Nixon and the cities

How the new Administration views the urban housing crisis
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 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.


Spills? Dirt? Accidents? Forget about them, too. Kid-Cushioned Floors come clean fast!

"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. For complete details see your floor covering contractor.

Persian Tile™, Spring® Luxury Cushioned Vinyl: Terracotta. Like all our installed cushioned vinyl floors, it meets all FHA requirements.
Yesterday’s luxury

today’s built-in convenience feature

NuTone Radio Intercom Systems will add sales appeal to any new home
add a built-in convenience feature to any home

Never before have you had such a complete selection of intercom systems from which to choose ... with prices to match! This widest selection of models and prices is sure to make "yesterday's luxury" today's built-in convenience feature ... tomorrow's necessity. No longer is it necessary to exclude this sales appealing convenience feature because of price or budget — the complete NuTone line fills the price gap. From low budget AM only models to the most refined, luxury systems on the market today. A system designed and priced to meet the needs of every installation — even the most modest homes. But, no matter what system or what the price, you know you can depend on NuTone quality, NuTone engineering, NuTone manufacturing, NuTone service!

Watch for the NuTone distributor displaying this sign.

Get the full story ... see the complete line of NuTone Intercom Systems at your NuTone distributor displaying this sign. See how easy it is and how little it costs to install this sales appealing convenience feature.

Home owners and home buyers are being pre-sold on the convenience features of NuTone Home Intercom Systems in leading shelter book annuals.

add NuTone Radio Intercom Systems

(now, that's convenience)

NuTone DIVISION
Madison and Red Bank Roads, Cincinnati, Ohio 45227
NEW DIMENSIONS IN BETTER LIVING
EDITORIAL

The new Administration and the urban housing crisis 71

Can Nixon’s team capitalize on the Johnson programs that have real promise, win
more local support for local programs and straighten out the HUD bureaucracy?
It will try hard, but six big problems are likely to water down most efforts

FEATURES

“The no-tile bathroom”: promotion talk or news in the making? 74

Tile surfaces and cast-iron and vitreous-china fixtures still dominate the market,
but the new molded and laminated plastics are starting to make inroads

Condominium as a design and marketing tool 80

Legally, condominium is simply a means of ownership. Practically, it can also be
an effective aid to design and marketing. Three projects make the point

Where will builders get the capital they need? 86

From going public? From merging with larger corporations? From joint ventures
or partnerships? An H&H Round Table explores these and other possibilities

A showcase house for the electronics age 95

into this house could give homebuilders a whole new approach to merchandising

A little humor adds spice to the stew called merchandising 100

And here are two examples: a series of lighthearted newspaper ads for a big
West Coast project and a whimsical brochure for an Eastern vacation community

NEWS

Inside the new HUD—first days bring fireworks and confusion 4

Call for Ray Lapin’s resignation roils a meeting of staid old Fanny May Board;
calusion reigns over FHA appointment and conflict develops in HLBB selection

New under the sun: some fresh building ideas for now—or never 16

A roof that lets in all the outdoors or a house that comes out of a spray pipe;
from several startling innovations you can choose which will—or won’t—work

Mortgage money: an analysis of the big slowdown 8

Funds for one-to-four family houses, which have never regained level of 1963,
will decline by $2 billion this year. Total mortgage will be off by $1 billion

DEPARTMENTS

Housing-stock prices 12  
Mortgage-market quotations 8  
Leaders 60  
New Products 117

Cover Aerial view of Boston. Photo: W. Kemp from Shostal Associates Inc.

NEXT MONTH

California—housing’s cradle of ideas for the 70’s: An analytical look at the excite­
ment and the innovations born in this most competitive of states and just begin­
ning to spread to the rest of the U.S. … Northern California’s growing emphasis
on natural-wood design … a convention-goer’s guide to San Francisco for
attendees of the Pacific Coast Builders’ Conference in June
Confusion in HUD: The new team is dragging its morass

If somebody made a television series based on the new HUD's first month, it could be a comic-farce entitled "Who's got the job?"

Within a month after super-administrator George Romney became housing secretary confusion abounded:

1. In a board-room shouting match, two board members of the Federal National Mortgage Assn. debated whether Ray Lapin should stay on as Fanny May president.

2. Possible conflicts of interest played havoc with Romney's attempt to name big builder Ray Watt as FHA chief (title: assistant secretary for mortgage credit and federal housing administrator).

3. And President Nixon himself had trouble choosing between two Californians for chairman of the Federal Home Loan Bank Board, an agency related to HUD which regulates the nation's savings and loan industry.

Tale of the city. In Washington, where rumors fly faster than at Army training camps, the hottest tale in town described the shouting match at staid old Fanny May.

As the story goes, Fanny May Board member Lloyd Clarke, last year's NAHB president, noted that every major trade association was 100% behind President Lapin, and that it might be a good idea for Sec. Romney, a Republican, to express some support for Lapin, a Democrat. He suggested that HUD's new General Counsel Sherman Unger, a fellow board member, solicit the support from Romney. Unger shot back:

"Lapin ought to resign to find out what kind of support he has."

Replied Lapin, who was presiding: "I have no intention of finding out."

Interviewed by HOUSE & HOME, Clarke declined to deny or confirm the shouting-match. But he added: "Every trade association is behind Mr. Lapin, and behind the new FNMA programs [the mortgage bond and special assistance insurance]. We need Mr. Lapin's technical expertise."

The Republican administration will have trouble replacing Lapin with one of its own, if that is its aim. Under the 1968 Housing Act, Lapin was named president for Fanny May's entire three- to five-year transition to private status. So he cannot be removed without cause until 1971, at the earliest.

Musical chairs at FHA. The bureaucratic give-and-take that marked Romney's attempts to name a new FHA chief resembled a dispirited game of musical chairs.

From Romney's first days in office, candidates for the mortgage position were a dime a dozen. Impressive housing and home finance men were mentioned, including Ray Niblack of NAHB; Graham Northrup of the Mortgage Bankers Assn.; Bev Mason of FHA and a score of others.

One of the strongest rumors was that John G. Heimann, the New York City investment banker, would get the post. Democrat Heimann ran in front for weeks before succumbing to pressures from Republicans who wanted one of their own.

Heimann was finally named a senior advisor to Secretary Romney, a consultant's job that substantially overlaps the functions of the assistant secretary for mortgage credit. He held a like per-diem post under ex-Housing Sec. Bob Weaver.

Watt's going on? Enter Ray Watt, West Coast builder of high repute. It is here that the plot thickens—to the embarrassment of the administration.

Watt, who was apparently offered the FHA post, was already working at his own expense in the office of former FHA chief Philip Brownstein when questions of possible conflicts of interest developed. The builder began answering queries about his stock and real estate holdings, but not before news of his troubles reached Capitol Hill.

Furor in Congress. The troubles vis-a-vis Watt echoed on Capitol Hill, where both Democrats and Republicans became agitated. Reports flew downtown to the effect Watt might not be confirmed if his nomination were sent up by President Nixon.

With all the problems surrounding Watt, former FHA Commissioner Brownstein was leaving his post February 20, and by law someone had to have his authority by March 1 to act on all FHA matters. Secretary Romney asked P. J. Maloney, number two man at FHA, to take the job as acting assistant secretary, but Maloney turned down the request for fear of jeopardizing his pension.

Secretary Romney then went to long-time HUD employee William Ross, a deputy assistant secretary, and asked him to fill in for 30 days—or until the Watt situation cleared itself up. Ross accepted the assignment and began work March 1.

In apparent embarrassment, Romney put the only announcement of Ross's appointment in the little-read Federal Register.

Watt's explanation. Late last month Watt said his problems would be resolved before April 1. "Then presumably," he said, "my nomination will be sent to Capitol Hill."

His first problem was how to dispose of $20 million in Boise Cascade common stock. There was speculation in Washington that Watt wanted to sell the stock. But late last month Watt said he would place the stock in a non-voting trust.

His other problems reportedly involved an old foreclosure on one of his California subdivisions insured by FHA and his personal real estate holdings.

Watt brushed aside the foreclosure questions as "no problem".

In his view, the real estate and apartment he owned with associates other than Boise Cascade was his only problem.

Said Watt, "We are trying to determine the kind of values to place on these investments in order to allow me to sell my interests. I plan to sell these investments which are valued in excess of a couple of million dollars."

Late last month, congressional aides confirmed that they expected Watt's nomination shortly.

The Loan Board hassle. Late last month, two California Republicans were vying for the chairmanship of the Federal Home Loan Bank Board, the Dutch-uncle of regulator of the S&L industry.

Finally, President Nixon resolved the problem by accepting the "voluntary" resignation of Robert L. Rand, the acting chair appointed by President Johnson just before he left office. As acting chief, Rand won wide support for the permanent post. But in the end he stepped aside, clearing the way for Preston Martin, California's S&L Commissioner.

--ANDY MANDALA

WASHINGTON, D.C.

* Brownstein is now Washington counsel for the Mortgage Guaranty Insurance Corp.

† In anticipation of Watt's appointment, Alan Bostein was named to replace him as chief executive officer of the Watt Co., a Boise unit.

NEWS continued on p. 71.
Kingsberry provides you with professional help to take full advantage of today's apartment demand. You'd expect Kingsberry to provide you with good apartment plans and soundly engineered construction packages. But Kingsberry does far more, to make apartments a sound and profitable investment for builders.

Your Kingsberry representative is trained and experienced in every stage of apartment planning—qualified to help select land, secure financing, choose the most suitable designs, offer construction assistance. He can even advise you on management of the units, or help you sell them. Pre-engineering assures fast build-out, avoiding major weather delays, guarantees tight cost control, and cuts labor costs up to 50%. Kingsberry apartments rent fast at top figures, providing maximum appeal to investors.

Learn for yourself the profit possibilities in Kingsberry apartment construction. Mail the coupon for full details.

Robert H. Welsh, Director/Marketing, Kingsberry Homes, Department HH-4, 5096 Peachtree Road, Chamblee, Georgia 30341, 404/457-4301.

☐ Please send full details on the Kingsberry Apartment Program, without obligation.
☐ Please have a Kingsberry representative call.

My interest in Kingsberry Apartments is ☐ immediate; ☐ for future planning.

Name ____________________________

Firm ____________________________

Mail Address ____________________________ Phone ____________

City ____________________________ State ____________ Zip ____________
A home styled in aluminum with enduring PPG Color Coatings is a moving site!

An attractive exterior is the most effective traffic builder. And aluminum building components protected and beautified with factory-applied PPG Color Coatings deliver the action.

For windows, doors, shutters, siding, shingles and soffits, PPG Color Coatings offer a colorful finish that stays fresh and bright year after year, requiring practically no maintenance. The finish is so tough that it takes all the punishment of shipping, handling and installation, and still looks bright, clean and factory-fresh.

Aluminum building components with PPG Color Coatings are available in a wide range of modern colors. These PPG coatings, used on all components, achieve excellent color matches or color harmonies.

To put PPG color coated components to work for you, specify them to your supplier. For more information on these coatings, contact PPG INDUSTRIES, Inc., Dept. 16W, One Gateway Center, Pittsburgh, Pa. 15222. Telephone 412/434-3191.
Mortgage money: The slowdown in private home financing

Investment in 1-to-4 family home mortgages reached a postwar record of $15.7 billion in 1963 but it has run below that figure ever since.

Mortgage financing lags despite a large increase in total private credit. Home loans accounted for 29% of the credit expansion in 1963 but only 18% in 1968.

The diversion of financing has been the primary reason for a depressed level of home mortgages. The primary reason for a depressed level of the money that is shifting home mortgage commitments is that the Federal National Mortgage Association, which had a peak in its purchases of home mortgages in 1964, is not now buying in the same volume. The agency's purchases of home mortgages have been running at a level of about $10 billion for most of this year, compared with $13.3 billion last year.

The slowdown in private home financing is partly a result of a general retrenchment in the real estate business, with many of the so-called 1-to-4 mortgage lenders finding that the business is not worth the risk.

The buyers. Commercial banks and savings and loan associations accounted for much of the increase in the purchases of home mortgages in 1968, but their investments will decline sharply this year. The only buyers to show an increase for both years will be the federal agencies.

The agencies, and primarily the Federal National Mortgage Association, have faced a sharp decline in mortgage financing in the last three years. The agency support also shifted fund-demand pressure from the mortgage to the bond markets. The construction mortgage market is still in a state of transition, and that transition is likely to continue into 1969 and beyond.

The increase in mortgage volume in 1961 came despite record federal debt financing and peak rates in the money and bond markets. The reasons were that S&Ls were well cushioned against disintermediation last year, by contrast with 1966, and the Federal Reserve permitted record credit expansion.

**HOMEBUILDERS' MORTGAGE MARKET QUOTATIONS**

Reported to HOUSE & HOME in week ending March 14. Prices are as of March 17.

**FHA Sec. 203b**

<table>
<thead>
<tr>
<th>City</th>
<th>FHA Sec. 203b Min.-Down*</th>
<th>FHA Sec. 203b Min.-Down Discount</th>
<th>FHA Sec. 203b Min.-Down Discount %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston</td>
<td>4-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Charlotte</td>
<td>4-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Cleveland</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Dallas</td>
<td>4-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Denver</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Detroit</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Honolulu</td>
<td>5% Up</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Houston</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>4-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Miami</td>
<td>4-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Minneapolis-St. Paul</td>
<td>2% Up</td>
<td>1% Up</td>
<td>75%</td>
</tr>
<tr>
<td>New York</td>
<td>4-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Oklahoma City</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>St. Louis</td>
<td>3-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
<tr>
<td>Seattle</td>
<td>2-1/2% Up 15%</td>
<td>3-1/2% Up 15%</td>
<td>75%</td>
</tr>
</tbody>
</table>

* Immediate cash covers loans for delivery up to three months, future cash covers loans for delivery in three to twelve months.

**Footnotes:**

- a-no activity. b-limited activity. c-net yield to maturity. d-sealed bid range. e-bid range.

**Sources:**


**Construction Loan Rates**

<table>
<thead>
<tr>
<th>City</th>
<th>FHA 207 Loan</th>
<th>FHA 207 Loan</th>
<th>FHA 207 Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>Honolulu</td>
<td>5% Up</td>
<td>4% Up</td>
<td>3% Up</td>
</tr>
<tr>
<td>Houston</td>
<td>4% Up</td>
<td>3% Up</td>
<td>2% Up</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>Minneapolis-St. Paul</td>
<td>2% Up</td>
<td>1% Up</td>
<td>0% Up</td>
</tr>
<tr>
<td>New York</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>Oklahoma City</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>San Francisco</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>St. Louis</td>
<td>3% Up</td>
<td>2% Up</td>
<td>1% Up</td>
</tr>
<tr>
<td>Seattle</td>
<td>2% Up</td>
<td>1% Up</td>
<td>0% Up</td>
</tr>
</tbody>
</table>

**Notes:**

- FHA Sec. 203b: First FHA Sec. 203b loans for delivery in three to twelve months.
- FHA 207 Loan: FHA 207 loans for delivery in three to twelve months.

**Footnotes:**

- a-no activity. b-limited activity. c-net yield to maturity. d-sealed bid range. e-bid range.

**Sources:**

New redwood plowed fascia...
engineered to save time and cut expenses on your next job!

With plowed fascia, you cut the cost of installing soffits and reduce the time of on-site application. However, with Certified Kiln Dried redwood fascia, the list of cost and time savers increases. You get permanently straight, flat installation. Weather resistance. Paint retention. Workability. And built-in customer appeal. Available now, redwood fascia is single or double plowed to fit either ¹⁄₄" or ³⁄₈" soffits. All standard patterns come in the long lengths up to 20 feet. For more on the engineered economies of redwood plowed fascia, please write.

That's the beauty of redwood!
The "OVERHEAD DOOR" electric is tougher than a tribe of Apaches

If you're the kind of builder who is always looking for a little extra "something" that will give you a special edge in selling your houses, you can stop looking. You just found The "OVERHEAD DOOR" electric — the radio-controlled automatic garage door.

The "OVERHEAD DOOR" electric is the most beautiful, well made, and convenient-to-operate garage door in America. Brag? Fact.

Any woman will realize instantly that The "OVERHEAD DOOR" electric actually improves the overall appearance of the house. (And let's face it — most garage doors don't.)

Any man will appreciate the door's rock-solid construction and full one year warranty on both material and workmanship. But the kicker comes when you put that tiny radio transmitter in their hands. At the press of a button The "OVERHEAD DOOR" opens and closes garage door automatically by radio control from your car!
and as dependable as the Sheriff.

electric glides upward smoothly, silently, safely. Another press brings it down and locks it. Suddenly your prospects become aware of the wonderful convenience of automatic garage door operation. And they’ll never again want to settle for less. They’ll love the door... and the house. From there on, closing the deal is a cinch.

We make doors that will complement any house you build, regardless of architectural style. They’re installed and serviced by our own factory-trained distributors. We have a nationwide network of these door specialists and we’re as proud of them as we are our doors.

Put our reputation and know-how to work for you by including The “OVERHEAD DOOR” electric in every house you build. It’s the best garage door in the world. And it can help make your prospects think you’re the best builder in the world.
City Investing Co. puts together a housing conglomerate

The New York investment combine has just bought Guerdon Industries, which rolls mobile homes and prefabs from its production lines in $150-million-a-year volume.

The purchase was arranged by City’s go-go president, George T. Scharffenberger, with whom expansion is a religion. Since 1966 he has raised annual revenue from $8 million to $1 billion, mostly through acquisitions.

The Guerdon purchase points up two movements sweeping the housing industry: the disappearance of building companies into major corporations, where the builders become mere operating divisions, and the trend to consolidations between segments of the shelter industry itself.

Trends to bigness. Mergers with big business began in the late 1950s, when such giants as Alcoa and Union Carbide began moving into homebuilding and land. By late 1967 the nation’s biggest housebuilders, Levitt & Sons, had sold out to ITT.

The consolidation within the shelter industry takes two forms. Big business after a dozen diversified companies in such a field is now beginning to merge into each other. A mobile-home giant, Redman Industries, provides the latest example with its purchase of one of the top-volume apartment constructor, Kansas Quality Building (News, Feb.). It is this latter trend that has brought from President Arthur Deko of Skyline Corp. (mobiles) the prediction that the line between his industry and traditional homebuilding will disappear in five years (News, March).

The new group. City Investing is moving via the Boise blueprint, and its new construction group now comprises a conglomerate within a conglomerate. Guerdon joins this lineup of shelter activities:

- Forest City, a lake-studded industrial and residential tract of 20,000 acres near Tuxedo, N.Y., about 30 miles from New York City. Carried by City Investing at $22.5 million book value, it was appraised at $76 million three years ago. Scharffenberger expects to sell it for $130 million.
- General Development Corp., of which City owns 49%. The Florida land developer earns $8 million a year, or 84 cents, on $54 million in 1967.
- Southern California Financial Corp., the holder for Southern California S&L of Los Angeles, which earned $1.5 million on $12 million in revenue in 1968.
- Mobile 6 of Santa Barbara, Calif., operating in 41 localities.
- Rheem Manufacturing of Richmond, Calif., which makes heating and air-conditioning equipment as well as containers.

At home and abroad. Scharffenberger proposes to ride a housing boom here and overseas. He will call on Rheem’s affiliates in 29 countries for help. And he says of his domestic plans:

"The purchase of Guerdon brings to maturity City’s activities in the housing and development field. We now have substantial technological, mass manufacturing and land capabilities that will enable us to be a major participant in the growth of housing and construction markets."

Guerdon’s record. City Investing bought 51% of Guerdon from L. Cap paert and his family, who had owned Magnolia Homes, another mobile-home company. Magnolia was ostensibly taken over by Guerdon in 1966, but much of the actual takeover was the other way round. The Cappaerts acquired 70% of the Guerdon stock, and he became president and chairman. He will retain both posts. Guerdon earned $7.79 cents a share, on sales of $70 million for the six months ended Oct. 31, 1968, up from $1.7 million, or 43 cents, on $53 million in the same period 1967. Sales for the year ending April 30 are estimated at $150 million.

City gave notes and cash for Guerdon and apparently got a bargain. The purchase did not disclose the price but did indicate that it was less than Guerdon’s per-share market price of $37,375 on the day of the sale. There are four million shares.

Housing stocks dive sharply; month’s decline third in a row

HOUSE & HOME’s composite index of 25 housing issues fell 30 points to 323.64, in the month ended March 3. After three months of losses, the index is off 14% from its December peak. Here’s the index:

Housing stocks 1966-68

---

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>March 3 Bid</th>
<th>Chng.</th>
<th>Prev. Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>260</td>
<td>-6</td>
<td>-13</td>
</tr>
<tr>
<td>Palomar Mfg.</td>
<td>70</td>
<td>+2</td>
<td>+2</td>
</tr>
<tr>
<td>J.W. Homes</td>
<td>152</td>
<td>-8</td>
<td>-6</td>
</tr>
<tr>
<td>Kusen &amp; Bod.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>Skyline Mfg.</td>
<td>120</td>
<td>-8</td>
<td>-8</td>
</tr>
<tr>
<td>First Hartford Rly.</td>
<td>16</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Crawford</td>
<td>98</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Advance</td>
<td>20</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>ske Ltvon Fin.</td>
<td>11</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Charter Corp. of Fla.</td>
<td>14</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Colwell</td>
<td>37</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Cont. Mgt. Investors</td>
<td>9</td>
<td>-5</td>
<td>-10</td>
</tr>
<tr>
<td>Cont. Mgt. Insurance</td>
<td>14</td>
<td>-3</td>
<td>-6</td>
</tr>
<tr>
<td>FNMA</td>
<td>134</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>First Mgt. Inv.</td>
<td>23</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Kusen Mfg.</td>
<td>12</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Lomax &amp; Net. Fin.</td>
<td>14</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Missouri Mfg. Corp.</td>
<td>18</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Mortg. Atlanta</td>
<td>15</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Palomar Mfg.</td>
<td>9</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Southland Mfg.</td>
<td>4</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Unified Inv. &amp; Ins.</td>
<td>9</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>L &amp; D Ins.</td>
<td>2</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>MGL Ins.</td>
<td>8</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Elta Ins.</td>
<td>18</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Atlantic Ins.</td>
<td>16</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Cont. Mtg. Ins.</td>
<td>23</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>HUD</td>
<td>1</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>N.Y. Life</td>
<td>15</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Trans. Inv.</td>
<td>23</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Trans. Amer. Ins.</td>
<td>15</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>U.S. Home &amp; Dev.</td>
<td>26</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Key Co.</td>
<td>32</td>
<td>-4</td>
<td>-4</td>
</tr>
</tbody>
</table>
Carpet of HERCULON® stands up beautifully no matter how often the Board puts its foot down.

No matter who puts his foot down, or how, or how often—carpet of HERCULON® olefin fiber stands up to the heaviest traffic. In the office. In the home. Beautifully. It doesn't absorb stains or soil. It's always easy to clean. A carpet of HERCULON is a good value to start with. It gets more so the longer you have it.

Carpets of HERCULON mean business. For more information contact Fibers Merchandising, Hercules Incorporated, Wilmington, Delaware 19899.

*Hercules registered trademark.
There's a new look to living

Gold Bond® Prefinished Woodrock has the strength, weatherability and fire resistance of masonry, but in clapboard form.

And it comes prefinished with a smooth finish so durable we guarantee it against blistering or peeling. And there are no weather hangups. Because it can go on in any kind of weather.

What's more, it is top-nailable.

It's the only completely concealed nailing system in the industry today. Face nailing is virtually eliminated. No adhesive is required. And mounting strips, slots or splines are things of the past.

Concealed nailing speeds installation. The applicator does not have to be so careful when nailing. Mistakes are covered up. Labor costs are reduced.

Prefinished Woodrock is available in 5 attractive colonial colors and white. So enjoy both. The attractiveness of Woodrock® and top nailing.

Making you look good is a National responsibility.

Gold Bond WOODROCK

The name Gold Bond identifies fine building products from the National Gypsum Company. For information on Woodrock, write Dept. HH-49W, Buffalo, New York 14225.
ind Woodrock makes it last.
Newest housing ideas: Some for today and some for the future

Homebuilders are not all traditionalists who run from new ideas. Today's innovators are stretching their imaginations in search of new construction methods and products. Here are five of the industry's freshest ideas, and they spread across the broad spectrum of urban development, land subdividing, vacation living and low-cost housing. All are imaginative; some seem overly so. Which, if any, walk the line between the possible and the impossible? Judge for yourself by checking off the ones you like.

This roundhouse is factory-Finnish

The factory-built house from Finland can be delivered to vacation sites in the United States for $12,000.

The house was discovered late last year by Philadelphia developer Leonard Fruchter at Manhattan's Museum of Contemporary Crafts, where it was on display.

Fruchter, attracted by the futuristic design, rushed to the Finnish Consul to get word to the inventor, Oy Polykem AB of Helsinki. Within two months, Fruchter's Futuro Corp., was the American and Caribbean distributor of the roundhouse.

Fruchter plans to begin producing the fiberglass units with his own concrete molds this Spring. The hand-pressure molds, which cost $50,000, could turn out 40 prefinished units a month.

The units' fiber glass inner walls, which match the curvature of the units, can be installed in various ways to suit each buyer.

PAPER HOME costs $1,200, can be thrown away

Sim Van der Ryn, and similar units. Financing has come through the localities, the Rosenberg Foundation and the Office of Economic Opportunity.

These California units are designed specifically for the poorest of families. But University of Wisconsin urban planner Barrie Greenbie, says modern technology has made disposable units feasible for us all.

Greenbie says prefabricated units, which could be replaced as simply as any industrial product, would eliminate the need for large-scale slum clearance. Urban blight could be checked without disturbing neighborhoods, by replacing houses as they decay, one at a time.

A survey of 127 Wisconsin homeowners conducted by Greenbie showed that 42% of the families who moved would have stayed in their old neighborhoods if they could have put new houses on their old lots.

This truck pumps out foam homes

Inventors of this highly experimental technique say two men could build a 1,000 sq ft. house in six hours.

The estimated cost is $3.80 a sq. ft., half the figure for standard house construction. But such estimates are tentative at best.

The inventors, Midwest Applied Science Corp. of West Lafayette, Ind., and their allied firms, do not plan to build the first house until late this year.

A Midwest spokesman says: "We had dis..."
HAMPAGNE GLASS inspires building-lot plan.

This plan has lots of privacy

A new subdivision layout that looks like
vines glasses laid stem to bowl offers more
housing privacy than the traditional rec-

The houses can be staggered by siting
them in the bowl, or wide part, of each lot.
And the homes can be built farther apart
than usual.

The design, invented by Canadian develop-
er J. Wyburn Lawson, gives each home-
owner wide frontage at one side of his lot
and a narrow vehicular entrance at the oppo-
site side.

Lawson is confident that his design will
increase a subdivision's value by 15%.
While easing the costs of laying utility and
plumbing lines, He is president of Himo-
canada Ltd., a contracting concern that
will test his theories this Spring in a 40-acre
ottawa subdivision.

If all goes well, Lawson will apply the
design to garden apartments and even to
high-rise office buildings. He got a United
States patent for the scheme late last year.

Superdome raises roof to a new art form

The movable glass roof does everything
but whistle tunes to the wind.

The thick glass lets in the winter
light but insulates against the cold. And
the four flaps fold back for carefree
topless living in the good old summer-
time.

The inventor, Sweden's Sar Bengt
Warne, designed the dome for his at-
trium houses in Stockholm five years
ago.

Now Warne is offering the prefab
roofs to American builders through
Super-Sky Products Inc. of Thinsville,
Wis. The 40-foot square roofs will
cost about $18,000, increasing the cost
of a $50,000 house by about 10%. The
domes have 10-year guarantees.

The first dome. When Warne, an
architect for the Swedish government,
built his first superdome in 1964, it
was an instant success on the continent.
But it received no recognition in this
country.

But in 1968 House Beautiful, the
consumer magazine, published a Warne
house in a round-up story of new Eu-

Warne is teaming with local architects
to design these first custom houses for
individual buyers. But he wants to re-
turn in a few months and joint venture
with homebuilders and prefabricators
to mass-produce atrium houses featur-
ing his dome.

Designing the old. American
homebuilders who talk about repro-
ducing colonial designs disturb Warne.

He says:

"We should never use modern tech-
niques to build historical designs. It
ends up looking terrible, because we do
not have the skilled workmen of the past.

"We should build things that have
never been built before—the new
look."
The new Athey Blade is just the right size for the not-so-big jobs.

What does it cost to use a full-size road grader? On anything but the big jobs — too much.

On the half-size jobs, you can cut the cost in half with Athey's new Blade. Finish grading, trimming shoulders, backfilling, grading out access ramps, parking lots or driveways. For any light grading requirement there is no more suitable machine.

Only 13½ feet long and 8 feet wide, and it has a tight, 17½ foot turning radius. The automatic transmission gives you an infinite range of speeds (0-18 mph) in both forward and reverse, operated by a single lever.

The Athey Blade with its 69 bhp engine weighs in at 10,000 pounds. Plenty of power and traction. And with its choice of blade sizes and tire dimensions, it's adaptable to virtually any use you might come up with.

Save the massive machines for the massive jobs.

Cut your costs with the Blade.

Let us send you more information.

Contact the Domestic or International Sales Division of Athey Products Corp., P. O. Box 669, Raleigh, N. C. 27682.
Price Pfister Marquis is now available in special finishes and translucent colored handles. Competitively priced and protected with our exclusive LustreGard™ protective coating.
Every builder of apartments and every apartment owner should have this new report.

So should you, even if you are only thinking about building or financing an apartment building.

We hired an independent research firm to find out what apartment residents really think about privacy—a concern that affects the comfort of every apartment owner.

What we learned was surprising.

We found out plenty.

There are many, many poorly constructed apartments, even those advertised as "luxury" and those with high rents.

One man wrote, "This apartment is supposed to be soundproofed. This is a bunch of bologna. I'm planning on moving."

Another said, "Our main complaint is the apartment above. It sometimes clutters from the room next door—about irritating noises from the apartment above or below."

We found out plenty.

For your copy of this report, just write for "What Apartment Dwellers Say About Privacy," The Flexicore Co., Inc., P. O. Box 825, Dayton, Ohio 45401.

Robert E. Smith
Vice President and Manager

California court extends builder liability

The State Court of Appeals has ruled that tract homebuilders are liable for faulty workmanship whether or not negligence can be proved.

Justice Wakefield Taylor has applied the theory of "strict liability" to California real estate for the first time. New Jersey's Supreme Court had invoked the doctrine against Levitt & Sons four years ago (News, Dec. '65), but the concept had been applied in California only when persons were injured while using such consumer products as autos or appliances.

"We think that in terms of today's society, there are no meaningful distinctions between the mass production and sale of homes and of automobiles," Justice Taylor said.

The ruling theoretically allows David Krieger of Palo Alto to collect $5,100 from bankrupt Eichler Homes Inc. for damage caused by a faulty heating system built into Krieger's house in 1951. Eichler's lawyers argued that the pipes were properly installed, but the court held the contentions were irrelevant.

—TY MARSHAL

McGraw-Hill World News, San Francisco

Two more mobiles purchased

U.S. Industries Inc. has purchased two mobile home companies with combined 1969 sales of more than $13 million. The purchase price was not disclosed.

The two companies are Central Industries of Greeley, Colo., a manufacturer of mobile home products, and Western Mobile Homes Inc. of Denver, a distributor.
Stone on plywood. The lifetime siding... by Sanspray.
FHA Accepted • APA Qualified

Factory-Finished for Quick installation
Combines the ease and low cost of paneled plywood construction with the beauty, durability and lasting value of natural stone. Sanspray stone on plywood panels can be used wherever plywood can be used. Simply saws and nails into place. No painting, no maintenance. Completely weatherproof! Sanspray won American Plywood Association qualification for exterior use after 7½ years of rigorous testing under all climatic conditions. F.H.A. accepted for use without sheathing.

Sanspray Industries, Inc.
515 Madison Avenue / New York, N.Y. 10022

☐ Have Representative call with samples. HH
☐ Send me the facts on Sanspray stone-on-plywood panels.
I am considering Sanspray for the following:
☐ Residential  ☐ Commercial
☐ Industrial  ☐ Other

Name _____________________________
Firm _____________________________
Address ___________________________
City __________________ State ______ Zip ______

D Have Representative call with samples. HH
D Send me the facts on Sanspray stone-on-plywood panels.
I am considering Sanspray for the following:
D Residential  D Commercial
D Industrial  D Other

Name _____________________________
Firm _____________________________
Address ___________________________
City __________________ State ______ Zip ______
The shangle.  It does a
The deep sculptured beauty of our Hallmark shingle, the one almost everyone calls "The shangle," is adding a new beauty and excitement to dwellings with mansard and peaked roofs.

And it's no wonder.

"The shangle" is an entirely new concept in roofing products. It combines the deep sculptured beauty of the finest wood shake and the lasting durability that only an asphalt shingle can offer. That means it won't rot, warp, shrink or split and it's fire safe.

Available in pewter gray, bronzed brown and golden tan, "The shangle" lets you make the roof as attractive as the rest of the dwelling.

For complete information, see your Sweet's file or write:

Certain-teed Products Corporation, Ardmore, Pa. 19003.

Manufacturers and distributors of roofing shingles, built-up roofing, fiberboard sheathing, fiber glass home insulation, and acoustical ceiling products.
CUTS CLOSET ROD COSTS TWO WAYS!

You buy it for less...costs less to install!

It's the lowest price seamless steel telescoping rod, yet its strength and appearance makes it a natural for volume builders.

The exclusive "quick mount" features gets 'em up fast...saves time on the job. Mount each Polyplug with one screw. Ease rod onto the plugs and give a slight twist motion to lock in place.

Sizes: 18" rod (extends to 30 inches)
   30" rod (extends to 48 inches)
   48" rod (extends to 72 inches)
   *72" rod (extends to 96 inches)
   *96" rod (extends to 120 inches)

*Furnished with center support

Packed 10 rods to a carton. (Each rod Poly-bagged with plugs, screws, and instructions.)

Contact your Hager supplier now. Get the extra savings from the lowest price rod that installs in a jiffy.

HAGER HINGE COMPANY
139 Victor Street, St. Louis, Mo. 63104

In Canada: HAGER HINGE CANADA, LTD.
The very model of a brick floor. In solid vinyl tile.

Kentile Colonial Brick warms up any model house with the expensive look of natural brick. Costs far less because it needs no special underfloor. Washes spotlessly clean—a big selling plus when you're talking to prospects. Greaseproof, resilient, quiet, comfortable underfoot. Colonial Brick, in 9” x 9” x ¼” tiles for fast, low-cost installation, comes in four glowing colors. Complementary wall base: KenCove® Vinyl in 10 colors. Your prospects are seeing Colonial Brick advertised now in Life, House Beautiful, House & Garden, and other leading national magazines. Samples? Ask your flooring man for Kentile® Colonial Brick.
WHAT YOU SEE...
through the Berger "Power Zoom System"
... as built into the Model 320 Transit-Level

18x

26x

34x

A TWIST OF THE ZOOM RING...
and you're ready to shoot.

New Power Zoom System lets you...

Vary the power of a Berger transit or level to suit your need of the moment

Skies hazy? Light poor? The Berger Power Zoom System will increase a target’s visibility.

About to take a long shot? The Berger Power Zoom System provides extra magnification and mirror-like clarity.

This Berger development—engineered into various Berger builders’ transits and levels—permits instant telescope power adjustment to compensate for different light and atmospheric conditions.

It’s easy to operate: just focus the cross hairs... bring in the image... vary the power to accommodate your eye— and go to work. The instrument can’t be thrown out of focus when you reset the image or adjust the power. The image won’t ever “walk off.” And the Power Zoom ring won’t wear out even with extensive use.

As an example of its versatility, the Model 320 with Power Zoom System offers a range of approximately 18-34 power. Without the system, the same instrument provides a fixed 22 power. Berger models 480, 500 and 150, and all engineers’ instruments, are now also available with Power Zoom System at very slight additional cost. Look into Power Zoom at your Berger dealer—or write for more information. Berger Instruments, Div. of KMS Industries, Inc., 53 Williams St., Boston, Mass. 02119.

BERGER
Engineering and Surveying Instruments... Made in America by American Technicians, Since 1871

Georg...
Frigidaire makes the appliances that make the kitchen hat makes the sale

... at every price level

Make sure the kitchen in your house or apartment lives up to her great expectations! Make it a Frigidaire kitchen. Bright! Beautiful! Packed with the ease and convenience she has already decided she wants. Here, a mere three possibilities at three different price levels. Many more are available.

Small price
Big convenience
Here, you will note the exclusive NEW Frigidaire Laundry Center which will be available later this year. It is a stacked washer-dryer and is just 24" wide. You will also note a Compact 30" Built-In Range with a Glass Door, a sizable single-door Refrigerator and a DeLuxe Undercounter Dishwasher that installs flush front.

Middle-of-the-road prices
Extra convenience
In this price category, you might select a 30" Wall Oven with Electric-clean feature, a Cooking Top and a Custom DeLuxe Undercounter Dishwasher. Other Middle-of-the-road selections might well include a 16.6 cu. ft. Refrigerator which is Frost-Proof and on rollers, plus a 2-speed Washer with Durable Press Care and matching Dryer.

Just a little more
for luxury living
Here is the lavish convenience for which she is really looking. The Refrigerator has just about everything: it is 21.9 cu. ft. in size and features Side-by-Side styling plus an Automatic Ice Maker. In addition, there is a Twin 30 Two-Oven Range with Electric-clean lower oven and a Custom Imperial Undercounter Dishwasher. She can also express her own decorating tastes in her kitchen with Designer Doors; either standard or optional equipment on the appliances shown.

The Frigidaire Quantity Sales Representative in your area has the facts, figures and ideas for kitchens that SELL! Call him today.
pockets, checks, or grain to hamper play, and won't splint or crack. You'll probably never have another checkerboard quite like it. You can order new Boise Cascade Vinyl-Bond Insulite Siding in long rectangles for the outside walls of houses or apartments, or other kinds of light construction. It is not available with the checkerboard pattern, but everything else is the same.
Every serious builder should play Checkers. It’s a nice way to relax and have some fun and still get in some serious business. And besides, you can get this Checkers game absolutely free. The beautiful checkerboard itself is a square piece of our new Gold Vinyl-Bond Insulite Siding. It makes the only checkerboard with a satin-smooth, factory applied finish that’s guaranteed in writing for 10 long years. Guaranteed against blistering, peeling, checking, and the repeated deployment of Kings. In addition to Gold, new Vinyl-Bond Insulite Siding is available in three other great colors: Avocado, Sandstone, and White. It can be easily applied with conventional tools and comes with reversible, weather-drip edges and color-matched accessories. It resists fading, and is completely weatherproof so you could set up a game in the rain. It also has no knots, pitch-pockets, checks or grain to hamper play, and will not split or crack. You may never have another checkerboard quite like it. So don’t delay a minute. Send us the coupon below. Or, if you don’t want to play games, call up your Boise Cascade dealer and put in an order for 8” x 16’, or 12” x 16’ Horizontal Lap Vinyl-Bond; or 4’ x 8’, or 4’ x 9’ Plain Panels. Unfortunately, neither type is available with the checkerboard pattern.

BOISE CASCADE
BUILDING PRODUCTS
Boise, Idaho 83701

Please send me your Checkers game with the new Vinyl-Bond Insulite Siding checkerboard— including a set of checkers and rules.

NAME

COMPANY

STREET

CITY

STATE

ZIP
What you're looking at is history's most beloved door knob. It has to be because there are more than 75,000,000 of these Bel Air design knobs in homes and apartment throughout the world. Even in Bel Air, the snooty Los Angeles suburb. Which is plenty particular about its door knobs.

Kwikset Locksets
America's Largest Selling Residential Locks
The no-tile bath

Create a new selling environment of elegance that's practical with FORMICA® brand products.

Sell what your prospects are seeing in Better Homes & Gardens, Good Housekeeping, House & Garden and Redbook. Contact your local distributor, fabricator or Formica representative.

Sell the new look in baths with FORMICA® Panel System 202. Wide, smooth panels of Sauterne Finesse, 261, cover the walls... Classic Crema Marble, 401, lines the Fiat® shower.

Sell new freedom from care with a Panel System 202 tub surround of elegant Classic Crema Marble. No tile or grout mess; requires only an occasional sponge-down to stay clean and sanitary.

Sell the look of fine furniture in bathroom cabinetry. Island vanity surfaced with Rosewood, 602, helps coordinate entire room—paneling, beams and built-ins.

Leadership by design

© 1969 Formica Corporation • Cincinnati, Ohio 45232 • subsidiary of CYANAMID
DOOR CLOSER
The only low price closer on the market that allows full 180° door opening without damage to closer or jamb.

FEATURES ASSURE VOLUME SALES...HIGH PROFIT

- Smooth Rotary Hydraulic Operation
- Right- or Left-opening Doors
- Adjustable Closure Speed
- Latches Door Securely Every Time
- Compact — Requires only 2¾” between doors
- Silicone Damping Fluid — Temperature Compensated
- Installs Easily in Minutes

Attractively Blister Carded For High Impulse Sales
Counter Demonstrator Available

An all new, heavy duty hydraulic POWR-CLOSER for interior doors is also available. Write for POWR-CLOSER or ROTA-CLOSER literature.

IVES
THE H. B. IVES COMPANY
New Haven, Connecticut 06508

Social notes . . .
The Bill Branghams say farewell to California at a builder bash

Peripatetic Bill Brangham, who has directed marketing for the biggest builders, is becoming executive vice president of Florida's giant Behring Corp. That means leaving his home state and his closest friends, so he gave a farewell party. Because HOUSE & HOME watches builders at work and play, it sent its own Suzy-type social reporter to get this story.

What a way to go.
Bill and his young wife Suzanne threw a party for their dearest friends at one of Los Angeles's poshest hotels, the Bel Air, before embarking on their swinging new life in Fort Lauderdale.

It was cocktails and shrimp and meatball delicacies from six to nine in the dimly lit Garden Room, which is separated from the rest of the hotel by a small bridge over a plashing stream.

Among the 150 guests, we noticed Bill's former boss Michael Tenzer, marketing director at the Larwin Co., and his lovely wife Jackie, and Don Sichel, sales manager of American Housing Guild of San Diego.

We missed—by minutes—seeing Larwin President Lawrence Weinberg, Macco Corp. Vice President Harold Laskey and Nathan and David Shatell, president and vice president of S&S Construction.

Bill, dashing in a blue pin-stripe, describes his position with Behring as a "tremendous opportunity." Glass in hand, Bill added: "We are going to do things with factory construction that others aren't doing. I hope to satisfy the large low cost market throughout the South."

The Behring Corp., headed by 40-year-old Ken Behring, had $100 million in sales in 1968, and led a building boom in Fort Lauderdale.

Bill, now 46, headed the marketing arm of Ross Cortese's Leisure Worlds in California and was marketing vice president for Reston in Virginia.

Bill told us he was glad to be going East. But Suzanne, stunning in a scarlet tunic and pants, whispered her regrets. She will miss California. And certainly, we miss her and Bill.

—CAROL HARRI
McGraw-Hill World News

Joan Irvine complains to Congress

The prettiest witness the House Ways and Means Committee is likely to see reiterated her decade-old charges of mismanagement against the foundation that controls her family's 88,000-acre Irvine Ranch near Los Angeles.

The hearings into possible tax abuses by tax-exempt foundations provided the thrice-divorced Joan Irvine Smith with an ideal platform, but her testimony was disputed by the Irvine Foundation.

The 35-year-old blonde said her stock, worth $45 million, would be worth $180 million under proper management. She even challenged the foundation's takeover of the land company.

The old gentlemen of Congress seemed sympathetic toward her pleas for the foundation's ouster. But only Rep. Sam Gibbons (D., Fla.) offered firm advice: "Sell TV rights of this [story] and you'll come out fine."

—IRVINE RANCH'S JOAN
From Congress, a word of sympathy

NEWS continued on p. 3.
Who says there's nothing new under the sun?

3M Company introduces "3M" Brand Heavyweight Textured Granules to makers of quality asphalt shingles.

Today's homeowner appreciates texture. He loves the honest feel of brick, stone and other natural materials.

So we created new "3M" Brand Heavyweight Textured Granules—larger, tougher than ordinary granules. They work beautifully in shingle designs that show a quiet new elegance in roofing.

More texture, more profit. According to a survey we took recently in Southern California, 3 out of 4 homeowners prefer our new heavyweight granules. You can take the same kind of survey. Let your prospects see and feel the difference. You'll sell a premium roof at a premium price. Without any argument!

Tough on the weather. "3M" Brand Heavyweight Textured Granules stand up against wind, hail, sun and rain because they're embedded deeper into the asphalt.

New rustic tones.


We borrowed these colors from nature. Mellow and rustic, they help each house blend into its environment. They never shout from the rooftops.

Ask your supplier for asphalt shingles made with "3M" Brand Heavyweight Textured Granules. Or write to Industrial Mineral Products Division, 3M Company, 3M Center, Dept. OAE-49, St. Paul, Minn. 55101.
ROMANY-SPARTAN MAKES THE DIFFERENCE

This bath is finished with Romany-Spartan bright glazed wall tile and unique crinkle glazed floor tile. The bright glazed tile is exceptionally brilliant—it’s manufactured with a double glaze—the only double glaze in the industry. As for the crinkle glazed tile, they’re exclusive—not available from any other source. Have your tile contractor show you Romany-Spartan. We think you’ll agree that it will provide the difference that makes for an outstanding installation.

La Bella Contessa Home by Heritage Custom Homes, El Paso, Texas

LEONARD ROSEN
He becomes university fund raiser

ands BROTHER JULIUS
For now, he becomes a consultant

NATION’S TOP LOT SALESMEN TAKE THEIR COMMISSIONS—$128 MILLION

The housing careers of developers Leonard and Julius Rosen are all over but the counting.

In a $200-million deal, the brothers have sold the nation’s largest lot-sales operation (1968 volume of $95.7 million) to the billion-dollar GAC Corp., a diversified Pennsylvania holding company known formerly as the General Acceptance Corp.

The Rosens stand to become two of the nation’s richest men by selling their 60% ownership of Gulf American, a Florida based company they founded on a $125,000 investment only 12 years ago.

The brothers received GAC common shares valued at $27.7 million (based on GAC’s February market price of $48 a share), plus preference convertible shares that are potentially worth $100.7 million. That amounts to $128.4 million, or $64.2 million for each brother, in return for their Gulf holdings valued at $98.6 million.

And that is only the beginning. Immediate annual dividends, for each brother, will be $872,416 (based on current dividend rates of $1.50 per common share and $1.06 per preference share).

That $872,416 figure is more than eight times higher than the annual salaries the brothers received while running Gulf American in recent years.

In addition to the $872,416 from the common stock they own today, the brothers can convert each preference share for 2.53 shares of GAC common in three years. Based on today’s $1.15 dividend rate, the brothers converted holdings alone will yield annual dividends of $3.2 million.

So in all—adding today’s common stock dividends to tomorrow’s preference stock dividends—each brother will begin receiving dividends of $2 million a year beginning in 1972.

The big sellout climaxed the Rosen’s colorful careers after years of ups and downs. Indeed, the repeated efforts of Florida regulatory authorities to discipline the brothers’ company for allegedly fraudulent sales tactics prompted the GAC takeover (News, Aug. ’67 et seq.). During its difficulties in 1968, Gulf sales plunged to $95.7 million from $131.3 million in 1967 and Gulf lost $1.6 million compared to a 1967 profit of $16.8 million.

Says Delbert Reichardt, GAC financial vice president, “All the problems with the Florida Land Sales Board have been resolved and settled. We at GAC promised to exclude the Rosen’s from policy-making roles at Gulf [although each will draw consulting fees of $100,000 this year]. And the board promised to resolve all the old charges against Gulf past management.”

S. Hayward Wills, GAC president and board chairman, has named a new three-men team to run Gulf’s $800,000 acre operations in Florida and Arizona.

It was not immediately clear whether the mercurial Rosen brothers would stay retired. But if the past is any indicator, the former Baltimorians may be more advertising men, who made millions selling Charles Antel hair dressing before breaking the banking wall with Gulf American, will be back again in a new business.

For now, however, hard-driving Leonard, 53, seems content to continue his philanthropy for Israeli causes by becoming director and board chairman and chief fund raiser of Tel Aviv University in Israel.

Julius’ plans, beyond clipping GAC stock coupons, are uncertain. He is 50.

No matter what is ahead for them, they are confident of their ultimate place in history. Says Leonard: “When the history of Florida is written, the names of my brother and myself will figure in it prominently.”

NEW PRESIDENT FOR K&B

He is Eugene Rosenfeld, 34, certified public accountant who has worked for Kaufman & Broad of Los Angeles for six years.

LeRoy Golman, 44, replaces him as executive vice president.

Board chairman Eli Broad, 31, will pursue company expansion.
NOW...
YOU CAN OFFER A COMPLETE KITCHEN REMODELING PACKAGE INCLUDING NO DOWN PAYMENT... INSTANT FINANCING!

Here is the brand-new, nation-wide financing plan from Roper that offers you greater flexibility, instant action ... lets you bid-in and close more remodeling projects. Any prospect (single home or multi-apartment house owner) is eligible with paid-in equity equal to the amount of the loan required. And, the loan covers all labor and material expense as well as the Roper Appliance(s) required in the remodeling. Here are outstanding features of the Roper Homeowners Acceptance Plan:

• no down payment • no maximum loan limit • 7% installment loans • terms: to 60 months up to $2500; to 84 months over $2500 • includes credit life, fire/windstorm damage insurance, no extra charge • no closing or add-on costs • instant credit qualification • direct payment to suppliers within 24 hours after project completion

put this plan into action now!

Gentlemen:
Rush me complete details on the Roper Homeowners Acceptance Plan, including information on the complete package of sales aids.

| COMPANY NAME |
| STREET ADDRESS |
| CITY | STATE | ZIP |
| YOUR SIGNATURE |

Wherever you are, rely on gypsum products by FLINTKOTE

Some say FLINTROCK. Some say BLUE DIAMOND. No matter, either way you are sure of the finest in gypsum products and customer-oriented service.

A strong, viable combination of resources — manufacturing capability plus performance-engineered products and systems combine to give Builders the best, and NOW!

YOU'RE THE WINNER. As the man says, "You can't hardly lose when they keep finding ways to do things better". At Flintkote, we're never satisfied — even when you are.
The Compact/Vent-Away™ Our most popular-priced toilet with the built-in Vent-Away feature. Ideal for any price house. Shown here in Manchu Yellow.

The Luxor/Vent-Away® flushes with all the enthusiasm of ordinary toilets, but with little of the noise. Notice the color shown above? It's new, high-fashion Bone.

The Elongated Glenwall/Vent-Away™ is mounted to the wall to make floor cleaning quick and easy. Shown in new Bayberry.

It comes in 3 styles, 7 colors, including new Bone.

Install a self-ventilating American-Standard toilet and you're one step closer to closing the sale. The Vent-Away ventilator's built right into the tank. Nothing extra for your contractor to install. And if you really want to stop prospects right in their tracks, install one of these self-ventilating toilets in Bone—the new high-fashion American-Standard color that was the hit of the recent NAHB show.
New Andersen Perma-Shield

value of wood plus a rigid vinyl

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.

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

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

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

The dimensional stability of wood. Won't stick, twist, warp or bind.
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 6 basic Perma-Shield sizes and 3 sizes of sliding 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.

Andersen Corporation
Bayport, Minnesota 55003

☐ Please send complete Perma-Shield Literature.
☐ I'd like a Perma-Shield Demonstration in my office.
   Please have an Andersen Distributor call me for an appointment.

Name: ________________________________
Firm: ________________________________
Address: ________________________________
City: __________  State: __________  Zip: __________

Andersen Windowalls
Window Beauty is Andersen

北京 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.

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.

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.
This apartment building came in $100,000 under the estimate. 8" Brick-Bearing Walls provided the structure, exterior and interior finish, fireproofing, and sound control.

Muskegon Retirement Apartments
Muskegon, Michigan
Architect and Structural Engineer
DeVries & Associates
General and Masonry Contractor
Muskegon Construction Company
Owner
Muskegon Retirement Apartments, Inc.

8" brick bearing walls are used through the entire 11 floors of Muskegon Retirement Apartments, in Muskegon, Michigan. The structural system consists of 8" brick bearing walls and 8" precast concrete floor planks topped with 1½" of concrete.

Eliminating the traditional building framework offers economies, and permits infinite design possibilities. One example is shown in the exterior corner detail to the right.

Construction is simple, and rapid, because all brick wall thicknesses are identical from foundation to roof. In essence, Muskegon Retirement Apartments is a series of 11 one-story buildings, one atop another.

Complete details, including a thorough cost-breakdown of 40 major elements of the building are contained in an 8-page brochure that you can have. Ask your brick salesman for SCPI brick bearing wall Case Study No. 16. Or contact SCPI.

Structural Clay Products Institute 1750 Old Meadow Road, McLean Virginia 22101 Phone 703-893-4010
Don't let your hidden assets just lie there.

Copper's got it—the confidence of your prospects. People know they can count on rust-free, clog-free plumbing, drainage and hydronic heating systems when they're made of copper.

That's why copper is a selling ace up your sleeve. But hidden sales assets never closed a deal. So talk up the fact that your houses—like the majority of new homes—feature copper, the sure sign of quality.

And tell it the way it is: Copper plumbing doesn't rust (water runs pure and clear), it doesn't clog (inside, tubing is nearly as smooth as glass), it doesn't leak (soldered joints are virtually as strong as the tubing), it fights corrosion (copper piping has been known to last thousands of years), and it's economical (faster installation plus longer life mean savings for you and your home buyer).

Remember: substitutes never match up to first-stringers. So don't disappoint home-buyers by hiding your best assets—copper plumbing, drainage and hydronic systems. A substitute for copper is exactly that—a substitute.

Copper Development Association Inc.
405 Lexington Avenue, New York, N.Y. 10017
The Chromalox® heating system with a cool idea.

Here's the new Chromalox® APT electric heating and air conditioning system. Compact yet powerful... and designed especially for apartment buildings. It provides each tenant his own individual temperature control at any time of the year.

Choose from three heating capacities — 5 kw, 10 kw or 15 kw; and from two cooling capacities — 1½ ton or 2 tons.

Install the furnace in the wall, ceiling or closet. Position the Compressor Unit through the wall, on a flat roof or on a concrete pad outdoors.

These and other features make the APT system ideal for apartments of all sizes.

For complete information on the APT system and all comfort heating/cooling equipment, contact your local Chromalox representative or write for Bulletin R 25102-1.
Who makes a home siding that stands up to rain, sun, heat, cold and small boys?

Philip Carey.

It’s Philip Carey’s Villager Solid Vinyl Siding . . . made from tough B. F. Goodrich Geon® vinyl.

Here’s a fine, new material that easily repels the assaults that deface or damage other siding materials. Rain won’t rust it . . . or drum loudly on its surface. Sun won’t hurt it. Nor will scratches show . . . because the color goes all the way through. And, heat and cold won’t create problems, because Villager Siding gives and takes with temperature changes.

Aspiring young athletes won’t dent it with baseballs, footballs, golf balls, stones, sticks or other small fry artillery. And there’s more.

Villager Siding won’t support combustion, conduct electricity, absorb moisture, rot, warp, blister or peel.

Isn’t this easy-to-handle, easy-to-install and lastingly beautiful siding the ideal answer for new homes or old?

For more information, write Philip Carey Corporation Dept. HH-469 Cincinnati, Ohio 45215.
No other van offers any of these better ideas... even at extra cost!

So many better van ideas! And not for love or money can you get them in any van but a Ford Econoline!

Only Ford gives you Twin-I-Beam riding smoothness. The unique front suspension made famous in Ford pickups. Two solid I-Beam axles for strength and coil springs for easy ride—the most rugged independent suspension yet!

Only Ford gives you an outside service center. Just lift the chest-high hood for easiest possible checking of oil, water, battery, windshield washer, water, voltage regulator, and more. Everything is easy to reach.

Only Ford gives you increased floor space—23% more. Engine's been moved forward—out of the loadspace. You get 23% more clear unobstructed floor area than in any other van. Over 8½ ft. clear load length in Ford vans, SuperVans offer over 10 ft.

Only Ford gives you driver "walk-thru" to the rear. Convenient aisle to cargo area from driver's seat. No need to step outside to reach load compartment. Engine cover is an insulation sandwich to seal out noise, heat; top is flat with raised edges for use as package tray.

Only Ford gives you payloads as big as 3590 pounds. Higher capacity axles and heavier construction in three new series let you carry more weight—650 lb. more payload than any other van. And still more better ideas! Long wheelbases and wide track (over 5½ feet) result in turnpike stability even on windy days. . . . power goes up to a 302-cu. in. V-8 . . . self-latching doors! Get the full story at your Ford Dealer's!

FORD ECONOLINE VANS

Outsells all other vans combined!
Kohler presents the rebirth of the blues.

With New Orleans Blue, the bath goes bright, bold...and anything but ho-hum. A new Kohler color...pure as the note from a blues cornet. New Orleans Blue joins the other Kohler blues: Cerulean, a delicate pastel...and Blueberry, a deep accent. It’s the rebirth of the blues. Bold shapes, too. The Caribbean, a big (6-foot) luxury tub that installs anywhere: island or peninsula...in a corner...sunken.

You can do anything to its exterior: brick...laminates...paneling...bring carpeting up the sides. Safety features? Grip-rails and a Safeguard® bottom. There’s the Lady Fair, too. A shampoo center, baby bath, and lavatory basin for every member of the family...with hose-spray and swing-away spout. Sell Kohler’s happy blues...bright, bold ways to end the ho-hum bath for your customers.

Kohler Co., Kohler, Wisconsin
It's never too soon to plan for extra profits.

Sometimes it seems that half the profit on a house these days is in the extras, labor costs being what they are. Yet all too often the astute builder, who offers the home-buyer attractive appliances in the kitchen, completely overlooks the opportunity of offering attractive blinds on the windows.

Actually, we're not too surprised. Blinds haven't always been attractive. Until now! For now Levolor has added exciting new colors to slats; added extra tapes for a striped effect; even invented Rivieras, a whole new kind of blind with slats and tapes so slender they seem to disappear.

You might say, Levolor puts a little more into blinds so you can get a lot more out of them. Don't overlook this opportunity to make extra profits on every house you sell. For more information write for Levolor's "Builders Program" and how you can profit with it.

LEVOLOR
LEVOLOR, LORTZEN, INC.
723 RIDGE STREET
HOBOKE, N.J. 07030
Kitchen Kompact cabinets have been “Quality Certified” by the National Kitchen Cabinet Association. It’s your assurance of proven performance and satisfaction.

GLENWOOD HAS A GRANDEUR ALL ITS OWN!

NEW, EXCITING CABINETS BY KITCHEN KOMPACT

Now, Kitchen Kompact introduces a great new look to kitchen cabinets. It is Glenwood—an aristocratic walnut finish and grain pattern with clean, classic styling. Glenwood has a grandeur all its own!

Kitchen Kompact cabinet construction equals its stylish appearance. Drawers are of one-piece Durium—a new, high impact-resistant material that is virtually indestructible. An improved, roller-free suspension system makes drawer action even easier.

All KK cabinets wear the famous Mobil “Family Proof” finish—a highly resistant finish, formulated exclusively for Kitchen Kompact. So exceptionally tough, the KK finish is resistant to household chemicals, mild acids, water and alcohol, even nail polish.

See the two distinguished KK lines soon: new, exciting Glenwood and the exceedingly popular Mellowood. You couldn’t recommend a cabinet with more value to your customers.

Kitchen Kompact is available from fully stocked distributors in most major markets. Look in the Yellow Pages for your nearest KK distributor.
Every home has one. Which is why every home should have Tuf-flex tempered safety glass in its patio doors. It's three to five times stronger than regular glass of the same thickness. It takes a tremendous blow to break it. And even then it's safer than regular glass. Because it breaks into relatively harmless pebble-like pieces. Play it safe. Use Tuf-flex in your doors!

LIBBEY-OWENS-FORD CO.
Toledo, Ohio 43621
How to cut
golf course maintenance
by 40%

Suppose your tee areas were always ready. No re-seeding or sodding ever. And suppose your greens didn’t need constant pampering. No mowing, sodding, weeding, feeding, watering or de-bugging. Your greens would always be ready to play, too. Well, now you can forget practically all of the tee and green work.

You can do it with AstroTurf® tees and greens. AstroTurf got its start in a Monsanto laboratory eight years ago. AstroTurf practically ends the maintenance of tees and greens. They require 40% of all course maintenance expenses, including labor, according to the Pennsylvania Turfgrass Survey from the Pennsylvania Dept. of Agriculture.

But you may be wondering if you’d sacrifice the playing quality of your course with AstroTurf tees and greens. AstroTurf tees actually improve play. Because tee areas stay in beautiful, green condition—golfers can pick the spot to get the best shot. This tee doesn’t divot. Doesn’t lose its grass blades. We gave our tee surface plenty of hard driving strokes. And it just smiled back, green and grassy. A natural turf tee area, by contrast, is on its way to ruin after one slash with an iron. An AstroTurf tee is also made to withstand steady puncturing by golfers’ spikes and wooden tees. And golfers can tee off five minutes after rain. (One AstroTurf tee, 15 ft. 20 ft., costs $750.00 plus installation.)

Or, take AstroTurf greens. They’re the result of years of painstaking development. First, we checked 120 grass greens at a sampling of fine golf courses. We measured the way ball bounced, “bit” and rolled. We even had to develop the instruments to do the measuring because nothing like this had ever been done before.

Then, we developed AstroTurf greens to perform like the best grass green. In addition, they’re about the same morning, middle and evening in all kinds of weather. They can be played minutes after rain stops. And, except for snowy days, they can be used practically all year round. (One AstroTurf green, 3,000 sq. ft., costs $7,500.00 plus installation.)

We’ll mention just two other advantages of AstroTurf. You don’t have to spend a small fortune for special tee and green maintenance gear. You don’t have to wait for tees and greens to grow. When they’re installed, your course is ready to play. So, if you’re planning a new course, you can’t afford not to investigate AstroTurf tees and greens. Get the facts. Write: Monsanto Company, Department 15, 800 North Lindbergh Boulevard, St. Louis, Missouri 63166.

AstroTurf tee at Bermuda Dunes Country Club
Bermuda Dunes, California, near Palm Springs
Cut labor cost with
Bird Wind Seal
Jet® Shingles and
Pocket
the savings

your crew worked for peanuts, me wouldn't matter. That's why you'll appreciate the value of new Bird Wind Seal JET Shingles. hey lay faster. No cutouts. Selfligning. Your crew moves on quicker to the next job. More jobs, less labor cost per job, more profits for you. For more information, mail the coupon.

Once you've installed JETS, you'll see the difference... in your pocket.

Ask about the exciting new Terracolors in the Bird Shingle line.

BIRD & SON, inc.
Box HH4, East Walpole
Mass. 02032

Please rush information on the new Bird Wind Seal JET® Also send me information on:

☐ Bird Vinyl Siding  ☐ Bird Vinyl Shutters
☐ Bird Vinyl Gutter Systems

Name_________________________
Address_______________________
County________________________
City___________________________
State_________________________ Zip___________
What makes aluminum screens better?
The aluminum.

Aluminum makes screens easy to see and breathe through . . . because aluminum keeps screens cleaner than other screening material. Doesn't attract dust electrostatically.

Aluminum makes screens resistant to cigarette and spark damage. Lighted cigarettes won't put holes in an aluminum screen. Neither will sparks from barbecues or burning leaves.

Aluminum makes screens stain . . . because aluminum never stains brown, ugly stains. Never rots or mildews. Aluminum screens give maximum life in salt air or smog.
Aluminum makes screens impervious to gnawing insects. Mice and rats won't gnaw through aluminum screening, either.

Aluminum makes screens look good...because aluminum itself looks good. It's available in many colors. What makes aluminum screens better? The aluminum.

Change for the better with Alcoa® Aluminum
Apartments on stilts make flood-controlled land usable

The land, a 6-acre strip north of the Rouge River in Farmington, Mich., had been considered unusable for housing by both the U.S. Army Corps of Engineers and local officials. Reason: It is part of the river's flood control plain, and its topographical characteristics could not be legally changed. But the architectural firm of Siegal Avrin Associates proposed that two-story apartments be put on the site, and built on stilts high enough so the lower story would be above flood level. The space under the buildings would be used for parking.

It was found that the stilts cost more than conventional construction, but that this was substantially balanced by the low cost of the raw land.

The completed 91-unit project has a density of 14.9 per acre and includes five 15-unit and two eight-unit buildings. Besides the covered parking area provided by the stilt construction, 48 exterior parking spaces are included in the project, bringing the total space available to 182 and giving an overall parking-to-unit ratio of 2.1.

The larger 15-unit structures contain one and two-bedroom apartments while the two smaller buildings contain only two-bedroom units. Most of the apartments include balconies, compartmented baths and extra storage space in the form of lockers.

Rentals range from $175 to $220. Builders: Dobrowitsky & Rosenblum.
EDITORIAL

Grappling with the ungrappleable

Nixon's team will try hard in urban housing, but big problems are likely to water down most efforts

In his inaugural address, President Nixon said, "We are approaching the limits of what government alone can do. Our greatest need now is to reach beyond government, to enlist the legs of the concerned and the committed."

"To match the magnitude of our tasks, we need the energies of our people—enlisted not only in grand enterprises, but more importantly in those small, splendid efforts that make headlines in the neighborhood newspaper instead of the national journal."

So the Nixon housing team is doing three basic things:

1. It is sifting out, from all that the Johnson Administration left behind, those housing programs that have real promise, and concentrating on them.

2. It is down-grading Federal clout in local housing programs, hoping to beef up local support. (It’s also clear now, for instance, that the Council for Urban Affairs, headed by urban-big-thinker Daniel Patrick Moynihan, will not be a super-agency but a sounding board.)

3. It is trying hard to straighten out the snarled bureaucracy and procedures of HUD. Whether it can or not is still open to some question (see p. 72).

When the President named George M. Romney as his nominee for HUD's Secretary, he stressed the fact that HUD was in need of an administrator, and that he had gotten one.

Clearly, Romney is devoting his time to organization at HUD, and in his first face-to-face interview with an industry magazine, he showed his grave concern about turning around an already declining situation. Romney told House & Home's Washington correspondent, Andy Mandala, that before any bold new programs emerge from HUD, "We've got to stop losing ground on the ones we have."

The new Housing Secretary knows full well he has his work cut out for him, and is putting in long hours at the Department in attempting to become familiar with his job. He is still, however, visibly uncomfortable with many housing terms, and he is still a hip-shooter: After only a few days in office, Romney said that he does not believe our housing goals can be met. Senator William Proxmire (D. Wisc.) immediately shot back, "I hope Governor Romney has not succumbed to defeatism so early in the game. The 'can't do' philosophy is typical of the bureaucrats at HUD and FHA who opposed setting goals in the first place and who have a miserable track record in producing housing for Americans of low and moderate income."

"Before Governor Romney throws in the towel he should make an all-out effort to build the units scheduled for this year and next year."

The Johnson budget message of January 15 slated 233,000 low-income starts for fiscal year 1969, and 47,000 of these are under Farmers Home Administration programs.

Romney's basic approach to government-and-housing is pure Nixon: he places great hope in solving problems by appealing to the goodwill and volunteer effort of individuals at the grass roots. In a speech shortly after being named Secretary, Romney said: "From our beginning as a nation the hallmark of Americans was our habit—when tasks were too big or complex for the individual—of forming voluntary associations to get things done—whether it was clearing land, raising barns, building churches, dams and roads or conducting charitable activities. Another distinction was limited government through our Federal system of national, state and local governments with their checks and balances."

"... the solutions to America's problems lie not primarily in Washington but in the hearts and minds and hands of individual Americans—in their homes, daily activities, neighborhoods, associations, enterprises, and instruments of self-government."

To old time Washington hands those sentiments seem incredibly naive, but others argue that since the bravura of Federal programs under the Johnson administration didn't accomplish much, Romney's faith in the grass roots is worth a try.

Problem 1: Local control, zoning, taxes can block any Federal housing program

HUD's new team will have to be magicians to establish any sort of decent record in helping to produce new low-income housing in cities or suburbs. Many rent supplement and rent certificate programs have been killed in the past by local government vetoes, and state and local referenda have managed to kill scores of urban renewal and public housing projects. It is highly unlikely that the new HUD team will try to overcome simple expressions of self-government like these.

Then, too, the Workable Program requirement in the National Housing Act is used by the grass roots effectively to prevent low-income housing programs in suburban communities. All a community has to do to be ineligible for a low-income housing program is to not meet Workable Program requirements. If a community fails in any one requirement to meet a Workable Program, it doesn't get shouldered with poor families. The Housing Act of 1968 neatly avoids this issue. However, it makes no requirement for a Workable Program to qualify for section 235 or 236, and it does exempt section 208 (acquiring private housing units for public housing).

The problems of zoning are even worse. Each municipality

continued
in a metropolitan area (Chicago has over 1,000) uses its zoning power to improve its property tax base, the source of most municipal revenues. This fiscal zoning tends to exclude any project which would weaken the fiscal base. The result is not only the frequent rejection of low-income housing projects, but the unwillingness to abate taxes for any housing or urban renewal project.

Doing anything about zoning and/or the multiplicity of political jurisdictions in metropolitan areas, would really violate grass roots rights. True, if the Nixon Administration places more of the welfare burden on the Federal government, a city's heavy reliance on the property tax would be somewhat lifted. But there are hundreds of urban imperatives always making their bids on almost-bankrupt municipal exchequers.

**Problem 2: Model Cities could become mired in gobbledygook and lack of funding**

HUD and the President regard Model Cities as perhaps the best tool for upgrading slums. Few would argue with them because a slum is created by people with all their myriad problems, and housing does not change people. So correcting a slum, using many agencies of government to provide jobs, education, public health, as well as an improved physical environment, is a good and logical process.

Model Cities is fortunate in having Floyd H. Hyde, former mayor of Fresno, as its Assistant Secretary. Hyde has a good record and knows what he is doing in the city. But he'll have his work cut out for him.

The National Commission on Urban Problems, the Douglas Commission, praised Model Cities as a concept but cited two major pitfalls:

"The first is the danger that the program will become bogged down in the 'planning process' and planning terminology at the expense of action. One hears from Model City experts and reads in its literature an abundance of language taken from space jargon which might best be termed modern barbarisms. One hears very little about how many houses will be built, how often the garbage will be collected, and what kind of schools, health clinics, and job training classes are planned or when they will be open for use. . . . There is a danger that the program will be overweighted by the creation of a multitude of new committees or institutions to coordinate, plan and talk with one another—that needless layers will be added, rather than existing institutions be made more efficient."

"The second major problem, and one which affects the first, is that of funding. Unless there are enough funds to carry out programs, Model Cities will become nothing more than a talking and planning program. It is the promise of funds and the receipt of funds which provide the incentives for cities to develop innovative programs and to foster the active involvement of neighborhood residents . . . . From the perspective of late 1968 [when the report was written], one wonders whether the funds appropriated by Congress for the program this year, which represent almost a 40 per cent cut in the amounts requested, are sufficient to make the promise of Model Cities possible."

More than 150 cities have been awarded planning grant authorizations totaling $1 billion, but less than a dozen cities have had their plans approved by HUD. Additional funding, which some experts believe should reach $5 billion a year, will depend upon how fast plans can be put into the mill and how well Congress receives the initial results.

While Model Cities carries with it the local involvement so strongly espoused by Nixon and Romney, it just might be that such involvement results in little more than petty political infighting.
Secretary of the Treasury Charles Walker, while endorsing the broadening of investment powers for S&Ls, also has indicated he might favor abolition of Regulation Q—that regulation which limits interest rates on time deposits at commercial banks to 6%. And many S&L men consider the abolition of Regulation Q an unqualified disaster.

**Problem 5: New routes to equity capital, tax incentives may be in trouble already**

Romney insists the job of producing urban housing will take massive infusions of equity capital from a number of sources. He does not believe the present homebuilding industry has the wherewithal to carry out the full job.

"You can't move from the present level of production to a higher level of production without the introduction of huge sums of equity capital from new sources," he asserts. He will try to obtain equity capital from as many sources as possible, including large industrial corporations.

One of the Nixon Administration's favorite instruments for securing new equity capital is the National Corporation for Housing Partnerships created by the Housing Act of 1968 and now under the chairmanship of Edgar Kaiser. Kaiser is confident NCHP can raise $50 million from the private sector for seed money to generate a total of $1.9 billion of financing. Housing Partnerships created by the Housing Act of 1968 and try to obtain equity capital from as many sources as possible, including large industrial corporations.

In House & HOME's interview, however, Romney flatly stated that "no decisions have been made as yet on whether to seek new tax incentives for building." He noted accelerated depreciation already represented a good incentive for real estate, and that mutual savings banks possessed an incentive in their allowable 3% reserve set aside. The mutual savings banks may lose this tax loophole shortly, however, as the House Ways and Means Committee plans to examine the formula in its tax reform hearings.

Moreover, accelerated depreciated for real estate has recently come under fire. Former Treasury Undersecretary for Monetary Affairs Stanley S. Surrey has recommended that taxpayers be required to depreciate real property on a "straight line" basis. But without depreciation, what builder in his right mind would participate in providing new housing for low-income housing. NCHP estimates that its initial seed money could generate 130,000 new units. Whether NCHP's 25% participation is enough to entice local equity remains to be seen. Say some big builders, "If I can get local participation to put up 75% of the money needed for a low-income housing project, I can get 100%.

Tax incentives are still another way to prime the housing pump, and President Nixon has often urged that incentives be provided to obtain additional funding for housing.

In HOUSE & HOME's interview, however, Romney flatly stated that "no decisions have been made as yet on whether to seek new tax incentives for building." He noted accelerated depreciation already represented a good incentive for real estate, and that mutual savings banks possessed an incentive in their allowable 3% reserve set aside. The mutual savings banks may lose this tax loophole shortly, however, as the House Ways and Means Committee plans to examine the formula in its tax reform hearings.

Moreover, accelerated depreciated for real estate has recently come under fire. Former Treasury Undersecretary for Monetary Affairs Stanley S. Surrey has recommended that taxpayers be required to depreciate real property on a "straight line" basis. But without depreciation, what builder in his right mind would build for the limited profits of 221d3, 235 or 236? All low-income housing programs under these sections would come to a screaming halt overnight.

**Problem 6: Labor battles still rage on with no relief from any side in sight**

The AFL-CIO building trades expect a move by the American Labor Alliance (Walter Reuther's UAW teamed up with the Teamsters) to take much mass-produced housing for Model Cities away from the traditional building trades. Reuther has visited the White House and Secretary Romney whose recent set-to with building trades' Meany does not help matters.

Shortly after his appointment, Romney confronted Meany with the building trades' high wages, restrictive practices, and general dislike of prefab techniques. Accusing the building trades of restrictive practices may be an academic argument for two reasons. First, in many cities some major construction jobs have not been put out to bid simply because general contractors know there are not sufficient skilled tradesmen in the mechanical trades for subcontractors to bid on major work. So the day may not be far off when prefab plumbing trees, for instance, are going to be used—without tearing them down and putting them together again in the field—if the mechanical trades want to work at all.

Second reason why arguments against certain practices may be academic is that the AFL-CIO can make a reasonable case for their ways. Unemployment rates in construction are twice as high as in other industry, primarily due to seasonal unemployment. In any year, total number of tradesmen employed in the building industry rises and falls 30% to 35%. In 1967 the Labor Review reported lower annual earnings for contract construction workers than in any manufacturing industry.

Another big labor fight, that could hurt urban housing schemes, is coming up over the concept of black capitalism favored by a good many people in the Administration. The Executive Council of AFL-CIO calls it "a dangerous, divisive illusion offered as a panacea by extremists, both black and white, by some businessmen who see a chance for profit and by a few well-intentioned but misguided liberals".

On the subject of integrating the building trades, the Douglas Commission had to say:

"It is only simple justice to say that conditions have improved greatly during the last two years. An estimated 8,100 Negroes are registered in current apprenticeship programs—nearly twice the number in 1966. Not only are most of the international unions helping in this work but nearly 50 Apprenticeship Outreach programs—efforts at active recruiting of apprentices—are being carried out by local union councils. The craft unions have joined with other groups to provide training programs to prepare youths for the apprenticeship exams. There is still some discrimination, both open and hidden, and much remains to be done. When we began our work nearly two years ago, the overall verdict could not have been this favorable. But progress has been made and the unionists who have made it deserve commendation. They should, however, push on with even greater vigor and with still greater cooperation from the local unions. A large increase in the total volume of building will also create many new jobs and permit the minorities to share even more in the general advance. For, as the fishermen remark, 'a rising tide floats all the boats.'"

In sum, coming to grips with urban housing problems is incredibly complex because so many different constituencies and institutions are involved. Political, bureaucratic, economic, professional and vocational groups fight, compete and sometimes agree with each other. But each group carries its own set of imperatives like a cherished destiny, for which all other destinies must make way. And the institutions, financial, regulatory, governmental and the like, all behave the same way because they too, in their way, are constituencies.

When you add to these problems the outrageous tommyrot that "lefties"—who should know better—utter about ways to solve urban housing problems, the knot becomes truly Gordian.

Perhaps, in the final analysis, the only way out is our traditional way out: raise the level of the poor's income (by compensatory education, jobs, daycare centers, etc.) to the point where they can consume in the free market place. But at any rate, with hard work and the good will of the housing industry, the Nixon team can make a dent in urban housing problems.

—Richard W. O'Neill
Plastics manufacturers have a new battle cry. So far only Formica Corp. has actually voiced it: "The no-tile bath" was Formica's loudest sales pitch at this year's NAHCO convention (photo, above). But other plastics producers are proposing the same idea. In fact, while Formica encourages the use of high-pressure plastic laminates instead of ceramic tile on bathroom walls, other plastics are being offered as substitutes for both ceramic tile and conventional cast-iron and vitreous-china bathroom fixtures.

Fiberglass-reinforced plastic has made such deep inroads into the bathtub and shower-stall markets that almost all major fixture manufacturers have added it to their lines. Man-made marble, a product made of pulverized natural marble and resins, is acquiring a small army of new fabricators all over the country who sell half of their production in the lavatory and tub markets.

Tile is still king in the new-bathroom market. But the benefits offered by these new molded and laminated plastics—labor savings, low maintenance, strong sales appeal—are forcing builders to consider these alternatives. For a look at the three basic alternatives, see the following five pages.
FRP (for fiberglass-reinforced plastics) bathroom fixtures first appeared in 1958 on the West Coast. But not until 1964, when a major bathroom fixture manufacturer—Universal-Rundle Corp.—got into the business, did they start making important inroads into housing. And not until 1968, when other major fixture manufacturers entered the market, did they become a product with a dramatic future.

From sales of 50,000 in 1966, FRP tub/showers and shower stalls jumped to 150,000 sales last year, and industry spokesmen predict they will capture 25% of the tub and shower market by 1972.

American Standard, Borg-Warner and Crane entered the market last year, Kohler this year. And the new prestige and publicity these giants are bringing to the young industry are boosting many smaller manufacturers who have been in the field for years. The surge of interest is largely due to the sales and product-development efforts of the industry's principal raw material supplier, Owens-Corning Fiberglas Corp.

All the installation and maintenance benefits of FRP fixtures lie in the fact that they are molded in one piece with integral surrounds (photos, right). Builders nail the surrounds directly to structural framing (photo, below), so there is no delay for setting and no danger of the tub settling away from the finished wall. And because the surround and fixture are monolithic, they are free of dirt-catching seams, joints and corners.

A Michigan apartment builder, Conser Construction Co. in Ann Arbor, says that in three years of using one-piece tub/showers it has saved 10% in annual maintenance costs compared with cast-iron tubs with ceramic-tile surrounds. One-piece tub/showers cost Conser $10 more than cast-iron tubs, but they eliminate the cost of installing ceramic tile.

FRP manufacturers once had a problem producing a stain-proof finished surface. But the gel coats used for this have now been improved to the point where all regional codes and more than 75% of local codes permit FRP fixtures. Test, performance and quality standards for FRP tubs and showers were issued by USA Standards Institute in 1967.

FRP manufacturers' next product advance will be more flexible designs like those shown on pages 76-77.
Universal-Rundle Corp. introduced this five-piece shower stall and a five-piece tub/shower in January to overcome a major drawback of FRP fixtures—i.e., remodelers can't use the one-piece units because they're too big to pass through finished doorways and can't be maneuvered inside most existing bathrooms. The new sectional models are bolted together through outer flanges and the seams are caulked with butyl rubber.

Crane Co. makes it in four pieces that nest for shipment and fit through a 30" door for remodeling work. Two basic sizes—4'8" x 5'2" and 5'9" x 5'10"—come three models each, with list price ranging from $800 to $1,100. By
American Standard is introducing the unit this month for builders who want more sales appeal in the bathroom without switching to a complete FRP tub. A number of accessories are built into the walls: twin adjustable shower heads, extension spray, drop-down seat, soap dishes at two levels, storage shelves and a drop-down table. An optional ceiling includes built-in lights. Also available: a stripped-down economy model.

This complies with a recommendation made by the Cornell University bathroom study—that the dirt-collecting seam between toilet and floor be eliminated. The manufacturer of this high-priced system, American Standard, was the study’s sponsor. Color-matching problems are solved because all three fixtures and the floor and tub walls are molded out of the same material and in the same color, which incorporates marble veining (shown).

With trade discounts, the list price may include installation cost, which is far below that of a conventional bathroom. All fixtures, trim, accessories and piping are included, so no tradesman has to enter the room once the sections are bolted together and strapped to adjacent structural framing. Crane started producing the unit 12 months ago for apartment builders and remodelers, motel chains, urban-rehab specialists and other mass-housing interests.

Fitted with fixtures and then...

disassembled and nested for shipment to...

a master-bedroom installation...
2. Man-made marble

Two factors have established this material solidly in the bathroom-fixture market:

First, major companies have begun strong campaigns to set up franchise plants from coast to coast. Venetian International Inc., a prominent exhibitor at the 1969 NAHB convention, has more than 40 plants in operation and, with 110 franchises outstanding in 35 states, claims to be adding new franchises weekly. The PolyKrystalon Co., just four years old, has more than 60 franchised plants in 30 states. Turnkey franchise packages cost from $20,000 to $50,000, including staff training and equipment.

Second, the variety of products and styles available in man-made marble is growing constantly as the new fabricators stimulate national demand. Venetian is expanding from tubs and integral bowl/countertops to molded toilets. PolyKrystalon has expanded into simulated slate and specialty items like an 8' sea-shell bathtub that lists for $1,500. And custom options are easily had by combining stock parts with different accessories—e.g., surrounds and aprons.

Man-made, or reconstituted, marble is pulverized natural marble mixed with polyester resins and artificially colored. When it is molded into bathroom fixtures, which account for half of the industry's product sales, exposed surfaces are coated with polyester gel. Manufacturers say the material is four times stronger than natural marble and is so resistant to stains that it has been used for table tops in school chemistry laboratories.

Marble-making is a low-volume process

Half a day is required for the production sequence shown below, and at least another half day for curing. Casting forms must be sprayed with release agent and gel coat well in advance of pouring, and colors must be mixed carefully by hand to achieve a satisfactory graining effect. Operators learn largely by trial and error and few become experts in less than six months. Scenes below show new Venetian Marble's Westchester plant, Irvington, N.Y.
Plastic veneers

These have been marketed as wall finishes for new bathrooms for some time. But only recently have they been made practical for remodelers.

In late 1967 Formica Corp. introduced a high-pressure laminate system engineered specifically for refinishing old bathroom walls. The laminate is the same ¾” sheet material used for countertops, but has a thin foam backing to prevent imperfections in old walls from being telegraphed through to the new plastic surface. But the most important feature making the laminate feasible as a coverup for bathroom walls is that it adds less than ½” of new wall surface.

Formica’s engineers solved the problem of seams by designing two-piece moldings that are used to clamp the panels to the wall and are covered with post-formed ¾” laminate in matching color. Panels are bonded to the old wall surface with contact adhesive (below).

Now in its second full year of marketing, the system—called Panel System 202—is being sold to residential and commercial remodelers. New-home builders haven't been interested because of the package’s high cost: about the same as that of a top-quality tile job. So far the most feasible sheet finishes or new bathroom walls have been plastic-coated hardboard panels. These cost less than high-pressure laminates, offer greater variety in decor and can be adapted to bathroom fixtures with matching-color moldings of metal or plastic.

Plastic-hardboard for new walls

A line of plastic-coated hardboard made by the Marlite division of Masonite Corp. offers 70 different colors and patterns, including murals, wood-grains and embossed textures. Panels and planks (right) can be used on counter fronts as well as walls.

Plastic laminate for old walls

Formica Corp.’s special high-pressure laminate for remodeling work comes in panel sizes of up to 5’x10’, in four woodgrains, six marbles and eight patterns; and in suede, polished or furniture finishes. A ¼” layer of polystyrene foam laminated to the reverse side of panels absorbs imperfections in old wall surfaces.

Laminate cover-ups demand precision

Panels used in Formica’s System 202 can be fitted to old wall surfaces only by using a template—rulers and squares are useless. Precise fit is important because the panel seams are closed by a molding system that allows ¼” tolerances. Moldings are made in two halves that lock together by a serrated-fastener system. One half is nailed or glued to the wall and, after the new plastic panels are in place, the other half is hammered onto it with a mallet.
Three Condominium Projects

...show that condominium can be a marketing and design tool as well as a means of ownership

Legally speaking, condominium is a device which permits the combining of individual and common ownership within a housing project. Practically speaking, it can also be a highly effective aid to marketing and design thanks chiefly to the flexibility it makes possible in the planning and managing of multifamily housing.

The three projects shown in this article are cases in point. Each of them is aimed at a market where ownership, as opposed to renting, is vital. Each is built on terrain and under densities where tight grouping of units is essential. Each requires clubs and other community facilities which must be held in common ownership. And each places heavy emphasis on common maintenance of both grounds and buildings. Condominium ownership is the most efficient—and in some cases the only—way to fulfill all these requirements.

Condominium ownership also contributes heavily to the esthetic quality of these three projects. There are no lot lines, so buildings can be sited to make the most of the land's natural assets. And the exterior maintenance programs guarantee that the land and landscaping can be permanently kept at their very best.
A luxury townhouse project designed for a long, narrow canyon site

The 27-acre parcel—300′ wide and 3,000′ long—had been bypassed because of the steepness of one side and the low yield of buildable land (only about 19½ acres). In this plan, the buildings are all pushed onto the flatter part of the site, and grouped into sort of superblocks created by the serpentine-like pattern of the project’s private drives (land plan, below). Parking and entrances are on the outside of the blocks; inside are landscaped courts connected by a series of landscaped walkways (photo, left). The result is an intimate, park-like atmosphere that belies the overall density of more than 8 units per acre.

The 160 units include one-, two- and three-bedroom apartment and townhouse units (plans, below) that range from 1,240 to 2,000 sq. ft. in size. Price (when the project opened in 1967): $25,000 to $34,000.

VILLAGE CENTER, one of eight the project will eventually have, has building widely spaced to reflect the open feeling of the surrounding terrain. Hills in background typify the portion of the project that will be left as greenbelt area.

TWO-STORY BUILDINGS each contain four units—two upstairs and two down. The majority of the houses have two bedrooms, the rest have one. Prices range from $23,750 to $38,000.
An adult community that lays great stress on greenbelt areas

There are 1,210 acres in the project, and 550 of these—nearly half—have been set aside as permanent open land with riding and hiking trails. The rest of the project will eventually have about 4,800 units built on it, and the problem was to keep this built-up portion—with a density of about seven units per acre—from feeling overcrowded.

The first step was to break the development into eight villages like the one shown at right—each with its own village and recreation center—to prevent any feeling of monotony. Then the one- and two-story houses (plans, facing page) were attached in groups of from three to six units, allowing larger areas of land around them. And finally, two golf courses—a nine-hole par 3 and a standard 18-hole course—wind through almost the entire project and add to the open feeling.

A mountain resort project that crowds 36 units onto one acre

Close-in land is almost as valuable in a good resort area as in a city, hence it needs to be used just as efficiently. This site, slightly under an acre in size, is within walking distance of the town of Aspen, Colo., and two ski lifts up Aspen mountain, and its consequently high cost demanded very high density. The design shown here required extensive excavation (drawings, right), but it permitted 36 units to be built on three floors with enough flat area left for one parking space for each unit.

Apartments range in size from 400 to 1,400 sq. ft., and in price from $15,000 to $42,000. The drawings on the facing page show efficiencies and one- and two-bedroom units on the first and third floors, and, in one section of the project, a group of split-level second-floor units that have as many as three bedrooms and three baths.

PARTICIPANTS:

BUILDERS AND DEVELOPERS

Martin Berliner
Rognlie Martin Associates
White Plains, N.Y.

Jack Bertglino
Quality Construction Inc.
Kansas City, Kansas

Carsen Cowherd
Kansas City, Mo.

Brian Foy
Multicon
Columbus, Ohio

Ted Greene
Terradyne Const. Co.
Kansas City, Mo.

Albert Keidel Jr.
The House Co.
Baltimore, Mo.

Elwood J. Leep
San Jose, Calif.

Allan H. Lindsey
El Dorado Hills West
El Dorado Hills, Calif.

Norman Peterkrewd
Levitt & Sons
Lake Success, N.Y.

Albert Ratner
Forest City Enterprises
Cleveland, Ohio

Janis Risbergs
General Builders Corp.
Babylon, N.Y.

Wilson W. Siemens
The Alex Beam Co.
Kansas City, Mo.

Hugh Temple
Van Nuys, Calif.

R.A. Watt
Gardena, Calif.

Lawrence Weinberg
Larwin Company
Beverly Hills, Calif.

Quinton R. Wells
Kansas City, Calif.

Robert Wienerman
U.S. Homes & Development
Fremont, N.J.

MOBILE HOME MANUFACTURERS

Barry Donnell
Town & Country Mobile Homes
Wichita Falls, Texas

Joseph Prebys
Skyline Homes
Elkhart, Ind.

FINANCIAL

William Batchelder
Mid-Services Corp.
New York City

Kenneth Campbell
Standard & Poor's
New York City

Leslie Golestein
Abraham & Co.
New York City

Merrill Halpern
H. Muntz & Co.
New York City

William Henry
Gulf Oil Corp.
Pittsburgh, Pa.

Frederic B. Hof
The Pressprich Corp.
New York City

Elmer B. Heaking
Prudential Insurance Co.
Newark, N.J.

Franklin N. Howard
First Federal Savings & Loan
Peoria, Ill.

John Lynch
Dyline & Co.
New York City

Robert Medearis
Builders Resources Corp.
San Francisco, Calif.

Dan D. McMullen
McMullen & Hard
New York City

Howard Nelsen
Connecticut General Insurance Co.
Hartford, Conn.

William J. Walsh
McCormick & Co.
Chicago, Ill.
get the capital they need?

From a public stock offering? From a merger with a larger publicly-owned company? From joint venturing or partnerships? From venture capital groups or institutional lenders in exchange for equity in a development? From a combination of any of these?

To explore all possible ways for builders and developers to raise capital, House & Home recently held a Round Table in Kansas City. Gathered to exchange ideas were not only builders and developers, but also home manufacturers, investment bankers, underwriters, banking officials, and executives of some of the nation’s largest institutional lenders and venture capital groups.

For two days the 41 experts discussed the pros and cons of various methods of financing the volume of housing needed in the decade ahead.

They agreed that tomorrow’s builder needs the kind of access to the capital markets that other big business has. Front-end investments in land development, recreation facilities and ancillary services in major subdivisions and apartment complexes are growing astronomically. The pioneering experiences of the men at the Round Table offer much guidance to every builder making his own financial plans for the years just ahead.

For a summary of the discussion, please turn the page. . .
Going public appeals to more and more builders, and Wall Street likes it too

The long-run benefits of access to capital and executive talent outweigh the initial costs of a stock offering and the restrictions put on corporate officers by public ownership. But the stock market demands continuity of performance and profits.

Stanley Edge: I haven't spoken to a builder within the last year who builds over $5 million worth of houses a year and who isn't seriously interested in going public. As long as the investing public has a romantic attitude about housing and housing stocks, those stocks are going to be a very good thing on the market.

One reason that builders are interested in going public is because it is the only way they can make the real value of their business negotiable. They also know that the only way to attract the young, brilliant boys coming out of colleges today into the building industry is to go public.

Leslie Goldstein: Entrepreneurs in the homebuilding business or elsewhere are entrepreneurs because they want to become wealthy. When this was primarily a privately-owned industry the opportunities for people with talent to become wealthy were relatively limited. This is no longer so. A compilation of executive salaries indicated clearly that the larger the company, the higher the executive salaries. As the company goes public the opportunity for executives in the homebuilding business to become extremely wealthy increases due to stock options which may increase in value and produce capital gains for these executives.

Ken Campbell: In the early '60s, when a number of homebuilding companies went public, there was a great amount of discussion about the high cost of going public.

Larry Weinberg: From what I have been led to believe, it should run you about 6% or 7% of the amount that you're going to sell to the public plus a couple of hundred thousand for your legal and auditing fees.

Merrill Halpern: I think that is pretty close. I think in a deal the size of $5 million you might go to 8% or 8.5% but that would be your maximum.

Campbell: The long-run economic benefits to a company to have access to national capital markets over a period of 10 to 15 or 20 years are much greater than this initial cost.

Halpern: I would like to comment on what an underwriter looks for when he looks at a merchant builder going public. He looks for a combination of various factors one of which is size. We look for no less than $10 million in sales, no less than $300,000 after taxes, a steady growth rate, preferably some kind of geographical distribution of product. Another critical factor is the quality of management. A one-man show does not belong in the public market place. Another thing is a management philosophy that can be believed and communicated. If management cannot articulate a concept that can really be put across as meaningful, then that company is really not going to be an interesting vehicle to the public.

Once a company goes public there are tremendous demands placed on that company for continuous earnings growth, a 14% to 20% minimum each year. Although that may not be the most intelligent way that the company should run, it is what the market place demands.

Ira Gordon: I want to add to what Merrill said. Before you contemplate going public, you should clearly define your objectives. Is it to sell your company at an attractive price or is it to grow by using this equity capital? Possibly it's an estate purpose or to develop a vehicle for growth through acquisitions. It's not important that you select a big underwriter to handle your issues. It is extremely important to know if they are going to assist you in the after market. Some underwriters help to support the market by maintaining an inventory of your stock should there be any fluctuation. Once you offer your stock to the public, you are on public display for all to know about your personal as well as your corporate income. If earnings are not up to expectations, you may get some irate shareholders coming to meetings to criticize your personal income and expenses.

Dick O'Neill: What other factors would you use in appraising an underwriter?

Gordon: The size of your underwriting is extremely important. The size of your company and how many shares you anticipate offering will determine the size of your underwriter. Also, your underwriter should get to know your company, your objectives and your goals. I would recommend to anyone here thinking of an underwriting, depending on the size of the share offering, to consider a rather good, medium-size company rather than a large one.

Barry Donnell: One of the points that my company looked for was: is this going to be a lasting relationship? When you first go public, your underwriter will make the key market in your stock. The relationship has to be good, communication has to be good. Another point: If you're thinking about raising equity capital, you should get the money that you feel you need at one time rather than going back to the market for additional capital.

Bob Keidel: If you're a public company in the development business, you have to have your eye on a 10-year target. It's difficult to program your profits so that you always show a 15% improvement over the previous year. Suppose a company just equals the previous year. Its stock may go down, it is going to have some unhappy shareholders, but is this something that you can live with?

Gordon: In a new offering, if your stock goes down it is very hard to get it back up to where it was and this is important. Your earnings ratio is important. If you can show a continual upward trend when you're going public, the market will treat your issue accordingly. If you have a fluctuating earnings situation, your stock may stay at the same level or may go down.

Keidel: I was referring to a company that has been public and is showing consistent increased profits each year. If their programming just doesn't produce it one year, is it permanently damaging to the multiple?

Gordon: I would say no. The market price may dip for a period of time, but if you can get back on the trend of increased annual earnings, the market usually recognizes this.

Halpern: Your question is good. There are few listed companies who maintain a continuous growth rate. But companies like these rarely have 30 times multiples, and when you talk about high multiples you are defining growth companies. The expectations of the corporate market place are high. If you falter for a short period of time, you run the risk of losing that nebulous thing called "growth", which is a combination of performance, the industry you're in and the ability to obtain sponsorship.

Goldstein: Investors are basically cowards and the one thing that makes them secure is continuity and reliability of earnings growth. Levitt had a small disaster shortly after going public, yet its multiple forged ahead later on because the investor was willing to accept the excuse of special circumstance. Kaufman and Broad also had an interruption of a very fine record. But as far as the market place is concerned, two strikes and you're out. The investing public will accept one year without growth but they will not accept two.
Dan McMullen: One type of company that the market is interested in is what we call a concept stock. Rouse would fit into this category. We will pay for these stocks and will accept any earnings for a time unless we get discouraged and I can't tell you exactly when that happens.

A second problem is the difference in the accounting times of the real estate business versus Wall Street's. We normally accept accounting periods of one year or less and you're going to run into a problem in this area.

Jim Pease: In a secondary offering, is there any minimum size of stock that has to be offered?

Halpern: Only the smaller underwriters today will underwrite less than two or three million dollars. A secondary is inadvisable for a company in its first public offering. If management is only selling its own shares and doesn't need new money, what is the growth potential of the company if there is no need for new equity?

John Lynch: A secondary can be sold directly by the company or the participants. A secondary in the market place below a certain size obviously can sell shares under certain conditions without much impact on the price of the stock.

Dan Schein: If you get a no-action letter from SEC, and if you're not a principal in the company as such, you don't have to register the stock for a certain period of time.

Norman Peterfreund: When you are a public corporation, you are not a master of your own fate. Outside pressures on the stock can affect your stock price. While we enjoyed an almost continuous 20-25% compounded profit growth since we went public, this growth was not reflected on the stock exchange until building stocks became the vogue. Despite our spectacular growth record, when building stocks as a whole were hit our stock was affected as well.

There is one other major problem once you go public—you are inhibited in your management actions and management talk. Statements made can be misconstrued and if your stock makes sharp increases or decreases you can find yourself subject to lawsuits.

Campbell: The relationship of the company and the investment analysts becomes much more structured when you're a public company. We rely to a much larger extent upon the written record both in what you say in letters and your annual and quarterly reports. If some company official says something that doesn't prove out it's a very sticky situation.

Bill Walsh: When you're private you rule your own roost, you don't have to answer to the outside. But when you go public, you may find that someone has purchased large blocks of your stock, someone that you don't want to have as a partner. You may be acquired without your knowing it.

Peterfreund: Here's a comment concerning balance sheet presentation which could be helpful. Traditionally, accountants include in current assets that inventory with a business cycle of one year. This means that the inventory will be converted into sales within one year. The American Institute of Accountants has stated that inventory that takes a longer time to mature may be treated just like a current asset even though its normal cycle is in excess of one year. Unfortunately, real estate was omitted when this ruling was written. Yet, land has a normal cycle of 3-5 years from acquisition to utilization, and there is a distortion in the traditional one-year concept. We refuse to segregate our balance sheet into the traditional current and fixed categories. We have been successful in explaining our position and Wall Street has readily accepted our presentation.

Halpern: The only way for a builder-developer to get over that problem is to have several developments staggered. If he puts all of his eggs into one, or even two baskets, he runs a risk of not only having a good business but also a cyclical earnings curve based on traditional account periods.

Mortie Macks: Say you have a company and want to raise "X" millions of dollars. I understand interest rates and the cost of an initial offering. Now, beyond that there must be some added costs.

Peterfreund: Going public results in substantially increased legal and accounting fees and additional staff to produce timely accounting reports. In addition, you will have bank transfer fees and annual report and meeting fees.

O'Neill: Are you trying to find out if there is some sort of vigor that nobody here is talking about?

Macks: Yes, I am.

Campbell: On the dividends, this is between you and IRS and the accumulated earnings tax. You are under the same structures to pay out dividends as a public company as you would be when you would pay your income tax in a private company.

Edge: Let me give one answer about costs. A builder client just went public and the cost was somewhere between $30-$35,000 above the underwriting. This was for a five-year market projection, attorney's fees and accounting fees.

Macks: Is the investor satisfied with growth alone or does it require an annual payment in addition to the growth in value of his stock?

McMullen: You have to show the ability to use money efficiently. If your rate of return on the money is higher than 15%-20%, you probably don't have to pay any dividend to attract enough capital to do what you want to do.

Lynch: It depends on what earnings you're showing. If you're earning a dollar a share with potential growth and you don't pay a dividend, you're not going to get too many screams. If five years later you are earning $8 a share and your growth begins to slow and you haven't paid a dividend, there may be some serious questions at your annual meetings about disbursing part of this or putting it to use somewhere where you have more potential for corporate growth.

Campbell: Kan and Levitt, before they were acquired, had a record of paying consistent dividends quarterly for a number of years through thick and thin. If the investor sees a quarterly dividend record maintained through up and down, he tends to think this is less risky than where the dividend is highly variable.

Schein: I wouldn't recommend a growth company paying a cash dividend because it needs that cash in its business. A stock dividend would be more acceptable.

Ned Rochon: What is a growth company? Only a year and a half ago you would have defined Gulf American as one, but what would you say today?

Schein: My firm did look at Gulf American from the standpoint of investor participation and not an underwriting. There were probably a lot of hidden assets there but you had to be prepared to hang on for a long period of time. No one has brought up mutual funds in relation to the stock market today. Mutual funds are going to play an even greater role in stock ownership than today. If you're a small publicly-held company, you're not going to attract mutual funds. I don't know if that is a blessing or not because they can drop your stock just as quickly as buy it.

Goldstein: Mutual funds range in size from $2 million to billions of dollars, and private investment partnerships that range widely in size. There are institutional markets for almost any size company and "hedge" funds, the private partnerships, several million dollars in size, that look for commitments of $100,000 to $500,000, principally in small companies capable of showing rapid growth.
Mergers and acquisitions let builders tap the strengths of larger companies

Investment bankers are constantly looking for potential corporate partners to bring together. The builder must adjust to his new role as a wholly-owned subsidiary, but will now be insulated from the risks of a highly cyclical housing market.

Schein: In the area of mergers and acquisitions we will find that there are many ways to become public in that field that you don't use when you are initially going public.

O'Neill: Why would a builder want to be a subsidiary of a bigger company? Presumably the builder will have to work a lot harder to fulfill the promise that the bigger company saw in him at the time of merger.

Peterfreund: There are many reasons. In order to succeed as a public corporation, you must maintain a continuous compound growth. Sometimes this is impossible to maintain. If you drop from a 25% to a 15% growth it could have a marked detrimental effect on your stock. A parent company acts as an umbrella between you and the exchange. Also, you are not subject to the cyclical situation where a particular unfortunate situation can affect an entire industry. If you are a member of a large diversified organization you are immune to the rapid up-and-down cycle.

Schein: I have found that service-oriented businesses command a great attraction for the large conglomerate or publicly-held company looking for both synergistic effect and for management in growth areas.

No business is growing at a more rapid rate than the building business. The potential is tremendous. The idea of supplying you with capital so you can take on larger projects and giving you a bigger and better balance sheet to work with, might make a lot of sense. By the same token, they are not looking to buy net worth, they are interested in your management and your ability to grow at a rapid rate within your own industry.

We are going to see a number of mergers which will allow builders to facilitate their growth and give them the additional capital necessary.

O'Neill: A private builder doing well is the one a conglomerate would want to acquire. This builder or developer is in a position to derive profits that he couldn't get as a subsidiary. So, a great many private, large builders feel that if they wrote an agreement to merge with a large publicly-held company, the agreement would be unacceptable to the publicly-held corporation and vice versa.

Edge: Let's go back to the builder's point of view. His real value is not negotiable and he has to go public to become negotiable. When he writes the agreement there is no understanding of the real value of this company by the major manufacturer who wants to acquire it. You have to take him on long-term averages.

Don Scholz: The problem of acquiring a builder stems from the fact that he is making all this money. In my observation, they may be making money but they don't have it in cash. It's tied up in the business.

The biggest single advantage of an acquisition is the opportunity for the builder to get his investment into negotiable securities and to take some cash out of the business, and still maintain control of his own operation.

One more point: The only way a larger acquiring company will be able to justify the normal builder acquisition is that they are really not buying net worth—they are buying the builder's talents to produce profits. A good builder has a high profit potential in relation to net worth and a successful acquisition negotiation has to recognize this fact.

Edge: We have been working with two nationally known and very reputable accounting firms to develop a common ground of net worth. We are interested in your management and your ability to grow at a rapid rate.

There is no way to do it except, I believe you and you believe me, and let's shake hands. It's that ridiculous.

O'Neill: How do you keep that builder and his team working for you if you are just acquiring his managerial skills and his ability to wants to get market value for the land and properties where he has created value. The public market place and the merger both achieve the goals of expansion capital plus the equity.

There are a number of good, creative, rapidly-growing builder-developers who are very regional. It doesn't make sense for them to be a public company.

Schein: The option program is one way to guarantee that you will have the million-dollar management that some of you are afraid you're not able to have.

If you can offer your vice presidents an incentive that is not taxable to a certain degree and gives them the chance to be owners of your company, you are giving them an incentive that they can't get any other place.

What happens when the market breaks in the building field? I hope it never happens, but when you are small and publicly held and that stock breaks, you're sunk. But when you merge with a large publicly-held company the other areas of their business can remain strong.

Goldstein: There are some risks to mergers and acquisitions. Acquiring companies are not all high quality. Many conglomerates have been formed on a chain-like game and if you are coming in to wards the end of the chain you might not be getting very desirable paper.

There is another risk. If you tie up with a conglomerate which in terms of a 20% growth capability and you have a 20% growth capability, you are getting very low future values for very high future values. Do you want to do that?

At some point in every business man's career, money takes on less significance and challenge takes on more. You must be sure that the acquiring company has enough imagination to give your people the motivation that will be attractive enough to keep your truly talented people.

Peterfreund: We seem to be concentrating on money as the only means of retaining personnel. Young people today do not live by salary alone; it is challenge and responsibility that attracts them and creates loyalty and dedication. Please do not construe these comments to mean that you do not have to provide decent salaries, bonus plans, stock options and the like, but they must be put in their proper context and not considered as the most important attraction to young people. We run an extensive college recruitment program and we find that students want to know what responsibility and challenge you can give them immediately when they come to work.

Walsh: Another way to keep top management is by contract. You know for five years you work nowhere but here.

There is another problem. The leader of a privately-owned company answers to no one. When a merger takes place he is probably not going to answer to someone. What kind of personal frustrations is he going to have?

Rochon: By joining irtt, the Levitt organization was lucky because the type of work that the two do are so completely different. It doesn't always result in quite such a happy relationship.
John Medearis: We were put together six major materials suppliers: U.S. Plywood-Champion Paper, Stanley Works, American-Standard, National Gypsum, Whirlpool and Continental Casualty.

The basic concept behind the program was to provide front-end equity capital, to small and moderate-size builders in the single-family field. We feel the need in today's market for equity capital participation by a large, well-financed organization. We operate under a limited partnership agreement, not a joint venture whereby we have determined 1) the capabilities and capacity of the existing management team, 2) the project 3) the overall local market penetration. We develop a detailed cash flow analysis in order to arrive at the determined amount of equity capital needed. We will provide 80% of the required equity capital, and in exchange for our participation, we develop some formula for profit splits.

Typically, what we attempt to derive is a 30% return on our equity capital contribution. After that point is reached, we negotiate a sliding scale on profits. This creates two incentives, one for the builder to return our equity capital as rapidly as possible, thereby optimizing both our and the builder's rates of return and, once the project turns a profit, the builder partner gets a higher percentage of additional profits.

We formed a limited partnership in which the participating builder is the general partner and Builders Resources Corp. is the limited partner. We decided to do this for two reasons: One, to protect the investment of our participating stockholders, and two, for overall control of the project.

We are capitalized at $8 million and we have an extensive bank borrowing capacity. Therefore, we are working under relatively unlimited capital resources, and we are looking for individuals who have both the capability and capacity to expand their operations.

We look to builders who have the capability of acquiring a management team which can handle this accelerated volume.

We have also found the participating builder is looking for more than equity capital contribution. They are looking for guidelines, control and monitoring, for management advice and consultation and projection, for know-how and technology.

Bertoglio: Why would a developer who could produce a 30% return
yield not go into his own market place to get this money?

Medearis: Most of the people who come to us are people who recognize the need for a great degree of financial stability. They recognize that we can lend these other degrees of management participation, whereas in the local market, we are not going to get those ancillary benefits.

As dollars become available in the project we are going to give him 20 cents on every dollar and we are going to take 80 cents until we get into a profit position. Then he is going to take 50 cents of every profit dollar and we are going to take 50 cents until we have received a 39% return.

Bertoglio: If there was a total profit of $20,000 that year, what would the builder get?

Medearis: If there is only $20,000, he would get $10,000 and we would get $10,000.

Edge: We are doing the same thing for American-Standard in appraising projects that come in for joint venture capital. One of the real necessities for this type of operation is the fact that the lead time in developing a project today is quite long.

We don't get the first dollar back in the building business until the first house closes. This can be three years from the time you put your first dollar into the ground.

The second thing is the way we must market houses day. We put from a quarter to a half million dollars in just marketing and merchandising operations. So, unless we have the money to do these things, we are never going to be able to make the homebuilding industry a really solid investment from the standpoint of the investing group.

James Pease: Part of the builder's need for equity financing has arisen from the fact that local lumber yards no longer provide equity capital in the form of improved lots to build on.

Don Scholz: Some questions to Bob Medearis on his operation:

What are the upper and lower limits of the kind of situations that you go into? Second: How long are you prepared to let a program go before it starts to show this 30% return? And lastly, does your investment also include the money necessary to mount the merchandising effort?

Medearis: In reverse order: Yes, we do take into consideration funds to incorporate marketing, model home expenses, architectural fees, land development expenses, engineering feasibility studies, and market research reports, which you normally don’t get with any type of participating loan.

Secondly, we are programming our activities on about a 26-28 month basis. Some will cycle out more quickly, others are going to be in the 36-38 month category. We are looking for builders who are doing currently 50 to 150 units yearly with equity participation funds needed in the category of $75,000 up to a half million. We don’t care to get into projects larger than that.

Pease: When a builder has good relations with his suppliers, he can often get assistance in financing by way of lenient treatment of accounts receivable.

Keidel: Must you buy from the manufacturing companies who are putting up this money?

Medearis: No.

Bertoglio: Do you have a debt instrument in addition to your limited partnership vehicle to give you acquisition in the event of default?

Medearis: Yes, the limited partnership agreement form is quite a comprehensive form and we have built into it many protections.

Bertoglio: Is your debt instrument a note or is it just a guarantee within the partnership?

Medearis: It’s just a guarantee.

Fred Hof: The ancillary benefits that are available in this have a collateral advantage in the ease of merchandising this to the permanent lender.

Medearis: No question about that. There is another advantage. We have within our limited partnership agreement a clause which implies our participation on a long-term basis. We don’t want to go with the builder on a one-shot deal. We try to build in incentive to assure that builder and ourselves that he is going to go into other projects with us.

Elwood Leep: You only furnish front money?

Medearis: That is correct, only front money.

Leep: The builder has to arrange his other financing for his development?

Medearis: Yes. We rely on the builder to negotiate it. However, we set up everything on an area manager basis and this man will go in with the builder and negotiate a line with a local lending institution.

Leep: In two cases, you cite there was a 30% return to you and builders still made a good profit for themselves?

Medearis: Look at their rate of return, which is up in the 300% category.

Leep: Do they get a salary?

Medearis: Yes, we give them a builder's fee and that is a negotiated amount.

Wilson Siemens: You mentioned the local lines of credit. Under the terms of your limited partnership, are builders usually able to get these without having the development and construction lender look to you through this limited corporation?

Medearis: We make it pretty clear that they are not to look to us for guarantees. We will talk to them about a guarantee of completion but not guarantee of the loan.

Siemens: Could you outline the fee a little more?

Medearis: No, I can’t because we don’t have a fee arrangement. It really depends on the project size and what we think our risk is going to be.

Weinberg: This kind of operation was indulged in by many of the S&Ls in Los Angeles to a greater or lesser degree. It was strictly on a debt basis, but what the fee arrangement was in a sense a share of the profits. The builders knew that this was an expensive way to finance their operation so they only got the high risk situation or the young fellow just getting started. As soon as this young fellow got a couple of developments under his belt, he went to the local bank. So, they found that they weren’t building up a really long-range relationship and ended up with a great many marginal situations.

Medearis: That is a very valid observation and I hope we have a greater degree of sophistication than the S&L’s did in the California area. You know it’s a risk business and that is why you’re going to get in excess of the 30% return back. If you watch the control mechanisms and go in on the other ancillary activities, you can weed out those bad projects.

Hof: What is the builder's profit? Is the overhead cost included in your 80-20 split?

Medearis: Yes.

Campbell: I want to find out from Bill Walsh how his program compares with this; how his program is doing.

Walsh: All the projects in which we have invested are either multifamily or office buildings.

We invest our money when the construction loan opens. If we get in before that time, we expose our money to such tremendous risks that there is just no return that is commensurate with the risk, unless one is a developer.

We try to get a nominal rate of return during the construction time.
period but obtain for ourselves all
most all of the tax loss that
an be generated during construc-
tion period. We operate occa-
sionally as a principal, but more
frequently as an agent for wealthy
individuals or for institutions.

Medearis: It depends on the
length of time and the degree of
participation. We approach it
basically on a cost basis.

Macks: I take it you do come in
prior to zoning and planning.

Medearis: Yes, after a review
and determination that there are
no problems in zoning. If it looks
fairly routine we will participate
in advance of the final subdivision
approval.

Macks: How does Builder Re-
sources' program differ from Con-
necticut General's program and
Prudential's program?

Elmer Hosking: We haven't
taken an equity position in single-
family projects as yet although we
make many single-family mort-
gage loans. But we have taken an
equity participation in other type
projects. We have split the equity
ownership sometimes in cash,
sometimes with something in kind,
such as builders' profits and over-
head. We then split the resulting
cash flow.

Price: Bill Walsh says that the
minimum net worth that they
work with is something like a mil-
lion; what is yours, Bob?

Scholz: You don't have any
standard program for it?

Nielson: No. But where we do it
we make sure that we have a clear
cut position that we can do what
we want to do.

Hosking: We have no standard
pattern either. We have formed
Pie Realty as a subsidiary, as an
added mechanism for use in cer-
tain equity deals.

Scholz: Are you actively looking
for that kind of business?

Hosking: Very much so—with
a professional, of course.

Bill Batchelder: We are not
operating with insurance company
credit, we are operating with hold-
ing company credit. We have iss-
ed what is a standby commit-
ment for the total cost of con-
struction—and certified cost—
guaranteeing on completion they
can be called upon to fund. That
passes the risk of construction
onto the construction lender.

That means we also guarantee
any equity capital above the fund-
ing. The equity gap is then taken
out at predetermined rate of inter-
est, all cash flow going to pay off
the equity gap upon the split of
profits. Once any funding is re-
paid, net income is shared on a
determined ratio.

Another type enabled an as-
semblage of plottage. We issue a letter
of credit for a two- or three-year
period and once the plottage is as-
continued
4

Institutional investors are playing an increasing equity role in real estate

Inflation has forced many insurance companies into equity ownership to maintain an investment return no longer possible with fixed debt securities. But major lenders see no possibility that they will ever desert the single-family house mortgage field.

O'Neill: Why is our business so intriguing to some institutional investors today?

Batchelder: Big institutions in general are coming around to the same philosophy that Wall Street has. We are in for heavier inflation and you can't maintain levels of return by fixed debt securities. This is going to take the form of increased interest in stocks and growing interests in real estate.

I don't think many of us know too much about equity investments in real estate, and we are trying to find out about them.

Nielsen: From the standpoint of financing multifamilies, the industry has become greatly interested. We have been able to get extra rewards—sometimes a percentage of income—but, some of us feel that this is an area that we should be careful about. You never know how well your completed high-rise or garden-apartment project is going to do until it hits the market place. We have seen some grief in the multifamily area but I'm sure we will continue to have great interest in it.

We talk about mutual funds, but where will that money go, into the stock market? How about getting some of that money channeled into equities in real estate, or real estate investment trusts?

Hosking: A joint venture involving a wholly-owned subsidiary would be considered.

Sound: Approximately what size are you interested in?

Hosking: We are only interested in the large ones, $20 million on up.

The Act is basically built upon the process of leverage from the Federal level via rent subsidies, or via paying a rate of interest that the buyer can't himself pay on his home. By using this lever we are hoping to pry loose some long-term money. Where you have these two basic laws, I don't see how you can have anything but terrific inflation.

McMullen: You are talking about two basic things. One is a definition of equities as putting money in a project, a shopping center or something. As far as mutual funds are concerned, you are talking about stocks and bonds. You're talking about two different objectives.

Mutual funds want mobility, the ability to get in and out. If you are putting your money in a shopping center, it may take six or eight years to realize your objective. I think the housing industry must think this way.

Walsh: To invest in equity, and I define equity by ownership, not of stocks and bonds but of property, it takes a decision making factor which can't be handled with institutional financing committees. There are too many on-the-spot decisions that have to be made. This is going to create some difficulty for institutions. It takes tremendous flexibility and experience. You can't call the president at 2 a.m. and ask him to call the board into session.

Whitman: Those aspects of the real estate industry that are based on tax shelter—and that is a large part of the industry—would be hard put to offer marketable securities to Wall Street. For a large part of the industry, the optimum method may be getting private capital from those individuals who have the tax bracket to get the maximum advantage.

O'Neill: Is the tax advantage of depreciation greater for a person in a high bracket than a tax-free municipal bond?

Whitman: Yes, but there are other factors; Wall Street's standards. One is glorification and the second is the earnings per share.

McMullen: If you rely solely on people in high income tax brackets to supply equity money you are limited to a very small market and we can see this in the difference between a tax exempt municipality bond and a regular corporat bond.

Nielsen: We have money, plus some real estate expertise. We do not and cannot afford to have on our staff the necessary people to build a new city. We bring in professionals who have this expertise. This is where the large lenders are going to have their most success in getting into the equity ownership of real estate.

Hosking: We have been in real estate a long time but we don't have the kind of expertise that builds buildings. We supply a good part of money and we get some one else to do the operation but I think we still keep a hand on the over all policy with the developer. When it comes to the everyday decisions, this is his job. I think the two parties can work hand in hand.

We have had enough experience to prove that.

McMullen: Insurance companies can invest in equity investments and in stocks. What are the percentages of investments they can do in both?

Nielsen: Under present legislation there are definite restrictions on the money you can put in the ownership of real estate. We have a holding company which can do many things. One subsidiary of that is in the real estate business. We have a holding company which can do many things. One subsidiary of that is in the real estate business. John Hancock recently formed a second realty entity. We do have definite limitations in this area of the number of dollars that we can change into the so-called equity positions.

Hosking: We are a New Jersey corporation and we are permitted to have 8% of our assets in real estate. This may not sound like very much but when you take 8% of $25 billion, it adds up to $2 billion.
Just another walled house designed to merchandise visual privacy? Wrong. Check inside and you’ll find a brand-new merchandising package geared to . . .

If you think “all-electric” house means electric cooking and heating, it’s time you broadened your thinking. And this house will help. First off, it’s filled with enough communications equipment to resemble an amateur radio/television station. Second, the communications network is wired directly to local services like police and fire departments, school and library. Third, electricity takes over virtually everything, including door locking, bathtub filling and sewage disposal.

The house is experimental, but not blue-sky. Much of its equipment is already commercially available or in the test-market stage. And the house is part of a 70-lot subdivision that is completely wired—with two coaxial TV cables and six-pair telephone cable—for intra-community communications. Westinghouse Electric Corp. built the house (Electra-House) and subdivision (Electra-Lab) in the 10,400-acre new town of Coral Springs, Fla., through a subsidiary, Coral Ridge Properties Inc. The dual experiment could revamp a builder’s merchandising, and the next four pages show how.
A kitchen command post saves work

First, a housewife can watch her children on closed-circuit television while she prepares meals (see cameras, opposite page) and talk to them by multistation intercom. Second, she can see and talk to front-door callers by TV and intercom. Third, she can conduct telephone calls by speaker phone so she doesn’t have to hold the receiver when her hands are covered with flour. The phone is a business-office type that includes pushbuttons for transferring calls to extension phones.

And for the nervous housewife who wants the ultimate in security, the center includes a double panic button—two instead of one, so they can’t be pushed by accident. Pushing the panic button sets off burglar and fire alarms, and places recorded phone calls in sequence to various local authorities. The messages are stored in an automatic dialer.

A bedside command post saves worry

The homeowner can check out suspicious night noises without leaving his bed. By pushing buttons on the bedside console he can turn on outdoor lights at front and rear, and tune in front and rear TV cameras on his bedroom screen to look for prowlers.

But he really doesn’t have to be concerned about burglars if he remembers to push the buttons on the console that lock front and rear doors and activate sensors that will automatically sound an alarm and make phone calls (story above) if a window or door is forced.
n education center features school on TV.

Valid children in the Electra- house would go to class through two-way TV communication with their teachers. The subdivision's coaxial-cable TV system could also be wired to the cal library or other instructional centers.

From a broadcasting studio operated by Coral Springs, the community network provides 1-hour weather reports, background music, local news and store advertising. And to speed up utility maintenance, the system may be used for ading electric meters and monitoring transformer loads on remote control centers.

Closed-circuit TV monitors entryways and children at play.

A four-camera system—scanning front (left) and rear doors, children's patio play area and swimming pool (right)—lets the housewife keep an eye on her family from locations other than kitchen and bedroom. A portable monitoring set can be hooked up in a sewing room (below) or any other frequently used work area. Cameras in formal areas are recessed into walls, but in informal areas they are left exposed on brackets, simplifying adjustments of their field of view. The demonstration monitoring system uses color equipment.

Door locks are electric.

They are wired to the bedside console so the homeowner can check front and rear security without leaving his bed. All exterior locks can also be operated from a front-entry key switch.

Fire guards are automatic.

Heat and smoke sensors will sound an alarm, activate sprinklers and send a phone call to the fire department by automatic dialing. The system also works off an outside pull (below).
A portable appliance center does away with extension cords

Appliances are stored in open recesses on one side of the kitchen island. And the ample counter space surrounding them permits several to be used simultaneously (above).

Some of the appliances—an electric frying pan, for example—are operated by plug-in controls which are permanently attached to current sources by means of retractable wires. The housewife pulls one of these controls out of its recess (right), dials it for the type of cooking or temperature required and inserts its jack into whichever appliance she is using.

A portion of countertop in front of the appliance center is made of irradiated wood developed by Westinghouse. It resembles a butcher’s chopping block, but is impregnated with plastic that resists knife cuts.

The indoor kitchen is supplemented by an adjacent outdoor kitchen on a covered patio (right). A swimming pool area and a dual-purpose garage—both adjoining the outdoor kitchen/dining area—provide enough additional entertaining space to accommodate up to 150 guests.

For precision-minded bathers—a bathtub run by pushbuttons

Controls recessed in a wall panel next to the tub make faucets obsolete. The bather turns dials and pushes buttons to set water temperature and depth, and to fill and drain the tub. A light blinks on when the bath is just right. An added attraction is built-in hydrotherapy equipment which Westinghouse is testing. Pressure flow and degree of aeration are set on the control panel and maintained along with water temperature until the bather steps out.

Outdoor heating enhances patio living

Quartz lamps add to the usefulness of the Electra-House outdoor cooking/dining area by raising air temperature as much as 20'. Outdoor kitchen includes barbecue grill, under-counter refrigerator, water cooler.

Street lights are scaled to human size

A low-height fixture is used three ways at the Electra-Lab: 1) mounted on 30”-high columns (left) for medium levels of street lighting, 2) mounted on 60”-high posts (right) for high levels of illumination at intersections and 3) mounted on fence posts for low-wattage decorative lighting. Reasons for using the small-scale fixture instead of conventional light poles are to eliminate direct glare and to integrate lighting with community-owned trees, flower gardens and utility structures. An optional cap contains an aperture for uplighting trees.
A harder-working heat pump is also easier to service. Servicing is simplified because all the heating/cooling equipment is mounted on tracks in an ventilated cabinet built into an outside wall. The components—heat pump, hot-water heater, electronic air cleaner, fans and resistance heating coils—can be pulled out easily for repair or replacement. And the cabinet contains space for future accessories.

To get extra mileage out of a conventional Stinghouse heat pump, Electra-House engineers have teamed it up with a heat-recovery heater. Rejected heat produced during the heat pump's air-conditioning cycle and excess heat produced during the heating cycle are picked up by a heat exchanger and used to heat domestic water. Anticipated benefit: a 10% reduction in energy required for water heating.

Electricity even disposes of sewage

The demonstration house has its own 500-gal.-per-day treatment plant that reduces domestic waste to ash and treats waste water thoroughly enough so it could be used for lawn-watering. And because this experimental plant works by an electrolytic incinerating process, it produces heated waste water that might be used to preheat domestic water supply. Maintenance needs—periodic ash removal and electrode cleaning—should be minimal.

How to hide the meter

To complement their advanced underground wiring (below), Electra-House designers installed a flush-mounted watt-hour meter instead of the traditional surface-mounted meter with its conspicuous glass-bulb enclosure. The meter socket is narrow enough to fit between 16" o.c. studs in an exterior house wall.

Half-buried transformer may boost underground wiring performance

Specifically, the semisubmersible transformer vents heat buildup faster than fully buried transformers but is less conspicuous than pad-mounted transformers. Westinghouse engineers have installed all three in the 70-lot Electra-Lab (lower left).

They created the half-buried unit by bolting a ventilated circular housing—made of fiberglass polyester and projecting 18" above ground—to a standard submersible transformer and vault. A comparison shows that in a 2.7 mph breeze the vents permit 55% greater heat escape than do fully buried transformers.

Underground circuitry at the Electra-Lab is a single-phase primary loop lateral cable with short radial laterals.

Specifically, the semisubmersible transformer vents heat buildup faster than fully buried transformers but is less conspicuous than pad-mounted transformers. Westinghouse engineers have installed all three in the 70-lot Electra-Lab (lower left).

They created the half-buried unit by bolting a ventilated circular housing—made of fiberglass polyester and projecting 18" above ground—to a standard submersible transformer and vault. A comparison shows that in a 2.7 mph breeze the vents permit 55% greater heat escape than do fully buried transformers.

Underground circuitry at the Electra-Lab is a single-phase primary loop lateral cable with short radial laterals.
A big California builder, the Larwin Co., created these ads for its Greenbrook subdivision ($33,990 and up) to compete for attention in the crowded pages of the Sunday Los Angeles Times.

Each is five or six columns wide to insure page domination no matter where the ad appears.

Conceived by Neil Jacoby of Westwood Advertising, the series is built around 19th century steel engravings from books now in the public domain.

Says Jacoby: "The age and income groups we want to attract to Greenbrook like the low-key exaggeration of these drawings."

Most effective ad: the crowd spilling down the stairs (far right).

Some couples get excited about our new homes.

LARWIN'S GREENBROOK

Our homes are too big to be believed.

A 5-bedroom $37,750 home with no down payment to veterans. It's unusual.

People are insisting on our big 7-bedroom Spacemaker.

Our 2-story Spacemaker has been very well received. Probably too much house for the money.
The developers of Village 2, a Pennsylvania vacation community, tailored this brochure to upper-income families interested in second homes, priced from $25,000 to $30,000.

The cartoons appeal to the concern that many successful men feel about the harried pace of their business lives and their need for off-hours relaxation. An analysis of the first 100 buyers proved that Village 2 had hit the target: most were self-employed, were in their forties and had incomes well over $25,000.

Created by General Electric's Community Development division, the idea was executed by consultants Bill Becker and Marvin Shaw.
Fireplacings simplified

Heatilator® Mark 123 Fireplace

easy to build with

... costs up to 50% less installed than conventional masonry*
... is the most flexible wood-burning fireplace for home, apartment, vacation or weekend retreat use.
... can be offset 15° or 30° with starter section for easier installation.
... comes as a complete package from hearth to chimney top.
... can be installed by anyone (average time less than 3 hours).
... can be placed anywhere in any room with no special support foundation required. U.L. listed for zero clearance to combustible material.
... trims to look the way you want the fireplace to look with brick, stone, marble, glass, simple wood molding, etc.
... saves 6 sq. ft. on corner installations with exclusive slanted rear corners.

*Based on national averages.

easy to live with

... two fireplace models available. Select 36" screened area ($3036). Or, 46" screened area ($3046) with flatte black decorative hood.
... is guaranteed smokefree.

If you build apartments, here's how the Mark 123 system can increase your rental income
... improve your sales value.*

Average rental without a fireplace ........................................ $150.00 per month
Average rental with a fireplace ........................................... $160.00 per month
Rental Increase ................................................................. $120.00 per year
Mark 123 Fireplace Installed ................................................ $325.00

Increased rental pays for the fireplace in less than 33 months—at that point you earn $120.00 per year extra profit per apartment. If you sell the building at a rate of 7.5 times annual income, you increase your return on investment by over $8,000.00 for a 10 apartment building.

There's a model and style for every home or apartment. See the complete line at the Authorized Heatilator Fireplace Dealer in your area, or write... 

Heatilator® fireplaces

VEGA INDUSTRIES, INC. 1849 E. Brighton Ave. Syracuse, N.Y. 13205
Why sell just houses?

Keep pace with consumer preference—build Total Electric Homes.

Twice as many homebuyers want electric heat as builders are now providing, reports a recent Department of Commerce study. Electric heat has arrived. Millions of families already enjoy it. And millions more say they want it.

A Total Electric Home is full of features that turn browsers into buyers. Fast.

Features like flameless electric heat. Electric water heaters. Self-cleaning ovens. Electric clothes dryers. Electric air conditioning. Features that’ll help you sell faster and more profitably. A big reason for the big trend to Total Electric Homes: nationwide ads like the one pictured are selling the benefits of carefree electric living in Life, Look, Better Homes & Gardens, and American Home.

Why not take advantage of the growing preference for Total Electric living? Your electric light and power company will welcome the opportunity to work with you.
pretty respectable sum. Of course, not all of it is free and clear. We like that leverage.

When I talk of equity, I mean real estate subject to a first mortgage. Most of the real estate we own today is free and clear of debt. But this is a pure equity position and the name of the game in real estate is leverage.

Hof: I believe that pension funds, as avidly interested as they are today in equities, are waiting to see a standard norm established by the larger institutional investors before they take their big steps into committing sizeable funds in real estate equities.

Nieelson: There are bound to be shifts between emphasis on mortgage lending and the bond market. The mortgage area is not getting what it's always gotten in the past, say 35% to 40% of the net gain in assets.

We see fewer people putting money into thrift institutions where it will go into mortgages and bonds. This is a marked trend and to me it's all brought about as a result of inflation and the fear of more and more inflation.

Martin Berger: In our inflationary economy, the trend on the part of the institutional investors toward taking an equity participation in addition to the traditional fixed mortgage position will continue.

The insurance companies and commercial banks seem to be leading the parade and the mutual savings institutions will be moving in the same direction.

I do not subscribe to the position that it is the moral responsibility of lenders to support the one family market. Insurance companies, savings banks, savings and loan associations and commercial banks have prime responsibility of producing a sound portfolio with attractive yields for the benefit of stockholders, policyholders and depositors.

Ray Watt: I certainly recognize that we have to pay more for money. But if all the insurance companies only go for the higher yields and we have no funds whatsoever in the single-family market, it's going to really penalize the buyers of single-family homes. It isn't fair for Pru to put 25% of their mortgage funds into single family and Connecticut General to put in nothing.

Hosking: I don't think the insurance industry will desert the single-family market. We certainly have not done so. There are many other factors beyond yield to be considered.

Campbell: Two major growth areas have been the mutual funds and the pension funds and 75% of their new money is going into equities.

Nieelson: Here we are getting the heart of the thing. Isn't basically fear of additional inflation, coupled with a very high rate of interest on short-term loans?

Campbell: This is true. I'm convinced that we are going to have a 4% annual inflation of infinitum.

Whitman: There is one point that I want to make about the institutional investors who talk about getting a higher yield as getting an equity participation. You must look at more than just investment results if you are going to measure how a financial institution does. Whether you're a pension fund or life insurance company or a bank, you are basically handling other people's money. There is very little of the equity that belongs to the stockholders or the mutual owners or what you will.

Your fiduciary obligation keeps you in a senior position, and you should think along these lines when an attractive investment comes along.

Wall Street is now bullish on housing and is paying premiums for its stocks

Price/earnings ratios of 20 to 50 are common, and represent investor confidence in a boom period ahead. But volatility works ways, and housing stocks are vulnerable to a downturn in the market generally as well as any setback in sales and profits.

Weinberg: Why are people so interested in investing in housing stocks?

Lynch: Because the potential for a day is greater than it has been
would call the investing public, because there is not that much stock around in companies like ours.

McMullen: Your index in the housing stocks is up 500% in the last two years. You have already factored in the five good years ahead, and if you run into a problem either in the housing market or in the stock market, you’re going to feel it.

Scholz: Maybe the public knows more about what it’s doing in this field than we think they do. In our case the price the public was putting on our stock eight or nine months ago was unbelievable. But in that space of time what they were predicting has been surpassed.

Another factor that must be kept in mind is that with companies in the development field that retain multifamily, you have to look beyond the statement to see what the real profit is. This would certainly be true in the multifamily, motels, shopping centers ownership type of real estate operations.

Weinberg: There are supposed to be 40,000 homebuilders. There are perhaps 10 of them that do merit the kind of P-E ratios that we talk about. What differentiates those ten from the 39,990? What will enable those ten who today may account for 1½% of the new house market to be able to grow despite the fact that housing starts may go down some year? Those companies demonstrated the ability during the difficult years of 1966, to go counter to the overall cycle. Those companies have the ability to show year after year 25% to 35% and as much as 50%, annual compounded growth. They have the ability to show very substantial profits after taxes, year after year. They develop superior products and market them in a superior fashion.

These companies are at the threshold of their true growth. What kind of a P-E ratio do you put on that commodity, not homebuilders as such, but a rare kind of business animal.

Goldstein: I agree. The mistake the investment community might make, is to be indiscriminate in their investment decisions.

The few people who have taken capital gains on the rise in our industry’s stocks are not what I would call the investing public, because there is not that much stock around in companies like ours.

McMullen: Your index in the housing stocks is up 500% in the last two years. You have already factored in the five good years ahead, and if you run into a problem either in the housing market or in the stock market, you’re going to feel it.

Scholz: Maybe the public knows more about what it’s doing in this field than we think they do. In our case the price the public was putting on our stock eight or nine months ago was unbelievable. But in that space of time what they were predicting has been surpassed.

Another factor that must be kept in mind is that with companies in the development field that retain multifamily, you have to look beyond the statement to see what the real profit is. This would certainly be true in the multifamily, motels, shopping centers ownership type of real estate operations.

Weinberg: There are supposed to be 40,000 homebuilders. There are perhaps 10 of them that do merit the kind of P-E ratios that we talk about. What differentiates those ten from the 39,990? What will enable those ten who today may account for 1½% of the new house market to be able to grow despite the fact that housing starts may go down some year? Those companies demonstrated the ability during the difficult years of 1966, to go counter to the overall cycle. Those companies have the ability to show year after year 25% to 35% and as much as 50%, annual compounded growth. They have the ability to show very substantial profits after taxes, year after year. They develop superior products and market them in a superior fashion.

These companies are at the threshold of their true growth. What kind of a P-E ratio do you put on that commodity, not homebuilders as such, but a rare kind of business animal.

Goldstein: I agree. The mistake the investment community might make, is to be indiscriminate in their investment decisions.
applying high-price earning multiples to all companies in the housing industry without making a careful study of which companies have the potential of increasing their share of market and which companies do not.

**Rochon:** One of the marks of a sound company, if it is running at a high peak ratio, is that it can withstand the criticism of Wall Street.

Our last tabulation of stocks showed all of our five categories up with the exception of one. The high-ratio companies among the mobile homes and the homebuilders don't manifest this extreme sensitivity to criticism that you would find in a company that was overpriced and essentially weak.

The mobile homes have been perfectly healthy for the most part. They have continued to gain, and have even risen about 10% since the election, in what was called "the Nixon discount market".

**Lynch:** If we have growth, the growth should come to the larger builders. If the growth comes to these ten builders, then it's going to come at a time when the market is contracting or flat and their percentage of market place is going to be higher than it would have been in an expanding market. Wall Street has done a lot of things recently to resolve some of the financing problems that could restrain growth.

We have been doing some serious work to set up some techniques that would enable us to act as a conduit in the mortgage area. We would like to provide some sort of collateralized notes that would be marketable.

**O'Neill:** What about the return on a concept investment?

**McMullen:** You have to get 20%.

**Nielson:** You're going to make a mistake, you're not going to get 20% from most developers.

**Goldstein:** We should look back at what the public investor is willing to pay for government-sponsored business concepts. You remember what happened to everybody involved in the space program. They got glamour multiples because the Federal government was going to put a lot of money into the program. Housing is now glamorous partly because the Federal government is going to put a great deal of money into its program. As long as the government emphasizes housing, you can raise equity money at very low prices because of the promise of growth. Equity money won't be a problem even if housing stocks come down. They are likely to be the most rapid recoverers in the next bull market because the long term glamour is going to be persistent unless you have a dramatic change in government attitude which I don't think anybody expects.

**Martin Whitman:** I agree. When you talk of returns, there are earning returns, cash returns, and depreciation returns. When you talk about 20%, you are talking about a combination return which is easy to see and a different thing than builders talk about.

We investors tend to pay premiums for government help because it gives us a lot of stability for growth; it gives us a very good environment to operate in. It would seem that is the kind of environment the housing industry is going to have.

**Halpern:** I'm getting confused about definitions. Dan McMullen said that we had to get a 20% return on new equity investment.

**Campbell:** There is a difference. If a company gets $3 million in new stockholders' equity, it has to earn $900,000 to achieve 30%. It's earnings per share that the stock market is going to demand.

**McMullen:** I'm talking about new concept.

**Halpern:** If a company goes publicly at 20 times earnings, which is a 5% return on investment, if the only get a 5% return, they are not going to keep that 20 times multiple very long. They have to go to 20%.

**Campbell:** There is a big difference here. Dan McMullen is talking about return on stockholder equity and Les Goldstein is talking about what the investor will require to hold that stock.

---

Help protect America's Sailors

Young sailors need protection on the high seas.

What better way to protect them than with tub enclosures and shower doors of ASG's wired glass.

ASG wired glass combines safety and privacy. The Pinstripe Finetex® shown here has single strands of wire set 1/2 inch apart for added strength. Its Finetex pattern passes plenty of light, yet obscures images. And, like all ASG wired glass, it's an FHA-approved safety glass.

ASG makes wired glass with a variety of beautiful surface patterns. You can choose the look, the light transmission, and the degree of privacy to fit any need.

Make safety a selling point in your homes. Feature safety glass by ASG—tempered, wired, or laminated. And write for our free manual of government and trade association standards for safety glass. Dept. HH-49, American Saint Gobain Corporation, P.O. Box 929, Kingsport, Tennessee 37662.
OUT OF THE ORDINARY

FIREHOOD
A truly magnificent open hearth, fabricated metal fireplace for beauty, comfort and decorative accent. FireHOOD reaches up to beamed ceilings or installs effectively in front of large picture windows without obstructing the view. In a choice of distinctive colors and models... wood-burning or gas-fired.

AZTEC
Aztec fireplace is one of the newest and most unique free-standing units available for contemporary homes and apartments. The space age ceramic bowl in a selection of 5 modern colors lifts the room completely "out of the ordinary." Aztec, like FireHOOD, takes minimum floor space and requires no extra structural support.

THAI-TEAK
Thai-Teak (Botanical name, Tectona Grandis; imported from Thailand) is lustrous and luxurious... easy to maintain with just an occasional waxing... withstands the hardest wear... resists termites, rot, decay... is available at a cost that compares with medium-priced carpet and vinyl... and comes in 85 different patterns.

TO BUY SMART... IN WHITEPRINTERS
buy only the speed you need!

THAI-TEAK
Genuine Imported
Thailand

BANGKOK INDUSTRIES, INC.
1545 W. Passyunk Ave., Philadelphia, Pa. 19145
Please send details on Thai-Teak Custom Flooring.
Please have your representative call on me.

NAME
ADDRESS
"A fire rated gypsum wallboard partition system with STC 61? Never heard of such a thing!"
IT'S TRUE! New highs in sound control achieved with gypsum wallboard partition systems developed by Celotex Research:

**STC 61**—On wood studs—one-hour fire rating
(UL Design No. 33-1 hr.)
*Test: Riverbank No. TL 69-117

**STC 58**—On metal studs—two-hour fire rating
(UL Design No. 30-2 hr.)
*Test: Riverbank No. TL 69-118

THE SECRET of the superior sound-deadening efficiency of these partitions is the Celotex "mismatch" system—a practical application of a scientific principle of sound transmission: As sound waves move through wallboard of one thickness into a board of different thickness, friction is created and noise intensity is reduced. Celotex Research has established specific combinations of $\frac{1}{4}"$ to $\frac{5}{8}"$ Celotex Gypsum Wallboards, and precise application techniques, that set new highs in performance yet offer the economy of wallboard systems. Their Sound Transmission Class ratings of 61 and 58 have been verified by IIT Research Institute Riverbank Acoustical Laboratories.

"I can't hear anything at all"

Send today for your free copy of the Celotex STC 61-58 specification folder. It shows construction details of these systems that provide new levels of noise-free comfort and privacy. And that's a sales feature your tenant and buyer prospects have an ear for.
Fountains by RAIN JET

Thousands of crystal-like droplets capture the color and brilliance of underwater lighting 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. Patented.

Complete fountain, including 3-ft. bowl, recirculating aquavator and underwater lighting from $199.50. Other size bowls to 8-ft. No plumbing needed. Just provide electrical connection and fill bowl with water. Send for free full-color literature...or for full-color 3-D Viewer ($2.00).

Division of RAIN JET CORP., Dept. HH-31
301 S. Flower St., Box 868, Burbank, Calif. 91503

Circle 109 on Reader Service card

Save time and money by eliminating the need to locate and drill holes for anchor bolts with ANCHOR CLIPS!

With building costs continuing to rise, time, where the completion of a job is concerned, is a major factor.

You can cut into the time spent anchoring wood framing to masonry, with old fashioned anchor bolts, with new "V Strength" Anchor Clips.

Competitively priced, Anchor Clips, eliminate the need to locate and drill holes for anchor bolts. The result...considerable time saved!

Available in two sizes, 14¼" for one block and 22¼" for two block embedment, they can be used on concrete, brick or block. The upper arms can be wrapped around plates up to 2" x 8" in size. For literature and sample, write:

Panel Clip Co.
P. O. Box 423
Farmington, Mich. 48024

Circle 110 on Reader Service card

Help protect America's Grown-Ups

Kids aren't the only ones who need protection around the house.

So why not make your homes extra safe for everyone. Install ASG safety glass in your homes and let safety help you sell.

ASG makes all three kinds of safety glass—wired, laminated, and tempered. They're available in a variety of decorative surface patterns. And all have FHA approval.

Use ASG safety glass in sliding doors, window walls, partitions, and tub and shower enclosures. It's just the kind of thoughtful extra that home-buying families are looking for.

ASG has just prepared a special manual of governmental and trade association standards for safety glass. For a free copy, write: Dept. HH-49, American Saint Gobain Corporation, Kingsport, Tennessee 37662.

©American Saint Gobain 1969
Rush literature and prices on products checked below:

- X-act Wood Mold Shutters
- X-Panda Shelves
- Vent-a-System
- Aluminum Louvers

I am a

- Builder
- Architect
- Dealer
- Distributor

NAME ____________________________

FIRM ____________________________

ADDRESS ____________________________

CITY ____________ STATE ______ ZIP ________
Warm air always goes up...

make sure it always goes out...

with Vent-a-System

Millions of feet of Vent-a-System installation on tens of thousands of fine homes has proven what years of research and testing established — that Vent-a-Ridge combined with Vent-a-Strip soffit ventilation creates a uniform flow of air throughout all seasons and wind conditions. Vent-a-System is backed by a $1,500,000 warranty that says it must maintain attic temperature no more than 15°F above outside air... a warranty no one has challenged! Vent-a-System is your best guarantee against weather infiltration. The end result is a home cooler in summer, with lower air conditioning costs... warmer in winter, with dry attic insulation and elimination of moisture damage. In addition, Vent-a-System helps prevent wood rot, paint peel and roof shingle deterioration. Send card for complete information.

EJ products co.
P.O. BOX 68
PRINCEVILLE, ILLINOIS 61559
PHONE 309-385-4323

MAIL THIS POSTAGE-FREE CARD FOR DETAILS
A miracle material...

The material—a crystallized glass that can transmit infrared radiant heat while confining it to one spot—will show up in kitchens this month as the smooth surface of Modern Maid’s electric countertop (photo, above left). And within the next few months, Tappan will test market a gas-fired model (photo, above right) designed by Dorwinague. Both will be sold with separate ovens and priced $100 to $150 more than comparable conventional cooktops.

Meanwhile most major manufacturers ranges—gas and electric—are experimenting with the idea. So next year should bring more electric models, the first gas ones and, possibly, a freestanding range. Modern Maid’s mockup (photo, right). All of these new cooktops will have one thing in common: their surface material. The cooking surface is one of a family of crystallized glasses developed by Owens-Illinois under the trademark CER-VIT, now being produced in flat sheets by PPG Industries under a franchise from o-r and called Hercuvit. It can take temperatures up to 1300° (which earlier surface materials could not). It resists thermal shocks—i.e., ice thrown on a hot spot (photo, top). It won’t transmit heat laterally, so the cooktop stays cool except directly over the heating element. Like glass, it can be highly polished, but it is stronger and resists fracture, abrasions, acids and chemicals, doesn’t expand with thermal changes. It can be transparent, translucent (as in the cooktops) or opaque in a variety of colors.

Besides many future uses for it in the aerospace industry, there are already plans for two more kitchen products: windows for self-cleaning ovens and microwave oven shelves.
A baker's dozen of "nuts and bolts" to cut costs and speed construction

The "new and improved" glamor products and materials in the housing industry consistently receive most of the fanfare and attention. But the constant improvements in less glamorous construction products—such as builder's hardware—often go unnoticed.

Yet these improvements, even though small, can mean important savings to the builder. Many new items of vital construction hardware, costing only a few cents, can cut 15 minutes off a workman's time or eliminate some costly construction materials and save the builder many dollars of expensive on-site labor and reduce in-place costs.

All of the structural hardware products on these pages have one thing in common—they connect one thing to another. And they do it rapidly, efficiently and cheaply. And since minutes saved on each joining operation can add up to days cut from construction schedules, these items are equally important both to the one-at-a-time builder and the large-tract developer.

Drywall clip cuts time, labor and material costs because it eliminates lead-in posts. Clips are pressed onto edge of drywall sheet, 16" o.c., then nailed to stud at interior corner. Prestige Metal Products, Antioch, Ill. Circle 203 on Reader Service card

Reinforcing steel for concrete block walls is easy to install, strengthens load-bearing walls and minimizes cracking. Nine-gauge rods are welded 16" o.c., come in 10'8" lengths and all standard wall widths. Metalcraft Engineering, Lincoln, Neb. Circle 205 on Reader Service card

Lath clips fasten diamond mesh lath to steel studs. Clips are packaged in 50-clip units that load into a specially designed gun, are driven into studs at 6" intervals or less, with lower lath sheets overlapping upper sheets. U.S. Gypsum, Chicago. Circle 206 on Reader Service card

Post base clip is adjustable, positions 4x4 posts even when bolts are out of line. Rot- and termite-proof, the base cover has weep holes to let moisture escape and bottom holes for concrete nails or stud fasteners. Panel Clip, Farmington, Mich. Circle 208 on Reader Service card

Vinyl corner bead for stucco, plaster and exposed aggregate walls, is lightweight, won't rust, bleed, warp, dent or shrink, will take all types of paint. Steeple 7' lengths of 7', 8', 9' and 10' packed 100 to a box. Casings, West Middletown, Pa.
ailless bridging has projections at each end that are hammer­ed into joists after sub-flows are in place. Bridging is available nine sizes for 2x8, 2x10 and 2x12 joists spaced 12", 16" or 24" c. Timber Engineering, Wash­ington, D.C. Circle 209 on Reader Service card

Joist hanger for 2x4s, eliminates toe-nailing, can be used for short-span roof and ceiling joists, false beams and stud anchorage. Hangers, in a wide range of sizes for joists up to double 2x14s, are shipped with special nails. Timber Engineering. Circle 210 on Reader Service card

Steel shims provide better control than scrap wood, help support jamb against studs. After jamb is positioned against studs, shims are nailed to uds, then jamb is nailed to studs id the positioning tabs are easily bent off and removed. Timber En­gineering. Circle 211 on Reader Service card

Plywood clips replace solid blocking and are approved by FHA. Clips are available for use with 3/8", 1/2", 5/8" and 3/4" roof sheathing. Special leveling arm provides a snug fit, helps prevent clips from falling off. Timber En­gineering. Circle 212 on Reader Service card

Elastic clamps hold cable, wire, pipe, conduit, hose or tubing with rivet, screw or nail. Clamps come in polypropylene (A), cellulose (B) and nylon (C), and in 17 sizes from 1/8" to 1 1/2" i.d. Fastway Fast­eners, Lorain, Ohio. Circle 213 on Reader Service card

Beam clamps fit all steel beams: flanges up to 5/8" in thickness. Shown, clamps will hold, hor­izontally or vertically, conduit or pe (3/8" to 2"), chains, threadeduds (1/4" or 3/8"), light bus ducts and outlet boxes. Fastway Fast­eners. Circle 214 on Reader Service card

Scissors clip snaps onto a tee­bar with one hand, even in tight quarters. Clip comes with integral threaded stud 5/8", 1 1/2", 2" or 3" long, has a 50-lb. load capacity, firmly holds fluorescent lights, acoustical ceilings, etc. Fastway Fast­eners. Circle 215 on Reader Service card

New products continued on p. 122

Manufacturers and distributors of quality products for the Nation’s construction industries since 1910.
Guess who’s just around the corner?

US!

You can get Dur-O-wal wherever you get masonry

Masonry wall reinforcement is the kind of product that’s no good “on order”—you need it on the job and on time.

Dur-O-wal truss masonry wall reinforcement is nationally distributed and is the most widely used.

And Dur-O-wal truss is the most versatile. You get a selection of more shapes and sizes applicable to single wythe, composite or cavity walls. Our eleven manufacturing plants are backed up by a network of thousands of dealers.

You can get Dur-O-wal truss where masonry is available.

Don’t risk holding up jobs waiting for an off brand of reinforcement. Dur-O-wal truss got to be first in this business by being on hand and on time with the best. Write or phone the Dur-O-wal plant nearest you for further information.

DUR-O-WAL MANUFACTURING PLANTS • ALABAMA, P.O. Box 5446, Birmingham, Ala. 35207 • ARIZONA, 213 South Alma School Road, Mesa, Ariz. 85201 • COLORADO, 29th & Court St., Pueblo, Colo. 81001 • ILLINOIS, 625 Crane St., Aurora, Ill. 60505 • IOWA, P.O. Box 368, Cedar Rapids, Iowa 52406 • MARYLAND, 4500 E. Lombard St., Baltimore, Md. 21224 • MINNESOTA, 2653 37th Ave. S., Minneapolis, Minn. 55406 • NEW YORK, P.O. Box 628, Syracuse, N.Y. 13201 • OHIO, 1678 Norwood Ave., Toledo, Ohio 43607 • WASHINGTON, 3310 Wallingford Ave., Seattle, Wash. 98103 • Also manufactured in Canada.
Baths

Control center includes two fixed shower heads, a flexible hand shower, storage for whirlpool bath accessories, controls to preset bath temperature and depth. Oval tub, 42" wide, has sculptured head rest. American-Standard, New York City. Circle 216 on Reader Service card

Non-scald control for shower and bath has all moving parts in a solid brass replaceable cartridge with a pressure-equalizing chamber. Adjustable shower head is self-cleaning, tub spout has diverter latch. Powers Regulator, Skokie, Ill. Circle 217 on Reader Service card

Water-saving toilet uses a siphon jet for positive flushing action with one-third less water than needed in conventional tanks. Compact tank is 2½" lower, 2" narrower, than manufacturer's volume-selling regular model. Crane, Chicago. Circle 218 on Reader Service card

One-piece toilet is only about 19" high, will install easily under a counter. Fixture is ideal for powder rooms, just 20¾" wide and 24¾" deep and modestly priced. Available in a new deep blue plus six other colors, and white. Kohler, Kohler, Wis. Circle 219 on Reader Service card

Low-profile toilet is only 25½" high and styled much like one-piece units. A pushbutton handle operates the regular flushing valve. Color available: gold, avocado, beige, blue, pink, lavendar, plus white. Borg Warner, Chicago. Circle 222 on Reader Service card

Decorative cabinet in an antique gold or silver carved wooden frame with crystal or plate doors has an integral lighting fixture. Unit can be wall-hung or recessed. A grounded outlet is inside the cabinet. Jensen Los Angeles. Circle 220 on Reader Service card

Water-saving faucet, after pre-setting, delivers a fixed-volume spray eliminating splashing and reducing water waste. A single calibrated knob controls temperature. Spout is adjustable. Richard Fife, New York City. Circle 221 on Reader Service card

New products continued on p. 12
Do yourself a favor.

Switch to Float-Away or metal bi-fold closet doors.

- Stable pricing
- Finest quality • Easy to install
- Five decorator designs
- Any width; any height to 8 feet
- Handled by reputable building material dealers
- Prompt delivery

Let us tell you the whole Float-Away story.
Write today on your letterhead:

FLOAT-AWAY®
COMPLETE CLOSET SYSTEMS
Department HH-15, 1123 Zonolite Road, N.E., Atlanta, Georgia 30306. Phone (404) 875-7986

Wood shelving costs advanced? Check Float-A-Just steel shelves. Easily installed. With or without rods. Get the facts on our shelving today!
**NEW PRODUCTS**

**Baths**

*Picture-frame cabinet* features a wide sculptured gold frame surrounding an oval 20" x 24" mirror. The recessed cabinet fits a 14" x 11" opening and can be inverted so that piano hinge swings left or right. Grote, Madison, Ind. Circle 235 on Reader Service card

*Lifetime fittings* are white china with 14K gold trim. All faucets feature a 1000-month (83 years!) guarantee against leaks and maintenance. A complete line of bathroom accessories is available. FederHuber, Chicago. Circle 236 on Reader Service card

*Twin cabinets* flank a central mirror for three-way viewing. Unit, designed for surface mounting, is stocked 36" or 48" wide and 22" or 30" high, with or without a top light. General Bathroom Products, Elk Grove Village, Ill. Circle 237 on Reader Service card

---

Call or write Franchise Department: Area Code 301, 593-5600 for details today. Before you waste another sunset, Quality Courts Motels, Inc., P. O. Box 890, Silver Spring, Maryland 20901.
NEW PRODUCTS
start on p. 117

Doors and windows

oor-to-ceiling windows, 6' high, retain traditional look with up-in-muntins. Patented spring-loaded vinyl jamb liners prevent sticking, and both upper and lower sash pivot for easy cleaning. Pella, Pella, 1a. Circle 223 on Reader Service card

olded bifolds are hollow core doors wrapped in a seamless skin it won't split, has no face joints to open. Doors are shipped premade, are 6'6" or 6'8" high in a range of widths from 12" to 30". wenauser, Tacoma, Wash. Circle 224 on Reader Service card

What every over-confident builder should know about
Am-Finn Sauna

If you're already offering free refrigerator-freezer, dishwasher, washer, dryer, self-clean oven and free home owners' policy in your new houses... or all this plus pool and 9-hole golf course in your latest apartment building... you may think you're a big jump ahead of the competition.

Don't believe it!
You're probably just neck-and-neck with the guy down the street.
So how do you unload yours — first, fastest, with the best profit — to your highly pampered, demanding buyers and tenants?
Simple. Pamper them a lot more — at little extra cost — with Am-Finn Sauna.

Why Am-Finn Sauna?
Why not find out? Give us a ring today — overconfidence can be costly.

Am-Finn Sauna
Haddon Ave. & Line St., Camden, N. J. 08103
Please send me complete information on Am-Finn Sauna.

Name___________________________
Company _______________________
Address _________________________
City __________________ State __ Zip ___

New products continued on p. 132
First really new electrical convenience in years!

Electrac®
by Kirsch

Operates draperies electromagnetically. No cords, wheels, gears or separate motors.

Electrac is the best thing that's happened for builders since built-in kitchen appliances. When she holds the switch and watches the draperies silently glide open, it's the finishing touch that can help you close more new home sales.

You can have Electrac wiring built-in, or sets can be plugged into existing outlets, for any expanse of window. And for a cost that's much less than you might guess. For full information, write Kirsch Electrac, Dept.BW-469, Sturgis, Michigan 49091.

*Hidden from view, this power capsule glides along the inside rear of an Electrac rod, operating draperies as it goes.

NEW PRODUCTS
start on p. 117

Doors and windows

Wood panel doors are set in steel frames and finished in walnut or platinum with standard or gold anodized aluminum tracks. Seven widths—from 1'6" to 6'—are available 6'8" or 8' high. Leigh Products Coopersville, Mich. Circle 223 on Reader Service card

Tilt-down windows swing into room at waist height for cleaning. Windows are pressure-loaded on both sides for weather-tightness, and heavy extruded vinyl jamb liners act as insulation, permit smooth operation. Marvin Windows, Warroad, Minn. Circle 226 on Reader Service card

Sun control window has vinyl coated horizontal or vertical louver that rotate 180° within sealed insulating air space between two glass panes to control light and solar heat, reduce heating and conditioning loads. Air-Con Glass Flat Rock, Mich. Circle 227 on Reader Service card

Decorative trim can be glued or nailed to hollow core doors, exterior or interior use, handles like wood, may be painted or stained. Assortment includes plaques, panels, rosettes and moldings. Lure Covina, Calif. Circle 228 on Reader Service card

New products continued on p. 118
Quiet and compact!

Hunter Hide-Away® gives more heat more quietly than any other small fan-forced electric heater

- MOTOR MATCHED to wattage to give right air movement automatically
- 1500, 2000 or 2500 watt models—all the same heater size
- VERSATILE positioning at any height on wall
- ATTRACTIVE design, beige finish (chromed for bathroom, 1250 watts)
- THERMOSTAT built in or wall mounted
- IDEAL for homes, apartments, motels, offices

Hunter Electric Heat It's Matchless!
Hunter makes a complete line of electric heaters of all types.
Mail This Coupon Today
For Free Valuable Information

Check the pertinent boxes, please.

☐ X-PANDOTITE: I want my walls to hold nails, screws, brackets, bolts.
☐ X-PANDOTITE: I want a repair cement that expands as it sets.
☐ X-PANDO GUILD FORMULA: I want a better way to repair china and antiques.
☐ X-PANDO CAUXEAL: I need a flexible seal to put around my air conditioner and poorly fitting windows.
☐ X-PANDO TRAV-MAR: There are leaks in my basement. I want to seal the walls against them.
☐ X-PANDO POINTING MORTAR: I want to brush-coat my brick and concrete walls to make them look like new.
☐ X-PANDOSEAL WITH SILICONE: I want to end the above grade leaks in my brick, masonry and concrete walls.

Name.................................................. Street..............................................
City........................................... State........ Zip.............................................

X-PANDO CORPORATION
43-15 36th Street, Long Island City, N.Y. 11101 • (212) 3T 4-7180
Dept. HH49
Put up Bird vinyl siding. And put away the paint.

Forget about the paint when you put up Bird Solid Vinyl Siding. And its fast, easy installation lets you cut labor costs. Your homes take on a solid, clear-through beauty that lasts and benefits that sell.

When you build with Bird Solid Vinyl, you're building business for yourself. Because this unique new material with its outstanding sales advantages, ease of installation, and growing consumer demand is big business. And it's getting bigger every day.

Bird is keeping pace with this dynamic growth. By offering you the most complete line of solid vinyl building products in the industry.

**Bird solid vinyl siding** – Never needs paint. Beautiful, enduring, virtually maintenance-free. Won't dent, pit, rust or corrode like metal. Won't blister, rot, flake or peel like wood. In 8", double 4" and vertical. Choice of 3 colors, too.

**Bird solid vinyl soffits** – The final touch for lasting beauty and protection. Available perforated or plain. And the color is solid – all the way through solid vinyl – so they never need painting.

**Bird solid vinyl gutter systems** – Again, no painting or replacement. No rusting, rotting or flaking like metal. And unlike wood or metal, they stand up to the worst beating from wind, water and ice. In 10', 16' and 21' lengths.

**Bird solid vinyl shutters** – Long-lasting beauty. Simple installation with four color-matched screws. In all popular sizes and 3 colors to mix-match with siding.

For more details on the Bird solid vinyl profit line, contact your nearest Bird representative or vinyl wholesale distributor.

---

**BIRD & SON, inc.**
Box HH-4, East Walpole, Mass. 02081

Please send more information on your sales-making program on vinyl products. Also send product data on:

- Bird Vinyl Siding
- Bird Vinyl Gutter Systems
- Bird Vinyl Shutters

Company Name

Contact

Address

County

City

State Zip

---

Bird has the biggest solid vinyl product line in the business.
BETTER Homes For Clevelanders

IMPERIAL VILLAGE

The first big step towards better living

By BETTER HOMES FOR CLEVELAND FOUNDATION
How vinyl (PVC) pipe made plumbing rehabilitation feasible in this 1908 Cleveland apartment

1. In rehabilitation projects, the magic word is "cost". This is particularly true in the re-plumbing part of the job. During recent months, in a typical rehabilitation project in Cleveland, Ohio, involving 110 apartment units, piping made of rigid Geon vinyl (PVC) was used for the drain, waste and vent system throughout.

2. In piping for hot and cold water distribution lines, a heat resistant material, CPVC, tradenamed hi-temp Geon vinyl, was used.

3. Cost factor of the vinyl plumbing systems for rehabilitation has been highly favorable. On this project, dollar savings were greater than one-third on bills of materials cost.

4. PVC pipe is lightweight and easy to install through and around the existing framing. It can readily be preassembled.

5. Installation was remarkably easy in tight, hard-to-get-at places because solvent cemented joints eliminated threading and soldering.

6. Maximum safety was achieved because torches were not required for installation; this was especially important in confined, "tinder-dry" construction.

7. The simple method of joining PVC and CPVC piping is highly efficient—on one job only four leaks out of 5000 joints. And they were easily corrected. Expansion joints, shown here, were used between floors and performed equally well.

For more than 15 years, the raw material experts in pioneering PVC pipe have been our technical men and development engineers. Our experience can be your experience. For information on PVC and CPVC pipe, contact B.F. Goodrich Chemical Company, Dept. H-15, 3135 Euclid Avenue, Cleveland, Ohio 44115.
The extra touch that home buyers like.

No matter what the price range, Colonel Logan Ornamental Iron adds just the touch of distinction that impresses home buyers. Standard sizes keep costs surprisingly low; speed deliveries.

Free 16-page catalog gives all the facts. Fully illustrated. Shows complete line of railings, columns and matching accessories.

Free "idea" book. "Decorative Ideas in Iron" is loaded with suggestions for unusual ways to use ornamental iron—inside and out.

Both books FREE! Mail this coupon today!

Logan Co.
Dept. HH-4, P. O. Box 6107, Louisville, Ky. 40206
Please send me your new catalog and "Decorative Ideas in Iron" book.
Name
Address
City/State/Zip

Western District: 1426 S. Santa Fe Ave., Los Angeles 90021

Circle 125 on Reader Service card

Door and window hardware

Decorative traverse rod is finished in black with matching core carriers, rings and spear-shaped ends, comes in four lengths from 29" to 156". Extendible rods are convertible to one-way draw. Stanley, New Britain, Conn. Circle 233 on Reader Service card

Mortise door bolt, with round or oval escutcheon, has a precision-moulded case finished in black vinyl. Alloy steel hub is permanently lubricated, fits a ½" spindle. Overall size: 1½" x 3½" x ½". H. B. Ives, New Haven, Conn.
Circle 231 on Reader Service card

Weatherstrip-sash balance for removable double-hung wooden windows has fool-proof sash platforms to hold sash in any position. Vinyl-coated steel provides smooth operation, durability, good insulation, requires little upkeep. Zegers, Chicago.
Circle 232 on Reader Service card

Cabinet hardware has hand-hammered look. Assortment includes two knobs, two pulls with optional backplates and matching hinges, available in antique brass or pewter-like finish. National Lock, Rockford, Ill. Circle 234 on Reader Service card

New literature starts on p. 117

138 Circle 125 on Reader Service card
Our company, listed on the NYSE aggressively managed and in the process of expanding countrywide our highly profitable operations through a low-cost distribution system. We offer a broad line of hardware, floorcoverings, major appliances and building supplies. For this challenging career opportunity we seek an experienced retail merchant or marketing executive from the building materials industry qualified to direct the buying, merchandising, sales promotion and selling activities. He must be aggressive, a natural leader of men, and a man qualified in a relatively short time to move to the next higher level and direct store operations as well.

Compensation consists of base salary plus bonus and a liberal on-contributory fringe benefit program. Your reply which will be treated in complete confidence should include pertinent information about education, career experience and present compensation arrangements.

WRITE TO:
BOX 98
LAKE BLUFF
ILLINOIS 60044

$50,000
V.P. GENERAL
MERCHANDISE
MANAGER
HARD LINES
Retail and Wholesale Chain

Handcrafted AFESA doors & Old World Ironmongery...
together they complete the look that completes the sale.

Magnificent AFESA doors and authentic wrought-iron hardware can make the selling difference between a 'nice' home and an extraordinary showcase. Handcrafted, finished and stained by native Spanish artisans, AFESA doors bear a weather-beaten texture and rich patina which cannot be duplicated. And the perfect complement is Renaissance-inspired antique iron-mongery, distinctively ornate in "Dull Black." For prestige sales assurance—contact your AFESA dealer or write Cornell-Newton today for free specifications and styles brochure.

Write for free illustrated brochure
CORNELL-NEWTON, INC.
P.O. Drawer 112,
Beverly Hills, California 90213

Cornell-Newton Dealers

CANADA
Toronto 15
Super Structure Door Co. of Canada
62 Densley Ave.

CALIFORNIA
Orinda 94563
Edward T. O'Reilly & Co., Inc.
89 Loma Vista

COLORADO
Denver 80206
The McIntyre Co.
P.O. Box 6033
Cherry Creek Station

CONNECTICUT
Newington 06111
Laurence R. Smith
68 Holmes Rd.

FLORIDA
Miami
Farrey's Wholesale Hardware Co.
P.O. Box 1597
Little River Station
Jacksonville 32206

MASSACHUSETTS
Boston 02127
Creative Hardware
933 E. 2nd Street

MICHIGAN
Omaha 68144
Gibson Architectural Products, Inc.
11902 Elm St.

MINNESOTA
Trenton 08638
Lewis A. Jammer Co.
180 Ewingville Rd.

MISSOURI
West Caldwell 07006
Pella Products of Northern N.J.
35 Fairfield Place

NEW YORK
New York 10021
Elmer T. Hebert
410 E. 62nd St.

NEW JERSEY
Trenton 08638
Lewis A. Jammer Co.
180 Ewingville Rd.

NEW MEXICO
West Caldwell 07006
Pella Products of Northern N.J.
35 Fairfield Place

OHIO
Cleveland
Pekoc Hardware
14009 Kinsman Rd.

OREGON
Portland 97210
Mulino, Products Co.
2636 N.W. 26th Ave.

PENNSYLVANIA
Philadelphia 19130
Alexander Woodwork Co.
1529 Parrish St.

VERMONT
Manchester Depot
The Ral-Jerich Corp.
Bromley Mt. Rd. Route 11

WASHINGTON
Portland 97210
Mulino, Products Co.
2636 N.W. 26th Ave.

CANADA
Toronto 15
Super Structure Door Co. of Canada
62 Densley Ave.

CALIFORNIA
Orinda 94563
Edward T. O'Reilly & Co., Inc.
89 Loma Vista

COLORADO
Denver 80206
The McIntyre Co.
P.O. Box 6033
Cherry Creek Station

CONNECTICUT
Newington 06111
Laurence R. Smith
68 Holmes Rd.

FLORIDA
Miami
Farrey's Wholesale Hardware Co.
P.O. Box 1597
Little River Station
Jacksonville 32206

MASSACHUSETTS
Boston 02127
Creative Hardware
933 E. 2nd Street

MICHIGAN
Omaha 68144
Gibson Architectural Products, Inc.
11902 Elm St.

MINNESOTA
Trenton 08638
Lewis A. Jammer Co.
180 Ewingville Rd.

MISSOURI
West Caldwell 07006
Pella Products of Northern N.J.
35 Fairfield Place

NEW YORK
New York 10021
Elmer T. Hebert
410 E. 62nd St.

NEW JERSEY
Trenton 08638
Lewis A. Jammer Co.
180 Ewingville Rd.

NEW MEXICO
West Caldwell 07006
Pella Products of Northern N.J.
35 Fairfield Place

OHIO
Cleveland
Pekoc Hardware
14009 Kinsman Rd.

OREGON
Portland 97210
Mulino, Products Co.
2636 N.W. 26th Ave.

PENNSYLVANIA
Philadelphia 19130
Alexander Woodwork Co.
1529 Parrish St.

VERMONT
Manchester Depot
The Ral-Jerich Corp.
Bromley Mt. Rd. Route 11

WRITE TO:
BOX 98
LAKE BLUFF
ILLINOIS 60044
How to present zoning cases

Unless it gets the zoning it needs, no apartment project will ever be built. A new step-by-step guide to presenting your case to zoning boards and to the public has been written by NAHB's Director of Land Use, Lee A. Syracuse.

Syracuse tells how to choose the right attorney and how to keep proper records, and he outlines an effective slide presentation for a hypothetical project. For Information Bulletin No. 4, send $3.50 to: National Assn. of Home Builders, 1625 L St., N.W., Washington, D.C. 20036.

APARTMENT LIVING TODAY. A 16mm color film is now available on loan to NAHB members as an aid to presenting the case for apartment living to the public (story, left). The 25-min. film, Apartment Living, A Better Environment Today, presents some of today's best projects, with their conveniences and recreation, as refutations of opposition based on the barracks-like housing of yesteryear.

To make the film, NAHB's Lee Syracuse visited 30 projects in 23 states, shooting landmark apartment projects of the past as well as the best of today's new developments. Syracuse has included every architectural style and type of land plan, from colonial to contemporary, from urban to resort, from flat land to hillsides. And he hopes the film will be an "eye opener to those who feel there is something wrong with apartment living" by showing the type of amenities, previously enjoyed only by the very wealthy, but now possible for many apartment dwellers. Write to: Lee Syracuse, Director of Land Use and Development, NAHB, 1625 L St., N.W., Washington, D.C. 20036

CERAMIC TILE. Four-color booklet shows actual applications of three-dimensional, high-relief, large-sized architectural tiles on exterior and interior walls and floors. Fifteen patterns and eight colors are illustrated. American Olean Tile, Lansdale, Pa. Circle 302 on Reader Service card

SINK FRAMES. A two-color catalog tells how to reduce sink installation time and gives detailed specifications and price listings for a complete line of frames and accessories. A special reference section gives specifications for all models of major sink manufacturers and includes model numbers, frame sizes and requirements. Vance Industries, Chicago. Circle 303 on Reader Service card

LIGHTING FIXTURES. For houses which are colonial or traditional in style, a complete line of fixtures based on colonial designs is shown in a four-color catalog. The traditional style of the chandeliers, wall lights, pendants, post lights and lanterns is emphasized by photographs of interiors, exteriors and details of colonial homes and buildings. Included: complete information on dimensions, types of glass and finishes available. Also included: two or more pages on contemporary fixtures and landscape lights. Artoller Lighting, Garfield, N.J. Circle 304 on Reader Service card

PRE-PAINTED GUTTERS. Longer life and less maintenance are claimed for a line of steel roof drainage products, first dipped in zinc and then coated with white polyester enamel. The galvanizing process makes the gutters resistant to corrosion inside, the slow-baked outer coat forms a long-lasting bond that will stand up to all types of weather. Various styles of gutters, drain pipes, and connectors are illustrated. Also shown: accessories such as sealant and gutter spikes. Wheeling Corrugating, Wheeling, W.Va. Circle 305 on Reader Service card

PLASTIC PANELS. Complete specifications for manufacturer's line of flat and corrugated translucent fiberglass-plastic in panels and rolls are given in a technical brochure. Included: information on condensation control and maintenance, data on the load-bearing capacities of the various panels, weights, illustrated construction details recommended for skylights, sidelights, partitions and patio roofs and specifications for glazing panels and special order panels and accessories such as fasteners, flashing, and sealants. Filon, Hawthorne, Calif. Circle 306 on Reader Service card

Why do builders choose ShoweRFold® enclosures?

Homes and Apartments move faster when women approve your bathrooms. And women love patented ShoweRFold tub and shower enclosures because they're beautiful, safe, and real work savers. They fold to less than 10 inches, allowing complete access for easy entry, bathing children or cleaning tub. Closed, they keep water inside where it belongs. The flexible panels wipe clean with a damp cloth. They will not mold or mildew. Safe! Can't crack, chip, shatter or break. Lifetime replacement guarantee on panels, too.

ShoweRFold gives bathrooms a beautiful, spacious appearance. Choose from decorator panel colors. Trimmed in gold or silver anodized aluminum with bright or satin finish. Budget-matched. A complete range of sizes and styles provides product in every price range. 82 models in all. Write for free literature.
Shakertown 8' self-aligning panels cut cedar shake or shingle application costs up to 70%! Nailing time alone is reduced by over half. With these authentic cedar shakes or shingles bonded into an efficient, easy to handle 3-ply* panel, you nail only at stud centers . . . multiple handling and nailing of individual shakes is eliminated. At a 14" exposure, just 11 Shakertown panels cover the equivalent area of 250 individually applied shakes. Available in a variety of textures with even or staggered butt lines, natural cedar or semi-transparent finishes.

*Where local code permits, Shakertown 3-ply panels may be applied directly to studs.

Write for detailed brochure

SHAKERTOWN CORPORATION
DEPT. HH-4
4416 LEE ROAD
CLEVELAND, OHIO 44128

In Canada
BESTWOOD INDUSTRIES, LTD.
P. O. BOX 2042
VANCOUVER 3, B.C.

FREE NAILS
Help her keep her new home new... 

Build in her cleaning!

With a VACUFLO Built-In Cleaning System she'll be able to vacuum everywhere in her home including the garage and basement, without lugging anything around except a four pound hose. She'll like that.

Air is exhausted outside, not recirculated in the home. VACUFLO will help cut down on dusting; prolong the life of carpeting and keep her home looking newer, longer.

Costs no more than any other major appliance. The VACUFLO installers won't be in your way long... less than a day.

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

It sounds worth discussing... let's!

Name: 
Title: 

Firm: 

Address: 

City: State: Zip: 

Telephone: Area Code: 

NEW LITERATURE

PLASTIC PIPE. An illustrated booklet gives step-by-step procedures for the proper installation of PVC drain waste vent pipe and fittings. Photographs show workmen cutting pipe, applying adhesive and fitting sections together. Evansite Plastic, Carrollton, Ohio. Circle 307 on Reader Service card

LAMINATED PLASTICS. A guidebook, with sample chips, details colors and patterns in manufacturer's new collection of decorative laminated plastic surfacing material. Conshohocken, Wisconsin Rapids, Wis. Circle 308 on Reader Service card

WOOD FIBER SIDING. Full-color photographs show actual applications of manufacturer's five patterns of siding in a leaflet that also lists the properties of the product, specifies the lengths, widths and thicknesses available in each pattern and outlines the manufacturer's guarantees. Masonite, Chicago. Circle 309 on Reader Service card

SANITARY LANDFILL MACHINERY. Two booklets compare the types of machinery best fitted to do large or small sanitary landfills. Photographs show loaders and dozers in operation at trench and area fills, and per-hour operating costs are included for several machines now being used in various cities. Available from local Caterpillar Tractor dealers.

Annual H&H indexes
Copies of House & Home's editorial indexes for 1965, 1966 and 1967 are still available. Each is an eight-page, cross-referenced listing of subjects covered that year by this magazine. To get copies (there's no charge) write to: Reader Service Dept., House & Home, 330 West 42nd St., New York, N.Y. 10036.

CHAIN SAWS. Full-color brochure illustrates six models, gives complete specifications for full line of ten models, lists all accessories and spells out manufacturers' guarantee. Skil, Chicago. Circle 311 on Reader Service card

STEEL PRODUCTS. A small booklet reports the success of a builder-remodeler who uses steel products such as sinks, range hoods, bathtubs, doors and ductwork, as well as structural steel. Photos show various applications, American Iron and Steel Institute, New York City. Circle 312 on Reader Service card

CONCRETE VIBRATORS. Details on the use of high frequency external vibration systems in the manufacture of precast and prestressed concrete products. The manufacturer's engineering service is outlined, specifications for various plates, rammer and hammers are given. Photos show actual applications. Wacker, Milwaukee, Wis. Circle 313 on Reader Service card

TRACING TABLES. Several series of portable, fixed-base and drafting table lightbox units are illustrated and described in a booklet that gives complete specifications and discusses features. To-scale drawings show standard grid patterns available. Stacor, Newark, N.J. Circle 314 on Reader Service card.

Circle 129 on Reader Service card
That hammer is costing you money!

Let Duo-Fast Automatic Nailers show you how to cut costs

You get your nailing jobs done 5 to 6 times faster when you use Duo-Fast Staplers and Nailers instead of those high-cost hammers... and time saved is money earned.

The heavy-duty CN-137 Nailer drives all nail sizes, 6d common thru 16d sinkers, without changing the tool in any way. A top favorite with builders.

The smaller IN-123 Nailer drives shorter nails... 1⅛" thru 1⅜". Speeds production of lighter nailing jobs of all kinds.

The S-763 Stapler Nailer drives heavy, galvanized, FHA-approved staples up to 2" long. Very popular for nailing sheathing and plywood.


Gun, Hammer & Strike Tackers speed the installation of building paper, insulation, ceiling tile, underlayments.

Cut your costs on framing, sheathing, plywood floor and roofdeck, soffits, bridging, gable fill-ins, trusses—all parts of building construction.

Switch to Duo-Fast automatic nailing and see how much your hammer is costing you.

Write today for Builders Brochure FT-26 and free demonstration

DUO-FAST FASTENER CORP., Dept HH
3702 River Rd., Franklin Park, Ill. 60131

DUO-FAST  IN  FAST  TO  HOLD  FAST
Everything you need for tacking, stapling and nailing.

Write for Literature & Sample

CASINGS INCORPORATED
WEST MIDDLESEX, PA. 16159
West Coast Address:
P.O. Box 236, N. Hollywood, California 91603
<table>
<thead>
<tr>
<th>Page</th>
<th>Company Name</th>
<th>Subcategory</th>
</tr>
</thead>
<tbody>
<tr>
<td>128W1</td>
<td>Ador Corp. (Sub. of Rusco Industries, Inc.)</td>
<td>Casings, Inc.</td>
</tr>
<tr>
<td>58, 59</td>
<td>Aluminum Company of America</td>
<td>Condon - King Co.</td>
</tr>
<tr>
<td>106, 106A</td>
<td>American Olean Tile</td>
<td>Cornell Newton</td>
</tr>
<tr>
<td>110, 114</td>
<td>American Saint Gobain Corp.</td>
<td>Congoleum Industries , Inc.</td>
</tr>
<tr>
<td>43, 62</td>
<td>American Standard (Plumbing and Heating Div.)</td>
<td>Certain-Teed Products Corp.</td>
</tr>
<tr>
<td>131</td>
<td>Am-Finn Sauna, Inc.</td>
<td>Celotex Corp.</td>
</tr>
<tr>
<td>128S1, M1</td>
<td>Anderson Mfg. Co., V. E.</td>
<td>Caradco, Inc.</td>
</tr>
<tr>
<td>146, 3rd Cover</td>
<td>Armstrong Cork Co.</td>
<td>California Redwood Assn.</td>
</tr>
<tr>
<td>18</td>
<td>Athey Products Corp.</td>
<td>Caradco, Inc.</td>
</tr>
<tr>
<td>136, 137</td>
<td>B. F. Goodrich Chemical Co.</td>
<td>Bangkok Instruments</td>
</tr>
<tr>
<td>11</td>
<td>Berger Instruments</td>
<td>Bethlehem Steel Corp.</td>
</tr>
<tr>
<td>105</td>
<td>Beithlehem Steel Corp.</td>
<td>Berger Instruments</td>
</tr>
<tr>
<td>57, 135</td>
<td>Bird &amp; Son, Inc.</td>
<td>Bethelehem Steel Corp.</td>
</tr>
<tr>
<td>111</td>
<td>Blu-Ray, Inc.</td>
<td>B. F. Goodrich Chemical Co.</td>
</tr>
<tr>
<td>28, 29</td>
<td>Boise Cascade Corp.</td>
<td>B. F. Goodrich Chemical Co.</td>
</tr>
<tr>
<td>70</td>
<td>Bruce Co., Inc., E. L.</td>
<td>Boise Cascade Corp.</td>
</tr>
<tr>
<td>9</td>
<td>California Redwood Assn.</td>
<td>Boise Cascade Corp.</td>
</tr>
<tr>
<td>67</td>
<td>Caradco, Inc.</td>
<td>Boise Cascade Corp.</td>
</tr>
<tr>
<td>143</td>
<td>Casings, Inc.</td>
<td>Boise Cascade Corp.</td>
</tr>
<tr>
<td>112, 113</td>
<td>Celotex Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>22, 23</td>
<td>Certain-Teed Products Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>63</td>
<td>Chevrolet Motor Div. (General Motors Corp.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>111</td>
<td>Condon-King Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>2nd Cover</td>
<td>Congoleum Industries, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>47</td>
<td>Copper Development Assn., Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>139</td>
<td>Cornell Newton</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>106B</td>
<td>Delta Faucet Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128N4</td>
<td>Deluxe Homes, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128E1</td>
<td>Designaime Home Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>134</td>
<td>Diziat Co., Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>143</td>
<td>Duo-Fast Fastener Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>120, 121</td>
<td>Dur-O-wal</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>107</td>
<td>Edison Electric Institute</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>106A</td>
<td>Fenestra</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>20</td>
<td>Flexicore Co., Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>42</td>
<td>Flintkote Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>123</td>
<td>Float-Away Door Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128S2A, S2B</td>
<td>Florida Gas Transmission</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>30</td>
<td>Ford Motor Co. (Truck Div.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>31</td>
<td>Formica Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>27</td>
<td>Frigidaire Div. (General Motors Corp.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>41</td>
<td>George D. Roper Sales Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>103, 104</td>
<td>Georgia-Pacific Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>142</td>
<td>H-P Products, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>24</td>
<td>Hager Hinge Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>13</td>
<td>Hercules, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>133</td>
<td>Hunter Division (Robbins &amp; Myers, Inc.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128M2, N3</td>
<td>Inland Homes Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128W2</td>
<td>International Pipe &amp; Ceramics Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>32</td>
<td>Ives Co., H. B.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>25</td>
<td>Kingsberry Homes</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>5</td>
<td>Kinkead Industries (Showerfeld Div.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>140</td>
<td>Kirsch Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>53</td>
<td>Kitchen Kompact, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>51</td>
<td>Kohler Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>30</td>
<td>Kwisket (Div. of Emhart Corp.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>129, 130</td>
<td>Leigh Products, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>52</td>
<td>Levelor Lorentzen, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>54, 55</td>
<td>Libbey-Owens-Ford Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>138</td>
<td>Logan Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>33</td>
<td>3M Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>65</td>
<td>Miami-Carey Div. (Philip Carey Corp.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>56</td>
<td>Monsanto/Astroturf</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>14, 15</td>
<td>National Gypsum Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>145</td>
<td>National Homes Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>1, 2</td>
<td>NuTone, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>10, 11</td>
<td>Overhead Door Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>6, 7</td>
<td>PPG Industries (Coil Coating Div.)</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>114</td>
<td>Panel Clip Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>125, 126</td>
<td>Pella Rolscreen Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>49</td>
<td>Philip Carey Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>124</td>
<td>Quality Courts Motels, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>114</td>
<td>Rain Jet Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>N7, N8</td>
<td>Red Cedar Shingle &amp; Handsplit Shake Bureau</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>64</td>
<td>Republic Steel Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128E3, N5</td>
<td>Richmond Homes, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128E4</td>
<td>Samspry Siding Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>21</td>
<td>Shakertown Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>141</td>
<td>Simpson Timber Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>46</td>
<td>Structural Clay Products Institute</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>119</td>
<td>Tarter, Webster &amp; Johnson</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>128SWA, SWB</td>
<td>Thiolel Texas, Inc.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>34</td>
<td>United States Ceramics Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>69</td>
<td>United States Plywood</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>36, 37</td>
<td>U.S. Steel Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>102</td>
<td>Vega Industries</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>61</td>
<td>Weiser Lock</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>4th Cover</td>
<td>Weyerhaeuser Co.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>35</td>
<td>Whirlpool Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>48</td>
<td>Wiegand Co., Edwin L.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>134</td>
<td>X-Pando Corp.</td>
<td>Boyd, Inc.</td>
</tr>
<tr>
<td>39, 40</td>
<td>Yale Div. (Eaton, Yale &amp; Towne, Inc.)</td>
<td>Boyd, Inc.</td>
</tr>
</tbody>
</table>
When you join the National Homes team you move into the high-volume, high-profit league. In 1968, National Homes builders sold an average of 319 homes every weekend! The fantastic growth of the Growth Shelter Company—to 16,611 units per year from 11,809—was the talk of the entire housing industry. There must be reasons for all this action. There are. A lot of them. All good reasons. Let's start with reason number one. Money. When you team up with the Growth Shelter Company you have access to all the money you need for construction and permanent financing. National Homes Acceptance Corporation has more on tap to back our builders all the way. So money's no problem for you. But what are you going to use for manpower to expand your volume and profits... because you can bet your bottom dollar manpower is going to get nothing but scarcer. That brings us to reason number two. National Homes' crane erection technique is your answer. You can set a home up in hours and complete it in five days. You beat the manpower shortage and turn your money faster. That makes more money for you.

Models for growth? No problem. We offer as an option the industry's only complete selection of crane-erected homes from National's Collection of Distinguished Homes. And that brings us to reason number three. Models. You'll find over 300 of them in our Collection pictured here... all the way from $15,000 to $65,000... just what you need for today's selective buyer who wants excellence in style, design and quality. So that makes three good reasons why you should become a National Homes builder. Want to know more? We'll be glad to give you the whole story.

Plants: Lafayette, Indiana; Horseheads, New York; Tyler, Texas; BEST, Effingham, Illinois; LESCO, Martinsville, Virginia; KNOX, Thomson, Georgia.

Cut yourself a piece of the action. Clip the coupon below now and mail today.

Your profits grow with the Growth Shelter Company

1967
11,809 HOMES

1968
16,611 HOMES

Jim Price, Board Chairman
National Homes Corporation
Lafayette, Indiana 47902

I want my profits to grow. Tell me how I can join your winning team of builders. My interest is in

Immediate or Future planning.

I have developed lots.

Name

Title

Company

Phone

Address

City

State

Zip

Dept. HH
Sweep them off their feet with a colorful Armstrong floor.

Suddenly, the whole house is brighter, more inviting, more memorable.

An imaginative idea like this can lead to a closer look at your model. And close looks produce closed deals.

It doesn't cost a red cent more to have this extra selling leverage of Armstrong color in your homes. You can get smart, contemporary color for the price of ordinary, yesterday color. And you can get it throughout the entire Armstrong line—from budget-priced Excelon® Tile to luxury sheet Vinyl Corlon®.

As a starter, send for our Builder’s Color Scheme Kit. Actual fabric, paint, and flooring samples—coordinated in six dramatic schemes, all selected by professional decorators.

Write Armstrong Builder Design Service, 304 Sixth St., Lancaster, Pa. 17604.
Introducing: Superwide laminated decking from Weyerhaeuser®.

It's Ponderosa pine in 8, 10 and 12-inch widths of precision-made laminated decking.

The extra width means extra economy. There are fewer parts to handle, and it takes less labor.

And you get beauty as well as efficiency.

The new superwides are available in all the standard surface patterns, textures and architectural and standard grades from Weyerhaeuser.

Prestaining available. You can specify both pine and hemlock decking prestained in a choice of six Olympic® Stain tones. They're standard colors, easy to match if you finish the trim at the site. Custom staining is also available in any color you choose.

To learn more about our new wide decking, laminated beams and other Weyerhaeuser products, send us the coupon.

To: Weyerhaeuser Company, Box B-5925
Tacoma, Washington 98401
I'm interested. Send me the facts on Weyerhaeuser superwide laminated decking.

Name_____________________________
Firm____________________________
Address__________________________
City______________________________
State________________Zip__________

Circle 133 on Reader Service card