for his family is a key part of this role. While the wife may be the prime mover in the decision to buy, the husband is almost equally convinced of the value of a good home. Both respond eagerly to the idea of owning a house when it is put in terms of comfortable, convenient shelter for the entire family; at the same time, both are relatively uninformed about the realities of home ownership.

So if you're selling to the first-house market, consider these points:

Children are the focal point for this market; the house is first and foremost a place to bring them up. All references to environment relate to a child's needs; things like proximity to good schools, playgrounds, traffic safety, etc., are of primary importance. Where there is more than one child in the family, concern for children's needs overrides almost all other requirements. Areas like recreation rooms should be stressed in terms of their use by children, not adults.

Privacy, for the first-house buyer, means a way for members of the family to get away from each other. Although parents are primarily interested in their children's needs, they also want to retain some privacy for themselves, so location and arrangement of bedrooms are important. The wife looks on the master bedroom with a dual interest. As a nighttime room, she sees it as the center of the husband-wife relationship, but she also has a daytime vision of it being used for sewing, ironing, mending, etc., and she includes the children in such uses. The man more likely looks upon the master bedroom as one room the children will never enter.
Neighborhood and community facilities are important as part of the setting in which the children will be raised. At the same time, organized adult activities are relatively unimportant, probably because parents see the demands of children and house as taking up most of their time. The image of the neighborhood as "a safe place to raise children" is one to stress.

Pride of ownership is very strong. Men like the challenge of improving and adding to the house, and women now consider the home the center of their existence. Promotion should be directed at the house itself as the "family nest". The feeling that the family can be together in a relaxed and casual atmosphere is attractive, as is the outward and visible proof that the husband is a good provider and the woman a good mother and wife. First-house buyers take particular satisfaction in having entered the ranks of homebuyers; they feel that the house confirms their status.

**The up-grade market:** He doesn’t want to move at all, but she thinks he should buy her a bigger, better house

The children have grown older, and husband and wife now differ markedly in their attitude toward housing. Gone is the unanimity that centered on the children (although this is still the area of greatest agreement). Gone is the husband’s demand for his and his wife’s mutual privacy; now he’ll settle for privacy for himself. The wife sees her husband’s willingness to buy her a new home as proof that she is still attractive and important to him. But he is less willing to demonstrate this; having made many improvements in his present house, he resists the idea of moving anywhere. The decision to buy rests in large part on how discontented the wife is with the inconvenience of her present home. So if you’re selling the up-grade market, consider these points:

- **Newness** is a positive virtue. The never-ending repairs and maintenance of the aging house are resented by the husband; he looks forward to things that will not wear out or break down for a while to come. The woman likes the idea that the new house is spotlessly clean. Both like the idea of less work to keep it up.

- **Children** remain a strong motivation for both husband and wife. They are acutely aware of the demands made by growing children upon the available space and privacy. Concern for the children evolves around the generalities of health, safety, and general welfare, rather than specific community facilities. As children become teenagers, anxieties about the neighborhood increase; the concern is now more with the community than with the house itself.

- **Privacy** is now ranked much higher by the husband than by the wife, although neither see it in terms of a place where they can be alone together. The husband wants the house to provide him with a retreat from children’s activities and too-close association with neighbors; the wife is not particularly concerned with personal isolation. Interestingly, quiet has a great male appeal, but the woman is so used to household noises that she does not equate quiet with privacy.

- **Convenience** is a strong motivation for the wife. She has accumulated a long list of complaints about her present house, and every one that the new house eliminates or mitigates will be a selling point. With a family that is now in and out at all hours of the day and night, she is apt to feel that her present house is not big enough. And she wants the very newest in kitchen planning and labor-saving appliances.

  The male idea of utmost convenience is not moving at all. He doesn’t want to think about paying for another home, and he will find all kinds of proofs that the present house is entirely satisfactory.

- **Community facilities**, like golf and boating for men and crafts and community clubs for women, are as important in this market as children’s facilities were in the first-house market. These facilities should exist already, not just be promises for the future.

- **Personal achievement** has a strong male appeal. A more expensive house is both a symbol of the husband’s economic success and a place where he can rest, relax and do as he pleases. This same appeal can be made to the wife in terms of her success as a wife and mother; the house is proof that her husband is still willing to buy her things.

- **Investment** can be an important motivation for up-grade buyers, since they are the old pros of homeowning. The family’s rise in income may make the second purchase easier than the first, but there is still resistance to giving up that earlier symbol of successful investment. The wife is more interested in the “how much a month?” figure, which she can manage like any other household expenditure, than in the sales price. Both husband and wife resist the idea of loss on the older house; this possibility must be played down. And any program that aids the resale of the present house or minimizes the expense and inconvenience of moving will have great appeal for the husband.
Here's unpleasant news from all markets: Both he and she are disappointed in the model houses builders are offering.

In fact, one portion of the motivation study indicates that model houses and apartments may be losing more sales than they are gaining. When couples visiting model areas were interviewed before entering the models, their average negative response was 12%. But when the same couples were interviewed again after going through the models, average negative response rose to 40%, with the biggest disappointment registered by women—the prime movers in the decision to buy.

The chart below shows, on a room-by-room basis, the average changes in motivational response of both men and women after touring the models; black symbols indicate a drop, white indicate a better response. And the reasons for the changes are detailed at right.

<table>
<thead>
<tr>
<th>MEN OR AREA</th>
<th>ROOM OR AREA</th>
<th>WOMEN</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>ENTRANCE FOYER</td>
<td>-15</td>
</tr>
<tr>
<td></td>
<td>LIVING ROOM</td>
<td>+10</td>
</tr>
<tr>
<td></td>
<td>DINING ROOM</td>
<td>-8</td>
</tr>
<tr>
<td></td>
<td>RECREATION ROOM</td>
<td>-16</td>
</tr>
<tr>
<td></td>
<td>KITCHEN</td>
<td>-9</td>
</tr>
<tr>
<td></td>
<td>STORAGE/UTIL AREA</td>
<td>-9</td>
</tr>
<tr>
<td></td>
<td>MASTER BEDRM &amp; BATH</td>
<td>+6</td>
</tr>
<tr>
<td></td>
<td>OTHER BEDROOMS</td>
<td>0</td>
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<tr>
<td></td>
<td>OTHER BATHROOMS</td>
<td>+6</td>
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<td></td>
<td>BACK YARD</td>
<td>-24</td>
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Foyer. This caused sharp disagreement. Men tended to like the entrance area for its individuality and status. Women, however, measured its convenience and found it lacking.

Living room. Both sexes were pleased with this area. The men considered it a satisfactory privacy area, and their wives saw it as a primarily adult room. The study says living rooms are not vital to the buying decision, but they are one room that husband and wife can agree they like.

Dining room. Strong negative reactions came from both partners. Men felt it failed as a place for their socializing and acting as hosts and good providers. Women considered it inadequate for showing off possessions, and they had reservations about how it would fill the needs of children.

Kitchen. Here was another disagreement. Surprisingly, men were pleased by the kitchen, seeing it in terms of providing good facilities for their wife and children, with ample privacy to work (although they themselves don't work there). Women thought of all the time they would spend in the kitchen, and they registered disappointment.

Recreation room. Here the reaction was unanimously bad. Both sexes expected much in character, size and attractiveness, and both were disappointed. Women thought the room failed as a center for children's activities, teenage use and general family togetherness. Men's disappointment was more personal, because they think of this room as a den, hobby room or entertainment center. Since adult and juvenile activities are almost always at odds with each other, the recreation room poses a particularly difficult problem for the builder.

Storage and utility area. Another disappointment. Both men and women rated this area as important, and both registered severe dissatisfaction after inspecting it.

Master bedroom and bath. This area rated well, and the survey says the reason is that most builders presented it well. Both husbands and wives liked its privacy and convenience (especially the husbands, who saw it in a way to shut the door on the children), and the lavishness of most model presentations registered high in terms of suggesting possession and good investment. This area of the house may be closing more sales than all the rest combined.

Other bedrooms. Generally favorable response, mostly from men who saw these rooms as providing privacy both for themselves and the children. They also felt the bedrooms would look impressive to guests, and so raise status.

Family bathroom. Another positive response by both husbands and wives. Women saw it as functional for the children, men rated it as another symbol of their success in providing for the family.

Backyard. Potential buyers' hopes for this area almost dropped off the bottom of the scale. Perhaps reflecting the fact that builders too seldom do much about the appearance of the grounds around their models, neither men nor women were able to visualize this space in terms of how they might use it. Not one single motivational response from either sex was favorable—a sad state considering that so much leisure time is spent outdoors.
'68 outlook: a 15% jump in starts

So predicts George A. Christie, chief economist of McGraw-Hill's F. W. Dodge Co. Here he spells out the reasons for his optimism

Next year's big construction gain will come from the market where it is most overdue—housing. Responding quickly to 1967's easier credit, homebuilding is improving steadily from its badly depressed level at the beginning of the year to an almost-normal rate by year-end (graphs, opposite).

Mortgage money was expensive in 1967, but the year's housing recovery is solid evidence that when a need for housing exists, it's the availability rather than the price of credit that really counts. With a growing current need for housing—plus a backlog of carried-over demand—1968 will bring continued expansion of the revival that began this year.

So, with adequate financing, here is how next year should shape up: 1.5 million private and public housing starts and a peak seasonally adjusted rate of 1.55 million in the final quarter; a 20% increase—to $21.4 billion—in the value of new nonfarm housing; a particularly strong gain in apartments.

One-family housing was the first to benefit from this year's turnaround in the mortgage market. After a severe decline that had cut the rate of single-family house construction by 50% at the October 1966 low point, activity almost instantly reflected November's switch to credit ease. The construction rate bounced back 15% by year-end, and by mid-'67 had recovered 85% of last year's pre-credit-crisis level.

Apartment building fell farther than one-family housing, and took several months longer to respond to the improved money-market conditions. Once it did, though, the multi-family building recovery was even more dramatic. From a low rate of only one-third its 1966 peak, apartment building finally began to pick up in February 1967. By mid-year the rate had already reached 75% of its former volume.

As a result of the Fed's boldly easy money policy during 1967, and the heavy return flow of funds to the savings institutions,
further recovery in homebuilding can be anticipated for the final months of this year. Even with its weak beginning, 1967’s total volume will top that of 1966 by almost 100,000 units.

With housing activity once again nearing its former stride, the 1968 forecast requires a different approach. For too long, the housing market has had only one dimension—credit. When funds became scarce, housing suffered; when they were made available, housing recovered. This means, of course, that there hasn’t been anything even vaguely resembling a consumer-oriented housing market for the best part of two years. Instead of responding to the needs of families for shelter, the supply of housing has been rationed by the rigidities of the capital markets.

The inadequate supply of new housing units coming forth under these conditions is partly indicated by the sharp drop in the rental vacancy rate (graph at bottom right). A similar scarcity of for-sale housing is reflected in sharply rising prices of both new and existing homes.

But now the availability of mortgage financing is beginning to put the housing industry back in touch with its prospective buyers. So the question of demand is again relevant.

Perhaps the most critical—as well as the most frustrating—aspect of housing demand is its postponability. More than any other type of consumer decision, the question of whether to buy or to wait is a big one in the housing purchase. And largely because of this strong element of postponability, the yearly volume of housing starts rarely corresponds closely with annual family formation. It is only over somewhat longer periods of time (say five years) that this relationship has meaning.

Demographic patterns of the early and middle ’60s suggest that two strong forces are now at work for housing demand. One is the rising trend of household formation; the other is a carryover of postponed demand for the past two years when some half-million potential units were not built.

A look at the demographic trends of the ’60s in relation to housing output offers some interesting guidelines for the near-term residential building outlook.

Item: Household formation during the first half of the ’60s was actually lower (by 7%) than in the preceding five-year period. Housing volume nevertheless managed a modest gain between 1960 and 1965, chiefly because the replacement demand was very high. Even so, the biggest gain in housing between 1960 and 1965 was packed into the early part of this period. Growth in housing starts has been absent since 1963.

Item: During the second half of the ’60s, the rate of household formation is slated for an increase of about 10%. The marriage rate—which stayed level throughout the early ’60s—began to rise around the middle of the decade as more persons reached marriageable age. A continuation of this trend is anticipated for the rest of the 1966-70 period.

Item: During the first two years of this current period of rising household formation, the housing market has been blighted by a severe capital shortage. When housing starts should have topped 1.5 million a year, they fell far short—at 1.2 million in 1966 and 1.3 million in 1967.

Money will be far from “easy” in 1968, but there’s good reason to expect that it will be available for housing—though it will be expensive. Going into 1968, the mortgage market is in its best shape since early 1966. To a large extent, the realization of the strong current demand for housing will depend on a steady flow of credit. An anticipated modest expansion of business capital spending implies that industry will not be making unusual demands on the capital markets in 1968. On the other hand, the potential size of the federal deficit—in the absence of new taxation—would require heavy government borrowing next year. And the additional threat of mounting inflationary pressure raises the probability of a switch to tighter money policies sometime during the year. The Johnson Administration’s proposed tax surcharge is, therefore, insurance against another credit squeeze.

RISING CONSTRUCTION RATE is forecast by economist Christie. His estimate (based on Dodge figures): Seasonally adjusted annual rate of nonfarm homebuilding will rise from 1,181,000 units (value: $17.7 billion) in 1967’s second quarter to 1,430,000 ($22.5 billion) in 1968’s last quarter.

AVERAGE ANNUAL INCREASE IN HOUSEHOLDS, as post-World War II babies come of age and marry, is boosting basic demand for new housing.

FALLING VACANCY RATE—tends to 6.3% of available rental units in this year’s second quarter—points up rising demand for new apartments.
Better use of hilly land

Working between the extremes of mass pad-grading and custom-fitting houses to slopes, two young architects have devised a system of hillside development that combines attractiveness and low cost.

"On the one hand, since we're running out of flat land, we have to build on the hills. On the other hand, the public is beginning to fight to preserve our beautiful hillsides. We have to find a way to satisfy both these demands."

So says architect Robert W. Hayes of the firm of Hayes & Smith in San Francisco. Working chiefly in the Bay Area, where hills are a way of life for builder and architect alike, Hayes and his partner, Barry G. Smith, have evolved what they call the sculpture method—a system of hillside planning that, they feel, can satisfy both the conservation-minded public and the profit-minded builder. And while the sculpture method should obviously find its greatest application along the mountainous West Coast, it is equally practical for any area where steep land has been bypassed because of the difficulty—and expense—of building on it.

As the sketches at the bottom of the page show, the sculpture method is essentially a compromise between two completely different methods of hillside development:

1. The mass-grading or pad method has been used on the West Coast ever since volume builders started working the hills in the early 1950s. It does produce flat lots, hence simple foundations, but that is its only advantage. Pad projects require massive cut-and-fill operations, in the course of which the natural features of the land are usually destroyed.

2. The natural or custom method is usually confined to custom homes. It puts each house on an undisturbed site, and so results in a far handsomer development. But because each foundation—and sometimes each house—must be tailored to the lot, the method is too expensive for the merchant builder.

Under Hayes & Smith's sculpture method, the site is analyzed and broken down into a few basic slopes (usually five or six), and models are designed to fit each slope. Foundations are standardized, and grading is thus confined to what's necessary to bring a lot to the exact configuration for the appropriate model. The result is far less earthmoving, and a much more natural-looking project.

On the next five pages the sculpture method is explained in the best-possible way—by an actual case study. A builder brought Hayes & Smith a plan for a steep, 15-acre site; it was already laid out as a 37-lot pad project, but the builder wanted to see if Hayes & Smith could improve it via the sculpture method.

They did. Specifically:

- They raised the number of lots from 37 to 62.
- They cut grading 70%.
- They trimmed improved-lot costs, according to engineering estimates, by $4,450 per lot. Even after costlier foundations for the sloped lots were figured in, the net saving per house was $4,270.

Unfortunately, this case study does not have a happy ending. The builder was pressed for time—he was running out of lots, the rainy season was approaching, and the new plan would have cost him a year's time in re-engineering and approvals—so he had to go ahead with the old pad plan.

"He was almost crying when he left our office," says Hayes. "And since then we've done a lot of other work for him."

To see how the sculpture method could have improved the builder's project, begin at right.
The site: 15 acres with obvious natural appeal

Esthetically, the oak-studded hill shown above is the site's strongest feature; from an engineering point of view, it is the biggest problem. As the topographical model at right shows, the hill gives about two-thirds of the area an average slope of 30% (the topo lines are at 5' intervals). And the remainder of the site is bisected by an equally steep draw.

"In this part of the country," says Hayes, "we'd classify the site as moderately difficult."

For purposes of this study, the land was conservatively valued at $152,000 (it was actually bought years ago for considerably less). About 20 miles from downtown San Francisco, it is in an excellent area where houses sell for around $32,000.

To see what the builder planned to do with this attractive site, turn the page
The original plan: 37 house pads and a ravaged site

When the builder walked into Hayes & Smith's office, he brought with him the lot layout shown at top right. It was completely engineered, and the project was ready to be started.

For a flat site, the plan would not be unreasonable. Although the lots vary considerably in size and shape, a dozen of them are on a dead-end street, and there is a commendably low ratio of road length to number of lots.

But when the plan is superimposed on a topo of the site (center, right) the result is something else again. While in a sense the layout is dictated by the site, in fact the site must be brutally altered to accommodate the layout. Items:

The top of the hill must be knocked off, changing an attractive wooded area into a naked plateau.

Almost every lot below the hilltop must be cut or filled so much that it winds up with a 50% grade on one side. The result will be a monotonous repetition of identical pads, each with an unsightly dirt bank that can never be made really attractive.

The earthmoving bill will be huge; engineering estimates called for moving a total of 127,000 cu. yds.

The layout does fulfill the builder's primary requirement—to provide flat lots (topo model, bottom right), hence simple and inexpensive foundations for his houses. But these flat lots exact a stiff economic penalty. Grading limitations make it impossible to lay out more than 37 pads; the project's density will therefore be 2.4 units per acre. But local zoning permits 7,000-sq.-ft. lots or, allowing for roads, about 5 units per acre. So in theory, this pad plan will cost the builder the potential profit on some 40 houses.
The new approach: a scheme based on natural contours

“If you work in sympathy with the existing land,” says Hayes, “you not only end up with a much nicer project, you cut your grading costs drastically. So that’s how we replanned this project.”

Traffic circulation was the starting point for the new layout. Collector streets, shown in the plan at top right, were run through the draws, much as in the original plan. But instead of a dead-end street to the center of the hill, which required chopping off the hilltop, a loop was laid out so that houses could be built on both sides of the road and the hilltop left untouched as a small park.

The second step was to classify the types of grades along the roads so that house plans could be begun.

“The builder wanted to build between four and six models,” says Hayes, “and we were able to break the grades down into five basic types.” These types, shown in the drawing at right center, are 1) uphill from the street with a gentle cross slope (blue areas), 2) uphill from the street with a steep cross slope (green), 3) level from the street with a gentle cross slope (brown), 4) gentle downslope from the street (yellow), and 5) steep downslope from the street (red).

“Some areas didn’t quite fit into any of these categories,” says Hayes. “So, for the moment, we left them unclassified.”

At this stage the exact amount of earth-moving required by the new scheme was not known. But a comparison of the topo model at the bottom of this page with the one on the opposite page shows that the new scheme needs much less digging. Equally important, the site suffers far less defacing from the ministrations of the bulldozer.

The next step: Design prototype houses for the five basic grades.
The new plan: 62 lots requiring only five basic models

The models are shown below; their color codes show which of the five types of slopes they were designed to fit. Since the houses are only prototypes, their plans may still be changed, and each can have several elevations.

With the houses designed, correct lot widths for each model were established, and the final lot plan (right) was made. Also at this point, previously unclassified parts of the site were assigned to the slope category to which they could be most easily graded.
The result: lower grading costs and optimum land use

Compare the grading map at right with its counterpart for the original plan; this one requires moving only 38,000 cu. yds., versus 127,000 for the original. Moreover, at least half the depth of every lot on this plan is never touched by the bulldozer.

But the most important advantages of the Hayes & Smith plan show up in the drawing below. Instead of the 37 houses that the builder's first plan would allow, there are 62 houses—almost the theoretical maximum of about 70 that a flat site would have permitted. Although the houses are set close together, each enjoys an unobstructed view either up or down the slope. And a check of the color-coded models on the facing page against the appropriate sites below shows that despite the proximity of the houses, each family will have more than adequate privacy.
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These modular boxes could expand mobile-home markets

TILT-UP HIGH-RISE UNITS (11′x12′ boxes) are shipped on their sides in stacks, then craned into vertical position around stairwell and utility core.

So says a supplier of mobile-home components—Jones & Laughlin Steel Corp.—which introduced the scale models shown here at a recent trade show in Chicago.

Mobile-home makers who saw the models agree. They point out that the J&L designs could indeed help their industry expand its market, which, though growing steadily, is still pretty well limited to low-cost, single-family housing.

For one thing, the J&L models—designed by Dalton-Dalton of Cleveland—suggest ways for mobile-home manufacturers to shake the "house trailer" stigma that has always plagued their industry.

More specifically:

The new designs could put mobile homes into the apartment market. Three possible approaches are pictured here—a garden apartment (bottom, left) and two high-rise designs. In one high-rise system (left), modular boxes would be slotted into a pre-built steel frame. In the other (above), stacks of boxes would be trucked to the site on their sides, then tilted up with a crane and placed around a utility core, which would include stairs and/or elevators. Says a spokesman for the Mobile Home Manufacturers Assn: "We see mobile-home high-rise apartments being built inside of two years."

The new designs could also put mobile homes into the market for higher-priced single-family houses. Two possible designs are shown below. One is a two-story house made up of four stacked and staggered modules. The other is a pavilion house that could be expanded by simply adding modules. Each 12′-square module has four cantilevered sections, which would be folded for shipment and unfolded at the construction site.

But could the new designs be produced efficiently at a reasonable cost? By all means, says J&L. All the designs incorporate basic mobile-home modules, and all could be easily adapted to mobile-home assembly lines.
Country living within convenient reach of San Francisco and Oakland is offered at Parktown in the northeast area of the beautiful Santa Clara Valley. Comfortable hacienda design predominates. The elegant four-bedroom San Gabriel model shown here is priced at $24,400.

Parktown...520 acres of carefree

To catch a woman's eye, here are red oak cabinets, ceramic counter tops, a recessed ceiling of light and outstanding appliances by Whirlpool. 30-inch double oven, electric cooktop, range hood and disposer are extra easy for builders to install. And the Whirlpool dishwasher greatly reduces hook-up time with its exclusive quick-connect baseplate.
living...with Whirlpool appliances

Parktown, a $65 million dollar planned community in California's Santa Clara Valley, has everything for pleasant living!

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All model homes in this community feature Whirlpool 30-inch double ovens. Other Whirlpool built-ins include Whirlpool dishwashers and food waste disposers. Even the new Whirlpool central vacuum system, the Jack-Vac shown at right, is offered as an option.

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For more information about this excitingly economical system of building with brick, call or write

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In fact, the "good old days" weren't all that good to grandmother. She'd have traded them cheerfully for one, good, up-to-date supermarket.

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Think about that the next time you hear some well-meaning person say there's too much competition today, too much choice in the marketplace, too many brands in the supermarket. They think the government should step in and restrict this competition.

But, since nobody knows for sure how far you can restrain competition without harming the economy, hadn't we better be careful? Do we want to give up the things that grandpa never had? Certainly, the less competition there is, the fewer new and improved products we'll see in the market.

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Hand-carved door comes in choice of three patterns and three finishes: pecan, mahogany or walnut. Doors are sold with matching transom and side lateral sections; carved door panels can be purchased separately as appliques. Leon's, Tucson, Ariz. Circle 299 on Reader Service card

Glass wall with gold-anodized mullions combines fixed and sliding windows plus sliding glass doors. Sliding windows with counter-level pass-throughs are available for kitchen-patio designs (shown). Ador/Hilite, Fullerton, Calif. Circle 360 on Reader Service card

Tilt-window hardware—combination weatherstrip-balance made of rigid vinyl—lets sash be tilted or removed at any point of travel without striking screen or storm window. Incorporates flexible-leaf design. Caldwell, Rochester, N.Y. Circle 298 on Reader Service card

Tilt window allows removal of both top and bottom sash, yet air infiltration is claimed to be just 50% of the allowable standard. Each sash is balanced on both sides. Head, sill and checkrails are weathersealed. R.O.W., Ferndale, Mich. Circle 361 on Reader Service card

Double steel doors are made of resin-impregnated honeycomb core bonded to zinc-coated steel exterior and interior faces. Mill-applied surface treatment helps paint adhere. Available in several styles, prehung and weatherstripped. Steelcraft, Cincinnati. Circle 363 on Reader Service card

Fin-seal weatherstrip combines a solid physical barrier with silicone-treated pile fibers. The polypropylene projects .030" above the pile, requiring less pile compression to seal out air and water. Comes in several sizes. Schlegel, Rochester, N.Y. Circle 364 on Reader Service card

Prehung patio unit with ventilating sidelights consists of foam-insulated steel doors, magnetic weatherstripping and adjustable sill/threshold. Choice of single or double sidelights, including screen panels. Pease, Hamilton, Ohio. Circle 365 on Reader Service card

Automatic garage door of fiberglass panels and aluminum frame includes solid-state radio receiver and transmitter for remote control. Comes in standard sizes up to 18' wide, in white, green or sand color. Overhead, Dallas. Circle 362 on Reader Service card

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Wall-hung fireplace with built-in heater can be installed anywhere because it needs no flue. Plugs into an electrical outlet and provides 5,100 Btuh of heat through a forced-air fan. Over 68" high, 16" deep, Thulman, Ellicott City, Md.
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Automatic ventilator combines the appearance of a traditional cupola with the advantages of forced-air attic exhaust to comfort-condition homes having up to 1,500 sq. ft. of ceiling area. ABS plastic roof. Kool-O-Matic, Niles, Mich.
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Compact comfort system for homes and light-commercial buildings may be installed on rooftop or on grade. Provides up to five tons of electric direct-expansion cooling and up to 150,000 Btuh of gas heating. Lennox, Marshalltown, Iowa.
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Pushbutton fireplace can be installed in new or existing construction as easily as a clothes dryer because it exhausts through a power vent instead of a chimney. Three models offer marble or brick styling. Dyna, Los Angeles.
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Electric fireplace with simulated logs incorporates a remotely controlled heating element that warms an average-size room. It is wall-hung, and includes brass trim, brass-plated screen, and color choice. Rangaire, Cleburne, Tex.
Circle 419 on Reader Service card

Electric fireplace with simulated logs incorporates a remotely controlled heating element that warms an average-size room. It is wall-hung, and includes brass trim, brass-plated screen, and color choice. Rangaire, Cleburne, Tex.
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Draft-barrier heater eliminates 1) cold air dropping off a window surface and 2) the need to overheat an entire room to overcome drafts. The resistance unit is 3" high, 2" deep, and operates thermostatically. Electro-mode, Auburn, N.Y. Circle 418 on Reader Service card.

Upflow furnace features a three-speed motor and ten-year warranty, and comes in five sizes ranging from 50,000 Btu input to 150,000 Btu input. Motors are 1/4 h.p. on smaller units, 5/8 h.p. on larger units. Janitrol, Columbus, Ohio. Circle 416 on Reader Service card.

Steel closet doors help do away with two expensive and irritating problems—call-backs and dissatisfied customers—and help you cut costs as well. Closet doors made of steel are easily installed in a matter of minutes. And their unique trim system eliminates the necessity of costly alterations of frames or door openings. Steel doors come painted and ready to be hung.

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Circle 423 on Reader Service card

Free-standing fireplace can be used as a room divider or can be built into a wall. Fire chamber is suspended from a 5' walnut-woodgrain mantel supported by tubular steel legs. Choice of openings: 36", 42", 48". Donley, Cleveland.

Circle 422 on Reader Service card

Signal thermostat plugs into an AC outlet and is connected to a lamp in homeowner's window when house is unoccupied. If house temperature falls below a pre-set point, the light goes on to alert neighbors or service man. Honeywell, Minneapolis.

Circle 424 on Reader Service card

Power humidifier needs no drain line and uses cold water. Can be installed in basement, crawl space, attic or closet, with or without ducting. Comes with wall-mounted humidistat for automatic operation. Hamilton, Lincolnwood, Ill.

Circle 425 on Reader Service card

Toe-space electric heater fits under kitchen cabinets or bathroom vanities, plugs into a wall outlet and has a built-in thermostat. Unit contains an electrical element immersed in sealed-in water. International Oil Burner, St. Louis.

Circle 426 on Reader Service card
Air-cooled condenser for the light-commercial market is designed for remote hookup to self-contained air-conditioners. Air is discharged upward to deflect operating noise from buildings. Two models: 3- and 5-ton. Trane, La Crosse, Wis. Circle 428 on Reader Service card

Conical fireplace comes complete with legs, two sections of pipe (24" and 27"), heat shield, fire screen, 8" to 7" pipe reducer, damper assembly and a 1-lb. can of furnace cement. Choice of nine finishes. Preway, Wisconsin Rapids, Wis. Circle 427 on Reader Service card

Central humidifier, built of stainless steel and impact-resistant plastic, uses a polyurethane moisture wheel rotating in a water reservoir. It can be installed on either a warm-air or return-air plenum. Worthington, East Orange, N.J. Circle 429 on Reader Service card

Electronic air cleaner traps particles as small as .01 microns, thus eliminating more than 90% of a home's airborne contaminants. Air-handling capacities of 1,200 and 1,600 cu. ft. per min. Day & Night, City of Industry, Calif. Circle 430 on Reader Service card

Room air conditioner is designed especially for horizontally sliding windows and will also fit many types of casement windows. Two models—6,000 or 8,000 Btuh—measure 14¾" wide, 24¾" deep, and 19" high. Frigidaire, Dayton, Ohio. Circle 431 on Reader Service card

Side-opening fireplace, made of gray cast stone with buff liner, adapts to contemporary or traditional decor. Includes simulated white stone mantel and hearth top. Dimensions: 4'9" wide, 3'8" high. Ready-built, Baltimore, Md. Circle 432 on Reader Service card

Steel raingoods made of Armco ZINGGRIP® PAINTGRIP® Steel eliminate what is probably your biggest problem—paint flaking—while at the same time giving you low-cost strength and durability.

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NEW PRODUCTS 1968

lighting

Cast acrylic sheet with smoke-printed leaf pattern can be used as luminous ceiling or lighting canopy, and as translucent room divider. Comes in 48"x72" and 48"x96" panels, in standard 1/4" thickness. Acrylite, Wakefield, Mass.
Circle 366 on Reader Service card

Compact mercury lamp—only 5 1/2" long—produces more than twice as much light as a 50-watt incandescent lamp and lasts ten times longer. It produces light similar to that of a cool-white fluorescent lamp. General Electric, Cleveland.
Circle 367 on Reader Service card

Post-top luminaire for streets, walkways and gardens is designed for use with mercury lamps of up to 175 watts and can be mounted 8' to 15' high. Fits 2 1/2" to 3" dia. pipe and comes in choice of nine colors. McGraw-Edison, Milwaukee.
Circle 368 on Reader Service card

Ultraviolet fluorescent tube is designed to give users the same health benefits they would get outdoors under equivalent foot-candle levels. It matches the ultraviolet spectrum of natural outdoor light. Duro-Test, N. Bergen, N.J.
Circle 369 on Reader Service card

Book-shelf fixture provides high-intensity diffused lighting and looks built in. It is made of walnut with a birch soji front panel, and comes in 38" and 50" lengths with fluorescent lamps. Lamar, Freeport, Long Island, N.Y.
Circle 370 on Reader Service card
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ARMCO STEEL

Outdoor gas light made of 18-gauge copper will operate with three different burner assemblies. Contains six removable panes of 1/4" tempered glass, and a scalloped top and chimney. Dimensions: 23"x36". Arkla, Little Rock, Ark. Circle 371 on Reader Service card

Wrought-iron chandelier in Medieval style is hand-pounded. It is 27" in diameter, 19" high, and can be hung up to 43" from ceiling. The six lights feature candelabra bases and will accommodate 60-watt lamps. Moe, Louisville. Circle 372 on Reader Service card

Wall lantern has three side panels made up of four glass panes outlined in slim brass strips. For use in entrance halls, beside fireplaces, or outdoors. Choice of antique solid brass or antique copper. Progress, Philadelphia. Circle 373 on Reader Service card

Lightweight pendant incorporates a white diffusing cylinder inside a 13"-dia. yellow globe of spun-glass cross-thatching. Comes with a pull-chain switch and will accommodate a 100-watt bulb. Del-Val, Willow Grove, Pa. Circle 374 on Reader Service card

New products continued on p. 118
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Cavrok brings the realism and beauty of brick, stone and wood in 4' X 8' reinforced fiberglass panels. Easy to apply over new or existing walls, with hammer and nails or Cavbond, the interior/exterior adhesive.

Watering system for lawns features a fan-jet sprinkler that covers a rectangular area as large as 2,500 sq. ft. and can be adjusted to fit smaller shapes. Package includes automatic four-station control box. Moist O'Matic, Minneapolis.

Wastewater system for apartments, schools and factories provides aerobic treatment plus underground watering for soils with poor percolation. The system combines two molded-fiberglass tanks and sump pumps. Cromaglass, Williamsport, Pa.

Ornamental fountain requires no plumbing. The self-contained unit includes a recirculating pump, underwater lighting, and requires only an electrical connection. Bowl sizes range from 36" to 94". Rain Jet, Burbank, Calif.

Stainless-steel bar sink, self-rimming, is shipped complete with gooseneck swing spout and strainer. Ideal for family rooms, dens and patios because it harmonizes with all color schemes. Federal Stainless Sink, Blooming- ton, Ill.

Single-control fitting for kitchens features sculptured styling with a contemporary flair. In addition to new design, the manufacturer provides a five-year insured warranty with the brass fitting. Price Pfister, Pacoima, Calif.

Perforated pipe for septic-tank systems is easy to install. Internal couplings applied at the factory do away with the need for tapered or snap couplings—the installer simply drives sections together. McGraw-Edison, Milwaukee.
New products continued on p. 120
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Circle 98 on Reader Service card

NEW PRODUCTS 1968

hardware

Matched knob/backplate of 2¼" diameter is designed for cabinets, flush interior doors and bifolds. The die-cast unit comes in a variety of finishes for traditional or contemporary settings. Style name: Patrician. Amerock, Rockford, Ill.
Circle 375 on Reader Service card

Gem-shaped knob with diamond-shaped rose comes in two different finishes—etched or antique—in brass, bronze, or chrome. Metal is first black-oxidized, then fine-sanded and coated with protective plastic. Kwikset, Anaheim, Calif.
Circle 377 on Reader Service card

No-mortise hinge in neutral white or warm woodtone features nylon bearing and permits removal of door without removing any part of the hinge. It is self-locating, and rated for doors of up to 30 lbs. L. E. Johnson, Elkhart, Ind.
Circle 379 on Reader Service card

Long-handle entry lock is designed for use on massive doors. The rugged lockset—suitable for single- or double-door installations—is available in four different styles for a range of house designs and entry styles. Weiser, South Gate, Calif.
Circle 376 on Reader Service card

Cabinet hinge covers mate with the manufacturer's broad line of handcrafted gold- and silver-plated switchplates and receptacles. A related line of ornamental hardware includes escutcheons for interior doors. Belding, Los Angeles.
Circle 378 on Reader Service card

Heavy-duty lock for industrial and commercial use opens automatically when correct combination of numbers is pressed. Shuting the door automatically locks and resets the mechanism. Panic button unlocks from inside. Presomatic, Lyons, Ill.
Circle 380 on Reader Service card

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Heavy-duty lock for industrial and commercial use opens automatically when correct combination of numbers is pressed. Shutting the door automatically locks and resets the mechanism. Panic button unlocks from inside. Presomatic, Lyons, Ill.
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**Ceramic-tile adhesive** with synthetic-rubber base offers high resistance to slippage, permitting tile to be placed from the top down which reduces installation time. One gallon will cover more than 100 sq. ft. of wall area. 3M, St. Paul, Minn. Circle 382 on Reader Service card.

**Concrete floor paint**—an acrylic emulsion polymer—has high wet abrasion resistance, is heat stable at 140°F for 300 hours, and withstands soapy water without blistering. Good for swimming pools. Standard Dry Wall, New Eagle, Pa. Circle 381 on Reader Service card.

**Decking stain** for exterior wood flooring is formulated to stand up under heavy foot traffic and severe weathering. Choice of colors includes bark brown, smoke gray, forest green, redwood, black and white. Cabot, Boston. Circle 383 on Reader Service card.

**Latex enamel** dries to an eggshell sheen and can be scrubbed. Recommended for trim and walls in kitchens, bathrooms, and public hallways. Dries to the touch in one hour. Spreading rate: an estimated 450 sq. ft. per gal. Devoe, New York City. Circle 384 on Reader Service card.

**Danish oil finish** for interior wood produces a protective finish with a hand-rubbed look. It is self-sealing, clear satin, and can be applied by brush, cloth, roller or spray. In gallons, quarts, pints and aerosol cans. Pratt & Lambert, Buffalo, N.Y. Circle 385 on Reader Service card.

In both conventional and contemporary homes, more and more builders are adding the sales appeal of a fireplace and doing it at less cost with built-in steel units. Available in styles and sizes for any home, all are easily installed. Steel fireplaces are factory-engineered and fabricated to assure fast installation, saving you costly man-hours. Armco ALUMINIZED STEEL Type 1 is widely used in steel fireplaces because it assures maximum durability in parts subjected to heat. This special Armco Steel is hot-dip coated with aluminum. It not only resists the combination of heat and corrosion but has good heat reflectivity. Effective use of ALUMINIZED STEEL in code-approved designs helps eliminate the need for conventional refractory and expensive brick construction. For more information on steel fireplaces and the advantages they offer you, write Armco Steel Corporation, Department E-3377, P. O. Box 600, Middletown, Ohio 45042.

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NEW PRODUCTS 1968:

Garage-door opener may be actuated by pushbutton or remote-control radio transmitter. All circuit components are front-mounted behind a one-piece cover held by a single screw. Light has built-in time delay. Alliance Mfg., Alliance, Ohio. Circle 407 on Reader Service card

Power traverse rod is operated by a silent linear motor that has no gears, no bearings, or any other moving parts. Basic two-way-draw kit includes track cut to specified length up to 32', standard switch and cords. Kirsch, Sturgis, Mich. Circle 410 on Reader Service card

Lighted pushbuttons are designed to harmonize with ornate door hardware and will adapt to all 6- to 16-volt chime circuits. Their hand-cast antique-brass finishes are protected by baked acrylic clear enamel. NuTone, Cincinnati. Circle 411 on Reader Service card

1800-watt dimmer incorporates an electronic delay circuit that permits a push-on-push-off switch. Unit is finished in black and gold, includes a 5"x7" faceplate, and fits a double-gang wall box. Lutron Electronics, Emmaus, Pa. Circle 409 on Reader Service card

Nail-strap snaps on to most cable, leaving one hand free to pull and hold cable straight while nailing. The staple is intended for use on Romex, UF, and other type NM, two-conductor, No. 12 and 14 cable. Zinc-plated. Holub, Sycamore, Ill. Circle 408 on Reader Service card

Electric stairway in aluminum or wood construction is operated by toggle switches and is instantly reversible. Treads are covered with ribbed rubber, and buyer has choice of 3/4" plywood door, or metal fire door. Precision Parts, Nashville. Circle 406 on Reader Service card

Electric stairway may be actuated by pushbutton or remote-control radio transmitter. All circuit components are front-mounted behind a one-piece cover held by a single screw. Light has built-in time delay. Alliance Mfg., Alliance, Ohio. Circle 407 on Reader Service card

122

Circle 101 on Reader Service card

HOUSE & HOME
Gas range with six-burner cooking capacity has a solid-state ignition system, front-mounted controls, and removable oven/broiler door and cook top. Waist-level broiler broils with a patented radiant energy system. Caloric, Topton, Pa. Circle 434 on Reader Service card

Roll-out hood features dual squirrel-cage blowers that deliver 200 cu.-ft.-per-min. ventilation. Satin-finish aluminum front panel may be replaced by laminated plastic or wood veneer to match kitchen decor. Broan Mfg., Hartford, Wis. Circle 433 on Reader Service card

Provincial cabinets in distressed-pecan color feature deeply beveled door panels, antique bronze hardware, and one-piece veneers of white birch on all exposed faces. Also: adjustable shelves and magnetic catches. NuTone, Cincinnati. Circle 435 on Reader Service card

Eye-level range with recessed top and chrome trim has fluorescent surface and oven lights. Surface burners are operated by automatic controls, oven is clock-controlled. In avocado, white, copper or beige, with brushed-chrome top. Brown, Cleveland, Tenn. Circle 436 on Reader Service card

Built-in dishwasher contains upper and lower spray arms, and stainless-steel blades that liquify soft food wastes. Three models—with from two to six pushbuttons—offer four, six or nine washing cycles. Gaffers & Sattler, Los Angeles. Circle 437 on Reader Service card

Stainless steel sinks are in demand because your clients appreciate the beauty and easy cleaning of stainless. This is why more and more builders are installing more and more of them in homes in all price ranges. Seamless construction, easy-cleaning rounded corners, and heavily undercoated for quiet dishwashing help please buyers. Available in a range of sizes and types, stainless sinks can be used in any kitchen style or plan.

Why not give the kitchens in your homes the extra buyer-appeal that goes with stainless steel sinks? Write us for more information. Armco Steel Corporation, Department E-3387, P. O. Box 600, Middletown, Ohio 45042.

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Textured hardwood from Brazil features exotic wood grain in a choice of four color tones, at budget prices. It comes in lightweight 4'x8' panels—1/4" thick—random-grooved to make joints disappear. Georgia-Pacific, Portland, Ore.

Circle 447 on Reader Service card

Hand-printed wallpaper features a flocked leaf design on deep red or green foil background. Also: black flocking on silver background. Backgrounds are vinyl-coated, and the covering is strippable. United Wallpaper, Chicago. Circle 448 on Reader Service card

Structural plastic has a multi-faceted texture that looks three-dimensional. It is available in several forms—rigid or flexible, transparent, translucent or opaque—in standard colors and thicknesses. Krinkglas, Hialeah, Fla.

Circle 449 on Reader Service card

Prismatic panels for luminous ceiling are white-tinted and reversible. One face contains a geometric-prism pattern, the other is pebble-surfaced. Lighting effects are varied by reversing and alternating the faces. Arctest Products, Chicago.

Circle 450 on Reader Service card

New products continued on p. 130

Circle 105 on Reader Service card
Alternating 2½" and 3½" strips give Fireside Plank Floor a custom-crafted look.

Model Home Ideas that win buyers

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Make your model home stand out from the crowd. Brighten one room with the excitement of an authentic zebra skin rug on a beautiful Bruce Fireside Floor. Then watch traffic stop, take notice, and remember your house. Fireside Plank is dark and sophisticated, lends itself to all sorts of unusual decorating approaches. The famous Bruce Prefinish is baked into the wood to save installation time and money, give your buyers long-wearing beauty underfoot. Write for more information on all Bruce floors or see our catalog in Sweets' Files.

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We don’t know how many cowboys you sell to... but we do know that every single bathroom you build is right in the middle of THERMASOL COUNTRY. We know because THERMASOL COUNTRY is anywhere people live... even if there isn’t a cowboy around for a thousand miles. People want MORE for their money when they buy or rent... and that’s exactly what a Thermasol Home Steam Bath gives them! It also gives the builder MORE... in the way of profits!

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Circle 106 on Reader Service card
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Allen Jorgensen, builder of Osior Estates, Route #1, Rochester, Minnesota.
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Planked wall paneling features antique finish with sound knots. Mismatched veneers are separated by deep, wide vertical grooves and are cross-grooved to produce the effect of authentic colonial planking. E. L. Bruce, Memphis, Tenn.
Circle 443 on Reader Service card

Plastic-coated tub panels come in several color patterns including white gold fleck, and white, blue or pink gold marble. Package includes 4'x8' and 4'x30" panels, and moldings for inside and outside edges. Panel-board, Newark, N.J.
Circle 442 on Reader Service card

Plastic laminate featuring printed woodgrain is designed to blend with Spanish decor in kitchens. Comes in several finishes—including satin, furniture, low-glare, velvet and oil-rub— and in 3/16" and 3/8" thicknesses. Micarta, Hampton, N.C.
Circle 445 on Reader Service card

New literature starts on p. 134

HOUSE & HOME
HELP YOUR CUSTOMERS CHOOSE WINDOWS WISELY
("Seasoned" judgment adds comfort — cuts cost)

The four seasons provide four excellent reasons for your customers using only the finest weather-tight wood windows and wood patio doors. The full R•O•W line is designed to look better, live better and last longer than any competitive units. Buyers may tell you that first cost is the only consideration, but they don’t go back to the dealers who “sold them” expensive call-backs and justified complaints about excessive heating or cooling bills.

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That flat skinny bottle is the new
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It's made of glass fused to glass at
the edges. Then the space is filled with
dry insulating air and sealed to keep
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It's all glass for a very good reason.

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All leading wood window makers now
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of single windowpanes.

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edge is the only kind of bottle
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Libbey·Owens·Ford Glass Co. Toledo, Ohio 43624
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Centrally Controlled. Who Needs a Furnace!

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Berns Air King Corporation, 3050 N. Rockwell, Chicago, Ill. 60618.
NEW LITERATURE

For copies of free literature, circle the indicated number on the Reader Service card, p. 127

BUILT-IN OVENS. RANGES Dimensional diagrams are included in four-color product sheets on manufacturer's line of built-in and counter units. Both gas and electric models. Includes specifications. Sunray Stove, Delaware, Ohio. Circle 300 on Reader Service card

WOOD WINDOWS. Catalog describes and illustrates full line, including horizontal, slider, awning, outswinging casement and double-hung windows. With dimensions, details. 27 pages. Rimco, Rock Island, Ill. Circle 301 on Reader Service card

PLYWOOD SIDINGS. Guide illustrates range of siding styles and the ways architects and builders have used them. Application and finishing recommendations, strength data and suggested specifications. American Plywood Assn., Tacoma, Wash. Circle 302 on Reader Service card

WELDED-WIRE FABRIC. Revised manual tells how and where to use wire fabric, illustrates recent projects. Tables show how to estimate weights. 41 pages. Wire Reinforcement Institute, Washington, D.C. Circle 303 on Reader Service card

GOLD-FINISHED TOILET SEATS. Manufacturer's product sheet shows solid-plastic seats with metallic gold or silver finish. Will fit all regular bowls. American Plastic Products, Hamtramck, Mich. Circle 304 on Reader Service card

PRECIBRACIFIED BATHROOM. Packaged bathroom units constructed of fiberglass-reinforced plastic combine molded-in tub, lavatory, medicine cabinet and enclosed storage space with floors, walls and ceiling. Preplumbed, prewired package can be installed in an hour. A four-page bulletin describes and illustrates the unit. Crane, Chicago. Circle 305 on Reader Service card

FIBERGLASS GARAGE DOORS. Overhead doors with a 15-year performance guarantee from fiberglass manufacturer—are maintenance-free. A product bulletin cites advantages and includes dimensional drawings. Kinman Overhead Door Division, Columbus, Ohio. Circle 306 on Reader Service card

HURRICANE-RATED WINDOW. Low-cost, horizontal-sliding model in aluminum that meets hurricane specs is the subject of a four-page brochure. Windows are reversible, have adjustable mullion and full-length pressure seals. Ador-Hi-lite, Fullerton, Calif. Circle 307 on Reader Service card

ELECTRICAL-PRODUCT STANDARDS. Guide to current standards for a wide variety of electrical products is available from the National Electrical Manufacturers Assn., New York City. Circle 308 on Reader Service card

PLASTIC-FINISHED HARDBOARD. Full-color folder shows full line of hardboard for walls and ceilings. Eleven room settings are displayed. Marlite, Dover, Ohio. Circle 310 on Reader Service card

RESILIENT FLOOR TILE. Vinyl-asbestos and asphalt tile are displayed in full-color in a 16-page catalog. Includes general information, light reflectance values, abridged specifications. Azrock, San Antonio, Tex. Circle 314 on Reader Service card

PREFABRICATED WASTE-TREATMENT. Plants for both residential and industrial areas are described in a technical bulletin with detailed drawings. Companion lines—prefabricated sewage pumping stations and pneumatic ejectors—are also described. Can-Tex, Mineral Wells, Tex. Circle 311 on Reader Service card

INTERIOR HARDBOARD PANELING. Full panel line is displayed in a 24-page catalog in full color. Includes installation information, specifications. Masonite, Chicago. Circle 312 on Reader Service card

HARDBOARD. Sixteen-page booklet tells and shows how hardboard is manufactured, shows diverse uses in building and industry. American Hardboard Assn., Chicago. Circle 313 on Reader Service card

ASPHALT ROOF SHINGLES. A modern two-tab design—18" tabs rather than conventional 12"—plus giant ceramic granules in eight colors are design highlights of a new line. Shingles combine fiberglass and asbestos, eliminate organic felt. Fiberglass-asbestos reinforcement cuts bulkiness and weight, yet shingles have 55% more asphalt than conventional models. A four-color brochure displays new line, includes specifications. Johns-Manville, New York City. Circle 314 on Reader Service card


GENERAL-PURPOSE LUMINAIRES. Units for mounting up to eight fluorescent lamps are the subject of an eight-page bulletin. Luminaires are only 3 1/2" deep, blend with ceiling. Specifications. Walton Laboratories, Union N.J. Circle 319 on Reader Service card

SNOW-MELTING MATS. Completely assembled units of prespaced heating cable come in 12 standard lengths, in commonly used voltages. An information sheet describes mats, explains how they can be embedded in asphalt or concrete walks, driveways. Sunwarm, Kingsport, Tenn. Circle 320 on Reader Service card

CONCRETE SAWs. Full-line catalog includes newest additions—12.5 hp and 18.2 hp saws that combine power and portability. Engine on both saws is positioned to put maximum weight over the blade, keep saw from riding up out of the cut. Champion, St. Louis. Circle 321 on Reader Service card

RANGE HOODS. Three new ductless models—30", 36" and 42" long—are featured in a full-color catalog with ten other models. Also: hood accessories. Eight pages. Emerson Electric, St. Louis, Mo. Circle 326 on Reader Service card

New literature continued on p. 138
To All People Buying or Selling Doors:

Our dramatic sales growth has made possible vast plant improvements: new and larger production space, more efficient manufacturing operations, thus tighter cost control.

All the improvements we’ve made will be passed directly to you in our new FLOAT-AWAY closet door line. One line...the very finest metal bifold made. And we haven’t raised our price!

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   - URETHANE  □  STYRENE  □  GLASS FIBER

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6. Which insulating material is so effective home refrigerator makers can increase cubic capacity by 50% with no increase in external size?
   - URETHANE  □  STYRENE  □  GLASS FIBER

7. Which is the fastest-growing commercial insulant on the market?
   - URETHANE  □  STYRENE  □  GLASS FIBER

8. Which insulating material has such high strength it is being used as a self-supporting structural material in building?
   - URETHANE  □  STYRENE  □  GLASS FIBER

9. Which insulating material offers a choice of slab stock, pre-fab panels or foam-in-place methods?
   - URETHANE  □  STYRENE  □  GLASS FIBER

10. Which insulating material can you get the facts on from Mobay—and should, before you take another step?
    - URETHANE  □  STYRENE  □  GLASS FIBER

(Answers to questions 1 through 10: Urethane Foam)

Even if you scored 100% on this test, there might still be a lot you'd like to learn about urethane foam for insulation and structural uses. Write for the latest literature.

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Now you can drive 16d nails the lowest cost way—with a portable cartridge-fed nailing tool. It's another Paslode first! The Stallion saves time and effort, eliminates waste of nails, makes every nail count with power to pull boards tight. 4,000 to 5,000 nails per hour is a practical on-the-job speed, including reloading time. For all its power, the Stallion weighs only 11 pounds. It operates on compressed air at 80 to 100 p.s.i.

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NEW LITERATURE
continued from p. 134
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NOVEMBER 1967 Circle 116 on Reader Service card
Free booklet tells you how to use central air conditioning to close more sales

NEW LITERATURE
continued from p. 138

BORING BITS. Reference chart outlines proper bit sizes for standard diameters of pipe and conduit. Data for iron and soil pipe, copper tubing, rigid and thin wall conduit, and round or octagon outlet boxes. Price & Rutzebeck, Hayward, Calif. Circle 336 on Reader Service card

GEODESIC DOME. Engineering data for a 59'-6"- diameter dome, formed from triangular panels of coated plywood, is outlined in a four-page leaflet. Basic cost: $8,000 for, components that manufacturer estimates can be assembled in six days by a three-man crew. Trade Tools, Hayward, Calif. Circle 337 on Reader Service card

COMBINATION ALUMINUM DOORS. Line incorporates imitation stained- or leaded-glass panels in simple white aluminum frames. Panels are fiberglass plus polyester coated with acrylic. A four-page catalog includes prices and specifications. International Aluminum, Moonachie, N.J. Circle 338 on Reader Service card

STRUCTURAL SANDWICH CONSTRUCTIONS. About 8% of the 157 standards in a 916-page book are new or revised. Included: methods for evaluating mechanical and physical properties of wood, veneer, plywood and fiber building boards; definitions of terms relating to wood; specifications for wood and timbers. Also: adhesives and general methods of testing. Copies are available—at $14—from the American Society for Testing and Materials, 1916 Race Street, Philadelphia.

HINGED BIFOLD HARDWARE. Designed for openings with or without stops, hardware allows bifolds to open to a full 180°. An information sheet includes specifications, ordering information. Stanley, New Britain, Conn. Circle 339 on Reader Service card

SOUND-INSULATED FLOORS. System consists of a conventional subfloor, a layer of slate's felt and 1% of manufacturer's floor fill; floor is then covered conventionally with tile or carpet. Resulting floor will materially reduce the transmission of sounds between dwelling units and between rooms in single dwelling units. A product folder illustrates application steps, includes specifications. Zell, Livonia, Mich. Circle 340 on Reader Service card

H&H editorial index
A few copies of HOUSE & HOME'S 1966 editorial index, an eight-page reference guide, are still available. It includes a cross-reference listing of all subjects covered last year by H&H—115 in all, from acoustics to zoning—plus a combined, chronological table of contents of major articles.

If you'd like a copy of the index (there's no charge), write to: Reader Service Dept., HOUSE & HOME, 330 West 42 Street, New York, N.Y., 10036.

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