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Editorial

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In atmosphere of crisis, open housing comes to the nation

As the country mourned the slain Martin Luther King Jr. and racial violence flared in 111 cities, the House passed a nationwide open housing law.

"The law, which will affect 80% of the country's 65 million housing units, was immediately signed by President Johnson, who had urged passage for years.

Said the President: "This is a victory for every American. Through the process of law, we shall strike for all time the shackles of an old injustice."

The housing industry itself welcomed the measure. President Lloyd Clarke of the National Association of Home Builders, had said that the law "will work, and I know all builders will cooperate."

But the real estate industry still had reservations about what it considers "forced housing." The president of the 85,000-member National Association of Real Estate Boards, Lyn Davis of Dallas, promised to abide by the new law. But he added: "We feel that it is a loosely drawn and unsound legislative attack on the human right of private property ownership."

Civil rights leaders generally hailed the law, but they were quick to add that "much more must be done immediately."

Proud moment. In enacting the law, the House swallowed its pride and voted the Senate's version of the bill word for word. Had the House changed one comma, the bill would have been forced into conference. Then it would have gone back to the Senate, where a filibuster might have killed it.

The House passed the bill 250 to 171, in a bipartisan effort. The House's dramatic action was spurred quite clearly by the assassination of Dr. King, the nation's foremost spokesman for civil rights, and by the week of coast-to-coast rioting that followed (40 dead, $45 million in property damage).

Indeed, thousands of armed troops still patrolled Washington's streets as the House voted (photo, above).

Getting votes. "Last Thursday morning (before Dr. King's murder)," said William Colmer (D., Miss.), an open housing foe, "the Administration didn't have the votes to get that bill out of committee."

But on April 9, the day Dr. King was buried in Atlanta, the House Rules Committee voted 9 to 6 to force the Senate-passed bill to an immediate House vote. In an unusual move, floor debate was limited and no amendments were allowed.

The hero of the hour for bill supporters was normally conservative John B. Anderson (R., Ill.) who cast the swing vote in committee. Said Anderson, whose own constituents opposed the bill by 2 to 1: "I legislate not out of fear but out of concern for the America I love."

Stage by stage. The law, which will be enforced under civil law, will become effective in stages. By Jan. 1, 1970, coverage will be extended to 80% of all housing—that is, all but private homes sold without a broker.

The law will not dramatically affect the housing industry for eight months.

For questions and answers on how the law will affect homebuilders, see p. 44.

Cautious NAHB. Although NAHB did not officially endorse the bill, insiders reported that "a growing number of local associations were urging NAHB support."

Historically, NAHB has shied from such legislation for what it considered a sound business reason: Homebuilders did not want to be the only segment of the housing market forced to integrate.

Said President Clarke: "Such laws that distinguish between new houses and existing houses would place the burden of achieving nondiscrimination on homebuilders, though in any one year we add only 2% to 3% to the total housing supply."

The Des Moines builder added that community acceptance of open housing, and in turn the law's success, will be helped "in no small part by the educational efforts of our 40,000 NAHB members."

Even more caution. In a careful statement, the co-directors of the National Committee Against Discrimination in Housing, called the law "one step in the right direction."

But the NCDH leaders warned: "It would be cruel and dangerous to raise expectations of [ghetto dwellers] to believe that the new legislation will have any immediate impact on housing conditions or restrictive housing market practices."

According to an NCDH survey, fifteen states and about 100 localities already have local laws with broader coverage than the new civil rights act.

Bill Levitt does his part by announcing his own open-housing policy

The day after Martin Luther King was slain in Memphis, the nation's largest homebuilder decided to end discrimination in all his subdivisions.

Levitt's announcement came five days later, the day Dr. King was buried, in full-page advertisements in five big-city newspapers, including The New York Times.

The ad described the Levitt decision as the company's "tribute to Dr. King."

And in a press release issued that day, William Levitt noted that "open housing was one of Dr. King's greatest hopes."

The newspaper ads went on to urge all homebuilders to follow Levitt's example: "We ask all our colleagues to adopt a similar policy without delay. The forces of bigotry and prejudice must not be permitted to prevail any longer, and we urge all builders—large and small alike—to do their part in making America once again the ideal of the world."

Levitt & Sons had been selling to Negroes in 14 of its 18 tracts. Like many builders, the company followed "local custom," so its four subdivisions in the Baltimore-Washington area were segregated.

In general, Levitt's stand was praised by the press, civil rights leaders and the public. "We got 100 phone calls in one day," said a Levitt spokesman, "and 99 of the callers praised us."

Some newspapers, however, seemed skeptical. The Wall Street Journal's article left the false impression that the change was dictated by the parent, International Telephone & Telegraph. And the article added that Levitt's frank admission of discrimination "publicly bares a practice that is widespread in homebuilding."

Some builders had even harsher words—"It was a cheap publicity trick. The new law will cover his tracts anyway."

Levitt's public relations director, Richard Gunderson, refuted the criticism: "We reached our decision days before even the House Rules Committee acted."

A civil rights spokesman, who asked not to be named, said, "If builders are yelling, they must already feel the impact of his stand. So it's a welcome sign."

The National Committee Against Discrimination in Housing said: "William J. Levitt has set an example that every homebuilder and real estate man should be proud to follow."

And in an editorial, the Washington Post said that Levitt's decision "vastly improves the moral position of the industry."

NEWS continued on p. 8
Only one of these Starlight stylings costs more than $28.95
Low-cost lighting has always been an easy way to economize in budget or multi-family housing. These new Starlight designs make it easier than ever, and with a touch of luxury that's sure to appeal to your homebuyer prospects.

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All prices shown are suggested retail. (Prices slightly higher Denver and West.)
What's going on in low-cost housing research?

**FHA takes a hard second look at Ed Rice's magic boxes**

Promoter-engineer Edward K. Rice has had the government's housing research all but boxed up for the last three years.

With high-power Riceismanship, a confident smile and promises of cost breakthroughs, the persuasive promoter has won government financing for three low-cost building and rehab systems featuring his factory-built boxes (photos, above and facing page).

The experiments, backed by more than $2 million in government money, have propelled the 42-year-old Rice and his Conrad Engineers of Van Nuys, Calif., to the forefront of the government's housing experimentation—as one employee puts it.

But some high-ranking officials are beginning to reassess Rice's accomplishments. And by implication, they have posed this important question: Has government research gotten anywhere at all with low-cost housing?

**The lowdown.** As his critics see it, Rice's systems have a serious flaw. None of his low-cost boxes, whether for houses on the prairie or apartments in the city, has produced low-cost shelter (box, facing page).

Until recently, officials at the Housing and Urban Development Dept. betrayed no alarm. Says one: "Let's face it, [Housing Secretary] Robert Weaver doesn't give a damn about costs."

And though Rice has not built low-cost housing, he has built up Rice's image. With imaginative ideas and bold promises, he has created the impression that HUD is getting things done in the low-cost field.

But now, with President Johnson demanding that HUD triple low-income housing production this year, the agency has split into two warring camps. The prevailing camp will decide the future of Rice's boxes.

**New pragmatism.** Older bureaucrats like HUD's James R. Simpson—a Ricebox champion—bristle under questioning about Rice's accomplishments. Simpson, who will help distribute $10 million in research grants this fiscal year, insists there can be no failures in housing research.

"Every housing experiment is a success," says Simpson, who is HUD's building technology director. "Either you learn that the system works or that another system is needed."

Younger men like Charles A. Dieman—he directs the Federal Housing Administration's own research—take a more pragmatic stand.

Says Dieman: "Mr. Rice must demonstrate much lower costs if he wants to do any more business with me. On his last project [a six-story apartment in Richmond, Calif.], he first promised to build at $10 a sq. ft. But when we processed the apartment's mortgage insurance, he was up to $15."

Now we learn he is building at $24. "That isn't low-cost housing."

"Furthermore, his building system, called Uniment, runs counter to our efforts to develop simple technology that builders around the country can copy."

**Strange story of Uniment.** The curious evolution of Uniment indicates how Rice has brought his boxes into the public eye and his pipeline into the public treasury.

The Uniment tale features an unusual collection of personalities (a Chinese inventor, a war hero turned stock promoter and cooperative housing officials) and a new building cement that experimenters call a "laboratory curiosity."

The main character is Rice himself, who is widely regarded as a structural engineer, though officially, by his own testimony, a year ago, he is not a licensed engineer.

In the last ten years, the former college lecturer has woven himself into a string of interrelated companies, including his own ten-man Conrad Engineers and consulting engineers T. Y. Lin & Assoc.

At the center of the Uniment tale is Chem Stress, an experimental cement in which Rice has a financial interest. Lightweight, thin-walled boxes can be made with the cement, which stresses itself by expanding as it dries. Such boxes can be transported inexpensively in wide markets.

The concept is fine. But experimenters at the Portland Cement Assn. call self-stressing cement, with its complex chemistry, "an unknown quantity." Says one: "Engineers want to know a lot more about its long-term durability." A member of an American Cement Institute committee that has studied such cement since 1965 says, "None of us have ever discussed commercial applications. Self-stressing ce-
Instant rehab: Doubts haunt Ed Rice's masterbox

Instant rehab—the idea that created an instant reputation for Edward K. Rice and his Conrad Engineers—is now under fire from some powerful HUD officials.

Reason: Instant rehab reportedly cost $25,000 a unit, even after developmental costs are discounted.

This project showed off Rice's boundless imagination. Rice himself ran the show from a specially built platform as his hand-picked workmen rehabilitated a five-story Manhattan tenement in less than 48 hours. The crowning touch: Workers lowered preassembled bathroom-kitchen boxes into place through a hole in the tenement roof.

The announced cost: $13,000 a unit, or half the cost of new construction.

Housing Secretary Robert Weaver went to the site to hail the federally financed effort ($597,300 in mortgage insurance and a $1.2 million research grant). But by hourly press releases from a 24-hour publicity headquarters at the site, newspapers and magazines broke into eager praise ("Instant Rehab Proves Instant Success"). In an instant, criticism of Weaver's HUD for inaction faded in new enthusiasm for the agency's daring innovation.

That was a year ago.

Late last year the Institute of Public Administration, a private group, gave HUD a secret—and deeply pessimistic—evaluation of instant rehab. The report said costs were actually $25,000 and questioned whether such rehab would ever be economical.

That report has not been released. Says an IPA source: "Some HUD officials still want to think of instant rehab as a success."

James R. Simpson, HUD's director of building technology and instant rehab's biggest booster, refuses to discuss the IPA "draft." He promises to release a "finished report" within a month.

Rival HUD sources claim Simpson has "taken over the rehab report" and attempted to collect his own cost figures. Needless to say, housing officials expect optimistic conclusions.

Instant rehab does, in fact, have defenders. New York City housing officials are making plans for Conrad and Tishman Construction to rehab 20 more tenements this summer.

"The first project," says one official, "didn't produce meaningful costs."

Yet HUD sources say Tishman has already pegged unit costs at a discouraging $17,000. And some top-ranking officials insist:

"Instant rehab is dead."

Last August he teamed up with architect Moshe Safdie, who created Expo's Habitat. By manufacturing lighter boxes with Rice's cement, Safdie hopes to cut costs from Habitat's $100 a sq. ft. to $15.

Safdie proposed a Unitim-Habitat for Washington, D.C.'s in-city community (H&H, Oct. '67). At first District officials said they had no time for experiments. Enter Jim Simpson. He assured officials that some new systems were ready to go. And then he arranged a meeting between the officials and eight innovators—including Safdie and Rice.

Result: In February Safdie and two other innovators received $22,500 each to prepare a feasibility plan.

Although final costs have not been submitted, FHA's Dieman says, "Safdie's units will cost $30,000 each to build. It is a high-cost building system." Without Dieman's Sec. 233 mortgage insurance, the project cannot be built.

More to come. Safdie and Rice have informally proposed luxury housing for New York City. Giant Utah Construction & Mining Co. has an option to build it.

 questioned about New York, Joe Sherman, the FHA assistant whom Rice hired in January as a Conrad vice president, showed some Ricemanship of his own: "We can't discuss that project because the Mayor wants to make the first announcement. But don't print that."

This month Conrad Engineers is preparing an application for HUD's largest research contract to date ($5 million). The winner will evaluate new building technology for two years.

Does Ed Rice have a chance for this contract?

Ask Jim Simpson. It will be partly his decision.
Chicago high-school students build a builder's $50,000 model

Except for pouring the foundation, the 15 teenagers are doing all the work themselves (above) in three hours after school each day.

Similar projects are under way in Salinas, Calif., and Irving, Tex., but the young Chicagoans are undertaking the largest and most expensive teen homebuilding project on record. It's a three-bedroom-house with 2,300 sq. ft. and it will sell for $50,000 when completed in June.

The tyro building craftsmen attend Glenbrook North and Glenbrook South High Schools, where they take courses leading into architecture, engineering and the building trades.

Their project began last September when Harry Schwaegerman, a North High instructor, and builder William Kennedy, a North graduate and vice president of Kennedy Development Co., decided that on-the-job building for students would serve two ends:

• Replenish the shortage of carpenters, plumbers and electricians.
• Offer practical experience to students interested in the building trades.

Kennedy furnished a site in his Charlemagne development in suburban Northbrook, along with materials and plans.

"The profit from this year's house will be used to finance another next semester," says Kennedy. —Terry Sharpe

Inflation is taking house costs up, up—and away

The cost of the average house rose 10% in 1967, the sharpest increase in a decade. That was more than twice the increase in the consumer price index—4%—and two-thirds more than the average pay raise in unionized industries—6%.

And a nationwide survey of housing markets by Advance Mortgage Corp. of Detroit projects similar cost increases this year.

President Irving Rose of Advance warns that inflation is now taking most single-family housing out of the reach of families of modest income.

"There is a growing disparity between housing supply and demand," he points out. "There is a great demand for homes under $20,000, under $25,000 in the West, and for apartments under $150 (monthly rental). But neither are being built."

Vacancies. Advance also disclosed that, although vacancy rates are declining in some areas, they are not falling as fast as might be expected.

"The affluent adjust to inflation," Rose observes. "The poor double up."

Here is a comparison of vacancy rates in the available housing supply, both rental and homeowner units, in ten metropolitan areas at year-end 1966 and 1967:

<table>
<thead>
<tr>
<th>City</th>
<th>1967</th>
<th>1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>2.4%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Chicago</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Cleveland</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Detroit</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Houston</td>
<td>4.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>3.6</td>
<td>5.1</td>
</tr>
<tr>
<td>Orange County, Calif.</td>
<td>3.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>San Fran.-Oakland</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Seattle</td>
<td>2.8</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Detroit's vacancy rate is still the lowest for any market. But vacancies increased for the first time in five years.

Vacancy rates in Atlanta, Houston and Seattle and in the California markets of Los Angeles, San Francisco-Oakland and Orange County were the lowest in ten years.

The rental vacancy rate is 1.5 times the rate of total vacancies for most metropolitan areas. The homeowner vacancy rate is 50 to 65% of the total rate.

The '67 market. The survey traces the housing market's turn toward recovery in 1967. After starts touched a postwar low of 850,000 in October 1966, they bounced back to an annual rate of 1.58 million in the fourth quarter of 1967, a rate comparable to that of the prosperous years of 1963-65.

The sales-and-starts recovery was regional, not national. A few major markets were booming, and they included Atlanta, Chicago and Detroit; but others, including New York, Los Angeles and San Francisco-Oakland, were at or near postwar lows.

The vigor in the 1967 market was concentrated in apartments. The only booms were apartment booms.
Both new-home and modernization prospects are now seeing advertising for new Kentile® Wedge-Stone™ Vinyl Asbestos Tile in *Life*, *The Saturday Evening Post*, *Better Homes and Gardens*, and other leading magazines. These 12" x 12" tiles install fast and easy. Colors: 6.

**Looks expensive, but isn't: New vinyl Wedge-Stone tile!**

Whether you’re building new homes—or remodeling—this textured Wedge-Stone floor is a sure customer-pleaser. And for a quality Kentile vinyl tile floor that’s greaseproof, easy to clean, quiet and comfortable underfoot—Wedge-Stone’s cost is amazingly low. Ask your flooring man to show you samples.

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Brooklyn, N.Y. 11215
For the red-hot mobile-home stocks, an amber caution light

Mobile-home stocks are giving the most exuberant performance of any issues in housing, 24 hours after legislative developments are raising new questions (below) about the future of this fastest growing segment of the shelter industry.

The leading mobile issues are selling at or near their 1967-68 highs. All housing stocks have staged strong recoveries from lows of that period, set in January of 1967, but the mobile rally has been far more spectacular.

House & Home's value average of 25 key housing issues peaked one month ago at about twice its '67-'68 low (chart, p. 16). Two of the strongest categories of stocks on the index, building and land companies, were selling at 2½ times their lows after excellent gains. The mobiles were at 4½ times their lows.

Top results. The mobiles are closely held* and meagerly capitalized, but they ride high, wide and handsomely on a soaring, boundless tide of good news.

The industry has managed to shed a house-trailer image and fashion a reputation as the true prefaiber of tomorrow. The Mobile Homes Manufacturers Assn., in convention in Chicago in March, listed more than 300 companies with total sales of $1.37 billion in 1967. That was up from $1.24 billion in 1966 and $518 million in 1960.

The mobile companies shipped 241,000 units last year, and they quite seriously expect to be delivering 400,000 annually by 1972. Average price is $5,700 but luxury models range to $12,000-plus, and more than 65% of the market is already in homes 12' wide (as opposed to yesterday's eight-footers). Builder John Long (H&H, Jan. '68) has just unveiled the industry's first three-section model at the Arizona Home Beautiful Show. It has seven rooms and 1,920 sq. ft., and it sells at $18,000 to $20,000.

Eight manufacturers reached 40% of the industry's dollar volume, and reports from these leaders continue to glow. Some examples:

DMH (Detroiter): Sales estimated at $41 million for calendar '67, up 20%.

Fleetwood: Sales up every year for ten years, to $31.7 million in 1967 (April). Nine-month sales to Jan. 31 up 50% and prices more than doubled, to 93¢ a share, from same period a year earlier. Fifteen plants operating, three under construction.

Guerdon: Sales up 17% to $66.8 million in same nine months, earnings up to 62¢ a share from 13¢ in comparable period. Eighteen plants operating since acquisition of the Host Homes in 1966.

Skyline: A record nine months to Feb. 29 on sales of $69.3 million, up 46%, and share earnings of $2.12, up from 91¢ in same '67 period. $2.5 million expansion program begun last year will expand the present four plants and add five. Says

President Arthur J. Decio: "We can only view the fourth quarter and the year as a whole with the greatest optimism." 

New horizons. More than one of every five new single-family dwellings is now a mobile, but the industry's activity ranges far beyond this private market.

The industry claims it is ready to stack units to create high-rise housing somewhat like that shown in House & Home's April issue.

Guerdon has already bid for the federal low-cost housing market with a modular construction system. It got FHA insurance for 28 two-story townhouses it built as an experimental project in Vicksburg, Miss. (News, Dec. '67).

And Ritz-Craft Corp. has led the industry in a public-housing breakthrough in Chicago. It has sold the city 30 mobiles as interim housing for families displaced by apartments that are going into rehabilitation (H&H, Apr.). The three-bedroom mobiles were recommended by the Chicago Housing Authority. Says Chairman Charles Szywel: "The governing factors were speed and cost. We needed housing that would go up quickly."

The official explanation is that interim means a few months; but street lights are going up, sewage and water lines are being trenched in, and an official from Chicago's bureau of Housing says hazarding an estimated guess that the mobiles will be on their present site a year and a half from now. By that time the mobile industry will have had a chance to demonstrate its ability to shelter rehab or renewal refugees.

The interim technique has already spread. Atlanta will buy 60 mobiles for residents whose homes are being razed, and Washington plans to purchase units.

Fever of expectancy. For years the mobile makers have sought a key to unlock FHA financing, and the industry's new ventures have brought a flurry of reports that the agency was ready to take mobiles under its wing. Much of a recent bid-up in mobile stock prices was probably the result of this speculation.

But the agency refuses to confirm any such talk. It says only that it is interested in all new low-cost housing ideas and might insure any system that proves workable. Unless they know something that FHA isn't telling, the mobile-home investors may be letting wishes run away from horse sense.

For the red-hot mobile-home stocks, an amber caution light

President Arthur J. Decio: "We can only view the fourth quarter and the year as a whole with the greatest optimism." 

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The interim technique has already spread. Atlanta will buy 60 mobiles for residents whose homes are being razed, and Washington plans to purchase units.

Fever of expectancy. For years the mobile makers have sought a key to unlock FHA financing, and the industry's new ventures have brought a flurry of reports that the agency was ready to take mobiles under its wing. Much of a recent bid-up in mobile stock prices was probably the result of this speculation.

But the agency refuses to confirm any such talk. It says only that it is interested in all new low-cost housing ideas and might insure any system that proves workable. Unless they know something that FHA isn't telling, the mobile-home investors may be letting wishes run away from horse sense.

Their buying has taken some mobile-stock prices to 25 times earnings.

The hard facts. The mobile industry stands helplessly by. Across its rainbow has surged a cloud no larger than a Senate bill—labeled Truth in Lending. The legislation's effect would be to focus attention on the high-cost financing behind this low-cost housing.

Finance companies and commercial banks finance most mobiles with five- to seven-year chattel mortgages at about 7% add-on interest. A borrower of $10,000 for seven years has $4,900 added to his loan and signs for $14,900. He pays $177 a month and, because he has the use of the $10,000 for only about half of the seven years, simple interest figures to about 14%.

A conventional mortgagor would pay 7% simple interest on a declining balance. Each of his 84 payments would be $151 instead of $177, and his total interest would be $2,684, not $4,900.

The contrast is startling, and the problem intensifies as the prices of mobiles increase along with their size and their owners' demands for new luxuries.

Longer maturities are not the answer, for payments must be raised too sharply to accommodate any appreciable increase in the loan amount. Simple 6% interest and a 75% monthly payment would finance a five-year conventional mortgage for $3,900 or a 20-year mortgage for $10,500. At 6% add-on, the payments would have to be $85 and $96.

And any effort to hold monthly payments constant reduces the amount that can be financed. A $75 monthly payment at 6% add-on interest would finance $3,475 for five years and only $8,200 for 20 years.

Lower down payments might suggest a solution were it not for galloping depreciation. In conventional mortgaging the lender's risk is hedged by the property value, and the borrower's equity usually rises fast enough to offset depreciation. A disclosure that the lender's property roughly equal in value to the amount owing on the mortgage.

But a mobile home depreciates 20%-25% of its wholesale cost the first year and 5%-10% each year thereafter. Mobiles are worth only 50%-60% of their wholesale price after five years. Any reduction in the customary 20%-25% down payment would substantially increase the lender's risk of loss."

The better truth is that there is not much the mobile makers can do about this financing problem. The industry needs FHA, for a specter of the alternative has already arisen in Massachusetts.

The Bay State passed its own truth-in-lending legislation a year ago. Since then, says Executive Secretary Ed Tufts of the Massachusetts Bankers Assn., mobile-home financing has virtually halted.

* Examples: Insiders own 63% of Champion Home Builders, 56% of Guerdon Industries, 56% of Redman Industries.
MAMIE VANDERGILT SAYS:

“No self-respecting homeowner would dare be caught in anything less than...”

Trintessa*
THE ULTIMATE FOR SHOWER BATHING FROM FIAT

And you’ll agree! For the first time, decorated FORMICA* brand laminate wall panels combine with compatible color MOLDED-STONE* floors to create an exciting shower ensemble flattering to you... enhancing to your bathroom. Exceeding even its great beauty is the ease and economy of TRINTESSA* installation. Unique joint system provides a lifetime, leakproof unit that installs dry—that is without water, mortar or muss.

Exceptionally suited to remodeling.

This new, exciting shower concept combines a one-piece, stainproof floor with smooth surfaced walls that make hard-to-clean grout joints a thing of the past. Crowning its other advantages is the sparkling, tempered glass enclosure that does away with metal edge moldings. Just mail coupon today for colorful, explanatory brochure.

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Take one carpenter, 108 ft. and these ideas...
of moulding

Then watch your homes sell.

Even if you use more than 108 feet, adding eye appeal with moulding is simple, inexpensive, and extremely profitable. In fact, we've been told by builders themselves that mouldings put more sell per dollar into their homes than any other single item. Check these ideas, then picture how you can transform any ordinary home into a faster selling showpiece . . . with just a little moulding.

Get a free supply of great ideas on how to use mouldings to sell your homes faster.

Just fill out this coupon and mail it immediately to Western Wood Moulding & Millwork Producers Inc., P. O. Box 25278, Portland, Oregon 97225.

Yes, send me a free copy of the Western Wood Moulding Catalog and other ideas on designing and decorating with moulding.

Name
Address
Firm
City
State
Zip

WESTERN WOOD MOULDING AND MILLWORK PRODUCERS

MAY 1968

Circle 35 on Reader Service card
A new company offers equity money to homebuilders

Eight major companies have just invested $8 million in a corporation that will try to increase housing starts by providing builders with 80% of the equity needed to begin a project. The corporation would then receive 50% of the project’s profit.

The new concern, Builders Resources Corp., is negotiating its first contract with Miller & Smith Assoc., homebuilders in the Washington, D.C., area. The project, Westynton, will contain 130 single-family houses priced at $38,000 to $48,000. The financing company will provide equity of approximately $150,000.

Equity capital is the money a homebuilder must have in hand before he can get a loan from a financial institution. For example, a builder seeking a $1 million loan might be required first to raise $150,000 on his own. In such an arrangement, Builders Resources would provide $120,000 and the builder the remaining $30,000.

**Profit motive.** Len Harlan, a Builders Resources board member and an associate of Donaldson, Lufkin & Jenrette, the New York investment bankers who organized the venture, says the eight companies had two reasons for participating:

1. **Why? Because of the new importance of homebuilding.**
2. **Two reasons for participating:**
   - Because the new company offers equity capital with good profit potential.
   - Because the venture, says the eight companies had a 50% profit motive.

The new concern, Builders Resources, is headed by former homebuilder Robert Medears of Tucson, Ariz. The company is a second attempt by suppliers to ease financing problems in residential construction. Last year 12 corporations founded Home Capital Funds to make 90% conventional loans by adding 15% to the 75% mortgages that most institutional investors provide.* Home Capital has generated nearly 1,200 loans totaling $32.5 million; it will report profit of $32,000 for the first three months of 1967 after offsetting the $9,502 loss it took in its first nine months. The company is headed by C. W. Smith, former senior vice president of Mortgage Guaranty Insurance Corp. of Milwaukee, and operates in 24 states. It has just added the Bank of America as a participating investor along with Metropolitan Life and Investors Diversified Services of Minneapolis.

**Mortgage Guaranty net up; insurer to form new company**

Mortgage Guaranty Insurance Corp. earned $1,259,016, or 70 cents a share, in the first quarter, a 50% gain over the $838,717, or 47 cents a share, earned in the same quarter of 1967.

The Milwaukee company is the nation’s largest insurer of conventional mortgage loans. Its stock closed at $1.15 on Thursday after President Max Karl announced the quarterly figures.

Karl also disclosed that MGIC will form a holding company, MGIC Investment Corp., to control MGIC and two other operating companies, MGIC of Australia and Commercial Loan Insurance Corp., a subsidiary formed recently to write commercial mortgage and lease guarantee policies.

---

**HOUSE & HOME’s stock index adds mobiles, drops prefabs**

Why? Because of the new importance of the mobile-home industry. The index of 25 issues has been recomputed, dropping prefabs and adding the mobile-home companies whose names are dotted (*) in the tables at right. The new composite:

**HOUSING’S STOCK PRICES**

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>April 8 Bid/Close</th>
<th>Chng. of Month</th>
<th>April 8 Price/Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUILDING</td>
<td></td>
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<tr>
<td>Capital Bidg.</td>
<td>2.15</td>
<td>0.00</td>
<td>2.15</td>
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<tr>
<td>Cess, Blqg. (Cal.)</td>
<td>1.85</td>
<td>0.05</td>
<td>2.35</td>
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<tr>
<td>Dew, Corp. Amer.</td>
<td>1.65</td>
<td>0.05</td>
<td>2.35</td>
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<tr>
<td>Edwards Ind.</td>
<td>1.50</td>
<td>0.05</td>
<td>2.05</td>
</tr>
<tr>
<td>First Hartford Rly.</td>
<td>1.40</td>
<td>0.05</td>
<td>1.95</td>
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<tr>
<td>First Nat. Rly.</td>
<td>1.85</td>
<td>0.05</td>
<td>2.40</td>
</tr>
<tr>
<td>Fruea</td>
<td>0.75</td>
<td>0.00</td>
<td>0.75</td>
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<tr>
<td>General Bios.</td>
<td>3.00</td>
<td>0.05</td>
<td>3.05</td>
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<td>Kaufman</td>
<td>2.25</td>
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<tr>
<td>National Homes</td>
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<td>2.25</td>
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<tr>
<td>Pres. Real.</td>
<td>1.25</td>
<td>0.05</td>
<td>1.75</td>
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<tr>
<td>Sales Homes.</td>
<td>2.25</td>
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<td>2.75</td>
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<td>U.S. Home &amp; Dev.</td>
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<tr>
<td>Jim Jaffe</td>
<td>1.50</td>
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<td>2.00</td>
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<tr>
<td>Del. E. Webb</td>
<td>0.75</td>
<td>0.05</td>
<td>1.25</td>
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<tr>
<td>Western Orbita</td>
<td>0.50</td>
<td>0.00</td>
<td>0.50</td>
</tr>
<tr>
<td>(Lue Lander Ltd.)</td>
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</table>

**SALES**

American Fin. | 32% + 6% |
Cald. Fint. | 32% + 6% |
Empire Fin. | 32% + 6% |
Economical SAI | 32% + 6% |
Far West Fin. | 32% + 6% |
Fed. Fed. | 32% + 6% |
First Char. Fin. | 32% + 6% |
First Fin. West | 32% + 6% |
First Lincoln Fin. | 32% + 6% |
First Surety | 32% + 6% |
First Trust | 32% + 6% |
Great West Fin. | 32% + 6% |
Hawthorne Fin. | 32% + 6% |
Imperial Corp. | 32% + 6% |
Lyon Fin. | 32% + 6% |
Midwestern Fin. | 32% + 6% |
Trans-Ost. Fin. | 32% + 6% |
Trans World Fin. | 32% + 6% |
Union Fin. | 32% + 6% |
United Fin. Cal. | 32% + 6% |
Wesco Fin. | 32% + 6% |

**MORTGAGE BANKING**

- Advance | 10% 10% |
- Associated Mtg | 10% 10% |
- Charter | 10% 10% |
- Chem. Mtg. | 10% 10% |
- Cont. Mtg. Inv. | 10% 10% |
- FMB | 10% 10% |

**COMPANY**

<table>
<thead>
<tr>
<th>April 8 Bid/Close</th>
<th>Chng. of Month</th>
<th>April 8 Price/Month</th>
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<tr>
<td>First Mtg. Inv.</td>
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<td>FDMU</td>
<td>6% 6%</td>
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<tr>
<td>Lumen &amp; Rly. Fin.</td>
<td>4% 4%</td>
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<tr>
<td>Mort. Assoc.</td>
<td>6% 6%</td>
<td></td>
</tr>
<tr>
<td>Palomar Mtg.</td>
<td>4% 4%</td>
<td></td>
</tr>
<tr>
<td>United MTG Inv.</td>
<td>4% 4%</td>
<td></td>
</tr>
</tbody>
</table>

**LAND DEVELOPMENT**

- American Land | 8% 8% |
- Atlantic Corp. | 8% 8% |
- C. & H. | 8% 8% |
- Christiana O. | 8% 8% |
- Country Props. | 8% 8% |
- Crawford | 8% 8% |
- Delmar Bldg. | 8% 8% |
- Disc Inc. | 8% 8% |
- Fin. Palace Ave | 8% 8% |
- Garden Land | 8% 8% |
- Geva Inc. | 8% 8% |
- Gen. Motors Corp. | 8% 8% |
- Horizon Bldg | 8% 8% |
- Laguna Bldg | 8% 8% |
- Missouri Bldg | 8% 8% |
- Palomar Mtg | 8% 8% |
- Pacific Coast Inv. | 8% 8% |
- Suburban | 8% 8% |

**DIVERSIFIED COMPANIES**

- City Invest | 8% 8% |
- Forest City Enter | 8% 8% |
- Goose Co | 8% 8% |

**SHORT-TERM BUSINESS LOAN RATES**

<table>
<thead>
<tr>
<th>LOAN SIZE (000)</th>
<th>N.Y. City</th>
<th>7 other cities</th>
<th>8 North Central cities</th>
<th>7 South western cities</th>
<th>8 South western cities</th>
<th>4 West Coast cities</th>
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<tr>
<td>10-39</td>
<td>6.32</td>
<td>6.32</td>
<td>6.32</td>
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<td>500-999</td>
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<td>6.70</td>
<td>6.70</td>
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<td>6.70</td>
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<tr>
<td>1,000 up</td>
<td>6.85</td>
<td>6.85</td>
<td>6.85</td>
<td>6.85</td>
<td>6.85</td>
<td>6.85</td>
</tr>
</tbody>
</table>


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*The system is called piggy-back lending. Canada’s Central Covenants Ltd., formed under auspices of Aluminum Ltd., has made 7,000 such loans with good profit potential.*
Cater to the tastes of three different customers with the same tile. Mosaic makes it. The tile that lets your customers have their way without you changing yours.

The secret is Mosaic’s built-in color compatibility. Home buyers can change fabrics, paper, paint and accessories with no mechanical changes. Mosaic goes right along with any decorator plan. And not just in a bathroom, mind you. But all through the home.

Remember, too, the big appeal of Mosaic’s economy. Extremely low-cost maintenance combined with unbeatable durability.

Mosaic Tile. Today’s tile.

Fanny May's free-market auction will open on May 6

The Federal National Mortgage Assn. will now entertain offers of mortgages until 2:30 p.m. on Mondays for the money it has available for purchasing that week.

The agency will announce on Tuesdays the names of successful bidding companies and the prices it will pay.

Fanny May thus puts its new auction into operation May 6. The agency sets the volume of money it will spend for mortgages, and the free market sets the price—but only up to a point. The new practice will set the volume by its mortgage operation under which FNMA sets prices and the market sets the volume by its mortgage offerings.

The first auction will offer $40 million.

**Operating details.** The market will operate under rules set forth in House & Home in February, except for final details that had not then been arranged: 15% of the funds committed if the mortgages are scheduled to be delivered in 90 days, 3/4% on six-month delivery and 1% on delivery a year off. The seller must pay another 15% for an initial subscription to FNMA stock and an additional 1 1/2% if he delivers his mortgage to the agency.

Any seller can make up to three bids, one for each of the commitment periods.

Sellers will offer mortgages in multiples of $1,000 on FNMA's Form 425. Bidders in actual competition must offer packages from $10,000 up to $75,000 if $60 million is available for purchases, or up to $50,000 if less than $60 million is available. The total of one seller's bids must not exceed these limits.

Sellers may bid noncompetitively, i.e., agree to take whatever price the auction establishes. Successful bidders will be held to maximum offers of $50,000.

Bids will be offered in decimals rather than the fractions traditional to the secondary market: 92.25 or 92.38 instead of 92 3/8 or 92 5/8. Bids cannot exceed 100 (par) and must be rounded to two decimal places.

**Dry-run auctions.** The agency's dry-run auctions in 11 cities have gone far to dispel the myth of a geographical spread in prices.

Fanny May received 784 trial bids in representative cities from Atlanta to Seattle, and the price level established in the 90-day category was 94.19 to 94.57. The prices are not as significant as the spread—a mere 38 points nationwide.

So the agency will adhere to its original decision against splitting its market into regional operations.

**A price ceiling.** Fanny May has disclosed, almost inadvertently, that it will establish a ceiling on the prices it will pay. It will let drop this admission at a briefing session for 150 members of New York City's mortgage community at the Chase Manhattan Bank.

Former broker Max Pringle asked the FNMA panel of five: "Will you fix a maximum price that can't be exceeded?"

President Ray Lapin conceded that FNMA would, and he explained: "Fanny May has been a successful financial organization and intends to go on being one. We can't accept bids that would give a yield very far below the price we must pay for money, for example. We face financial squeezes, just as you do."

So the FNMA auction is not, as Walter Russell of the big New York brokerage of Huntoon-Paige was quick to point out to the assembled mortgage men, a fully free market. It is instead a controlled market.

Russell suggested that FNMA make the ceiling public.

Fanny May will not announce the ceiling. It will, as Lapin put it, a ceiling known only within the agency. But it can be applied, in his words, "to knock out those bids that are inordinately high."

Experts at the briefing suggested a better method of control, however. Fanny May need only limit the maximum price for purchases in any offering period in order to discourage overpricing. The less money offered, the keener the competition for it—and the lower the bid prices.

**Pringle advisory service will move to West Coast**

J. Maxwell Pringle, one of the pioneer FHA mortgage brokers in New York and long an elder statesman of the national mortgage banking community, moves the Pringle Advisory Organization Inc. to Walnut Creek, Calif., in mid-June.

Pringle's Mortgage Market Analysis, widely recognized as one of the most authoritative newsletters on mortgage developments, was published independently from April 1965 to December 1967, when it became a supplement to the financial newsletter Bankers Research, published in Westport, Conn. NEWS continued on p. 22

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**HOMEBUILDERS' MORTGAGE MARKET QUOTATIONS**

Reported to HOUSE & HOME in week ending April 15.

<table>
<thead>
<tr>
<th>City</th>
<th>FHA Sec. 203b Discount paid by builder</th>
<th>FHA 221/324 Discount paid by builder</th>
<th>Conventional Loan Rates</th>
<th>Construction Loan Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FNMA* 6% Private mix.</td>
<td>FNMA* 6% Private mix.</td>
<td>FNMA* 6% Private mix.</td>
<td>FNMA* 6% Private mix.</td>
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<tr>
<td></td>
<td>60% Trend</td>
<td>75% Trend</td>
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<td>Detroit</td>
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<td>7-8 Up 1</td>
<td>7-8 Up 1</td>
</tr>
</tbody>
</table>

* Immediate covers loans for delivery up to three months, future covers loans for delivery in three to twelve months.
  + Quotations refer to prices in metropolitan areas; discounts may run higher in smaller towns or rural zones.

**Footnotes:** a—no activity; b—limited activity; c—Net yield to investor of 6% mortgage plus extra fee, w—for comparable 15-year loans also, c—FNMA pays 5% point more for loans with 10% interest, y—discounts quoted are net after seller pays 1 1/2% marketing fee and 5% adjustment for stock purchase. Seller must pay 1 1/2% of mortgage for stock calculated in $10 units, of which $30 is contributed to FNMA capital and $80 is for a share holding at 10%.

Even if you don’t need creative financing, call on Kardon.

We’re good at ordinary mortgages, too.

The local mortgage banking subsidiaries of Kardon Investment Company have well-earned reputations for making your difficult mortgages easy. Being able to work with complex creative financing techniques like sale-leasebacks, leaseholds and wrap-around mortgages helps. So does not having any maximum loan limit.

For example, among recent Kardon mortgages: $2,200,000 for construction and permanent financing of 132 garden apartments in Newark, Delaware; $490,000 for a Syracuse, New York office building; $500,000 for a church in Nashville, Tennessee; $3,300,000 for an Atlantic City motel; and $3,500,000 for 179 homes in southern New Jersey.

The alert Kardon subsidiaries are just as eager to help you with an uncomplicated 5-digit mortgage as they are when you need intricate 8-digit financing—just as efficient with spot residential loans as they are with loans on large residential tracts and major income-producing properties. That’s saying a lot.
SCHLAGE HELPS YOU ANSWER—

What people desperately want today...

SECURITY—that's what people are anxious about. In their homes...in hotels, motels and apartments...in offices and plants throughout the country.

Security is, of course, Schlage's business. It has been for over forty years of research, development and the manufacturing of better door locks.

We first met the challenge by inventing the cylindrical lock. And as the needs for security have become more severe, we have kept on improving and perfecting our original and unique lock design.

We’ve developed finer quality materials and systems of manufacture: Special strip steels rolled to precise specifications...the closest tolerances in the industry...and kept our whole line under constant, rigid inspection.

So today, Schlage recognizes the greater needs and wants for security—and can provide greater answers than ever.

Take, for example, the new SCHLAGE DOUBLE SECURITY ENTRANCE LOCK. As described at right, this is real security!

Security underlies many Schlage locks which are specialized for different needs—for all residential and commercial applications. Attractive finishes, too, are diverse and readily available.

Naturally, Schlage locks cost a little more. But since there is little upkeep or maintenance cost, they soon pay for themselves.

SCHLAGE LOCK COMPANY
SAN FRANCISCO • VANCOUVER B.C.
The new SCHLAGE DOUBLE SECURITY ENTRANCE LOCK. It provides extra inside-and-out deadbolt security. It has a recessed cylinder. It has an armor-plate shield...has a free-spinning outside knob and a roller bearing in the deadbolt. It is a "panic-proof" lock that opens instantly with one twist of the inside knob. This lock resists being jimmed, sawed, pried, punctured or drilled!
Mortgaging's wheeler-dealer Jerry Hoffman hits a roadblock

Jerome D. Hoffman burst upon the financial scene during the tight-money crisis of 1966 with an incredible offer to bring the vast riches of pension funds into mortgaging.

The New York Supreme Court has now forbidden Hoffman and his Institutional Monetary Corp. to sell $25 million in securities to finance mortgage purchases. Court papers disclose just how well Hoffman did, during the intervening two years, with one of the most flamboyant operations ever attempted in the mortgage market.

The big league dream. Jerry Hoffman's story starts in St. Louis, where he pursued a vague sort of career into young manhood. "Attended" Washington University, where he was something less than a Big Man on Campus, and he did a short stretch as a catcher in the semi-pro time.

The university's records show him only as a summer student (Classes '53 and '56) and an exhaustive inquiry turns up nobody on the sports desk or the Post-Discatch or Globe-Democrat who ever heard of him.

Hoffman appears in the Middle East in 1956 as a CBS exchange correspondent, and it was then that he got the pictures that make his office a gallery of the poten­tates of the lands beyond the Nile. He had himself photographed with them all.

He made it to New York and worked, successively, for two of the city's most respectable real estate houses, winning an instant reputation as the man who knew where the money was. By 1962, at 29, he had organized National Realty Investors group and arranged for Swiss bankers to buy the Hilton and Sheraton Hotels, a deal that did lead to the stock market crash of that year.

Off on his own. Hoffman set up his monetary fund in 1963. Private pension funds had just attained assets of $63 billion. His path was clear in 20 years. Every mortgage man on the North Ameri­can continent was trying to pipe a line into the well, and Hoffman thought he had a way—participations. In 1964 alone, said Hoffman in one of his direct-mail broadsides, he would place $100 million in such shares.

One of Hoffman's most telling boasts of this period, as events would reveal, was of familiarity with the mortgage market: "Financing is not as mysterious as some people think." The IMC mailings recounted a dizzying succession of successes—Hoffman was in conference with both the money and credit marts, of mortgage sup­pliers and demand, and of personalities.

The mortgage community draws two lessons from the bizarre story of Jerry Hoffman. One lesson is obvious. He could not deliver. In 1966 virtually nobody could.

The other lesson is more subtle. Hoffman's assertion to the contrary, mortgage financing is "as mysterious as some people think"—indeed, more so. It is a complicated endeavor whose success turns on a sophisticated knowledge of the money and credit marts, of mortgage sup­ply and demand, and of personalities.

Run for the big money. Then came the New York State Banking Law of 1965, permitting trustees to mingle the monies of their several pension funds when they invested. Surely here was a gold mine for participations.

Hoffman took magnificent new offices at 295 Madison Avenue. He summoned Paul A. Nalen, former vice president of Mutual Benefit Life, to recruit a panel of the best mortgage inspectors he could find, and Nalen organized Criterion Marketing Report Inc. with a score of highly prestigious names.

Attorney General Louis J. Lefkowitz of New York now takes over the story. His affidavit in Supreme Court, New York County, sets forth this chronology:

In June of 1966, with the tight-money crisis nearing its peak, Hoffman mailed thousands of offers to provide mortgage funds in million-dollar lots.

Lefkowitz says replies came from 630 individuals or businesses in 42 states and five Canadian provinces. They asked for $1.1 billion.

Hoffman charged $500 to send an em­ployee to inspect the property. Then the client visited Hoffman in his new offices, where he was told the amount he might get. Finally one of Criterion's experts made a feasibility study, for which Hoff­man charged $2,500 to $25,000. All ap­plicants paid the inspection fee, and 300 paid a total of $741,000 for feasibility studies.

Lefkowitz told a press conference that one client was the Del Webb Corp. of Phoenix, which had paid $250 million in 1965 and sorely needed cash. Webb sought $38 million. Hoffman offered only $28 million at 8 3/4% after Webb paid a $25,000 fee, and Webb then found that it could get a larger mortgage elsewhere at a lesser rate.

The deception. Every client, says Lefkowitz, was ultimately offered less than he had been promised in conference with Hoffman. And on the requests for $1.1 billion, Hoffman delivered only $4.3 million, or about 0.4%, to three applicants. Yet he netted $1 million in fees.

The Attorney General told the New York Supreme Court that Hoffman had engaged in a "reckless, improvident and fraudulent" advance-fee scheme, and he added that he was calling the operation to the attention of postal authorities, the sec and U.S. Attorney Robert Morgenthau. Justice Arthur Markewich signed the per­manent injunction forever barring Hoff­man and his three defendant companies (IMC, Criterion and Institutional Monetary Trust) from selling securities in New York State. Hoffman himself has applied to withdraw an application to register the issue with the sec, but the agency must approve. It has not yet done so.

What went wrong? The mortgage community draws two lessons from the bizarre story of Jerry Hoffman.

One lesson is obvious. He could not deliver. In 1966 virtually nobody could.

The other lesson is more subtle. Hoffman's assertion to the contrary, mortgage financing is "as mysterious as some people think"—indeed, more so. It is a complicated endeavor whose success turns on a sophisticated knowledge of the money and credit marts, of mortgage sup­ply and demand, and of personalities.

Hoffman wrote repeatedly to virtually all of New York's top mortgage dealers, and his communication with them showed a lack of familiarity with many of the complexities of the mortgage market.

A story told by one of New York's most respected brokers is revealing.

"We were desperate in 1966," he relates. "Clients all over the country were calling us, saying 'Hoffman says he can get money. Why can't you?'"

"So we wrote out a check for $50,000 and I put it in my pocket, and two of us went up to see him.

"We didn't tell him we had the check. We just sat and listened. He talked—and talked—and with each word that check went deeper into our pocket. After half an hour we left—with the check."

Hoffman had not convinced them that he knew the business well enough to do the impossible.
NEW DAP FASTENER
4 ways it can bring new cost savings to you!

It's DAP Panel and Drywall Adhesive—the faster fastener. Installs drywall and pre-finished panels up to 50% faster. Eliminates hammer damage, countersinking, nail pop.

Prevents wavy walls caused by out-of-line studs—automatically bridges gaps up to 3/16". Gives a neater, tighter fit. Actually becomes stronger with age.

Completes furring strip installation faster, safer. No steel fasteners to ricochet. No chipping to weaken blocks. Waterproof—assures a solid, permanent bond.

Cuts nailing time on sub-flooring jobs. Gives you a solid, squeak-free unitized floor. Deadens sound transmission. Equally effective for stair treads.

And that's just the beginning. DAP Panel and Drywall Adhesive does much more because it's heatproof, waterproof, bleedproof. Grips tight to virtually any surface (even bonds shower stall frames to porcelain). Maybe it's hard to believe an adhesive will do so much so well. This one does. Contact your building materials supplier now.
How many painters do you know who'll
guarantee a prime coat for 5 years?

Chances are you can't name a single painter. That's not surprising. The only reason we're able to go out on the limb for a full five years is our meticulous factory-applied process.

No on-site priming can ever match smooth, uniform coverage like this. We're absolutely sure it won't blister or peel. And we write this into the guarantee.

This broad line of primed exterior products includes bevel siding, lap siding, panel siding and soffit. All available from one single source. From one reliable dealer in your area.

These products can go up in all kinds of weather because they are protected until the finish paint coat is applied. Finish coats of all types go on faster, with better paint coverage.

With no culls you get maximum utility of material. Every piece is usable. No broken pieces or knotty problems. It comes pre-packaged making it easier to handle and protect on the site.

Can we give you more facts (or do you already have a painter lined up who'll give you a 5-year guarantee)? Write us at Box B-2817, Tacoma, Washington 98401.
Lennox puts the comfort inside...

and the equipment outside

Look what's new for homes (and other buildings):

A single-package heating, cooling, ventilating system that's installed outside. On a grade-level slab. Or on the roof.

There's no flame indoors. No chimney needed. Nor inside space. You gain sales appeal.

The only thing brought inside is Total Comfort. Fresh, Living Air® warmed or cooled to fit the season. Humidified—or wrung dry of dampness. Cleaned electronically. Circulated continuously.

It's a fully weatherproof system, with insulated cabinet and electric ignition system.

The unit can—in its larger commercial capacities—offer 100% ventilation with outside air. And cool free when that air falls below 57°F.

Available for homes in sizes as small as 2 tons cooling and 80,000 Btuh heating. Commercial sizes range up to 22 tons cooling, 500,000 Btuh heating.

Electric cooling. Gas or oil heating. The system is completely factory assembled, wired and tested, including controls. Finest quality...and a single source of responsibility.

It's an ideal single-zone system for homes, apartments, schools, churches, offices, and other buildings.

For details, see Sweet's—or write Lennox Industries Inc., 384 S. 12th Ave., Marshalltown, Iowa 50158.
Something-for-everybody package clicks in D. C. townhouse society

Capital idea: D. C. developer uses 1/4" urethane foam insulation to pare costs; boost comfort, floor-space and profit in townhouse units.

Town Square Townhouses, a creation of architects Macomber & Peter, masters of the Federal style, is an ambitious urban renewal project in Washington, D. C. Being built by Bresler and Reiner, when complete it will consist of 116 garden apartments and 180 3-story, single-family units, priced up to $54,500.

Of brick construction, nearly all of the townhouse units are insulated with sprayed-on urethane foam applied by Bilton Insulation & Supply, Inc., D. C. specialists in this type of contract insulation since 1952.

Because of urethane foam insulation, each Townhouse unit gained a living space bonus worth $572-$1144* to the buyer.

Here is how the urethane foam gains were measured by the principals involved:

C. V. Davenport, Bilton executive vp and gen. mgr.: "The arithmetic is there for all to see. Urethane enabled the developer to gain up to 52 sq ft of extra floor space per unit. Urethane foam is a cryogenic insulant. With a k factor of 0.11 and as used in this instance (1" wall space consisting of 1/4" of urethane foam and a 3/4" air space), urethane foam replaces a 3¾" glass fiber batt. In addition, urethane foam is moisture-proof, the need for a vapor barrier is eliminated, and it safeguards electric wiring and plumbing fixtures against fire, freeze-ups and corrosion."

Potomac Electric Power Company determined that this wall design met their Gold Medallion insulation requirements. They estimate it will cost the average Town Square Townhouse owner about $305 a year to heat his home, $60 to cool it. A dollar a day for a $54,500 home investment isn't bad.

B. Reiner, Bresler & Reiner builders: "There is no question about the customer benefits of urethane insulation. I would be sold on it just for the space savings it offers. Most home-buyers don't care what insulation is used, but we publicize urethane as a key selling point. We translate the measurable extra floor space, consistent comfort, warmer wall areas, lower heating and cooling bills, and they are impressed."

R. A. Dwyre, Bilton sales mgr.: "With batt-type materials, builders often have an expensive, irksome problem of securing dry wall to the studding. Because of the slick vapor barrier necessary, nails keep popping out. With urethane, one man can complete two walls each on three floors (1140 sq ft) in about 30 minutes."

H. White, project mgr. and supt.: "I've been in the construction business for 30 years and I have never seen an insulating material that provides a better seal than sprayed-on urethane. It's clean, simple and fast in application, and leaves no mess of scraps to clean up."

The foam chemicals system for this project was supplied by Isocyanate Products, Inc., New Castle, Del. 19720. For the full story on urethane foam insulation in a wide range of projects, write MOBAY CHEMICAL COMPANY, Code HO-58, Pittsburgh, Pa. 15205.

*Made on basis of 2400 sq ft of living space in unit selling for $54,500. Buyer is paying about $22 per square foot. Better insulating ability of rigid urethane foam saves 26 sq ft to 52 sq ft or $572 to $1144.
Heavy debt perils Lytton Financial; Bart Lytton sells 13% of S&L firm

Lytton Financial Corp., one of the largest publicly held mortgage companies, is facing a critical financial squeeze.

The company has $28 million in debts due this month and, its annual report says, it "presently does not have the funds available to meet all of these obligations."

Bart Lytton, president and chairman, has nevertheless expressed confidence in raising the money before the deadline.

The financial problem affects only the holding company, not the two S&L subsidiaries: Lytton S&L in Los Angeles and Lytton S&L of Northern California in Palo Alto. Yet Lytton has admitted that the sale of one of the two S&Ls to satisfy the debts is a "likely possibility."

A spokesman for Preston Martin, California's S&L commissioner, said: "The capital and liquidity of the two S&Ls are unimpaired."

Lytton also said that he did not know what action the creditors would take if the financial obligations were not met on time, but he added that the creditors realized that "foreclosure is not an appropriate response."

The debts include $1.6 million owed to the United Automobile Workers Union and $1.2 million owed to institutional investors, of which the largest is Investors Stock Fund Inc., a mutual fund managed by Investors Diversified Services of Minneapolis.

Lytton has faced a financial crisis of his own. He has just sold 13% of the company's shares to the United Bank, Los Angeles. Los Angeles businessman Henry Salavateri confirmed that he had been approached "some time ago" about buying some of the stock but said he had nothing to do with the current sale.

Bankers Mortgage gets new chief

Bankers Mortgage Co. of California has chosen Kent L. Colwell as president to succeed Harland G. Keller, who is retiring.

Colwell has been financial vice president of Bankers since 1964, when founder Ray Lapin (now president of the Federal National Mortgage Assn.) sold it to Transamerica Corp., San Francisco's big "department store" of finance (News, Apr. '64). Colwell had been assistant to the president of Transamerica. He is treasurer of the California Mortgage Bankers Assn.

Bankers has also announced the promotion of John R. Jensen and Harold Granger to senior vice presidencies. Both men had been vice presidents.

The company is the ninth largest mortgage banking house in the country. It services $735 million in mortgage loans.

Lytton Financial's Lytton
"It's an awfully well-known name"

Lytton Financial, with assets of $730 million, has lost $12.5 million in three years—$3 million in calendar 1967, more than $2 million in 1966 and $7.5 million in 1965.

Lytton refused to disclose the identity of the group of buyers who purchased the estimated 334,449 shares or the price paid. But based on the closing price of Lytton Financial at the time of sale, $6.50 a share (NYSE), 13% of the company's outstanding stock would have been worth $2.1 million.

Lytton also would not say whether the sale was arranged to satisfy personal debts at the Union Bank, Los Angeles. Los Angeles businessman Henry Salavateri confirmed that he had been approached "some time ago" about buying some of the stock but said he had nothing to do with the current sale.

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News continued on p. 34
Frigidaire brings you...

more help in selling today's prospects who demand easy-clean kitchens. You probably know the hottest, most wanted idea in built-ins, The Electri-clean Oven idea. Now it's yours in a Frigidaire Compact 30 range. In just 30" of space, you can add a complete, contemporary cooking center. Surface units. Automatic controls. Plus an oven that goes from dirty to clean automatically. Cost per cleaning for your prospects: just about the same as a cup of coffee. This is the range for kitchens that create more leisure, not more work.

more help with fast, easy installation. We know installation time is money. Your money. We try to save you both. Example—the Compact 30 installs with just 4 screws.

An easy-to-follow installation guide is yours for subcontractor use on this and every Frigidaire built-in.

help your prospects clean up...

more help with customer satisfaction... factory-trained service available everywhere.

Coast to coast, one of our authorized service outlets is available to take over the service responsibility. You're free to concentrate on building and selling. This is another reason Frigidaire-equipped kitchens can help you build traffic. Boost rentals. Or close sales. Call your Frigidaire representative and let him show you.

Frigidaire bothers to build in more help

Model RBE-539N
New Andersen Perma-Shield®
value of wood plus a rigid vinyl

Welded insulating glass is standard. No need for storm windows.
(A real sales feature.)

No painting
Vinyl sheath doesn't need it. Can't rust, pit or corrode like metal, either.

Flexible Vinyl glazing bead eliminates all face putty problems.

The warmth of wood plus weatherproof vinyl cuts heat loss and gain, checks condensation.

Vinyl weatherstripping seals out drafts, springs back to shape indefinitely.

The dimensional stability of wood. Won't stick, twist, warp or bind.

New Andersen
Windows offer the insulating shield that needs no painting.

(No wonder you're seeing more of them lately.)

Inside a Perma-Shield sash there's a core of warm, stable wood. Outside, there's a thick sheath of rigid, weatherproof vinyl. And the glazing is welded insulating glass.

Is it the perfect window? You'll have to decide about that for yourself. We're proud of it, and we're pleased that Perma-Shield windows are being specified for some of the best new commercial buildings and residences.

Wide range of styles and sizes.
Choose casements, awning style, fixed types, single or multiples right from stock. There are 26 basic Perma-Shield sizes and 3 sizes of gliding doors—6, 8 and 12 feet.

For more information check Sweets file. Or mail the coupon below for literature or a Perma-Shield Demonstration in your office.

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Perma-Shield Windows

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Washington Club Inn, Virginia Beach, Virginia, features 40, 8-foot Andersen Perma-Shield Gliding Doors. Guests get a sweeping view of the ocean through snuggly weathertight gliding doors. No problems... even under the most severe salt-air conditions. Architect: Evan J. McCorkle, Virginia Beach, Va.

Emma Norton Methodist Girls' Residence, St. Paul. Difficult elevation could make window maintenance a nightmare, but there's little or no maintenance with Perma-Shield. They've been performance proved on thousands of residential and commercial jobs like this one—exposed to every climate over the last 9 years. Architect: Progressive Design Associates, St. Paul, Minn.

Low maintenance home, Long Lake, Minn. The Perma-Shield Windows in this home won't need painting, or storm windows, and they won't pit or corrode like metal. They combine the insulating value of wood and the maintenance savings of a rigid vinyl shield. Architect: George F. Panuska, Virgin Islands.
Kennedy offers a slum-housing plan, attacks the President's as defective

Sen. Robert Kennedy (D., N.Y.) announced a new slum-housing proposal and gave HUD Secretary Robert Weaver his best one-liner of the year: "It's a rich man's bill for poor man's housing."

The Senator, speaking before the Senate Housing subcommittee, outlined his new proposal and attacked the Administration's slum-housing bill, based on subsidized mortgage interest rates, for having "major defects."

The Kennedy plan provides a profit incentive to builders of low-rent housing in urban ghettos in the form of direct subsidies paid by the federal government. A new debenture issued to the builder when he receives federal mortgage insurance would obligate the government to pay him, each year during the life of the project, a supplementary and tax-free amount equal to 6% of his net equity investment.

The effect of this payment, Kennedy states, would be to raise a builder's annual after-tax profit to about 12%, or 6% more than he is allowed to make under existing 221(d)3 bylaws.

The Kennedy proposal also incorporates below-market-rate mortgages financed through government channels and reduced rentals through low-interest rates, 50-year terms, property-tax abatement and subsidized land costs.

The Senator's criticism of the Administration's slum-housing bill (News, April):

- It does not require that new low-income housing be built in urban poverty areas.
- It doesn't spur employment of low-income residents in rebuilding their housing.
- It doesn't involve local residents in community planning.
- It doesn't provide for improved relocation facilities.

Capitol Hill forecasters say Kennedy's proposal, in bill form, does not stand a chance of passage.

"It's too complicated and implies changes in the tax laws," says one legislator. Others, including Secretary Weaver, contend that the Kennedy proposal only serves to augment the concentration of Negroes in the ghettos.

Savings bankers nominate new chief

He is Robert J. Hill, president of the New Hampshire Savings Bank in Concord, and his nomination will be presented to the National Association of Mutual Savings Banks at its 48th annual convention in Washington May 17.

Hill succeeds Harlan J. Swift, president of the Erie County Savings Bank in Buffalo, N.Y. He is currently the NAMSB's vice president, a post to be taken by Richard B. Haskell, president of the Mechanics Savings Bank of Hartford, Conn.

Officers of the association serve one-year terms.

The association represents 500 mutual banks in the 18 states in which they are permitted.

Heads: Clinton L. Miller, 62, has retired as president of The Dime Savings Bank of Brooklyn.

PUBLICISTS: Sam Justice, formerly an information director for the National Association of Mutual Savings Banks (story above), has been appointed a vice president in the New York offices of Booko & Co., a financial and investment relations firm that maintains branches in Chicago and Los Angeles.

BUILDERS: Levitt & Sons of Lake Success, N.Y., has named James E. McCarty Jr. to the new post of national sales manager. He had been a division sales manager for the Readers Digest in Pleasantville, N.Y.
There's something new for the outside of your houses that you don't have to paint. It's called wood.

Not just run-of-the-mill wood. PFL® Siding from U.S. Plywood. It comes with a thin plastic coating that's bonded to it by heat and pressure. Thin. But tough. In an attractive range of colors. So you don't have to paint it when you put it up.

And it's highly resistant to cracking, crazing, chipping, peeling, flaking and blistering. So it shouldn't need painting for any of those reasons after you've put it up.

Being wood, it naturally won't rust or corrode in any weather. Being hard, it's very tough to dent. Which is more than you can say for some of those other new siding materials you may have heard about.

See your building supply dealer and ask for U.S. Plywood PFL Siding. If he doesn't have it, call us. Collect.

U.S. Plywood
A Division of U.S. Plywood-Champion Papers Inc.

MAY 1968
Circle 47 on Reader Service card
A computer’s projection for 1968: big rise in one-family homebuilding

Consultron, the service that analyzes the Census Bureau’s housing permits each month by computer, now projects increases in single-family building for 168 of 192 metropolitan areas in 1968. Consultron is a management and marketing service offered to builders by the Celotex Corp. and operated by the corporation’s consultants, W.R. Smolkin & Assoc. of New Orleans.

Many of the latest 1968 projections show sharp percentage gains over 1967—Las Vegas up 312%—but they do not necessarily signal a boom market. Because 1967 was a poor year—Census estimates national totals at only 612,900 single-family permits—it provides a faulty base on which to measure increases.

The forecast is not strictly a prediction of the number of private houses to be built this year. It is rather a projection of permits to be reached if the housing market continues as it has done.

The second column (below) shows permits projected for 1968. The third cites the projection made a month earlier, and the fourth measures the change and indicates the most recent market trend. The latest 1968 projection (column 2) for a city may still exceed the 1967 permit total but fall below the 1968 projection made a month earlier (column 3). This circumstance indicates a weakening market. It applies in 111 cities (example: Akron, Ohio), not counting 23 whose 1968 permits will fall short of those in 1967.

The fifth column shows the second column’s percentage gain or loss from 1967.
You can see at a glance why the Pasadena Art Museum chose to honor Flow-Matic for excellence of product design. The sculptured lines of Price Pfister's single handle water controlling device for the kitchen is a study in classic simplicity with a contemporary flair.

As winner of the coveted California Design X award, Flow-Matic will be featured in catalogs sold throughout the world by the Pasadena Art Museum. Millions of architects, builders, designers, artists and art lovers will become aware of Flow-Matic's incomparable beauty and design superiority. And one more thing: every Flow-Matic single-handle water-controlling device features an unconditional five year warranty on the cartridge with a labor allowance included.

PRICE PFISTER BRASS MFG. CO.
13000 Paxton Street, Pacoima, California 91331
Sold only through wholesalers
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Circle 30 on Reader Service card
His choice of Kemper cabinets is based on fact

Here are the facts that motivate most successful builders to install Kemper kitchen cabinets and bathroom vanities in their homes and apartments.

Fact: Kemper offers a selection of cabinet styles and finishes to complement any home. Fact: Kemper is one of the most competitively priced quality cabinets available. Fact: Kemper engineering simplifies and speeds up installation. Fact: Kemper cabinets are the only ones offering the builder the full protection of the NAFM Warranty. Fact: Kemper quality is achieved through the use of the latest and best woodworking equipment and materials. Fact: Kemper’s large warehousing facility and automated order processing procedures mean you get cabinets where and when you need them.

For more facts on how you can make more profit with Kemper cabinets in your homes and apartments call your nearby Kemper Distributor. He’s in the Yellow Pages. And, for your free copy of an informative, 24 page booklet “Kitchen Ideas by Kemper,” write to us. Kemper Brothers, Inc., Richmond, Indiana 47374.
IGNORE
NOISE
and you ignore 60% of your market.

It's a fact. Three-fifths of prospects in major metropolitan and suburban areas indicate they will pay extra for construction that reduces noise levels inside the home.

Six out of ten of your next customers are ready to put extra profits in your pocket, if you'll just put a little quiet-conditioning in their new homes or apartments.

And Celotex can help you do just that. We have the products, the systems and know-how to solve your every noise problem.

Let us send you the Celotex Sound Control System Guide. Shows you how to reduce noise transmission through common walls, partitions and floor/ceilings with a choice of 21 constructions using Celotex Soundstop* Board and Celotex Gypsum Wallboard. And how to soak up noise in family rooms, living rooms and kitchens with Celotex Acoustical Ceilings. Send for your free copy today.

*Trademark

YUCATAN, MEXICO—Ca. A.D. 987. Detail of a workman/sculptor from one of a series of paintings depicting major achievements in the history of Man the Builder.

The painting is one of three in Set B of the Celotex collection. For full-color reproductions (20" x 16") suitable for framing, send $1.00 (for each set of 3) to: Historical Construction Paintings, Box 368A, Miami, Florida 33145. Important: please specify Set A or Set B.

Set A consists of: The Ise Shrine, Japan; The Erechtheum, Athens, Greece; Ollantaytambo, Peru. Set B: City of Uxmal, Mexico; The Bayon, Cambodia; Neolithic Shrine, Turkey.

THE CELOTEX CORPORATION
Tampa, Florida 33607
Subsidiary of Jim Walter Corporation

MAY 1968
Circle 50 on Reader Service card
Buy ventilation and beauty in one package!

REDWOOD CUPOLAS

Get double value with a STEPHENSON CUPOLA! First, these quality redwood cupolas give a home the custom-built look of elegance. Second, installed on the rooftop, they are the best attic ventilators, exhausting hot moist air effectively with no moving parts. A wide variety of styles and sizes available. Order from our catalog today. Prices start at $39.00. Send for free catalog today.

STEPHENSON & COMPANY
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These are TECO-U-GRIP joist and beam hangers

They save up to 50% in framing floor and ceiling joists

Send for free catalog information on TECO's full line of labor saving fastening devices.

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It’s all Williams but the wallpaper

Just select the color. Williams does the rest with matched sets of vanities and upper cabinets, styled the way a woman wants them. Designer approved in seven planned-to-please-her shades and rich wood finishes — coordinating tops and bowls.

And Williams flatters her with the warm light of incandescent bulbs. With big, big mirrors. Delights her with durable finishes that resist her family. Provides more space for their belongings.

Does she like to plan? We’ve a range of sizes to fit any space and lots of optionals to make her planning practical. Don’t forget our popularly priced medicine cabinets — to use alone or with vanities. And that takes care of everything except the wallpaper.

Sold through selected distributors. Help yourself while you’re pleasing her. Write for our complete line catalog.

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Send me your free full-color catalog.

Firm Name
Address
City.
State and Zip.
Attention of
Type of firm

WILLIAMS PRODUCTS, INC.

Circle 53 on Reader Service card
Congress and the President have made open housing the law of the land (see p. 5).

How does this affect builders, lenders and owners? Here are answers to some of the most urgent questions about the law, Title 8 of the new Civil Rights Act:

Q: We bought land a year ago, before this law was passed. The land is for a project we plan to open in 1969. Must we sell to Negroes?
A: Yes. As of Jan. 1, 1969, you will be covered under the section that prohibits discrimination in the sale of a home that is not your personal residence. The new law states: "It is illegal to refuse to sell or rent after the making of a bona fide offer, or to refuse to negotiate for the sale or rental of, or otherwise make unavailable or deny, a dwelling to any person because of race, color, religion or national origin."

Q: Can we get around this law simply by informing a Negro that he can't inspect the house?
A: No. It is "forbidden to represent to any person, because of race, color, religion or national origin, that any dwelling is not available for inspection, sale or rental when such dwelling is in fact so available."

Q: Are builders of two or more dwellings a year affected immediately?
A: No unless the dwellings were insured by FHA after Nov. 20, 1962, or built on land cleared by the federal urban-renewal program. President Kennedy's executive order already covers these 900,000 housing units, but enforcement has been lax (News, Jan. '63).

The brunt of the new bill will not be felt until Jan. 1, 1969, when discrimination in all apartments and newly built single-family homes will be illegal. The only exceptions: resident owners and builders who sell fewer than two houses a year.

Q: We built a 50-unit apartment in 1959 with a conventional loan. Can we discriminate in rentals?
A: Not after Jan. 1, 1969, when your apartments will be covered.

Q: Does the new law carry criminal penalties?
A: No. You can't be sent to prison for simply discriminating. Under civil law, you can be sued by the discrimination victim or the federal government and fined up to $1,000 in punitive damages.

Q: Can the law indirectly result in a jail penalty without a jury trial?
A: Conceivably. If a violator defies a court order, a judge can rule him in contempt and send him to jail.

Q: What is the penalty if discrimination is proved in the sale or rental of housing?
A: First, you can be ordered to sell or rent to a complainant. If, while a complaint is pending in the courts, you sell the house to another buyer (provided the judge has not issued a restraining order against the sale), you can be required by the court to pay whatever actual damages were suffered by the complainant in addition to $1,000 in punitive damages.

Q: Are mortgage lenders affected?
A: Yes. As of Jan. 1, 1969, banks, savings, insurance companies or any other business engaged in making commercial real estate loans can not discriminate by denying a loan for the purchase, construction or repair of a building or by setting extra-high interest rates solely because of the applicant's race, color, religion or national origin.

Q: How fast will Negroes move into formerly all-white areas?
A: In certain suburbs, where large tract builders have been discriminating for fear of being at a competitive disadvantage, there may be an influx of Negroes, especially in suburban apartments. But what the Negro can afford to buy or rent is directly related to what he earns. So, while Negro income remains substandard, there will be no mass exodus from the urban cores to the expensive suburban areas.

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Thousands of crystal-like droplets capture the color and brilliance of underwater lighting by night and become a shower of diamonds. Thousands in use in homes, industrial and office buildings, banks, restaurants, stores and motels as well as gardens and parks.

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Area Code 513-325-7091
New Rosewood does wonders for a corporate image by capturing all the rich grain and color of hand-rubbed natural wood. Only difference: Marlite stays like new, Annual Report after Annual Report.

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New Marlite Mural, entitled “Flemish Harbor,” is crafted in deep brown and gold on a white background. Use this panel when you want pictorial effects in a hurry. (Marlite goes up fast without interrupting business.)


See Marlite's new line of prefinished hardboard paneling (including new Fire-Test Panels) in Sweet's File or write Marlite Division of Masonite Corporation, Dept. 522, Dover, Ohio 44622.

MAY 1968

Circle 58 on Reader Service Card
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VILLAGER

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soon... everyone will

the newest product of
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It's really something! Our own solid vinyl siding. The siding that won't do anything... except last and last... all the while looking its clean, smooth beautiful best!

Made of the best... B. F. Goodrich Geon® vinyls... in softly-rich colors: light gray, light green and white. Both 8" and double-4" types.

Now's the time to check up on this newest of all sidings. Decide how it can do a lot of good for your business. Get samples and literature.

Write or phone Philip Carey Corporation, Dept. HH-568, Cincinnati, Ohio 45215. Phone: 513—821-3000. It's worth it!
A toilet that ventilates itself? This has to be the hottest bathroom feature since American-Standard moved plumbing indoors! And we’re making it even hotter with big, bold, bright ads in LIFE, TIME, NEWSWEEK, SUNSET, BETTER HOMES & GARDENS, HOUSE BEAUTIFUL and HOUSE & GARDEN. No wonder smart, successful builders like Gene May, of Evermay Homes, McLean, Va. are featuring the remarkable Compact/Vent-Away in their model homes right now!
American-Standard has the Hot Ones for '68!

The sporty Fiesta makes other kitchen sinks look like they're standing still. Once women get their hands on that souped-up instrument panel, there's no stopping 'em! And smart, successful builders like J. S. Hovnanian of Holiday-On-The-Green, Mt. Laurel, N. J., know it. He's turning prospects into home buyers right now with a Fiesta sink in each of his model homes. We're backing Mr. Hovnanian and you up all the way with advertising that's reaching (and pre-selling) 137 million people. That's pretty wild, too!

© AMERICAN STANDARD Inc. 1968
The slip-resistant bottom on our Stan-Sure® tub makes stepping into the bath as easy as jumping into bed. Makes your homes easier to sell, too. (Just ask George McCormick, of Mac & Mac Inc., Pittsburgh, Pa. He's featuring Stan-Sure in his model homes for the second year now!) What more could you ask for? Big, bold ads like this making a splash with your best prospects in 14 of their favorite magazines!

*4 times safer than regular tubs.

These nationally advertised trend-setting products are being featured by builders all over the country. Reason? To help sell more homes faster. For more information and details on the special promotional program call your nearest American-Standard representative, or write us. American-Standard, 40 West 40th Street, New York, N.Y. 10018.

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Circle 62 on Reader Service card
The round one. 
It's what's new in central air conditioning!

This new Carrier air-cooled unit says your homes are as modern as '68 . . . distinguishes them from others down the street.

Makes all other condensing units, well, kind of square.

Is considerate of shrubs and neighbors, too, even close ones. Tosses heat and sound straight up—away from them, not at them.

And figure on low on-site labor costs. And Carrier quality through and through—at a very attractive low price.

The round one. Modern. Available in capacities from 17,500 to 49,000 Btuh. Well worth inspection—your Carrier Distributor is the man to see. Or write us at Syracuse, New York 13201.

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Meet our new continuous tree

Potlatch Electro-Lam beams are trees redesigned and rebuilt into superior load-carrying members. Each individual board is kiln-dried, then surfaced and scarf-jointed. Laminated together under tremendous heat and pressure into a continuous beam, they are stronger than a whole tree, carry more load than steel I beams the same size or weight. And our continuous lay-up makes any desired lengths precisely available. Electro-Lam beams are typical of the advanced products produced from our perpetual forest resource. From over a million and a quarter acres, trees are selectively harvested and remanufactured to solve some problem of business or industry. If you have a problem, we are finding answers, continuously. Potlatch Forests, Inc., P.O. Box 3591, San Francisco, California 94119.

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Lithographed on Northwest Coated Cover, basis 60, another creative product of Potlatch Forests, Inc.
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THE LEADERS ARE BUILDING

Three models show the kind of excitement that space can create

The house shown here, and the two houses on page 58, are new models at Greenbrook, a Larwin Co. project in Cypress, Calif. They are already proving to be best-sellers chiefly because they appear far more spacious than their actual area. And this in turn is due to their imaginative use of vertical space.

The main entrance to the house above leads to a mid-level landing (plan, below) that looks down into a sunken living room and up to a soaring 2 1/2-story ceiling and balcony on the upper level (top photo, left). By contrast, the dining room has a more intimate feeling because of the low ceiling. But the family room (center, left) appears larger than it is because it opens to the living room.

On the second floor, the master bedroom has a sloping ceiling (bottom, left) that rises to the ridge. And it is opened up even more by a high window and glass doors to its own sun deck.

Other features include a compartmented master bath, large walk-in closets, a full bath on the lower level next to the den (or guest bedroom), a bar in the family room and a separate laundry room between the family room and two-car garage. The fifth bedroom can be eliminated to make space for a three-car garage and a larger laundry.

This model offers 2,983 sq. ft. of living area, including sun deck; it sells for $35,550. Opened in November, it has already accounted for more than 100 sales.

The two houses on page 58 are priced at $35,990. Opened in February, they have accounted for a total of 50 sales.

All three houses represent the high end of Larwin's eight-model line, and they currently account for about 25% of total sales at Greenbrook. The project's total for the 16 months it has been open is 1,200 sales, with current delivery dates as far away as December.

Architect: B.A. Berkus.
DECORATOR FINISHES IN PERFECT TASTE

WEISER LOCKS

WEISER COMPANY • SOUTH GATE, CALIFORNIA
DIVISION OF NORRIS INDUSTRIES
photo photos julius shulman
central-entry model has a loggia leading through the house to the rear yard. above it, a glassed-in gallery connects the master bedroom with the rest of the house. a sunken living room (right) has a view of the front door and open gallery above. one step down from the living room is a conversation pit (plan, right, and cover). the in-line kitchen has an island sink that overlooks glass-walled family room. living area: 2,678 sq. ft., plus deck.
other photos of this and the model above are shown on p. 96.

side-entry model at greenbrook has a front fence to shield the living room windows and the entry court (plan, left). the kitchen—which has a walk-in pantry—opens into a large family room with two full walls of glass opening to rear patios. the two-story living room includes a conversation pit in one corner beneath the stair landing. the master bedroom (left) has its own rear balcony and a large closet-walled dressing room. total living area: 2,764 sq. ft.

letters start on p. 65
New from Ozite...lowest priced pattern carpet ever!

It's Ozite Outdoor-Indoor Pattern Carpet! Now get all the proven features of original Ozite Outdoor-Indoor Carpet made with Vectra fiber...and striking patterns, too! These aren't burned-in designs that catch and hold dirt. They're actual patterns...three in all...Brick, Wrought Iron and Mosaic...and each pattern comes in different colors. We call it Ozite Fiesta Carpet. Amazing Vectra fiber is colorfast...won't rot. Dense, firm surface resists soiling, is not affected by mildew. Low-cost installation. Seams beautifully. Face yarn will not ravel or sprout. There's no finer decorative carpet value for kitchens, baths, rec-rooms, patios, balconies, commercial installations...anyplace indoors or out!

Solid colors with rubber back! There isn't a more solid carpet value than Ozite Town-Aire Carpet! All the durability of Ozite Outdoor-Indoor Carpet, but with built-in high density foam rubber back for indoor use. Outstanding dimensional stability. Easy to install and maintain. See new Ozite Fiesta Carpet and Town-Aire Carpet at your Ozite dealer now.
You don't have to tell your prospects about Moenique.

But Moenique will tell them a lot about you.

It says you're up-to-date. Moenique is new—it's the first major improvement in years in shower-tub accessories.

It says you're interested in convenience for your homebuyers. Moenique puts everything in one easy-to-reach place.

It says you have safety in mind, too. Moenique unclutters the walls around the tub and thus eliminates many potential hazards.

At the same time, Moenique reduces your installation costs. One trade (not three) installs the accessory center.

Shouldn't you get the full story on this unique way to upgrade your homes? Get information fast on Moenique or on our full line of faucets. Call or write Moen, inventors of the single-handle faucet.

See Moenique at the Pacific Coast Builders Conference at Booth 101
How to make a good house great:

Mellowood Cabinets by Kitchen Kompact

Start with a Great Idea — Mellowood cabinets crafted by Kitchen Kompact. It's a stunning and exciting way to add sales appeal to your homes. Friendly, warm Mellowood is classically styled — doesn't date itself. And the rich, lush wood tones will complement any kitchen decor. The KK construction is just as good as its handsome appearance. An improved dual drawer suspension system affords even smoother drawer action. KK's exclusive rounded drawer design has proved itself exceptionally strong plus making cleaning far easier.

Here's another Great Idea . . . use Kitchen Kompact Mellowood cabinets in other room areas . . . game room, den, family room. Provides a finished, professional touch plus giving valuable, extra storage space. Check Kitchen Kompact's two distinguished cabinet lines — Mellowood and Fruitwood. You'll see why KK has been acclaimed "The Best Value in Cabinetry".

Want some Great Ideas for your homes? Write for the new booklet, "Great Ideas with Kitchen Kompact". Free for the asking.

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A GREAT IDEA!
BROAN-NEW! Two-speed, quality-built hoods for the budget-conscious—the Colony House line

Choose a Colony House Hood with rectangular duct, at 140 CFM (damper included) lists from $33.50...the round duct model at 160 CFM lists from $30.50...or the duct-free which lists from $37.50

All three come in Coppertone, Avocado, Stainless Steel and White, and are available in either 30" or 36" widths.

Broan quality features include two-speed control, a lifetime washable grease filter (and in the duct-free, an additional activated charcoal filter), 100 watt light. In short, more hood for your money.

Send for Colony House Hoods literature.
Introducing: The Kid-Cushioned Floors.
What do we mean by Kid-Cushioned?
Beautiful floors that can take a beating and not show it.
A new idea in vinyl floors that sells houses faster because it's a benefit buyers want.
Kid-Cushioned Floors aren't just plain, ordinary vinyl. But proved Congoleum-Nairn cushioned vinyl. Proved because its extra vinyl cushions its beauty against the beating floors take from kids, "lookers" and home-buyers... better than other floors. They have the cushion-in-the-middle. So when children jump-up-and-down, rassle & rough-house, the cushion "gives." Then bounces back to its original beauty.
"How about installation?"
Fast & easy. Kid-Cushioned Floors won't crack or split in cold weather.
They stay flexible. And many install on any grade. Thanks to our famous White Shield® backing.
"How about choice?"
Kid-Cushioned Floors come in the widest range of color-pattern combinations to ease your decorating problems. Yet Kid-Cushioned Floors never cost more and usually much less than their imitators.
BUILDERS BEWARE:
There's only one KID-CUSHIONED FLOOR. It was invented & perfected by us: Congoleum-Nairn. For complete details see your floor covering contractor.
5 dependable household servants from Miami-Carey...
and 5 good reasons to buy

These 5 essential products for the home all wear the same name plate. (Advantage: one source—one responsibility.) Each comes from an unusually large family of similar products. (Obvious advantage: good selection.) We’ve made them as easy to install as we know how. (Advantage: savings on installation.) They are tastefully styled. (Often overlooked advantage: little things sometimes sway big sales—like homes.) And their performance and quality have the Good Housekeeping seal. (A mutual advantage: making the kind of products that improve your business is the only way we know of to improve ours.) Why not try all of these products under one roof on your next job? You’ll have 5 advantages going for you.

For complete information ask for “The Builder’s Pack”—a complete set of full color catalogs on each of these lines. Address Dept. HH-568M, Miami-Carey Division, Philip Carey Corporation, Cincinnati, Ohio 45215.
WHEN YOU'RE THE FIRST TO SELL 4 MILLION DISPOSERS

We became first choice of 4 million buyers when the word got out: Waste King can take all the food waste any family can hand out—day in, day out for years—and do it quietly. Without jamming. Without annoying service problems. (Our warranty is one year parts and labor. And it's backed by over 900 factory-trained service agencies across the country.)

We hushed the irritating noises with our patented Hush Cushion suspension. And when people found it easier on the ears to take the daily grind, they bought Waste King.

We made our disposers another cut above the others by giving them a better cut below. With an exclusive surgical steel undercutter blade that really tears into its work. When people discovered that we cut up stringy stuff like corn husks and celery, they bought Waste King.

A disposer that's trouble-free, longer-lasting and quiet has the kind of selling points that help sell the kitchen that helps sell the house. We're telling 50 million readers of Look, Sunset and shelter magazines about it. Why not give your next project another edge on competition—Waste King's edge.
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GIVE THIS HANDSOME, LOOSE-LEAF BOOK TO YOUR NEW HOMEOWNERS — IT'S DESIGNED TO HELP THEM WITH DAY-TO-DAY MAINTENANCE PROBLEMS AND WITH ESSENTIAL RECORD KEEPING.

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MAY 1968

To Blg. Prod. Advertising Dept.
Subject: Home & Home Planners' Digest

Bob:

It might be a good idea to look into this method of distributing our product literature to home-planning families next year.

Here are some possible advantages:
1. The Digest can deliver our message daily throughout the year to custom-home planners identified by F. W. Dodge—over 50,000 a year!

2. Each literature request would come from a pre-qualified positive prospect.

3. We'd save money by sending literature only to bona-fide new custom-home planners.

Why not give Homeowner a call for more information today.

Jim
Keep the lid on building costs
—with the instrument of “101” uses

Which Berger is best for your needs?
(Not shown: Model 500 Optical Plummet Transit-Level. Same specifications as #20 but with optical plummet. $290.)

- Transit-Level
- Heavy Duty 12” Dumpy Level, Model 200A, 20-power internal focusing telescope. $79.00*
- Speed-A-Liner Dumpy Level, Model 190A, 20-power internal focusing telescope. $79.00*
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- Speed-A-Liner Transit-Level, Model 320, 20-power coated optics. With horizontal circle and 5 min. vernier. $290.00*
- Berger Convertible Transit-Level, Model 320

The more building jobs you can do with a single instrument, the easier it is to keep costs down. That’s why Berger’s Convertible Transit-Level (Model 320) is really custom made for these days when construction costs keep soaring and nibble away at your profits.

The Berger Convertible meets building challenges from measuring angles, extending lines and setting forms to aligning structural steel and establishing grades for streets. It does these and scores of other jobs fast and accurately—the insurance you need to protect against costly “do-overs.” And like every Berger instrument, it’s manufactured right here in our Boston factory. For its moderate price you get big instrument features like a 22-power telescope with coated lenses that focus 3 ft. to infinity, horizontal circle and vertical arc with double vernier reading directly to 5 min., plus all the other features and superb craftsmanship for which Berger has been known since 1871. See the Berger Convertible...get the feel of it, at your dealer.

MAIL COUPON FOR DETAILS
C. L. Berger & Sons, Inc., 53 Williams St., Boston, Mass. 02119

* All prices F.O.B. Boston, include carrying case and plumb bob. Tripod extra.

Letters continued on p. 74
Out of the carton and onto the wall...Long-Bell pre-finished cabinets save you time and money

No wonder this carpenter looks pleased!
He's winding up another quick installation of Long-Bell pre-finished, true-fitting kitchen cabinets. From rich exteriors to carefully crafted, factory-assembled "action convenience" interiors...Long-Bell design and quality construction lets him complete the job faster.

And his boss will be smiling, too.
For good reason. When the carpenter is done, there is no worry about temperature control and lost time for cabinet finishing. This kind of trouble-free speed means less building or remodeling costs—more units ready to show customers sooner. It all adds up to greater sales and profits.

"Action" conveniences intrigue, then sell.
Today's sophisticated homemaker insists on distinctive beauty—plus the latest in time and effort-saving efficiency.

Self-closing drawers, Lazy Susans, pop-up mixer shelves, sliding shelves in base cabinets and a pull-out vegetable rack are just a few of the favorite "action" sales-makers in the Long-Bell Luxuria line.

For added savings, use Long-Bell vanities.
Long-Bell's new line of pre-finished vanities will give bathrooms more sales power too. Available in three beautiful finishes, popular sizes.

Start quicker installation, greater sales action now!
Fill in and mail this coupon today.

INTERNATIONAL PAPER COMPANY
LONG-BELL DIVISION

MAY 1968

INTERNATIONAL PAPER
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Tell me more about Long-Bell Kitchens and Vanities.
☐ Please send literature and specifications.
☐ Please have a representative call.
I am a
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Attention of

Circle 73 on Reader Service card
Once a problem, now a crisis, air pollution is sickening and killing thousands of Americans and poisoning both city and suburb. Unless we act, things will get worse.

**DEATH IN OUR AIR**

**Builders gain competitive buyers a sensible solution**

**Mr. Dick Smith** of Falls Church, Virginia

Mr. Dick Smith, President of Richard Air Conditioning, Falls Church, Virginia reports how he has used the tremendous recent publicity on air pollution to really sell air cleaners.

"People are well aware of smog and air pollution problems. It's a fact that more and more people are experiencing respiratory problems. Without proper air filtration, the air inside the home is the same as the air outside. I figure if I can help my customer protect himself, I am doing him a great service.

"That's why on every air conditioning lead, I first send a brochure that talks Total Home Comfort with an air cleaner. Then I make a personal call. First I sell air conditioning, then I talk air pollution and the fact that for just four or five hundred dollars, he can have Total Home Comfort.

"I sell the Honeywell Electronic Air Cleaner at full markup and make good profits. I'll sell over 100 units this year."

**Mr. Art Roehner** of Fairborn, Ohio

"We're really happy with the Honeywell Electronic Air Cleaner," says Mike Zazoulinsky of Aurora, Ohio. "We have two developments under way right now—one in Rootstown, the other in Kent, Ohio. In the Kent development, we offer Total Home Comfort as standard equipment. That is, central heating and air conditioning, humidity control, and the Honeywell Electronic Air Cleaner."

**Mr. Mike Zazoulinsky** of Aurora, Ohio

Air Pollution Called U.S. Problem

WASHINGTON, D.C. (AP) — Delegates to the National Conference on Air pollution and Welfare has barely begun to exercise its authority under the Clean Air Act to publish "criteria" on air pollution, even though much of the data is scientific literature.

Almost 100 government and industry officials representatives of the public met Wednesday for the three-day conference which ended here Wednesday.

Delegates said the government also must appropriate dollars to state local governments to nationwide standards for air.

Pollution Growing Threat

Although they cannot yet prove it, doctors and public health specialists agree there is more concern about the foreigner in the air pollution than ever before.

Johnson administration officials, who also attended the conference, said the government was ready to help with those dollars.

The conference ended Wednesday morning with a silent air pollution demonstration. The Allegheny institute reported that at least one out of every ten Americans has some allergy problem.
edge by offering home to air pollution.

"We feel that when a man spends over $20,000 for a new home, he is entitled to the most comfortable home we can make for him. The Electronic Air Cleaner is definitely part of that comfort."

Mr. Zazoulinsky continues, "In our Rootstown Estates developments, we started offering this Honeywell Electronic Air Cleaner about eight months ago. And the last 4 out of 5 buyers had it installed immediately. They know its benefits, and the word spreads pretty fast.

"One family has a little girl with an allergy problem. They installed the Honeywell Electronic Air Cleaner, and it relieved her problems."

"I'm entirely sold on the Electronic Air Cleaner. It's obviously the coming item in home comfort."

MR. WILLIAM H. HIGHSMITH of Anderson, Indiana

"We install the Honeywell blank frame for the Electronic Air Cleaner in every home we build," says Mr. William H. Highsmith of Anderson, Indiana. "People who have had the Honeywell Electronic Air Cleaner before buy it readily again because they know of its advantages as far as dust, air pollution, allergies and cleanliness are concerned.

"About 30 or 35% of the new homeowners add the Honeywell Electronic Air Cleaner after they have lived in the house awhile. They not only realize that they will be living in a more comfortable home, but also that the resale value of their house will increase because of this feature."
We were the first company to get scientific about air pollution...

Air is polluted when there is something in it that nobody wants. Something that causes trouble. Like excess heat. Or too much moisture.

We fought it with science, becoming the only company to fully research and develop a properly balanced attic ventilation system. It's Vent-a-System, and it creates a uniform flow of air from soffit to ridge with no blowers, no motors, no moving parts. Already proven in thousands of fine homes, Vent-a-System is backed by our $1,500,000 warranty that says it must maintain attic temperature no more than 15°F above outside air.

The result is air cooler in summer and dryer in winter. Air conditioning costs are lower. Moisture damage is eliminated. Paint doesn't peel. Roof shingles last longer. And ceiling insulation is kept dry to prevent winter heat loss. Isn't science wonderful?

CLIP AND MAIL THIS COUPON TODAY FOR THE VENT-A-SYSTEM STORY!

Let's continue on p. 70

Land policy Down Under

HAIT: You may be interested to hear that a report on land taxation and land prices in Western Australia has been published by a select committee on which our agency, the Metropolitan Region Planning Authority, was represented. Material from HOUSE & HOME (Sept. '64) helped the policy makers to be sympathetic toward the control of land prices.

DR. DAVID CARR
Chief Planner
Metropolitan Region Planning Authority
Perth, Western Australia

Model Cities: human factors

HAIT: I was greatly impressed with "Business and the urban crisis" [Feb.]. It was a comprehensive, succint and straightforward analysis and challenge to private industry. I share your feeling that urban slums and poverty are among the most critical problems we face today. If we are to overcome them, all of us—government, business, educators, private citizens—must learn to work together, and work hard.

You may be interested in an explanatory comment in connection with the brief statement concerning the Model Cities program. The $11 million and $300 million figures were correct, but the explanation that the funds were built and sold only by trial and error.

Two: He seems to believe that Project Home was intended to provide a blueprint for building a successful house.

The American housing industry is working by trial and error. And it is not able to get its fair share of the consumer dollar. It wants to know why—and that was why Project Home was entrusted to our firm by 28 major firms involved in the industry.

Using tested and accepted techniques of market research (with which Mr. Young does not seem to be familiar), our organization produced a report on the basic human attitudes that influence Americans in the purchase or rental of homes. The results have not been seriously or convincingly challenged by Mr. Young or anyone else.

This report will not tell a builder how to construct a house. It was never intended to do so. But it does indicate things to avoid, qualities to emphasize, in building a communications platform that will appeal to a number of different housing markets. It does provide the fundamentals of motivation which automobile manufacturers, television distributors, makers of breakfast cereals, use every day, but which the housing industry has hitherto ignored—to its own detriment.

Mr. Young works for the Levitt organization, who are enormously successful builders. The pattern of their success was established long before Mr. Young joined them. His "expertise" gets a long ride on their coattails.

Project Home was an effort to bring housing out of the Neanderthal age. It is regrettable that Mr. Young sees fit to stand, stone axe in hand, at the entrance to the cave.

WILLIAM SNAITH
Raymond Loewy/William Snaith Inc.
New York City

For a report on Project Home, a buyer-motivation study by Raymond Loewy/William Snaith Inc., see HOUSE & HOME's November 1967 issue. Critic Young is senior vice president-marketing of Levitt & Sons.—Ed
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MAY 1968
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MAY 1968

Circle 78 on Reader Service card
were to be used for construction was erroneous. $100 million will be spent for urban renewal, but the remaining $200 million will probably be spent as much for social redevelopment as for physical improvements.

The Center for Community Planning is a new office responsible for coordinating and encouraging HEW's participation in the Model Cities program and other broad-scale urban improvement programs. Brick, mortar and pavement are necessary ingredients for any slum improvement plan. But without the human ingredients—education, health, jobs, and adequate income and confidence in oneself and in the future—these physical features are useless.

Each of the 75 Model cities will, of course, develop its own improvement plan according to its individual resources, problems and priorities. But discussions with city officials have thus far indicated a clear recognition that both human and physical redevelopment must occur simultaneously, and in close coordination.

I hope that your report stimulates the same interest and sense of urgency in the business community as it did within our office.

JAMES ALEXANDER, deputy director
Center for Community Planning
Washington, D.C.

How wise is good old Charlie?

HAAH. Your February editorial on "why Charlie's happy now," is a delightful bit of speciosity. Since he makes "22G per each and every," good old Charlie will probably buy a 50G house; and if he gets an 80% loan for 30 years at 7%, he will be paying $266.20 principal and interest per month instead of the $239.90 he would pay for a 6% loan. If he is in the 25% tax bracket, he saves one-fourth of the $26.30 difference, or he is paying $19.73 more per month.

Since Charlie can’t buy the daily pack of cigarettes, he will probably live long enough to fully amortize the loan. In 30 years he will pay an additional $7,102.

I know why Charlie's happy—Charlie's stupid.

ROLAND S. ROSS
San Francisco

Good old Charlie did buy a 50G house, but he made a $28,000 down payment because this was his fifth house, and his equity on each one got bigger and bigger—not only because of his mortgage payments but also because of the appreciated price of the house when he sold it. Charlie improved each of his houses and saved all his canceled checks to show the improvement cost—and prove to the IRS that there was no capital gain on the appreciation. On only one house did Charlie find himself in the red because he couldn’t sell immediately. So he rented it for a year and took the sum-of-the-years-digits depreciation on the income property, which gave him a nice rebate on his income tax. Charlie knows he probably will stay in his present house only five to six years, and while he’s there he can deduct the interest on his mortgage from his income tax. If he didn’t want to pay 7% for a mortgage at this time, he would wind up renting and would have no tax deduction. So Charlie is not so stupid. In fact, he’s fairly smart.—Ed

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EDITORIAL

More mystiques

‘There is no absurdity but that it may be firmly planted... by constantly repeating it with an air of great solemnity’

—Schopenhauer

On this page in March we outlined three mystiques—theories that seem to offer solutions to housing problems but actually make it more difficult to house all Americans adequately. Here are three more examples of the same kind of fuzzy thinking.

Mystique No. 4: the nonprofit syndrome. This has it that if one removes the profit motive from the development of low-income housing, it could be built at lower costs. Of course, no one has ever demonstrated that adequate housing can be built for low-income families with any more economy than adequate housing can be built for anybody.

But the real problem in nonprofit development is that such housing rarely stays low-income. In New York City, where there are now more than two million dwelling units, nonprofit groups have produced fewer than 25,000 units in the last hundred years for the ostensible purpose of housing low-income families. And today fewer than 400 of those units are occupied by families who could be called low-income under the broadest definition.

What happened? Almost all the nonprofit-produced units were sold to private owners who, wanting a reasonable return on their investment, raised the rents beyond the level of low-income families.

Why did the nonprofit groups sell out? Because, most experience shows, they had no financial incentive to keep, or keep up, the low-income units. Only permanent government agencies, set up to run low-income housing projects, have shown that they can do the job consistently for decades. A prime example: the local housing authorities that have managed public housing since 1937.

There is another problem, too. Most contractors who have taken on a job for a nonprofit sponsor are loathe to repeat the experience—and for a very good reason. Generally, the sponsor is so lacking in construction and financing expertise that keeping the job within the budget becomes a serious problem.

Mystique No. 5: the rehabilitation cure-all. Too many people who should know better see rehab as the answer to too many housing problems. To be sure, it does solve some housing problems. Where an area is clearly worth saving, for instance, rehab can do great things for a city. And the economies of massive rehab jobs can bring costs down to between 70% and 90% of the cost of new dwelling units. But there is no magic way to reduce those costs still further. In fact, 1967's highly touted "Instant Rehab" job in New York City cost around $25,000 a unit.

Where massive rehab would fall short is in hard-core slums. Reason: It would do nothing to change land-use patterns in these areas—would add no more recreation space, no more school space, no more commercial space or no more space for entertainment like movies and bowling. In effect, rehab would leave the slum gilded but still the same drab place with none of the amenities the rest of us expect in our everyday environment.

Then, too, massive rehab can do nothing about the problem of density. In New York's Harlem, for example, there are 50% more households than there are dwelling units. If all of Harlem could be rehabbed, people would still be cramped, three, four and five to a room. So the only workable solution is to provide more units in the same area with new construction.

Mystique No. 6: landbanks, the planners' utopia. Planners deplore urban sprawl, all the while ignoring the cheerful public acceptance since World War II of miles and miles of sprawl in every major U.S. city.

"But," say those who deplore, "you can't dismiss sprawl on those grounds. We must maintain green space to plan for the great urban centers of tomorrow, and we can do it by putting the land into landbanks."

That sounds fine, but such a proposal would involve federal use of the power of eminent domain in a sweeping and arbitrary program that could serve no immediate public purpose. If that power were used, the market value of land adjacent to the landbanks would skyrocket. And by the time the purchase could be made, Uncle Sam—meaning the taxpayers—would pick up an exorbitant tab, leaving a few landowners as rich as Croesus.

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The whole landbank argument disregards a basic fact: We are not a needy nation. If the public decides it needs a great cultural center in the middle of some mammoth junkyard, for instance, we have the money and technical know-how to do the job. Such an approach—developing what we need when we need it—would be a lot cheaper in the long run than lining the pockets of a chosen few by pursuing the landbank theory.

—RICHARD W. O'NEILL
For years, the hotly competitive Southern California market has been housing’s Mecca of merchandising ideas. Right now, this market’s emphasis on furnishing and decorating can show you...

How to use COLOR to make your models memorable

Many builders in many parts of the country will find the pictures at left and on the next ten pages astonishing, if not downright unbelievable. They show models decorated in blazing colors and furnished with a wild variety of furniture and accessories: they show a degree of decorating sophistication far beyond the experience of most of the housing industry; and in some cases, they show such an overpoweringly colorful atmosphere that a builder could justifiably fear his prospects would never get around to noticing the houses themselves under all that glitter.

But the hard fact is that this kind of decorating is selling houses. The Los Angeles market is the country’s biggest and most competitive, and it boasts the largest number of big, successful builders. These builders would not be paying hundreds of thousands of dollars to interior designers and landscape architects if there were a cheaper way to sell.

“In my opinion, this kind of model presentation is absolutely necessary,” says James Manley, vice president of the Donald L. Bren Co., which is building 1,200 homes in Valencia, in Ventura County. “But I’ll never be sure, because I wouldn’t dare try a project without it.”

The key idea behind this kind of decorating: Never let a visitor forget a model. Says John Martin, vice president and sales manager of the Mission Viejo Co., which is building 1,800 houses in Orange County: “We constantly have people come into the sales office to tell us they’re interested in the red house, or the green house, or the house with the crazy blue mirror.”

Says interior designer Pat Yeiser: “The decorating doesn’t have to be entirely believable—the idea is to excite people enough so they remember the house.”

And says interior designer C. Tony Pereira: “Some people will love what we do with a model, others will think it stinks. But none of them will forget it.”

This doesn’t mean, however, that taste isn’t important. On the contrary, the strong colors and color combinations that are going into these models demand an expert touch; otherwise the result could be an unlivable-looking mess.

“We’re trying to produce impact,” says Virginia Douglas of Douglas-Cottrell & Assoc., interior designers, “but we’re also looking for emotional acceptance. The visitor has to feel he’d be happy living there, and he has to instantly see the relationship of the living spaces.”

What about sex as a merchandising tool? Is it true, as has been increasingly suggested of late, that the best way to sell houses is to decorate and furnish models in a manner strongly suggestive of a sort of domestic bordello?

The answer, at least in Southern California, is emphatically no.

“If you mean sex in the sense of sex appeal—color, excitement and so forth—then we use it,” says John Cottrell of Douglas-Cottrell & Assoc. “But if you mean it in terms of suggesting physical sex—mirrors on the ceiling and that sort of thing—our builders don’t want it.”

Says Virginia Douglas: “We put a lot of emphasis on the master-bedroom suite, but we do it in terms of privacy—a mature relationship. I don’t think a builder with real taste would be caught dead using that Playboy-type stuff in his models.”

Says Jim Manley: “We don’t want to offend potential buyers, and that sort of thing would.”

And says Philip Riley, president of Mission Viejo Co.: “The heart of our merchandising is appealing to the whole family. The negligee-thrown-on-the-double-bed sort of thing would hurt us far more than it would help.”

Expert decorating costs a lot of money. It’s not unusual for a $25,000 model to have $10,000 worth of decorating inside and $10,000 worth of landscaping outside; so a seven-house model area could cost the builder $140,000—in front money.

“We charge $7.75 a sq. ft. to decorate a model,” says John Cottrell. “About $6 of that goes for furnishings, and the rest is our fee. But the builder will get most of that back, because somebody is almost sure to buy the whole furnishings package for his house.”

And says landscape architect Courland Paul of Courland Paul/Arthur Beggs: “Typically, a builder can expect to get back about half of his landscaping and exterior furnishing expenses when the models themselves are sold.”

High or not, the expense is worthwhile to Southern California builders. “During the worst of last year’s housing slump, our decorating business doubled,” says Virginia Douglas.

But can this colorful brand of model merchandising be effective in other more sedate parts of the country? This remains to be seen, but there are signs that it can. There has been a noticeable increase in the out-of-state-builder traffic through the Los Angeles market; some interior designers there are talking with out-of-state builders; and some very California-like merchandising ideas are beginning to pop up in other areas (see p. 98).

Perhaps the best indication was given by a former Tennessee housewife who had just bought a new home in Mission Viejo. She told Vice President John Martin: “If Memphis builders did half the job on their models that you do, they’d be selling homes like hot cakes.”

For a tour of some of Southern California’s most colorful models, start on the next page
A single dominant color can unify—and identify—specific models

**Builder:** Mission Viejo Co.
**Location:** Eldorado subdivision, Mission Viejo
**Interior Designer:** Douglas-Cotrell & Assoc.
**Landscape Architect:** Courtland Paul

Carpentry is the basic decorating element in these houses. The same carpet color is used throughout each to give a sense of continuity, and furnishings and accessories are keyed to this basic color. Result: Visitors remember these models as "the red house," "the green house" and "the yellow house." Models are priced from $18,000 to $22,000. The project will ultimately have 1,000 houses; about 450 have been sold in the past year.

The red theme of this model could have been overwhelming, had it not been used with restraint. So walls and much of the furnishings were kept much lighter than the deep red carpet. Note how mirrored doors (lower right) open up a bedroom.
This green model features simple, gaily painted furniture. "In this price range," says interior designer Virginia Douglas, "we try to give buyers inexpensive ideas on how they could do their own decorating."

Busy decorating patterns are used in this yellow model. The old clock shown in the top photo is a feature that most visitors remember.
Bright colors in these kitchen-family room areas draw attention to the big expanses of glass opening to the rear outdoor areas.

Green of the outdoors is echoed inside this model, and yellow decorating accents are used both inside and out.

Color can play up the relation between outdoors and in...

These pictures show two ways color can accentuate outdoor areas: by framing glass areas with strong contrasting colors, as at left, or blending with natural colors, as below.

Nearly 500 of these models, priced from $22,495 to $30,995, have been sold in Valencia, a 1,200-acre development north of Los Angeles.

BUILDERS: Donald L. Bren Co.
LOCATION: Valencia
INTERIOR DESIGNER: Douglas-Cottrell & Assoc.
LANDSCAPE ARCHITECT: Courland Paul
Comfort and excitement are combined in this living room, with its deep, overstuffed furniture and contemporary tables and accessories.

... and accentuate the luxury of high-priced townhouses

Muted colors and dignified decor used to be the hallmark of the luxury house. But these pictures show that brightness and imagination are just as much at home in the higher brackets as in the low—even though the appeal is obviously to the more urbane buyer who can afford to pay from $32,000 to $37,000 for a townhouse and to whom status is usually a high-priority requirement.

BUILDER: American Housing Guild
LOCATION: Whittier
INTERIOR DESIGNER: Hamilton-Howe

A bright sculptured rug emphasizes the height of this two-story living room.

A formal dinner setting gains a feeling of liveliness from colorful tableware, wall accessories and chair patterns.
COLORFUL CALIFORNIA MODELS continued

Photos: Julius Shulman

Color can be used in small touches or big splashes . . .

Only touches are used in the high living rooms at left; big areas of color would have been overpowering. But the kitchens of the same models (below), having more conventional proportions, benefit from big splashes of bright color.

In the past 12 months, 1,200 houses have been sold in the project where these models are shown (see p. 56 and cover). Price: $26,950 to $35,990.

BUILDER: Larwin Co.
LOCATION: Cypress
INTERIOR DESIGNER: C. Tony Pereira

Modest areas of red carpet are used in the model's living room. However . . .

In this model's living room, yellow is confined to accent areas. But . . .

... in the kitchen, the same red is splashed around much more generously.

... in the island kitchen, even the ceiling is covered with yellow.
Dashes of strong color in this kitchen-family room complement the blue of the pool and the color of the landscaping outside. But in the photo below . . .

... and it can be underplayed to emphasize outdoor areas

The outdoor areas in Colony Park (H&H, Sept. '67) are just as important as the indoor rooms, and almost every room has glass walls opening to its own patio. So the interior decorating is deliberately subdued, creating a visual balance with the patios.

Colony Park's 300 walled houses, priced from $30,000 to $39,950, have all been sold.

BUILDER: Harlan Lee
LOCATION: Westlake Village
INTERIOR DESIGNER: Erickson Assoc.
LANDSCAPE ARCHITECT: Sid Galper Assoc.

In this small dining area, a simple decorating scheme against light walls makes the patio seem part of the room.
**Color can add excitement to a model decorating theme...**

“Identity is vital,” says Darrell Howe, who decorated the rooms shown here and on the next page and also made some of the key pieces of furniture. “So I try to give every project a distinct style, and every model its own idea or character.”

The price range in this project—Tustin Meadows—is from $22,495 to $30,495. The project opened in February. About 265 houses have been sold.

**BUILDER:** Robert H. Grant & Co.

**LOCATION:** Tustin

**INTERIOR DESIGNER:** Hamilton-Howe

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Tyrolean theme is reflected in a hutch with beer mugs on its shelves, and a table with crossed legs.

Spanish theme is evident in the living room and family room of this model. A mirror over the living-room fireplace adds to the sense of spaciousness.
...and it can add the feeling of luxury to a small house

Grantpark exemplifies interior designer Howe's dictum that each project needs a special style. It is built by the same builder as Tustin Meadows (left), and falls in the same general price range ($24,495 to $27,995), yet its character is completely different—sumptuousness rather than individual themes.

Grantpark is a 250-house project that opened about five months ago; 100 units have been sold.

**Builder:** Robert H. Grant & Co.
**Location:** Cerritos
**Interior Designer:** Hamilton-Howe

---

*Living room of the bottom-priced model has low furniture and a low-hanging chandelier to emphasize the height of the ceiling.*

*Family room of the project's top-of-the line model shows interesting contrast between severe furniture lines and paisley ceiling pattern.*

*Family room, in the same house as the photo above, gets an intimate feeling from a papered ceiling and wood wine racks.*

*Continued*
Outdoor areas need to be colorful, too and so do model apartments

The growing trend to walled lots puts a bigger burden than ever on the landscape architect. Patios are becoming outdoor rooms that must be handled as excitingly as—and in harmony with—indoor areas. The pictures below and immediately at right show colorful examples of how this can be done.

The renter is as susceptible to excitement as the buyer, and the photos at far right show that apartments can be decorated as colorfully as houses.

Harmony between indoor and outdoor decorating is shown in this Deane Garden Home model at Huntington Beach. Price range in the project is $25,000 to $31,000, and 100 out of 133 houses have been sold. Interior decorating was by Pat Yeiser, and the landscape architect was Courtland Paul.

King-sized chess set by Courtland Paul makes visitors remember this walled model by Donald L. Bren Co. at Valencia.
Two treatments of outdoor areas are shown in Colony Park models in Westlake Village. At top: an intimate dining patio, at bottom a large pool terrace. Sid Galper Assoc. was landscape architect.

Hamilton-Howe decorated these three rooms in The Highlands, a high-rent (to $600) apartment project in Hollywood Hills. The alcove in the top photo was created by leaving the doors off a bedroom closet.
... And in New York: another way to make models memorable

Builder: Robert Martin Assoc.
Interior Designer: Elaine Sollar for B. Altman & Co.
Location: Tarrytown, N.Y.

Before launching their high-priced ($55,000 to $70,000) Tarryhill project in suburban Westchester County, partners Martin Berger and Robert Weinberg visited some of California's most colorful models. One result: Their models, too, are colorful. But they also gave each house a distinctive character by furnishing and decorating one of its four bedrooms as a "special purpose" room suggesting a particular interest, hobby or activity.

Photos: Bill Rothschild

"HER HIDEAWAY" is fitted out as sewing and dressmaking center, has desk for letter writing and household bookkeeping, and appeals to housewives as a quiet area for lounging or watching television.

"CULTURAL CENTER"—directed to the family with an interest in arts and crafts—includes paintings, sculpture and musical instruments.

"LEARNING CENTER"—devoted to the needs of students—has compartmentalized study areas as well as the latest audio-visual teaching aids.
'HIS LAIR' is furnished as the male refuge that so many professional men and executives demand at home. Equipment suggests that the room can be used as an office, study or physical-fitness gymnasium. Black walls and deep red carpeting carry out the strong masculine theme.

'FUN-AND-GAMES ROOM'—suggesting use as a children's playroom—is furnished with indoor recreation items, decorated with inexpensive posters.

'TRAVEL CENTER' includes mementos from vacation trips—foreign and domestic—wall maps and a screen for showing movies and slides.
HOUSTON TOWNHOUSES were Hallcraft Homes' first tryout of its new Data Core service. Builders are J.S. (Mickey) Norman and Wesley Development Co.

DENVER TOWNHOUSES are some of more than 3,000 built by Hallcraft in the Southwest.
For sale: a big builder's
townhouse formula

The big builder—Hallcraft Homes of
Phoenix and Denver—has impressive cre-
dentials. Hallcraft has built more than
3,000 condominium townhouses in Ari-
izona, Colorado and California since 1963,
and has a record of fast sellouts. Its first
project in Denver—207 units in 1964—
sold out in ten weeks despite a soft local
housing market and other builders’ fail-
ures. All told, Hallcraft has built 14,000
housing units in the past 16 years.

Now Hallcraft has set up a packaged-
manangement service—called Data Core—
to sell its townhouse know-how to any
builder it thinks is smart enough and suffi-
ciently capitalized to handle its kind of
project.

Data Core (Development Analysis
Townhouse Assn.) gears up the project,
guides it to grand-opening day and helps
with post-management details. The builder
pays Data Core nothing until he starts
selling townhouses; the fee is 4% per unit
sold, less if the units are rented.

"There's no magic in our formula," says
Data Core President Thomas Carlile.
"We're selling the ability to set up a
leisure-oriented townhouse project faster
and cheaper than anybody else, and with-
out as many mistakes."

Data Core's biggest appeal to would-be
townhouse builders may be starting power.
Says Houston developer James MacNaught-
ton: "They [Data Core] were the catalyst
that got our project started. It takes a lot
of money and a lot of hard work to get
one of these jobs off the ground. Data
Core, which saved us at least $50,000,
made it almost easy."

MacNaughton, who had encouraged
Hallcraft to set up Data Core, was its first
client. Other Hallcraft-formula projects
are now under way in Atlanta, Colorado
Springs and Arlington, Tex.

Hallcraft says Data Core is a "how it
was done" program.

Clients get Hallcraft's stock floor plans,
stock job-scheduling system, stock legal
documentation for winning condominium
approvals and a large file full of Hallcraft's
trade secrets for managing and merchan-
dising the project.

They get the benefit of Hallcraft's
volume-purchasing power and its staff of
specialists, including engineers, land plan-
ners and touring sales experts who visit
projects in the guise of shoppers to test
clients' salesmen.

They are told how to finance the project
and are closely guided in 1) choosing the
site, 2) getting approvals, 3) hiring sub-
contractors, 4) selecting and training a
marketing director and all sales personnel,
5) hiring advertising and public relations
agencies and 6) selecting and indoctrinat-
ing a management firm.

A client doesn't necessarily exhaust
Data Core's fund of knowledge after the
first project. He may continue using the

PHOENIX TOWNHOUSES reflect local flavor out-
side but have stock Hallcraft plans inside.
Formula design: stock plans and interiors behind localized facades

"Outwardly, our jobs are all completely different," says Data Core Vice President Joe Agee, "but behind the facades are the same proven floor plans we've sold so successfully in Phoenix and Denver." The exteriors are varied to suit a project's regional flavor and to blend with terrain. Data Core makes at least two elevations for each plan and designs a wide range of color schemes.

Agee's confidence in repeating Hallcraft's stock plans is well justified. Data Core's two best-selling models in Houston were also Hallcraft's two best-sellers in Phoenix and Denver—and the quality of decorating seems to make no difference. "Unfortunately," says Tom Carlile, "you can build just so many in one project without getting monotonous."

The best-sellers are also the highest-priced models in the line. "That's always the pattern," says Carlile. "Buyers take the top of the line first and work down in price as each model gets sold out." Typical price range: $20,000 to $25,000.

Other buyer patterns repeated in every Data Core project are:
1. Average number of children per family is 1.0. In the Houston project it was 0.9.
2. Average age of the buyer is 40. In Houston it was 39.
3. Average family income is high—close to $12,000. The Houston average for the first 40 buyers: $15,000.

Most buyers come from houses rather than apartments, so Data Core pays special attention to sound-deadening. Its party walls (above) have a sound transmission rating comparable to solid masonry. And to guarantee their effectiveness, Data Core permits no party-wall penetrations for plumbing or wiring. Its parking ratio is four-to-one: three spaces per unit plus an extra one in a perimeter area.

Data Core tries to discourage builders from tampering with the floor plans as well as other elements of its package. Says Agee: "In 3,000 jobs we've refined the package to the point where it's just about impossible to improve. Whenever a builder tries, he inevitably ruins something."
Formula merchandising: 
an all-out emphasis on 
a carefree way to live

"Country-club living, which is what we sell, has the same appeal to people everywhere," says Carlile. So all Data Core projects focus on a swimming pool, clubhouse and playground designed to sell as well as serve the buyer. All maintenance—including owners' roofs and exteriors as well as common areas—is taken care of for about $22 a month. The theme: "The tax advantages and privacy of home ownership combined with the non-maintenance convenience of an apartment and the fun of a country club."

Standard clubhouse specifications call for a lounge with wood-burning fireplace, a large room for parties, a teenagers' room, kitchen, billiard room, card room, exercise room and sauna bath. And the clubhouse must be two stories so that prospects have a vantage point for viewing the project.

Data Core plans the prospect's tour route carefully. He enters the project through the clubhouse and makes a tour of its rooms and the pool before visiting the model row. Planned talking spots, like a clubhouse balcony overlooking the pool or an adjacent school, are designated for salesmen. Says Agee: "Let the people see your amenities."

Specifications are also exacting for special-effect lighting. Outdoor fixtures are part of the project's initial design and involve a considerable investment. "You can't just bolt on night merchandising," says Agee.

Construction sequence is planned so that on opening day, in addition to the recreation complex and adjacent row of models, a row of townhouses can be seen under construction at a far corner of the project. Object: to impress the prospect with the project's openness.

Data Core's merchandising is more than skin deep. Says Carlile: "We believe in a lot of glamour, but at the same time we're sensitive to post-management problems." He specifies top-of-the-line recreation equipment—professional pool tables and exercise equipment—that Hallcraft has standardized through trial and error. A sprinkler system with expensive directional sprayheads is planned into the landscaping not only to simplify post-management but also to avoid future homeowner complaints about wet sidewalks or doorways.

Says Agee: "Our projects give homeowners a perfect place—the clubhouse—to get together and sound off about management. So we're extra careful not to give them anything to sound off about."
**Formula management: how Data Core keeps jobs under control**

Clients get Hallcraft's standard job-control diagram (right) plus detailed information showing how to handle every step of the project from initial planning to grand opening day.

"It's our own version of the PERT and CPM scheduling methods," says Agee. "We call it SPERT."

SPERT is not only an aid to the builder. It is a communications tool that lets Data Core's Denver headquarters keep tabs on the progress of several different builders and projects. If a builder runs into scheduling trouble, for instance, the consultants can study his job status on a duplicate work chart in the home office and advise him by telephone.

Every work phase on the job-control chart is keyed to indexed instruction manuals and to a host of visual aids. And all the information is cross-referenced to the chart: Example:

When a builder looks up "Paving Plans Offsite" in the manual index, he is referred to written material on the subject, to a folder of typical townhouse paving plans and to "Day No. 30" on the CPM chart—the deadline for starting paving plans in order to put them out for approval and bids on "Day No. 40."

The instruction manuals are subdivided into sections on preplanning (site selection and land acquisition), financing, engineering, construction, marketing and general information. Exhibits include blueprints, printed forms, photographs, movie film, tape recordings, records, brochures and pamphlets.

Data Core refers to this information as the "nerve center" of its townhouse formula and packages it in a locked file. Some of it, like a full set of exhibits for documenting the legality of condominium ownership, involves years of research and fees that would take a great deal of time and money to duplicate.

The file is supplemented by visits from field men. And, where project size warrants it, a Data Core-trained job manager becomes a permanent member of the builder's staff. For example, the Houston project—involving several 200-unit phases and a six-year construction schedule—is managed by a former Hallcraft executive who had spent five years in the company's Denver office. The manager of an Atlanta project, being built by Spratlin Assoc., is a former executive with Ross Cortese, the big retirement-housing builder; he was given a basic-training course at Hallcraft's Phoenix projects.
By building houses like this on owners' sites, Art Rutenberg has rolled up a volume of...

$18 million a year in odd-lot housing

Rutenberg Homes is based in a small Florida city (Clearwater, pop. 46,000), develops no land, owns no subdivisions and operates in only one state. Yet its annual volume in single-family houses is topped by only a handful of housing's giants.

Rutenberg's gross sales for fiscal 1968 (which ended April 30) were $18 million—a whopping 67% over the previous year. And President Arthur Rutenberg expects further growth. He is confident that he can put a branch into any Florida city that builds at least 300 to 400 houses a year.

"We can capture as much as 20% of any market's new-house sales within a few years," he says, "and 60 to 80 houses are enough to make a very profitable operation." There is justification for this optimism; market penetration of the company's 11 branches * now ranges from 5% to 15%.

Of course, some special characteristics of the Florida market work in Art Rutenberg's favor. For example, 60% of his buyers are retired or semi-retired families from out of state, and most of them buy for cash. The few who do want mortgages usually require only low-ratio loans that are snapped up eagerly by local lenders. And Florida cities abound with land developers, so Rutenberg's buyers have a wide choice of developed building sites.

But balancing these market advantages is a serious management problem that faces every odd-lot builder: Should he 1) decentralize and risk losing control of his costs and production or 2) maintain tight central control and thus create expensive layers of top management far removed from the point of decision?

Rutenberg has set up a management system which gives him the pluses but not the minuses of both approaches. He believes that move—along with two new employee-compensation plans and a wide choice of house plans—is largely responsible for his company's growth. For the details, turn the page.

* In Clearwater, Largo, Northeast St. Petersburg, South St. Petersburg, Sarasota, Ft. Myers, Cape Coral, Naples, Boca Raton, West Palm Beach, and Palm Beach Gardens. A twelfth branch, in Ft. Lauderdale, will open this spring.
These organization charts show the steps that led to Rutenberg's present setup

**STEP 1:** Division managers were given only nominal control, could be bypassed (broken lines) by home-office executives.

**STEP 2:** Division managers were eliminated, and control was centralized under company president and two area managers.

**STEP 3:** Division managers were reinstated—but this time with much more control over their operations.

'We give our division managers so much freedom they are almost partners'

Like partners, Art Rutenberg's division managers run their branches with little interference from the home office. But unlike most partners, they invest no money in the company, although they do share in its net profits (see p. 112).

The division managers' independent role didn't evolve overnight. In fact, Rutenberg realigned his personnel twice before he hit on what he considers a successful formula for managing his multi-city operation.

Initially, each manager had nominal control of his branch (Step 1, above). For instance, he negotiated subcontracts and bought most of his materials.

This arrangement was substantially unchanged for 11 years. But eventually two weaknesses cropped up: 1) the division managers' authority was weakened because their sales managers and field supers could bypass them and take problems directly to home-office sales and construction executives; 2) a heavy layer of high-salaried headquarters personnel boosted company overhead at the expense of net profit.

Disturbed by those problems, Rutenberg made an almost 180° turn in 1964 to strong central control (Step 2, above). He eliminated the home-office executive layer leaving himself as the sole policy maker. Division managers were also eliminated, and the sales and production managers of each division reported to one of two area managers, who in turn reported directly to the president.

To be sure, this arrangement slashed overhead. But it also limited the company's growth by putting decision making at the division level in the hands of only two men—the area managers—who soon found they could not devote adequate time and effort to Rutenberg's different markets. Vice President Dean Van Horn, who was one of the two area managers, recalls:

"The division I ran personally did fine, but the ones farther away suffered. Invariably, when a problem popped up at one division, it was at a time I was needed somewhere else."

To some extent, strong central control also made the division sales and production managers less effective. It invited friction between them, Rutenberg says, and led them to rely on the area managers for decisions.

So in 1966 Rutenberg began the organ-
izational changes that led to his present setup (Step 3, above). He immediately re-instated his division managers—but this time with far more authority and responsibility than they had under the 1953-64 arrangement. And two months ago he added two regional managers, who, he is quick to point out, will not reduce the division managers' authority. Instead, the two newly appointed executives will take on top-management responsibilities and thus free Rutenberg and Executive Vice President Kenneth J. Schwartz to recruit personnel and plan for expansion into new markets.

The company's division managers now have almost complete autonomy. For instance:

1. They set their own goals by budgeting their annual profit and loss. Each budget sets sales quotas and projects gross profit, expenses and net profit. Once approved by the home office, it becomes the standard for evaluating the division's monthly P & L statements (box, bottom right).

Each manager must convince the home office that he has the production capacity to meet his sales goals. The budget sets his monthly quota for starts. Within that month, he can't exceed the quota unless he can show he has lined up enough extra field supervisors and subcontractors to cope with the extra volume.

"We don't let a man outsell his ability to produce and then try to juggle his crews to keep buyers satisfied," says Rutenberg. "We'd much rather delay the start of a house for a month than get our buyers mad about non-delivery."

2. They hire everyone on their staffs—including office, sales and production people—and decide on pay raises, promotions and, if necessary, firing. The only exceptions: division sales managers, whose hiring (or firing) must have home-office approval.

3. They buy all materials and equipment except major appliances, on which bulk purchasing by the home office has turned out to be less costly and more efficient.

The home office keeps a computerized record, which shows variations in sub's prices—and thus serves as a valuable bargaining tool in negotiations.

But the division managers are not laws unto themselves. For example, a central design department draws up house plans and specifications. Then each division manager and the home office together decide which models will be built in his display area. The home office also produces advertising and brochures, although the division manager decides which ads and which media to use.

Most important, however, in preventing the chaos that could plague such a decentralized organization is a company operating manual. This loose-leaf book has 127 sections spelling out policy and procedural guidelines for every phase of the company's activities.

Subjests range from "telephone usage" to "management personnel changes," from "roof pitch factors" to "cash flow."

Guidelines leave no room for doubt. Some random samples:

On answering phones: "Do not ask who is calling? or say, 'May I tell him who is calling?'"

On intra-company hiring: "In no case is anyone to hold a conversation with a prospective transferee without the full knowledge and consent of his superior."

On advertising: "Newspaper advertising is to be placed on pages 3, 5, 7 or the back page."

On delivery dates: "The customer must not be told, 'We'll try to finish sooner.'"

On customer relations: "Each time a progress payment is requested from an owner (buyer), or received from a bank, a Polaroid picture of the owner's home in its current state should be sent to the owner with a note as to how the job is progressing. The picture should be dated on the back."

On subcontractors: "Each branch [division] is to have a set of subcontractors which are wholly different from those of an adjacent branch."

On market surveys: "Each January and July a market survey will be made by each branch on Form R34."

Neither division managers nor any other employee may deviate from the manual without the approval of Rutenberg himself or Executive Vice President Schwartz. If a change—requested by a division manager, for instance—is approved, it is written into the manual and becomes company policy. But within the manual's guidelines, all decisions are left to the branch managers' own judgment.

"The manual is not a curb on a manager's initiative," says Rutenberg. "It simply relieves him of decision making in many repetitive situations."

Who are Rutenberg's potential division managers? He says some of them are his sales managers and superiors. Others are high-level executives with other large home-builders or independent builders "who are grinding out $18,000 to $20,000 a year" and are stymied by limited capital, mortgage scarcities and discounts and land-buying and development problems.

Says Ken Schwartz: "Our best bets are candidates with a sales-type personality—men who are good at customer relations and also know how to manage a homebuilding business."

To such men, Rutenberg offers not only a high degree of autonomy but also a crack at spectacular earnings. To see how spectacular, turn the page.

<table>
<thead>
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<th>Budget for fiscal year</th>
<th>Actual 9-month performance</th>
<th>Prorated from full-year budget</th>
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<td>AMOUNT</td>
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How one division budgeted—and how it actually performed

The figures above show (left to right) the division manager's projections for the 1967-68 year, his performance for the first nine months and a nine-month prorating of his annual projections. By checking his "performance" percentages against the "prorated" percentages, he knew whether his division was exceeding or falling short of his estimates.
"We stimulate extra effort with profit sharing and incentive pay."

"The next step in your career could do wonders for your income," said the headline of a recent Rutenberg ad seeking candidates for division-manager jobs.

The copywriter wasn’t kidding. Largely because of profit sharing, introduced in late 1966, Rutenberg's division managers have done wonders for their incomes.

In fiscal 1968 (ending April 30) one manager earned $97,190. And, except for two new appointees who took over divisions toward the end of the year, all managers averaged $50,000 each.

By contrast, the average was $27,000 in fiscal ’67, when profit sharing was in effect for only the last seven months and when the managers were all relatively new to their positions.

Salesmen, too, have made impressive gains under an incentive-pay plan, also started in late 1966. Their average went from $9,500 in fiscal ’66—before the plan was adopted—to $15,400 in ’68. And the top performer earned $40,000 plus a $5,000 bonus as the first salesman to reach $1 million in annual sales.

Profit sharing for division managers (“the best business decision I’ve ever made," says Art Rutenberg) is based on net profit rather than gross sales. So it encourages well-rounded management by putting a premium not only on a man's ability to generate volume but also on his skill at controlling costs. For instance: He must buy shrewdly, schedule efficiently and insist on quality to avoid expensive callbacks.

The example above shows how Rutenberg's profit sharing works. The manager drew a salary equal to 1.2% of his division's projected gross sales—in this case, $18,000 on a gross of $1,500,000. Net profit came to 7%—or $105,000. The company skimmed off the top 3%—or $45,000—and then split the $60,000 balance with the manager. So the manager wound up with $30,000 in profit sharing plus his $18,000 salary—or $48,000.

Under Rutenberg's incentive-pay system, also shown above, salesmen can reap large rewards with a little extra effort. As a salesman's volume reaches a series of plateaus, his commission percentage is increased. And these increases are retroactive: They apply not only at that plateau and above but also to his previous sales for the year.

For example: Up to a volume of $249,999, the salesman's commission is 2%—so at that total he earns $5,000. But as soon as he clinches the sale that puts him at $250,000, his commission on future and past sales goes to 3%—and his earnings to $7,500 (the $2,500 in retroactive commissions is paid immediately).
'We offer floor-plan options with each model plus a wide price range'

Rutenberg's prospects are essentially custom buyers with strong preferences in house plans, and incomes ranging from modest to high.

To appeal to families with such different incomes, he offers nine models priced from $15,850 to $53,300 in the lowest-cost building area and from $17,515 to $58,900 in the highest.

And to give these families many of the advantages of a custom house without impairing his production efficiency, he offers most of his models with a choice of alternate plans (examples, above).

Says Spencer Hart, who heads the company's four-man design department:

"We're trying to provide the exact house that these demanding buyers want, but we do not want our salesmen playing architect and dreaming up houses that have to be priced out separately and fitted into our production schedules."

The company builds only to its basic plans and standard alternates, which have set prices for each area so that salesmen can instantly quote costs to prospects. Within that framework, minor changes in fenestration, materials and room size are welcomed. Each division has a draftsman, who draws up these changes. The division manager then prices them out.
Plastic plumbing makes new strides in housing

Plastic pipe's bitterest enemies are 1) cast-iron soil pipe manufacturers, 2) copper-pipe manufacturers and 3) union plumbers who are convinced that plastic pipe will put them out of work. All three fight plastic pipe's attempts to get code acceptance with every weapon they can devise. And even after code approvals are won, they fight to overturn them.

But even while metal-pipe manufacturers are denouncing plastic pipe, they are quietly beginning to produce and sell it themselves.

More than a dozen of the largest cast-iron and copper-pipe producers are now in the plastic drain-waste-and-vent piping business. The list includes U.S. Pipe & Foundry, James B. Clow & Sons, Glamorgan Pipe & Foundry, American Brass & Iron Foundry, Charlotte Pipe & Foundry, Triangle Conduit & Cable, Nibco Inc. and Mueller Brass Co.

Some of these companies have joined the Plastics Pipe Institute. And at least one has become a member of the ABS Council, the plastic-industry task force that fights for code approvals.

Old-line metal-pipe producers are joining the young plastics industry because—despite all their delaying tactics—plastic pipe is making steady headway in home-building: Examples:
markets—and even its enemies are helping

1. At least 17% of U.S. housing built last year has plastic pipe for drain-waste-and-vent (DWV) plumbing.

2. More than half of new single-family houses built in California last year have plastic DWV piping.

3. Plastic DWV piping has been approved by 13 state codes, by local codes within 32 states and by all regional and national codes, including the Building Officials Conference of America, Southern Building Code Congress, International Association of Plumbing and Mechanical Officials and FHA.

4. Plastic pressure piping for hot-and-cold water supply is now permitted in FHA-financed rehabilitation projects. It is being used extensively for low-cost rehab in Cleveland.

Outside the housing industry, plastic pipe enjoys big markets in natural-gas distribution, rural potable-water systems, crop irrigation and chemical processing. Almost 100% of all mobile homes and travel trailers have plastic pipe.

But metal-pipe competitors still say plastic pipe can't do the job. They have produced illustrated reports showing that household drain cleaners and other chemicals will destroy it. They say termites and rodents will eat it and fungi will attack it. They claim it produces lethal smoke when it burns. And they question how long plastic pipe will stand up under natural aging.

The plastics people have lots of practice answering these and other accusations.

For starters, they quote FHA Commissioner Philip Brownstein: "We surveyed [in 1966] all of our field offices to learn if there had been any complaints from owners of homes with ABS drain-waste-and-vent piping since 1961 when Materials Bulletin No. 33 was issued [permitting plastic DWV in FHA-insured houses]. The results show that not a single complaint had been received." And, the industry estimates, plastic DWV is used in more than a half-million single-family homes to date...
(and in over a million mobile homes).

Plastics people discount evidence that their product is subject to chemical attack. Their own laboratory reports show that plastic drainpipe resists all chemicals normally found in the home. Some of the most disastrous tests that metal-pipe interests have conducted on plastic drains have included paint removers and various acids in undiluted form.

Claims that plastic pipe won’t stand up are discounted also by case-history evidence. Plastic pipe has been used in Chicago’s municipal sewage-disposal plant since 1947, when it was substituted for severely corroded metal pipe. It has been used to carry acid wastes in chemical plants for decades. And the Farmers Home Administration has kept records since 1953 on plastic pipe’s performance in 10,000 miles of water-distribution systems.

Claims that plastic pipe is a fire hazard are contradicted by laboratory studies and in-use experience. The studies show that ABS (acrylonitrile-butadiene-styrene) plastic does not contribute to the start of a fire nor to the spread of flame and that the amount of poisonous smoke (hydrogen cyanide) it could produce in a burning house would be insignificant. PVC (polyvinyl chloride) plastic pipe has an even cleaner record—it is self-extinguishing in fire. There are other plastic pipes, but only these two are important to homebuilders.

**ABS and PVC producers are sewing up the plastic-pipe market in housing**

ABS, invented by Uniroyal Inc. in 1944, got a five-year head start on PVC. By the time ABS had been okayed for FHA houses in 1961, it had already made strong inroads in the mobile-home industry by winning California code approvals. PVC, invented in Germany 40 years ago, was not recognized by FHA until 1966 and had not enjoyed a high-volume market like mobile homes. As a result, almost twice as much ABS is used for DWV piping—15 million pounds in 1967, compared with nine million pounds of PVC.

But PVC has an advantage over ABS: It is better suited to pressure piping. Last year some 50 million pounds of PVC—compared with only three million pounds of ABS—were used for water-supply systems.

One producer, B. F. Goodrich Chemical Co., calls PVC the carbon steel of the plastic-pipe industry. Goodrich and some others produce a version known as CPVC (chlorinated polyvinyl chloride) that meets national standards for piping 180°F water at pressures of up to 100 psi and can withstand 200°F water for limited periods. ABS pipe, on the other hand, is limited to 160°F water at lower pressures considered adequate for DWV use.

Other companies hope to improve on PVC. Carlon Products Corp. is test-marketing a PVC pipe called Vynol that is supposed to be three times tougher than any previous DWV plastics. Carlon is also exploring ways to cut the cost of a different plastic called polypropylene oxide (PPO) that is said to withstand continuous water temperatures of more than 212°F. General Electric, too, is reportedly developing a super plastic for hot-water pressure piping.

**Plastic pipe boasts high standards protected by a policing system**


But the industry’s most significant standards are those that the independent National Sanitation Foundation enforces. More than a hundred pipe and fittings manufacturers and raw-material suppliers print the NSF seal of approval on their products just as the electrical industry uses the Underwriters Laboratories label. To use the seal, they have to agree to four surprise inspections of their plants every year. The NSF inspector picks a random sample of pipe or fittings for testing by the agency’s laboratory to see if it measures up to standards that the industry and NSF have agreed upon.

The industry has begun to develop standards for hot-water pressure pipe. But they will probably be slow in coming because the manufacturers disagree on how thick their pipe walls should be. CPVC meets national standards for 180°F pressure-pipe systems when it is made in iron-pipe thicknesses. But when it is extruded in copper-pipe dimensions, it meets no standards.

This hasn’t stopped at least one manufacturer, Genova Products, from going into full-scale production of CPVC piping in 1½” and 2” copper-pipe sizes. Genova is supplying the FHA-insured rehabilitation projects in Cleveland.

Another point the manufacturers don’t always agree on is how to promote the advantages of plastic pipe.
Only ABS, PVC and CPVC are factors in household plumbing

### PROPERTIES

- Good chemical and crush resistance
- Excellent impact strength and flexibility
- High level elongation at freezing
- Excellent low-temperature performance
- Non-toxic - NSF approved for potable water

- NSF approved for potable water
- Non-toxic
- High resistance to surge fatigue
- Excellent resistance to paraffins and solvents
- Good chemical and crush resistance
- Excellent impact strength and flexibility
- Low-pressure water systems
- Irrigation and golf course sprinkler systems
- Corrosive liquids and gases
- Underground conduits and gas reliners
- Industrial and chemical laboratory drainage systems
- Natural gas
- Water service
- Distilled and demineralized water

### APPLICATIONS

- DWV piping systems - mobile and residential
- Pressure piping and drainage systems
- Water service
- Irrigation, industrial and municipal
- Gas service
- Underground electrical conduit

- Excellent chemical resistance
- Good crush and impact strength
- Fire-resistant (self-extinguishing)
- High tensile strength
- Non-toxic
- NSF approved for potable water and DWV

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### MAX. TEMP. OPERATING

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### JOINING METHODS

- Insert fittings
- Butt welding
- Heat fusion
- External compression fittings
- Transition fittings
- Solvent welding
- Threaded Flanged
- Compression fittings
- "O" rings
- Transition fittings
- Bell-ring
- Rubber gasket
- Solvent welding
- Threaded Flanged
- Compression fittings
- "O" rings
- Transition fittings
- Bell-ring
- Rubber gasket

### STANDARDS

- ABS
  - ASTM D 1527, ASTM D 2282
  - ASTM D 2465, ASTM D 2468
  - ASTM D 2469, ASTM D 2513
  - F-S 320, FHA-MPS Revision No. 31, IAPMO TSC 6-81
  - TSC 3-62, IAPMO PS 17-65, IS 5-65

- PVC
  - ASTM D 1785, ASTM D 2241
  - ASTM D 2466, ASTM D 2467
  - ASTM D 320, F-S 540
  - MIL-P 22011, FHA-MPS Revision No. 31, FHA UM 41

- CPVC
  - ASTM D 256-63, ASTM D 1785
  - ASTM D 2241, ASTM D 2466
  - ASTM D 2467, ASTM D 2513
  - FHA-MPS 562, FHA-MPS 563

- SR
  - CS 228, ASTM D 2321, FHA UM 26, FS WP 00383

- CAB
  - ASTM D 1503, ASTM D 2513

### LEGEND:

- CS Commercial Standard, Office of Commodity Standards, U.S. Dept. of Commerce
- ASTM American Society for Testing and Materials
- F-S Federal Specifications, General Services Administration
- FHA Federal Housing Administration
- MIL Military Standards, Dept. of Defense

### NOTE:

1. Physical properties of thermoplastics pipe change with temperature
2. Maximum continuous operating temperature for non-pressure systems

**Continued...**
Plastic-pipe promoters used to stress low costs and easy-to-do installation

Some manufacturers have gone so far as to offer plastic pipe to the do-it-yourself market. Carlon Products, for one, introduced a DWV kit in 1966 that had “everything you need—including roof flashing, a brush and cement—to install a three-piece bathroom drainage system.”

Another plastics-industry tactic that hasn’t made friends among the plumbing industry is voicing predictions that plastics will make plumbers obsolete. Borg-Warner Corp.’s Marbon Chemical Division publicized such a prediction made in 1965 by Architecture Professor Walter Lewis of the University of Illinois. Said Lewis: The terms “plumbing” and “plumber” will be replaced by “plastication” and “plasticator” in 20 years. “Plumbing as we know it will not exist in 1985.”

Plastic plumbing materials do cost less than metal piping, and they do involve fewer work steps. Says a New Jersey plumber, Calvin Currier: “All you need to install it are a saw, a knife and a glue pot.”

But documenting their cost savings has not been easy for the plastic-pipe people. “The industry’s rule of thumb,” says Thomas Rourke of Celanese Plastics Co., “is that comparative DWV material and labor costs for a typical one-family dwelling run $115 for ABS or PVC pipe, $163 for copper and $205 for galvanized steel or cast iron.”

The catch is that a large part of these savings depends on the industry’s estimates of labor time. According to the Plastics Pipe Institute, installing a plastic DWV system for a one-family house can require as little as 4.25 man-hours (allowing full prefabrication) compared with 12 hours for copper pipe and 22 hours for cast-iron or steel. Thus the official materials-plus-labor breakdown becomes $97.85 plus $17.32 for plastic DWV, $114.91 plus $48.90 for copper, and $115.99 plus $89.65 for galvanized steel or cast iron.

The catch is that a large part of these savings depends on the industry’s estimates of labor time.

Plastic-pipe promoters are ceasing to dwell on cost savings. Instead, they play up:

1. Durability. Manufacturers claim plastic pipe stands up better than metal pipe, and they back it with long-term guarantees. Celanese, for example, guarantees its ABS DWV pipe fittings to homeowners for 50 years.

2. Safety. The manufacturers say their glued joints reduce fire risk in plumbing work because—unlike cast iron’s hot-lead joints and copper’s sweated fittings—they don’t require an open flame.

3. Versatility. Plastic DWV assemblies can be completely preassembled in off-site shops because they weigh up to five times less than copper or cast-iron assemblies. And plastic piping is easier to squeeze into old structures in rehab work because its joints don’t require working space.
How to clean up the busy-busy exterior

The difference between a well-designed merchant-built facade and a hashed-up one can usually be summed up thus: The good one is simpler, and it's handled with restraint. To prove this, HOUSE & HOME selected examples of the hashed-up variety and asked architect George Hugh Tsuruoka (left) to redo them in sketches. Tsuruoka is something of a specialist at this; as a design consultant (to, among others, the Architectural Aluminum Manufacturers' Assn., plus a group of ten major building-products companies), he regularly offers redesign ideas to builders. Note that in most cases his new design is no more costly than the original.

The good old ranch is still a basic house in much of the country, but that's no reason to keep on mixing its exterior finishes and overemphasizing its horizontal look. Here, Tsuruoka has eliminated the front brick bellyband and all horizontal siding, substituting vertical siding with a touch of stone to give the entry warmth. Result: a house that looks neater, bigger and much more up-to-date.

continued
The skinny-lot house (best known in Chicago) starts with the problem of end-on siting; here the problem has been made worse by two uneven masses of brick veneer on front. Removing the brick should save almost enough to pay for a new front step and planter, plus a little hip gable that gives the roof some character. A side fence also helps, providing it doesn't interfere with the driveway.

The handsome Pacific-style contemporary below looks joltingly different from the all-too-familiar split-entry at left, yet the only structural change is a moved foundation wall at left of the door. Everything else is done by altering wall and window masses and adding small hip gables to the roof.
There are a lot of little reasons why this split-entry's facade doesn't quite come off: too many window types, a truncated front gable and an overexpanse of hairy siding. Tsuruoka's redesign—which completely changes the character of the house from sort-of traditional to out-and-out contemporary—knocks off the gable, unifies the window styling and puts vertical siding on half the facade.

This little gem (how'd you like to have to frame up that roof?) looks hopeless. But by taking liberties with one corner (the near one), Tsuruoka has produced a neat, relatively simple little house with something of the feeling of an old colonial barn. The savings in rough carpentry and flashing alone should be enough to pay for the handsome new stone facade.

MAY 1968
If you had to pin a style label on this non-descriptive ranch, you'd probably call it colonial, after the shutters. So Tsuruoka has given it real colonial flavor with a recessed entrance, a mix of vertical and narrow horizontal siding and bigger windows with smaller panes. The crowning touch is an oversized chimney, which could be corbelled out in the attic so that it would eat up less living area.

If the house above is under-colonialized, this one is over-colonialized in the manner of the short-lived storybook or Cinderella houses of a few years ago. Redesigning it is largely a matter of simplification: Three identical windows replace the original mixture, and the ell's roof is cut back (but the sheltered entrance retained). The only addition is, again, a big colonial chimney.
On a really small box like this, good redesign may not pay off ...

In fact, most builders have found that the pseudo-Cape Cod box itself isn't worth building. But occasionally something of this general style crops up as a vacation house (it does offer a lot of space for the money), so Tsuruoka has shown how to turn it into a real Cape Cod. The narrow siding, bigger windows, colonial entrance and monster chimney will all add to the cost, but the result is a house with real character.

... and on an eye-opener like this, redesign may be impossible

At least that's what Tsuruoka thought. He returned this photo with a brief note to the effect that a joke can be carried too far.

But HOUSE & HOME's editors are a dauntless group. Welcoming the challenge, we sat down and produced the new design shown at right. Note that the basic character of the house is unchanged—in fact, it has been enhanced by purifying and emphasizing what was apparently the original design theme.

Who knows? We may start a whole new trend in imaginative subdivision architecture.
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When Jim Lees sells a house, he doesn’t have to sell the dishwasher.

“The people that buy my houses expect quality,” says builder Jim Lees. “And this means they expect a KitchenAid dishwasher.”

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Lees points out that there are many quality features in his homes, in addition to the dishwasher. Take his latest development of Penn Wood, in Westtown, Pa.

This location is one of the most highly desirable in the greater Philadelphia area. All homes have such features as disposers, and cabinets hand-finished by local Amish craftsmen. And some homes also have such luxury touches as fireplaces and air conditioning.

Since he formed his own business in 1954, Lees has developed several areas, building all types of homes, in all price ranges. And he still finds time for remodeling work, too.

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KitchenAid
Dishwashers and Disposers

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4. Change in bowel or bladder habits.
5. Hoarseness or cough.
6. Indigestion or difficulty in swallowing.
7. Change in a wart or mole.

If a signal lasts longer than two weeks, see your doctor without delay.

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Mr. Brooks Hudson

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I am: [ ] Builder [ ] Dealer [ ] Architect [ ] Distributor

MAY 1968

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Whatever you want in a swing-door bathroom cabinet, Grote has it... with a wall mirror to match

35 swing-doors in stylish metallic or elegant carved wood

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Circle 92 on Reader Service card
March 6, 1968

Mr. Tom W. Simons, President
Artistic Brass, Inc.
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Dear Mr. Simons:

I would like to take this opportunity to pass on to you our conclusion that we were very well advised to utilize Artistic Brass in our homes at Falls Grove, Flower Valley and Lake Normandy Estates. The record of customer reaction in the three communities as to decor and the total planning of the interior, as well as the exterior, contributed to the resounding success in sales. References to your product were frequent and complimentary.

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Executive Vice President
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The "Five-In-One" offers heating from 80,000 to 150,000 BTU, cooling from 25,000 to 56,000 BTU, humidification up to one gallon output per hour, and removal of up to 90% of all airborne contaminates. The "Five-In-One" is available for use with natural gas, L.P. gas, or fuel oil. It costs less and takes less space than a combination of comparable components purchased separately and assembled into a total comfort package.

Take a good look at Williamson's new "Five-In-One". (Patent Pending)
Announcing the all-new Bostitch clinch-nail roof truss system.

Combines the proven strength and durability of nail-on truss plates with the speed and low cost of a simple, compact air gun system.

**New Speed.** No more flipping of trusses during assembly. All joints are nailed from only one side. Now you can make trusses in half the floor space normally required.

**New Strength.** Each nail goes completely through both sides of each joint. "Clinching" action locks joints together—with 40% fewer nails. Fewer nails mean less truss assembly time, too.

**New Simplicity.** Bostitch Clinch-Nail System includes adjustable builder's saw guides for cutting all but truss webs right on truss assembly table! Two or three men easily operate entire system including cutting of webs and assembly.

**New Versatility.** Basic system handles almost any style trusses up to 40-foot span and 8-in-12 pitch. Just add extra tables and track to expand pitch and span to any lengths.

**New Economy.** There are no cumbersome or expensive presses or roller machines. Bostitch provides everything you need to build trusses except the lumber and saws. The new Bostitch Clinch-Nail Truss System includes low-cost hardware and plans for six movable truss tables, two Bostitch Truss Nailers, power saw cutting jigs for peak and heel joints and rafter tail cutoff, electric or gas.

**What it is:** Heart of Bostitch Clinch-Nail Truss System is the special two-ply truss plate and companion clinch-point nail. Each nail is power driven completely through joint and automatically clinched on opposite side. Two-ply construction of clinch-pad truss plates insures precisely controlled clinching action.
driven air compressor, air line hoses and accessories, plus truss plates and clinch-point nails.

1. Peak and heel joints are cut at the table during assembly. Precut webs are then placed in position.

2. Bostitch clinch-pad truss plate is next placed under each joint and a Bostitch truss nail plate on top.

3. Both truss plates and truss members are power nailed together simultaneously from one side of joint. Clinching anvil mounted on each tabletop automatically clinches truss nails.

4. Separate, movable clamp-and-nail tables at each truss joint accommodate practically any size or style truss. Spaces between tables simplify truss assembly and removal from any side.

Now truss making becomes easier, and more profitable than ever before! You get professionally designed, high-quality trusses at minimum cost. Field experience proves that two men can turn out up to 30-foot trusses in three minutes per truss including cutting top and bottom chords.

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Now Bostitch can do more than ever for you.
The sound-deadening gap: Why builders get less than they pay for...

Apartment builders and sound-control manufacturers have always suspected that the difference between a sound system's lab rating and its field performance is sometimes like night and day. Now the NAHB Research Foundation has documented just how great the gap actually is, and what causes it.

NAHB researchers made a long-term study to test the effectiveness of sound-deadening used in a 98-unit apartment project in Washington, D.C. The buildings—three-story, wood-frame structures in the $125 to $175 rental range—contain a host of standard sound-deadening systems and materials between units. But because of mistakes in workmanship, their performance varies.

NAHB's study—published in a thick report entitled "Field Study of Residential Acoustics"—is unusual for three reasons:

1. The buildings were not constructed for testing. They had already been designed and were under construction before the research team approached the builder-owner for permission to study them.

2. Researchers were able to examine details of sound-deadening construction during the building stage so they had a good idea of what caused acoustic failures when the finished walls and floors were later tested by instruments.

3. Tenants of the apartments were thoroughly interviewed to learn what noises they considered objectionable—in effect, a double check against the test findings.

Despite the builder's precautions against noise transmission, his tenants had many complaints. In order of most frequent mention, they were 1) impact noises through floors, 2) appliance and plumbing noises, 3) stairway noises, 4) airborne sounds through walls, 5) noises generated by tenants' own appliances, and 6) noises from central utility areas such as laundry rooms.

The builder's precautions included staggered studs, masonry party walls, fiberboard underlayment on floors, full-thick mineral wool stapled between floor-ceiling joist spaces, gypsumboard ceilings suspended in resilient ceiling channels nailed to bottom edges of joists, and sponge-neoprene bushings to isolate metal plumbing from framing members.

Some sections of party walls and floor-ceilings did have Sound Transmission Class (STC) ratings close to those of laboratory specimens. But other sections—of the same basic sound-deadening construction—were many STC points below laboratory ratings and in some cases completely ineffectual.

Tenants' complaints backed up the erratic effectiveness of the builder's sound-deadening—i.e., 40% of them had no complaints about noise, while the balance had complaints that covered every possible kind of sound transmission.

NAHB's conclusion: Apartment builders who want effective sound-deadening must pay the cost of substantial extra supervision for the workmen who install it. The best-conceived sound-break is useless in the hands of a workman who doesn't know how to install it. Some precautions they should be taught are listed below.

...and what NAHB experts advise doing to get your money's worth

Most sound-break failures discovered in the NAHB test were caused by wall penetrations. NAHB's rule of thumb: A 1/2"-diameter hole in a masonry wall reduces its STC rating by seven points. So the experts emphasize that if holes cannot be avoided, they must be sealed with mortar or heavy flexible caulking.

A typical source of sound leakage was the crack around exposed ceiling beams at the point where they pass through gypsum-board walls. Not only should the gypsum-board fit tightly around the beam, but the seams should be caulked on both sides of the wall before molding is applied.

Sound-deadening material in floor-joist cavities will help reduce plumbing noises, but only if the pipes are held free from all framing. The builder NAHB studied had used neoprene bushings on some pipes, but others had been secured by driving wood wedges between pipe and framing.

Telephone outlets and TV antenna terminals were found to be as detrimental to sound-deadening efforts as are electrical boxes. They don't have to be back-to-back to permit noise transfer, but merely in the same stud space.

How good does a sound-deadened wall have to be? According to NAHB's tenantsurvey, any party wall with a noise-reduction rating of less than 48 STC is little better than useless.

New products start on p. 147

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HOUSE & HOME
THE SILENCER

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It's a lucky thing for Lombardi that there are rough, tough clubs like the Colts, the Cowboys and the Bears around the league.

Without them, his Packers wouldn't be the great club they are.

Greatness, after all, is the rarest commodity on the market. It isn't something you're born and raised with. It's something you rise to—against the stiffest kind of competition.

A simple fact of life, you say. True in sports, or school, or business, or industry.

Funny thing, though... there are people around today who just don't buy that point of view when it comes to business.

They think there's too much competition in the marketplace. Too many brands in the sporting goods store, for instance.

Too many manufacturers fighting each other to sell you something.

They'd like the government to take steps that would eventually lead to fewer brands in the stores, and therefore, less competition.

But, they forget that restricting competition is not the way this country got great.

It is competition that produces the endless innovations in our marketplace... that creates whole new industries... more jobs... that makes the Packers the greatest.

Say... can you imagine Lombardi's reaction when somebody tells him the referee is going to call his plays for him?

And he can't average 241 in the line because the Colts average only 233?

Is Lombardi lucky?
If you're not a Weyerhaeuser Registered Home® builder, here's the kind of spring promotion help you missed.

(But you don’t have to miss the big fall promotion.)

Our spring home selling push starts with a feature in April American Home magazine on a new WRH® home. We call it “the WRH home that can change to meet family needs” promotion.

Big, full-color Weyerhaeuser Registered Home ads will run in both April and May issues of American Home. The 2-page May ad lists WRH dealers across the nation.

In addition, there's local publicity, big local newspaper ads, model home displays and a full-color idea brochure.

And WRH builders around the country are building model homes with a direct tie to this national publicity/advertising/merchandising.

Promotions like these are just one part of the full WRH story. As a WRH builder you get component packages at a stable price from a close-at-hand WRH dealer. New home designs. As well as 90 per cent mortgage financing at competitive interest rates.

And Weyerhaeuser backs every WRH home with a 20-year warranty on all our wood products used in the home, an important benefit to both first and second owners.

Send the coupon for more information on what's in WRH for builders. Just in time for the really big fall WRH promotion.

To: Weyerhaeuser Company
Box B-2850
Tacoma, Washington 98401
Please send me more details on the Weyerhaeuser Registered Home building program, and the name of my nearest dealer.

Name ____________________________
Firm ____________________________
Address __________________________
City _____________________________
State ______ Zip ____________
"At Campus Commons we take care of the maintenance, so designing for easy upkeep was critical."

"That's why we used red cedar grooved sidewall shakes."

When Sacramento's new Campus Commons development is completed, it will consist of 4,000 individual homes spread over 660 acres. Plus three swimming pools, a clubhouse and six tennis courts.

That's a lot to take care of. But a maintenance contract covering all exterior upkeep is part of every house. "Naturally with a responsibility that large," says Joe Tabarracci, Campus Commons' superintendent of construction, "we wanted to use exterior materials that would give us quality appearance yet still hold costs down and be easy to care for later on. Our architect, Warren Callister, specified Certigroove red cedar sidewall shakes."

Why? Because they provide the authentic, natural look only wood can give, at the lowest possible cost and with the highest possible practicality. Cedar shingles and shakes are durable, they provide a natural insulation barrier and they're strong enough to stand up even under hurricane winds.

Joe Tabarracci was so sold on the advantages of red cedar, he even went a step further—and put red cedar hand-split shake roofs on every unit. How about you? Like to know more about the low cost, high practicality and unmatched natural beauty of Certigroove shingles, Certigrade shingles or Certi-Split shakes? For details, plus money-saving application tips, just drop a line to:
5510 White Bldg., Seattle, Washington 98101. In Canada: 1477 W. Pender St., Vancouver 5, B.C.

Red Cedar Shingle & Handsplit Shake Bureau

One of these labels under the bandsticks of the product you buy is your assurance it was made, inspected and graded under regulations of the Red Cedar Shingle & Handsplit Shake Bureau. Insist on these labels.
New from York! A through-the-wall air conditioner for garden apartments that's quieter, more compact.

The Champion is competitively priced, but has York quality engineering that assures customer satisfaction, no maintenance problems.

Here's the industry's most advanced split system air conditioner—designed to meet builders' needs for a compact, trouble-free through-the-wall unit. It's York's all-new Champion...a quiet, dependable system that's ideal for garden type apartment buildings.

Equipped with inherently protected compressor motor and fan motor, the York Champion is delivered pre-charged and leak tested. Refrigerant lines are also pre-charged—and available in 15, 25 or 35-foot lengths, with York quick-connect couplings. Available in 1½ and 2-ton capacities, the York Champion may be installed with either upflow or counter-flow coils—to meet any job requirement.

Ask your Authorized York Dealer about York's new, quieter air conditioners for homes and apartments. Or write York Division of Borg-Warner Corporation, York, Penna. 17405.

*York found a better way to build an air conditioner*

Matched Borg-Warner Furnaces are designed to team with York air conditioning for year around comfort. Oil or gas-fired units in a complete range of capacities.
Gutter systems of rigid Geon vinyl will not rust, corrode, rot, peel, dent, flake, scale or call-back.

That's because they are solid vinyl, and the color goes through and through. Rigid Geon vinyl sheds rain water and chemical roof wash without being bothered by them. Geon vinyl is making the material difference in many building products ... windows, siding, pipe, conduit, gutters, downspouts, shutters, electrical raceways. And the difference is that they take care of themselves so that you won't have to. B.F. Goodrich Chemical Company, Dept. H-13, 3135 Euclid Avenue, Cleveland, Ohio 44115.

B.F. Goodrich Chemical Company
a division of The B.F. Goodrich Company
will help you sell more homes faster... at 1/5 the installed cost of conventional hand-hewn wood

Totally new! Truly revolutionary! Molded polyurethane Lite-Beams® defy comparison with wood... weigh less than ½ lb./running foot... go up in minutes with adhesives on any surface... indoors or out... require no auxiliary carpentry, plastering, painting or masonry... can be nailed, cut with a knife, sawed or drilled... channel can be used to hide small diameter pipes or wiring... come pre-finished in three popular shades...

Prospects will snap up homes, clients will approve plans faster when you include the look of authentic hand-hewn beams at minimal extra cost. In a word, Lite-Beams are HOUSE MOVERS.

LITE BEAM DIVISION of AM-FINN SAUNA, INC.
Haddon Avenue & Line Street, Camden, N. J. 08103
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When you stack one U.S. Savings Bond on top of another, it becomes a habit that's tough to break and hard to beat. That's because it's so painless. Just tell your employer or banker to set aside a regular amount for you before you have a chance to spend it. Sign up today.

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Bonus opportunity for people who buy Bonds through the Payroll Savings Plan or Bond-a-Month Plan—a new U.S. Savings Note called Freedom Shares. It pays a higher rate of interest and matures faster. Get all the facts where you work or bank.

U.S. Savings Bonds, new Freedom Shares

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here's something your customers can see!

Alsynite / Structoglas

A garage door of Alsynite/Structoglas is eye-catching and good looking. Helps you sell a house faster. Gives you additional talking points. Less maintenance. No painting. More usable living and play area with light transmitted evenly throughout the garage. Lightweight...no heavy lifting. Tougher than ordinary building materials. Resists fading and weathering. Won't shatter, dent or warp.

With Alsynite/Structoglas you know you have the finest reinforced fiberglass available. It not only looks better...but lasts longer. You avoid call backs and complaints.

Buy from quality garage door manufacturers who use only Alsynite/Structoglas.

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Anderson Door Company
Arm-R-Lite Doors
Arm-R-Lite Door Manufacturing Company
Berry Doors
Berry Doors Division of Stanley Works
Everite Doors
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Fiberline Doors
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Morrison Steel Products
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Ro-Way Doors
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Welbilt Doors
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Windsor Door
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of Anystream showerheads gives better performance, longer life and more value. Beautifully by SPEAKMAN

It costs less really than you think to enjoy the ultimate in showering pleasure... the fully adjustable spray of the Anystream showerhead. Now improved. With a newly designed T-shaped handle and up to 33% more spray channels.

Sheer luxury. Just a flick of the handle and plungers adjust to... invigorating needle... soothing gentle... normal rain... or full flood. Anystream always gives a full pattern spray... no hollows, jets or voids.

A further advantage. Anystream plungers are made of General Electric's Lexan, a high temperature plastic remarkably resistant to lime and other hard-water deposits. This safeguards against corrosion or sticking and gives assurance of superior Anystream performance for many, many years.

P.S. Water-saving Autoflo optional with Anystream showerheads.

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**NEW PRODUCTS**

For more information, circle indicated number on Reader Service card p. 161

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### Interiors

**Easy-to-install ceiling** needs no backing or suspension system: Redwood runners are nailed directly to joists, and then 2'x2' or 2'x4' lay-in panels—either acoustical board or light diffusers—slide into place. Cross members conceal joints. Simpson, Seattle. Circle 200 on Reader Service card

**Danish teak**, a new woodgrain offered in manufacturer's prefinished-hardboard-paneling line, comes bookmatched with ½" grooves. The panels measure 4'x7' or 4'x8'; are also available in 4'x10' size east of the Rockies. Masonite, Chicago. Circle 201 on Reader Service card

**Decorative wall tiles** that can be used at random or grouped for interest are 4½" square. They are part of a line that includes 22 designs, the newest which stem from Indian culture (first and third tiles). U.S. Ceramic Tile, Canton, Ohio. Circle 202 on Reader Service card

**Psychedelic locksets**—standard round-design knobs gaily decorated in brilliant colors—are plastic-coated. The mod locksets can be custom-ordered. Kwikset Sales & Service, Anaheim, Calif. Circle 204 on Reader Service card

**High-style flooring** of cushioned vinyl is deeply textured to look like travertine crisscrossed by dark-toned wood. The sheet flooring comes in 6'-wide rolls. Congoleum-Nairn, Kearny, N.J. Circle 203 on Reader Service card

**Dramatic ceiling tiles** with a deeply sculptured pattern for textural interest are suggested for Mediterranean and contemporary decor. The 12"-square, tongue-and-groove tiles are completely washable. Panels also available. Conwed, St. Paul, Minn. Circle 205 on Reader Service card

**Bold wallcovering** is fabric-buckled shiny vinyl in three color combinations: pink, orange and blue; blue, green and black; or orange, gold and green. Product is scrubbable, strippable and pre-trimmed. United Wallpaper, Chicago. Circle 206 on Reader Service card

New products continued on p. 150

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Circle 209 on Reader Service card
Jamestown Village, Cleveland, Ohio
Architect: Andonian and Ruzsa
Builder: Skyline Builders
One picture is worth a thousand words. Beauty, grace, charm, durability. You could go on and on without ever touching upon enough words to fully describe the new Hallmark shingle. It's indescribable.

In the first place, it really isn't a shingle. It's thicker, heavier and more deeply sculptured than any shingle you've ever seen.

And, although many builders insist that it looks like a fine hand-split wood shake, it isn't. It's fire safe and won't rot, warp, shrink or split. It's truly a new concept in roofing. It combines the deep sculptured beauty of a shake and the long life of a high quality asphalt shingle. That's why many people call it "The shangle."

We'd like to show you, with pictures, what words can't, how Hallmark's deep sculptured beauty in bronzed brown, pewter grey and golden tan, can add extra curb appeal to homes and garden apartments with mansard type roofs. CertainTeed Products Corporation, BA2, Ardmore, Pa. 19003.
New products start on p. 147

Lighting and electrical equipment

Communication center is easy to install

The multipurpose unit—a surface-mounted top panel for phone and radio/intercom, plus a recessed base unit with fold-down desk—requires no framing. The top half mounts directly on the wall, and the bottom is recessed into any 16"-o.c. stud wall. Note: Desk's storage unit straddles framing (left), eliminates the need to notch or support center stud.

The top unit incorporates the master intercom station, plus a cork bulletin board (an additional bulletin board can be substituted for the intercom). The lower unit contains two 40-watt lamps that go on when desk is lowered, also offers convenient storage area. Center is fabricated of extruded aluminum, with woodgrained accents. Emerson, St. Louis. Circle 275 on Reader Service card

Wall-mounted control console, to regulate remotely situated two-way radio stations over a telephone line, has solid-state controls. Capacity: two transmitting and two receiving frequencies. General Electric, Lynchburg, Va. Circle 223 on Reader Service card

Multiple-globe fixture incorporates four white plastic globes suspended from the pole top (a minimum of visible hardware makes it appear that globes are floating in space). In combination clusters of 24", 30" and 36" globes. Habitat, New York. Circle 220 on Reader Service card

Hand-wrought chandelier in Mediterranean style suspends matte-black arms with five white candles from a fluted-oak column. Fixture is 23" in diameter, 22½" high, and can be hung up to 44" from the ceiling. Del Val, Philadelphia. Circle 221 on Reader Service card

Carved-wood chandelier and wall sconce combine Spanish styling with turquoise Mexican detailing. The chandelier's blackened wood spindle supports aged-brass arms with six candles: it has 20" spread. Thomas, Louisville, Ky. Circle 224 on Reader Service card

New products continued on p. 152
Build a two-minute house guaranteed for five years

We think we’ve got a good thing going with our Insulite Pre-Painted Siding, and we’d like to send you some samples. You can build a little hardboard house with them in two minutes or so. And the pieces are guaranteed for five years against blistering, peeling, cracking or checking. That’s the same written guarantee you get with our full-size Pre-Painted Siding.

This stuff is good looking, tough, easy to put up, and saves time and money by eliminating on-the-job painting. But you can find all that out from the kit we’ll send you. Along with the samples, you’ll get a brochure with complete product information and, as you might have guessed, a small sales pitch.

So if you’d like to build a two-minute house with Insulite Pre-Painted Siding, call your Boise Cascade representative for samples. Or mail this coupon to Boise Cascade Building Products, Boise, Idaho 83701.
Baths

Multipurpose lavatory with deep, sloped basin can serve as a shampoo lavatory (it has a convenient spray attachment and swing spout) or as a baby bath. Overall size: 28" x 19". Kohler Co., Kohler, Wis. Circle 210 on Reader Service card

Picture-frame cabinet, flanked by antique brass or chrome fixtures, is available in a choice of six recessed models. Frame finishes include antique gold, and silver. Size: 34" wide, 25" high. Monarch, Elk Grove Village, Ill. Circle 211 on Reader Service card

Compact showerhead—a moderately priced, self-cleaning version of manufacturer's larger unit—has a double spray pattern, and can be adjusted from needle-sharp spray to full flood. Choice of bright- or brushed-chrome finish. Crane, Chicago. Circle 212 on Reader Service card

Luxury fitting—a single-handle ball faucet of 24-carat gold—comes in a choice of bright or satin finishes, both protected by a baked-on clear epoxy resin. Also offered in gold: complete tub and shower assemblies. Delta, Greensburg, Ind. Circle 213 on Reader Service card

Folding tub enclosure that permits almost total accessibility to the tub area is offered in hammered frosted glass (photo) or plastic laminate. Designed for standard 5' tubs, enclosure is 58" high, fits 57" to 59" openings. Theodore Efron, Chicago. Circle 215 on Reader Service card

Recessed cabinet has full-louvered wood door that comes unfinished, can be decorated to suit taste. Cabinet has a one-piece body and adjustable shelf brackets. A conversion kit permits surface mounting. General Bathroom, Elk Grove Village, Ill. Circle 214 on Reader Service card

Contemporary bathroom ensemble incorporates tub, walls, vanity basin, toilet and floor—all of fiberglass-reinforced plastic that looks like marble. Components are designed with few joints for easy cleaning. American Standard, New York. Circle 216 on Reader Service card

New products continued on p. 156
The Corporate Carpet

Specify carpet of HERCULON® olefin fiber wherever business is conducted.
HERCULON is tough. Aggressive. Competitive. Great for the long-range plan. Dirt, grime and spills stay at near-surface level. Clean-up is quick and easy. This means shorter hours for the maintenance staff. Less capital expense. Invest in the future, wisely. Specify HERCULON. For more information contact Fibers Merchandising, Hercules Incorporated, Wilmington, Delaware 19899. (302) 656-9811.

*Hercules registered trademark

Since when?
Since Herculon.
The New Four Seasons development includes 130 homes and 240 town house and garden apartment units. Designed for luxury living, it features a golf course, club house, swimming pool and shopping center, all within walking distance from the living units. Extra care in planning is evident everywhere. Even the apartments have two-car garages.

"Only Whirlpool could fill our needs,"
said Sid Kandel, president of New Four Seasons, Inc., Saint Louis area builders.

"Our luxurious, ultra-modern New Four Seasons development was to include homes, garden apartments and town house apartments," he went on, "all had different requirements for kitchen appliances.

"We wanted a full line in which both gas and electric appliances were interchangeable ... and a line that would do their own servicing. In my mind," Sid Kandel added, "only Whirlpool qualified."

Whirlpool had the breadth and depth of product line to furnish kitchen appliances for the entire New Four Seasons development.

In homes, electric built-in double ovens and cooktops, undercounter dishwashers, disposers, range hoods and the customer's choice of refrigerators were used. In garden apartments, gas built-in ovens and cooktops, top-loading portable dishwashers, disposers, and a 13 cu. ft. refrigerator were provided. For town house apartments; double oven CONNOISSEUR® electric ranges, under-counter dishwashers, disposers and 14 cu. ft. No-Frost refrigerator-freezers were installed. High-end models were selected by New Four Seasons, Inc. to provide customer valued features.

Whirlpool's Full-Line Concept can help you solve your appliance needs, too. It provides a complete line of appliances ... all design and color coordinated ... all from one handy source. You place one order ... deal with one man ... get undivided responsibility. Whirlpool also offers builder management services through the well-known consulting firm of W. R. Smolkin and Associates, Inc. Ask your Whirlpool distributor.
Moving nature indoors is easy... with trees, plants and ceramic tile.

The pleasures of an indoor garden are obvious. But, an atrium is often gained at the expense of convenience, or given a self-defeating “fish bowl” treatment.

Architect Ray Heuholt, A.I.A., solved this dilemma by combining living things and a natural material — ceramic tile — in this Des Moines, Iowa home. A ceramic mosaic floor surrounds the atrium and covers the family room, entranceway, kitchen, bath and halls. The atrium can be maintained simply, without worrying about water, soil, spilled gravel or falling leaves.

Ceramic wall tile and decorator tile are also used in the house for which Des Moines Marble & Mantle Co. served as tile contractor.

The colors, shapes, sizes, textures and patterns of American ceramic tile are endless. The seal at right on every carton of Certified Quality Tile is your assurance of tile that is regularly tested by an independent laboratory to meet the most rigid government specifications. For information write: Tile Council of America Inc., 800 Second Ave., New York, N.Y. 10017.
Luronite Deco/Trim is a modern space-age polyester plastic development that duplicates the intricate hand carvings of the old world craftsmen with modern durability. Luronite Deco/Trim carvings look and feel exactly like the finest hand carvings, even to the minute grainings found on the finest of woods. . . . to bring a richness of hand-carved sculptured elegance to the most ordinary furniture.

Luronite is tough . . . permanent . . . takes more abuse than wood . . . may be used indoors or outdoors (the same material is used on boats). It can be nailed, screwed, stapled or glued. May be cut, routed, rabbeted or mitered. Takes most standard paint, stain, leafing or antiquing. Exclusive styles available.

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Circle 114 on Reader Service card

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NEW PRODUCTS
start on p. 147

**Outdoor living**

**Gas-fired barbecue grill**—a three-piece, die-cast aluminum unit with 20"-deep cooker over 3' long—has two separate cooking areas. Its tubular post both anchors the unit and houses necessary gas lines. Charmglow, Antioch, Ill. Circle 260 on Reader Service card

**Grass-like indoor-outdoor carpeting** for patio and terrace areas is molded in 12" squares, can be cemented or nailed for extra-strong bond. It is odorless and non-toxic; and can be hosed or vacuumed. OBI Inc., Ridgefield, N.J. Circle 261 on Reader Service card

**Gas-fired broiler/grill** of cast aluminum permits in-the-ground or surface mounting. The unit cooks with special ceramic bricks and features adjustable grill racks, a grease disposer and built-in heat indicator. Roper, Kankakee, Ill. Circle 262 on Reader Service card

New products continued on p. 164
The world's most comfortable bathtub. It's Kohler's new Caribbean, with comfort-contoured interior—a full six feet of stretch-out relaxation. New safety: recessed grip rails, Safeguard® bottom. New versatility: "no apron" design with universal pattern (use left or right) permits a full range of installations—sunken tub, recess, corner, free-standing, peninsula. Unlimited choice of exterior treatments: paneling, tile, plastic laminates—even bring the carpeting up the sides. Bold, that's Kohler!

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Kohler Co., Kohler, Wisconsin
Circle 115 on Reader Service card
AUTUMN GLOW* CABINETS

From the makers of "the most beautiful kitchens of them all"—antiqued cabinets in a warmly traditional mood. The wood is boldly grained, and realistic "distress" marks have been added to suggest the mellowness of age. In harmony with the spirit of olden days there's pewter-type hardware with a handwrought look. And for elegance—a finely detailed moulding surrounds each door and drawer. Hermitage is delightful to live with.

Autumn Glow Cabinets are also available in a svelte Contemporary style—and a striking Colonial style with grooved and pegged doors and drawers. Your distributor has samples of all three styles—ask to see them today.

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The "Concord": Pembroke Greens, Naperville, Ill.; as built by Harris Home Builders (land developers and home builders in Chicago area); Mr. William F. Harris, Pres.

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It cost less than $1 sq. ft. Installed.

This wall doesn’t sell houses, and it cost over $1.50 sq. ft.

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MAY 1968

Circle 162 on Reader Service card

162W3
We'd like to point out the fact that CF&I makes the best nails money can buy. Not only that but we make it a point to give you a wide variety of different types of points, each designed for a particular purpose. A pointer to remember on point picking is that a sharp point is more likely to cause splitting but its holding power is greater because there's less distortion of the wood fibers. CF&I gives you diamond, blunt, chisel, needle, side, semi-side, duck bill, and pointless points to solve specific nailing problems.

Of course, there are other important points such as the head, shank, finish and size to consider in choosing the right nail for an application. Here's the choice CF&I offers. Heads: flat, oval, cupped, countersunk, flat countersunk, oval countersunk, brad, flooring brad, checkered, diamond, hook, scaffold, umbrella, dished, numbered, lettered, and headless. Shanks: plain, barbed, screw, ring, crenelated, and fluted. Finishes: bright, annealed, blued, cement coated, acid etched, hot tumble galvanized, hot dip galvanized, and electro galvanized.

Buy chemically-cleaned CF&I nails in 5, 25*, and 50* pound cartons. Get the point?
Sales offices nationwide. CF&I Steel Corporation, Denver, Colorado.

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Fill in the blanks and build a house.

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Add a fiber from and good things get better.
Window Beauty is.
Change for the better with.
Chances are most of your best prospects can fill in the blanks, because most of them read Life. In fact, Life reaches more young marrieds in the important suburban areas than any other magazine. Which may be why building products advertisers invest more dollars in Life than in any other single medium.

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How to Keep 1200 Plans Moving
Plan Hold Rolling Stand goes where you need it. Keeps plans, prints, charts wrinkle free... ready for instant use anywhere. Provides easy filing and finding for 1200 sheets up to 42" x 72" in size. Write for catalog of 31 unique filing systems to P.O. Box 3458, Torrance, Calif. 90510.

CABINETS
WALL RACKS
CARDY RACKS

How to Keep 1200 Plans Moving

Fort Hold Corporation

Circle 118 on Reader Service card

STOP more prospects!
Enhance the eye-appeal of your homes with
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Power Attic Ventilator


Koolmatic
Dept 88 1831 Terminal Rd. Niles, Mich. 49120

Water conditioner is a fully automatic extra-capacity unit that will filter out minerals, taste and odors from water up to 40 grains hard. To resist corrosion, the seamless plastic inner lining is encased in a metal shell. Bruner, Milwaukee. Circle 254 on Reader Service card

Dent remover forces irregularities out of expensive pipe with a hydraulic cylinder and shoe. Override in jack pushes dent beyond true round to compensate for spring in metal. Unit will handle pipe from 10" to 30". Cre Crose Int., Houston. Circle 255 on Reader Service card

Single-lever faucet has only one moving part, and both flow and temperature are controlled by lever movement. Available in either polished or brushed-chrome finish, the faucets carry an unconditional guarantee. Nile, Taylor, Mich. Circle 256 on Reader Service card

Basement drain is a hollow baseboard system that collects and carries away all water that penetrates below-grade walls or joints. Vinyl sections are 10' long, can be installed over finished walls. Basement Water Control, St. Paul, Minn. Circle 257 on Reader Service card

New products continued on p. 166

Circle 119 on Reader Service card

Circle 120 on Reader Service card
HOMASOTE GUARANTEED PANELS

surfaced with TEDLAR*–

for better board-and-batten construction—

Now you can design and build durable, long-lasting white board-and-batten exteriors that won't crack, chip, craze (flake or peel). Homasote's Guaranteed Panels are insulating, weatherproof and factory surfaced with a tough, stain-resistant Tedlar pvf film. And—with Homasote Guaranteed Panels, having the long edges wrapped, you eliminate exterior painting and back sealing. On-site construction time is definitely reduced through use of factory Tedlar-surfaced, metal snap-on batten covers that simplify application.

With a wide range of sizes available to minimize on-site application time, these panels are easily cut and shaped for good fit with either power or hand tools without cracking or splintering. On your next job, why not check the big savings and added beauty that Homasote Guaranteed Panels offer. They're the only weatherproof, insulating structural panels on the market that are also resistant to termites, rot and fungus. Your Lumber Dealer has literature and samples or write direct.

*DuPont registered trademark

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With a Hoitsma Scaffold Bracket on the job, it's like getting an extra day's work every week!

Hoitsma's patented adjustable scaffold brackets are fast and simple to install and operate... and carry an unconditional 10-day moneyback guarantee. If your local building supply dealer does not stock the Hoitsma line, write or call:

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Adjustable Scaffold Bracket Co.
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(201) AR 9-1391

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- Fast production... up to 9 feet per minute
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Then the low, wide and handsome Blu-Ray Model 146 is for you!

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**Plumbing and piping**

**Water softener** electronically senses the need to recharge itself from the condition of the water, recharges more often when water use or water hardness increase. Culligan, Northbrook, Ill. Circle 263 on Reader Service card

**Reusable plastic stopper** for sewer lines will fit any brand of vitrified clay pipe in the standard 6" domestic size. Stopper ring is inserted into the pipe barrel, and plug is then screwed into the ring. American Vitrified Products, Cleveland. Circle 268 on Reader Service card

**Compact conditioner** for ultra-soft water has molded plastic inner and outer shells, as well as a new plastic control valve. Manufacturer says plastic means lower production costs. Installed, the compact unit weighs 70 lbs. Pha-lans, Buffalo, N.Y. Circle 269 on Reader Service card

---

**NEW PRODUCTS**

start on p. 147
Water filter (center) is designed for dirt removal (sediment cartridge, left) or taste and odor correction (carbon cartridge, right). Plastic housing is corrosion-free, and cartridges are easily replaceable. Stover, St. Charles, Ill. Circle 264 on Reader Service card

Single-knob faucet is crystal and chrome, has only a single moving part—no gaskets, washers, strainners, springs or packing. The faucet may be set for preselected-water-temperature control if desired. Universal-Rundle, New Castle, Pa. Circle 265 on Reader Service card

Single-lever faucet carries a five-year guarantee, including both replacement and a $10 labor allowance for installation of a new ceramic cartridge. All manufacturer's fittings produced after Nov. 1, 1967, carry the guarantee. Price-Pfister, Pacoima, Calif. Circle 266 on Reader Service card

Gate valves for residential installation are made of bronze, for long, service-free life. They are available in ½", ¾" and 1" sizes, with full port openings for full fluid flow and minimum pressure drop. Hammond Valve, Hammond, Ind. Circle 267 on Reader Service card

Sewage-treatment plant is completely operational in five days, compared with 30 days for a conventional plant. A sludge-return unit travels the length of the settling tank, returning solids for continuous treatment. Chicago Pump, Chicago. Circle 259 on Reader Service card

New products continued on p. 168
NEW PRODUCTS
start on p. 147

Construction materials

Wood shims are now mill-cut and packaged to eliminate the carpentry time wasted in cutting wedges for squeaky or sagging floors, or ill-fitting windows and doors. Bundle contains 100 shims, 1/2" wide. Shakertown, Cleveland. Circle 240 on Reader Service card

Pool gutter is made of 7"x7" glazed tile, comes in choice of white or aqua to brighten up the pool edge. Gutter's smooth finish simplifies cleaning, and manufacturer promises easy installation. American Olean, Lansdale, Pa. Circle 242 on Reader Service card

Brick vent features a blade design that eliminates water entry from driven rain. A high rear water-stop provides added protection. Made of extruded aluminum, the vent is anodized to protect against pitting. Sylro, Merrick, N.Y. Circle 244 on Reader Service card

Chimney flashing is engineered to fit any chimney—regardless of the pitch of the roof—and paper templates and roof-pitch markings on each flashing side make assembly easy. No soldering is needed. Miller, Appleton, Wis. Circle 248 on Reader Service card

Free... Send Today! Complete catalog of "glamour" products to help create better, more beautiful kitchens and baths. Includes "where to buy" list for your locality. SWANSON MANUFACTURING CO., 607 S. Washington St., Owosso, Mich. 48867

Installation in the Wall!
Laminated decking comes in choice of three surface textures: smooth, saw-textured or wire-brushed (shown above, top to bottom). Decking is produced from six wood species, can be factory-finished. Potlatch Forests, San Francisco.

Circle 241 on Reader Service card

Post-base clips position 4"x4" posts even when bolts are out of line, support the wood 1 3/16" above surface water. Base cover is 16-gauge steel, zinc-plated for painting, with weep holes to run off standing water. Panel Clip, Farmington, Mich.

Circle 245 on Reader Service card

Haunch hanger is designed primarily for deck form work. The device—two pressed-steel ends welded to a steel strut—provides an exact 1" or 1 1/4" overhang. Installation and adjustment are from above deck. Richmond, Brooklyn, N.Y.

Circle 246 on Reader Service card

Joist hangers utilize two prongs that hold the device in place for easier placement and nailing. Made of 18-gauge galvanized iron, the hangers come in three sizes for loads of from 425 lbs. to 1,330 lbs. Simpson, San Leandro, Calif.

Circle 247 on Reader Service card

Sill-threshold has a floating aluminum saddle that can be adjusted as much as 5/16" to keep its weatherright seal. Core construction is of hardwood, with an aluminum top surface to minimize wear. Marquette Components, Grand Rapids, Mich. Circle 249 on Reader Service card

Install in seconds . . . save money on the job

The Hager POLYPLUG
(patent pending)

CLOSET ROD

Seamless tubular zinc-plated steel rods slip over "end serts." Each "end sert" is a plastic anchor that attaches to wall with a single wood screw. A twist motion extends the telescoping rod flush with the wall surface.

The low competitive price and the fast installation are money-saving advantages builders welcome.

Available for all closets up to twelve feet. See your Hager dealer for range of sizes and prices.

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Circle 126 on Reader Service card

New, Needed . . . for Wood Decking

Cabot’s DECKING STAINS

The popularity of wood decking, in demand now as never before for porches, sun decks, patios, etc., requires a finish both durable and decorative. Cabot’s Decking Stains preserve, protect, and beautify wood surfaces under difficult conditions.

- Economical: easy to apply and maintain.
- Resists cracking, peeling, blistering.
- Surface weather gracefully.
- Will not rub off or track off.
- Alcohol and detergent resistant.
- Suitable for all types of wood.


SAMUEL CABOT INC.
530 S. Terminal Trust Bldg., Boston, Mass. 02210

Please send color card and information on Cabot’s Decking Stains.

Circle 127 on Reader Service card

New products continued on p. 170
New elegance in kitchen design with the beauty of fine furniture adds value and distinction to homes.

NEW PRODUCTS

Doors and windows

Handcrafted doors—carved from kiln-dried solid pine with a weathered look—come in widths from 2'6" to 4'0", heights from 6'8" to 10'0". Doors are 1¾" or 2½" thick. Both sides are identical. Cornell-Newton, Beverly Hills. Circle 290 on Reader Service card

Decorative doors—of 1¼"-thick madera hardwood or pine—in incorporate upper inserts in choice of translucent polystyrene with a stained-glass effect, embossed translucent polystyrene or hardboard grillework (shown in that order). Panelboard, Newark, N.J. Circle 294 on Reader Service card

Prehung combination door is made of aluminum, incorporates a pre-installed closer lug and striker plate, plus three extra-strong celecon hinges. Door dimensions: 3' wide, 6'8" high. V.E. Anderson Mfg., Owensboro, Ky. Circle 296 on Reader Service card

New addition to variety of styles to make it easy for you to create customer-pleasing kitchens.

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UNITED CABINET CORPORATION

SHERWOOD

In the classic English tradition, Sherwood is the newest AristOraft design. This variety of styles and finishes enables you to offer kitchens with individuality.

Factory-square construction, conveniently located warehouses, protective packing, and competitive pricing mean fewer problems and more profits.

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JASPER, INDIANA 47546

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Company: ______________________________________

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Circle 128 on Reader Service card
Dimensional vinyl grille gives insulated-glass window the appearance of a colonial divided window. Grilles—available for all standard-size windows—come in rectangular- (not shown) and diamond-divided (left) styles. Rimar, Mt. Joy, Pa. Circle 295 on Reader Service card

Extra-thin prefinished door panel—¼" thick—permits plain door (being removed, left) to match plywood wall paneling. The 2'8"x6'8" panel is applied with contact cement to standard hollow-core flush door. General Plywood, Louisville, Ky. Circle 292 on Reader Service card

Glare-free insulating glass (center panel) reduces visible light transmission to 14% or 20% with a chrome alloy coating that lets glass maintain its transparency and keep color distortion minimal. Libbey-Owens-Ford, Toledo. Circle 291 on Reader Service card

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Are you still using old-fashioned one foot pipe sections for land drainage? If so, we suggest you investigate carefully Kyova long length pipe for this application. Kyova pipe in ten foot lengths is easily connected with a blow of a hammer. In a matter of hours with modern trenching equipment you can have your field drainage problem licked. See your supplier now and ask him about Kyova pipe or write for the illustrated book on how you can slash costs with Kyova pipe.

Write today for your copy of "How To Slash Costs With Kyova Pipe."

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Reading Job-Planned Utility Bodies give your men more time to profitably service your customers by reducing time lost looking for parts and tools on your truck. Reading's job-planned compartments keep everything at your fingertips — even the smallest parts are easy to see, easy to reach. Safer from weather damage and theft, too. And Reading quality gives you year after year of trouble-free service!

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Made by master mechanics for master mechanics. See your local truck dealer... or for name of local distributor send this advertisement with your name and address.

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Circle 130 on Reader Service card

MAHOGANY WALNUT PINE
Many designs. Made to order any size, any style. Also available: hand carved panels, easily applied to flush door for carved door effect.

Send 50c for catalog of imported Hand Carved Doors

imported HAND CARVED

Spanish-grillwork design on a three-dimensional Moresque background highlights a Mediterranean-style carpet of 100% acrilan. The 12'-wide carpet is offered in a choice of Madeira red, blue, gold or green. Hardwick & Magee, Philadelphia. Circle 271 on Reader Service card

Inlaid-vinyl flooring in manufacturer's budget line can be installed on, above or below grade. Choice of seven colors includes goldenrod, lime green, white with gold, sand beige, copper, and bamboo beige. In 6' widths. Congoleum-Nairn, Kearny, N.J. Circle 272 on Reader Service card

NEW PRODUCTS start on p. 147

Floors

Vinyl-asbestos tiles are textured to simulate random-patterned flagstones, and have embossed grout lines that conceal seams. Tiles come 12" square in residential gauge; brown, green, beige or white. Ruberoid, New York City. Circle 270 on Reader Service card

Inlaid-vinyl flooring in manufacturer's budget line can be installed on, above or below grade. Choice of seven colors includes goldenrod, lime green, white with gold, sand beige, copper, and bamboo beige. In 6' widths. Congoleum-Nairn, Kearny, N.J. Circle 272 on Reader Service card

Moderately priced carpet of 100% Herculon has a bulked, multi-level loop pile that promises long wear, resists the formation of traffic patterns. Carpeting is available in 12' and 15' widths. J. P. Stevens & Co., New York City. Circle 273 on Reader Service card

New literature starts on p. 174

HOUSE & HOME
Put it up 
Fast & Handsome

And you sure can with Palco-Ply redwood plywood.

Here's a modern building product that combines the quick convenience of plywood with the beauty and durability of redwood. For handsome interior paneling and quality exterior siding, Palco-Ply lets you build homes with plenty of pluses—1) its natural beauty attracts immediate attention, 2) unfinished will weather gracefully, may be stained or painted to any hue or color, or bleached, 3) fire, decay and insect resistant, 4) insulates against heat, cold and noise, 5) applied directly to studs, it serves as both sheathing and siding, and, 6) low maintenance. Palco-Ply is available in three grades—Clear-Heart Saw-Textured, A-Clear Brush-Textured and Select Saw-Textured. Standard lengths are 8', 9', 10' with a pattern selection of plain, inverted batten, Texture 1:11 with grooves 4" o.c., 8" o.c. and 4" & 12" o.c. Order from your dealer today.

For free color brochure, write:

For free color brochure, write:

Saw-Textured, A-Clear Brush-Textured and Select Saw-Textured. Standard lengths are 8', 9', 10' with a pattern selection of plain, inverted batten, Texture 1:11 with grooves 4" o.c., 8" o.c. and 4" & 12" o.c. Order from your dealer today.

THE PACIFIC LUMBER COMPANY
1111 Columbus Avenue, San Francisco 94133
35 E. Wacker Drive, Chicago 60601
2540 Huntington Drive, San Marino, California 91108
How to shoehorn an extra half-bath into your models

Many houses have space that's infrequently used. And often it's more than enough for a half-bath, or powder room. A new brochure suggests you think about making use of these often-wasted areas:

• The closet or empty space under a stairway.
• A pantry, hall or extra bedroom.
• A wardrobe or extra closet.

Two pages illustrate the variety of shapes that are possible for an extra room—including L-shaped (very compact), square (a bit bigger) and rectangular (easy to add). Four typical diagrams, with before and after plans, are shown above and at left.

A wide range of the manufacturer's plumbing and faucet fixtures comprise the 16-page brochure. And it's all in full color. Kohler Co., Kohler, Wis. Circle 350 on Reader Service card

For copies of free literature, circle the indicated number on the Reader Service card, p. 161

BATHROOM CABINETS AND ACCESSORIES.
Four new models, including a swing-door unit with a burnished-gold oval-framed mirror and a large unit finished in antique gray-green, get the spotlight in a 32-page catalog illustrated in full color. Also featured: lighting fixtures and bathroom accessories. Miami-Carey, Cincinnati. Circle 316 on Reader Service card

ALUMINUM WINDOWS.
Eight-page catalog displays project, casement, vertically pivoted and top-hung windows, as well as custom applications. Each type is fully described and many are shown in photos. In color. With specs. North American Aluminum, Kalamazoo, Mich. Circle 317 on Reader Service card

FASTENING DEVICES.
A reference file—consisting of 17 catalog and specification sheets—on full line of manufacturer's fasteners contains details on types of devices, dimensions, recommended load values and suggested applications. Also: list of wholesale distributors. Products covered: framing anchors, joint hangers, post-and-beam connectors, split-ring and shear-plate connectors, floor bridging and truss connectors. Timber Engineering, Washington, D.C. Circle 318 on Reader Service card

HOMEBUILDING INDEX.
The first annual NAHB index of periodical literature in the homebuilding field includes more than 5,500 articles (from 300 sources) compiled and arranged by subject. The range: from acoustics to zoning. For a copy of the 187-page index, send $10 to: Karl A. Baer, chief librarian, National Association of Home Builders, 1625 L St., NW, Washington, D.C. 20006.

ROOFING SYSTEM.
Heavy-duty system designed for resurfacing, waterproofing, and repairing combines liquid asphalt and a patented glass-fiber mesh; it is said to resist blistering and flame-spread, will not alligator, sag or slide. A technical brochure with application photos describes and illustrates the product. Koppers, Pittsburgh. Circle 320 on Reader Service card

LIGHTING FIXTURES.
A full line of traditional fixtures is illustrated in full color in an 80-page catalog. Included: wall-mounted lanterns, ring chandeliers, chain drops, coach and post lanterns, wall brackets. With complete specs and finish information. For a copy send $1 to: Artolier Lighting, Emerson Electric Co., Lanza Ave., Garfield, N.J.

FASTENING SYSTEMS.
Full-line catalog of pneumatic staplers, tackers, nailers and staple nailers—87 models in all—cites the proper tools for a wide range of fastening jobs. Includes a new round-headed, power-driven nail acceptable for finish work. 10 pages. Senco Products, Cincinnati. Circle 300 on Reader Service card

CERAMIC TILE.
Thirty-two-page brochure describes and displays glazed tile, ceramic-mosaic and Murray quarry tile; includes new decorated-tile designs, new colors and shapes. With tips on how to install, plus specs. American Olean, Lansdale, Pa. Circle 301 on Reader Service card

REDWOOD PRODUCTS.
Four-color information sheets display redwood accent columns, rough-sawn redwood decking and end-matched redwood paneling. Includes design, installation and specification data. Simpson Timber, Seattle, Wash. Circle 302 on Reader Service card

SOUND CONTROL.
Detail drawings for 27 systems covering floor-ceiling and partition assemblies are included in a new brochure with tips on added quiet conditioning. Includes a selector guide for related products. The Celotex Corp., Tampa, Fla. Circle 303 on Reader Service card

AIR CLEANER.
The benefits of an electronic air cleaner are cited in a four-page brochure that tells how it operates and includes two cutaway views. Lennox, Marshalltown, Iowa. Circle 304 on Reader Service card
To All People Buying or Selling Doors:

Our dramatic sales growth and more efficient manufacturing operations have made possible product improvements.

These new features will be passed directly to you in our new FLOAT-AWAY closet door line. One door ... the very finest metal bifold made.
And we haven't raised our price!
You'll be getting the same unparalleled service and wide choice of styles, plus stiffer louvers, improved track and hardware, non-modular sizes and increased pin diameter ... without a price increase!

A better deal for our builders and dealers. FLOAT-AWAY dealers generally have well-defined and protected territories, and under normal conditions are not competing with themselves.

Write us today for the FLOAT-AWAY catalog and price list.

PEOPLE WANT METAL BIFOLD DOORS FOR CLOSETS. ONLY FLOAT-AWAY MAKES THEM SO PROFITABLE AND PRACTICAL TO YOU.

Sincerely,

Fred G. Barnet
Vice President

MORE SALES! MORE SAVINGS! WITH NEW
Float-a-just SHELVES

Add sales: Only Float-A-Just shelves offer your customers splinter-free beauty PLUS the strength of heavy gauge steel.
Save installation time: Shelves are factory finished and installable in minutes...with or without rods.
Save shipping costs: Order shelves with Float-Away Doors for minimal freight charges.
The Nailer drives 6d common to 16d sinker nails 5 times faster than a hammer.

The Staple Nailer drives heavy, coated Duo-Fast Staples up to 2" long.

Finish and Brad Nailers drive finish nails and brads \( \frac{3}{8} " \) to 2" long.

Hammer Tacker drives \( \frac{3}{4} " \) to \( \frac{5}{8} " \) staples as fast as you can swing it.

Fast, efficient, easy to use

Whatever your nailing, stapling or tacking problem, Duo-Fast has the right tool to do your job just right . . . quickly and at low cost.

For nailing joists, floor and roof deck, the Duo-Fast Nailer does the job in "jig time." Drives 16d sinkers as well as 6d to 10d plain, ring-shank or screw-shank nails . . . all with the special Duo-Fast coating. Portable and powerful. Built-in safety device prevents accidental firing.

For wall sheathing, plywood subflooring, soffits, bridging, etc., the Duo-Fast Staple Nailer is just right. Powerful, it drives heavy, coated Duo-Fast Staples in less time than it takes to pick up a nail. Magnesium light, portable, air-operated. Accidental firing prevented.

For trim work, moldings, cabinets . . . any job that calls for neat nailing, Duo-Fast Finish and Brad Nailers pinpoint nails just where you want them. Drive brads and finish nails \( \frac{5}{8} " \) to 2" long. Countersink automatically to eliminate costly nail setting.

For insulation, building papers, etc., Duo-Fast Hammer Tackers are truly builders' favorites. Drive Duo-Fast Staples \( \frac{3}{4} " \) to \( \frac{5}{8} " \) long. Simple, one-hand operation. Ideal for volume tacking where speed and reach are important.

Write today for the Duo-Fast FT-26 Builders' Brochure. Your Duo-Fast man will be pleased to demonstrate these tools. No obligation.

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COST-CUTTERS FOR BUILDERS

Everything you need for tacking, stapling and nailing.
The Standard Bearer

ALL GSR PLASTIC PIPE FITTINGS meet ALL the government and industry standards covering their specific applications. The first step in the development of any GSR fitting is to research all applicable standards. Molds are designed and resins selected to meet these standards. Production samples are tested to make sure there is never any variation in GSR quality. All GSR fittings are clearly, permanently marked, so you know exactly what you are using.

Strict adherence to the highest standards is your guarantee of a quality installation. It means GSR fittings will fit precisely. They will withstand the highest pressures and temperatures to be met in the application. With proper joining, they will never leak.

It may be tempting to save a few dollars on cheaper, non-standard fittings, but this is utterly false economy. The savings can be completely wiped out in increased installation time and trouble. Non-standard fittings can turn your savings into serious losses.

The safe, sure way is to make GSR your standard for plastic pipe fittings. Ask your plumbing contractor about plastic DWV—and GSR, the world’s most complete line of plastic pipe fittings. R. & G. SLOANE MFG. DIV., THE SUSQUEHANNA CORP., 7606 N. Clybourn Ave., Sun Valley, Calif. 91352.
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