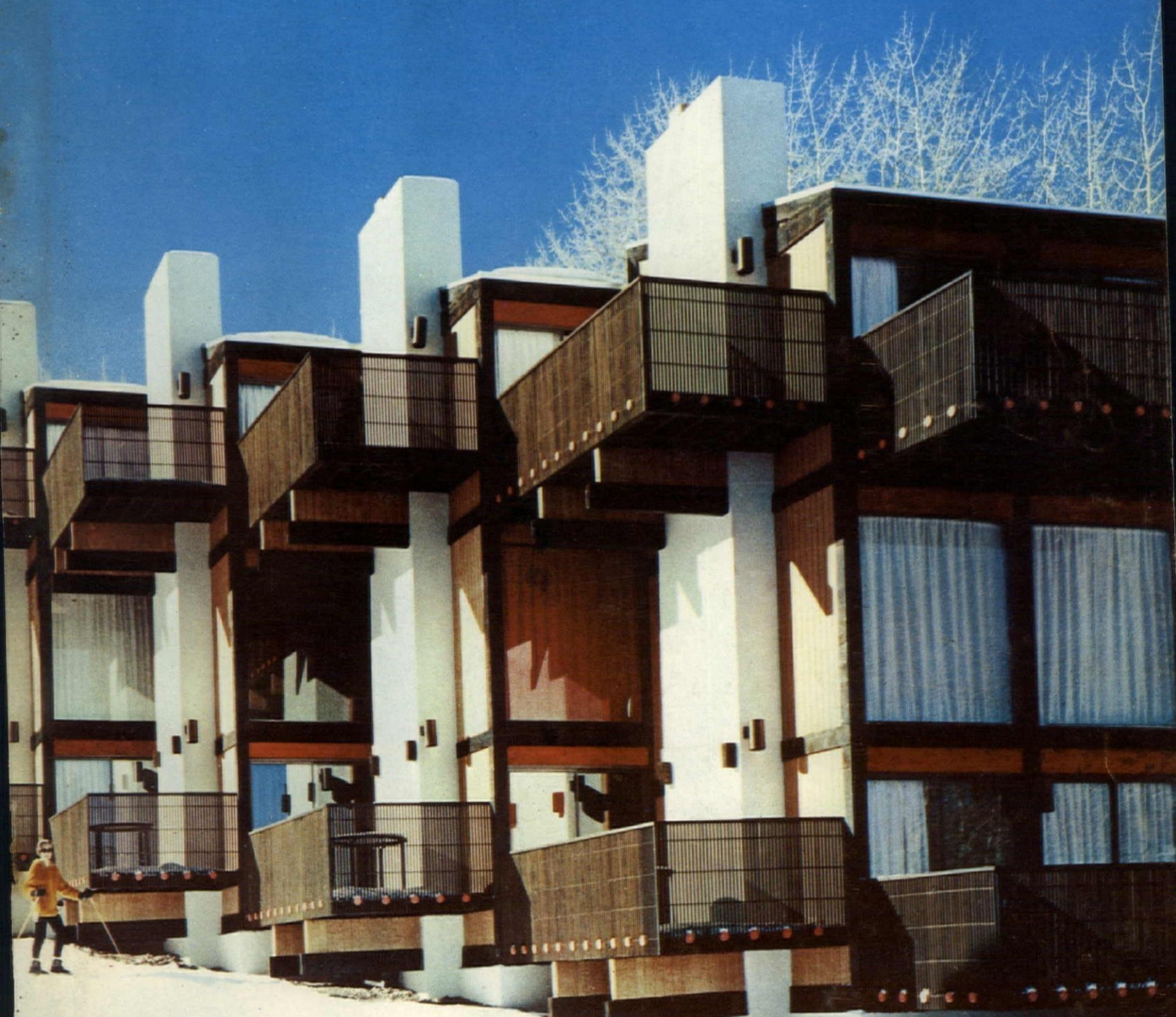


House & Home

THE MARKETING AND MANAGEMENT PUBLICATION OF HOUSING AND LIGHT CONSTRUCTION
APRIL 1970



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VOL. 37, NO. 4

APRIL 1970

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Cover: Townhouses at Aspen, Colo., ski resort. Architect: Donald R. Roark & Associates, Owner: Daniel Corp. Contractor: Morrison Construction Co. Photos: William Nelson.

NEXT MONTH

The best of tomorrow's higher-density housing, and how it will create better environments . . . How to survive in the tight-money jungle . . . Commercial ideas for modular housing . . . How—and why—to go public with your company



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Congress and the Administration gear up to help housing

Suddenly Washington can't do enough for housing. It's an election year.

From mid-February on, Congress has been more "shocked and concerned" than ever about the crumbling state of the home-building industry.

And the Administration, too, is displaying increased interest.

The upshot has been a flood of legislative proposals to aid the mortgage market. It would appear that Congress may enact a bill comparable in size and scope to the 1968 Housing Act.

There are proposals to get the Federal Reserve Board to open its discount window to the mortgage market and for mortgage lenders to make loans at 6½ per cent. Other ideas would in effect force pension funds and foundations to place up to 25 per cent of their assets in mortgages by tampering with their tax status.

Still another scheme would provide for a development bank that could make guarantees on credit and give technical assistance for low and moderate income housing.

Thrift incentive. Besides the measures being proposed to aid housing directly, there are bills to offer to the consumer a tax incentive for saving (NEWS, March '70). Several measures have been introduced to permit individuals to deduct from taxable income the first \$750 of interest from thrift institutions.

There is growing support for this measure in the housing and mortgaging fields, but it is believed that Chairman Wilbur Mills of the House Ways and Means Committee is opposed. His opposition would all but kill the bill's chances.

In hearings before the House and Senate Banking and Currency Committees, the industry's trade groups proposed additional legislation to aid housing.

- From NAHB: Redirect the investment policies of pension funds and the Federal Reserve System and establish a national secondary market for conventional mortgages.

- From the S&Ls: Provide associations with a limited type checking account; permit S&Ls to act as trustees for accepting Keogh Act funds, and establish a national secondary market for conventional mortgages.

- From mortgage bankers: Free FHA and VA rates from all ceilings, and establish a national secondary market for conventional mortgages.

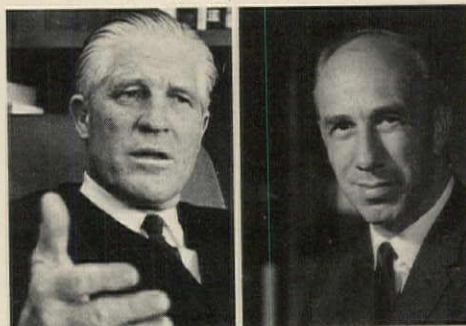
Secondary market. The interest from most private sectors of the housing industry in a secondary market for conventional mortgages is shared by the Administration. Secretary Romney, in his testimony before both banking panels, urged legislation to permit both the Home Loan Bank Board and the Federal National Mortgage Association to conduct such a system.

Romney told the committees that both agencies should have this authority, since the Bank Board could work primarily with S&Ls while FNMA continued to do business with its regular clients—mostly mortgage bankers.

The Administration's proposals for a sec-

Tom Hoy

Fabian Bachrach



ROMNEY

MAISEL

ondary market would provide for a participation scheme.

The purchasing agency would buy up to 90 per cent of the loan, but would have the right to turn it back to the originator for a three-year period if the loan went sour. Loans could be up to 80 per cent of value, but could go higher if covered by private insurance.

Mortgage bankers are not happy with the proposal. They don't want to participate in the loans, preferring to sell them outright. The S&Ls, on the other hand, have raised no objections.

Opposition. A view that is likely to carry more weight than these conflicting industry attitudes is that of Sherman J. Maisel, the Federal Reserve governor most concerned with housing.

Maisel told the Senate Banking Committee that the bill before then contained a number of flaws.

Allowing Fanny May to deal in conventional mortgages would raise liquidity questions that would cast doubt on Fanny May's ability to finance itself by issuing debt in the private market.

"No reasonable plan," Maisel said, "would provide assurance of investment liquidity or of capital safety comparable to that inherent in the federally underwritten mortgages in which Fanny May now deals."

Support of the idea of a secondary market—conducted by their agencies—was voiced by both Preston Martin, head of HLBB, and Allan Oakley Hunter, head of FNMA.

Dual rate. Romney also said the Administration will seek legislation to provide a dual rate for both FHA and VA loans.

One rate would be administered, as is now the case. The second rate would float free—but discounts would be prohibited. This was a recommendation of the President's Commission on Mortgage Interest Rates.

The Mortgage Bankers Association dislikes the plan. Mortgage bankers have urged Congress to free the rate or tie it to some statistical series. If there are no discounts permitted, they say, mortgage bankers won't use the system.

The Administration has also proposed that advances from the Home Loan Bank System be subsidized by a \$250 million authorization. Savings and loans have had to pay their regional banks up to 8 per cent for advances.

Secretary Romney, in urging Congress to

authorize the funds, warned:

"If the rate on advances is not reduced, associations may divert money from mortgages to repay advances. With the subsidy, we hope to maintain the volume of net new residential mortgage lending by S&L near last year's rate of about \$9 billion."

One major phase of the Administration's plan to obtain more funds for housing requires no legislation—just the threat of it.

Secretary Romney told the banking committees that the Administration actually opposed proposals to force pension funds to put money into housing. Instead, the Administration has been talking with these groups in an effort to persuade them to invest in mortgage.

The Secretary told the committees that the Administration would know by next month if its voluntary program is working, but he warned:

"One way or another, housing will be built and financed."

Slowdown. "Now that the economy is beginning to cool off, lenders have good reason to support this effort and begin shifting into mortgages," Romney declared. "The extent to which that shift does or does not take place voluntarily will be a significant indication of what—if any—further steps the government must consider to deal with the mortgage market problem."

While Romney stopped short of saying credit controls might be invoked against reluctant investors, committee members felt certain this is what he meant.

Clearly Congress and the Administration are moving to produce a worthwhile housing bill. Even though Chairman Wright Patman complains that proposals put forward so far "fall far short of being the answers for real change and lasting improvement," it is a safe bet that the housing industry will receive solicitous attention before Congress begins campaigning for reelection. —A. M.

Man who cut the prime rate: he's a former homebuilder

It had nothing to do with his decision, but Norman Denny has a long history as a builder. A Levitt alumnus, he has erected 2,000 homes and a luxury apartment in the Philadelphia area.

Denny is now president of Philadelphia's Lincoln National Bank, which reduced its prime rate to 8 per cent, from 8½ per cent, on Feb. 25. The prime is the loan rate offered to a commercial bank's top corporation customers.

"We felt the economic barometers were going down and that we should not wait until May, when other banks will probably reduce," says Denny.

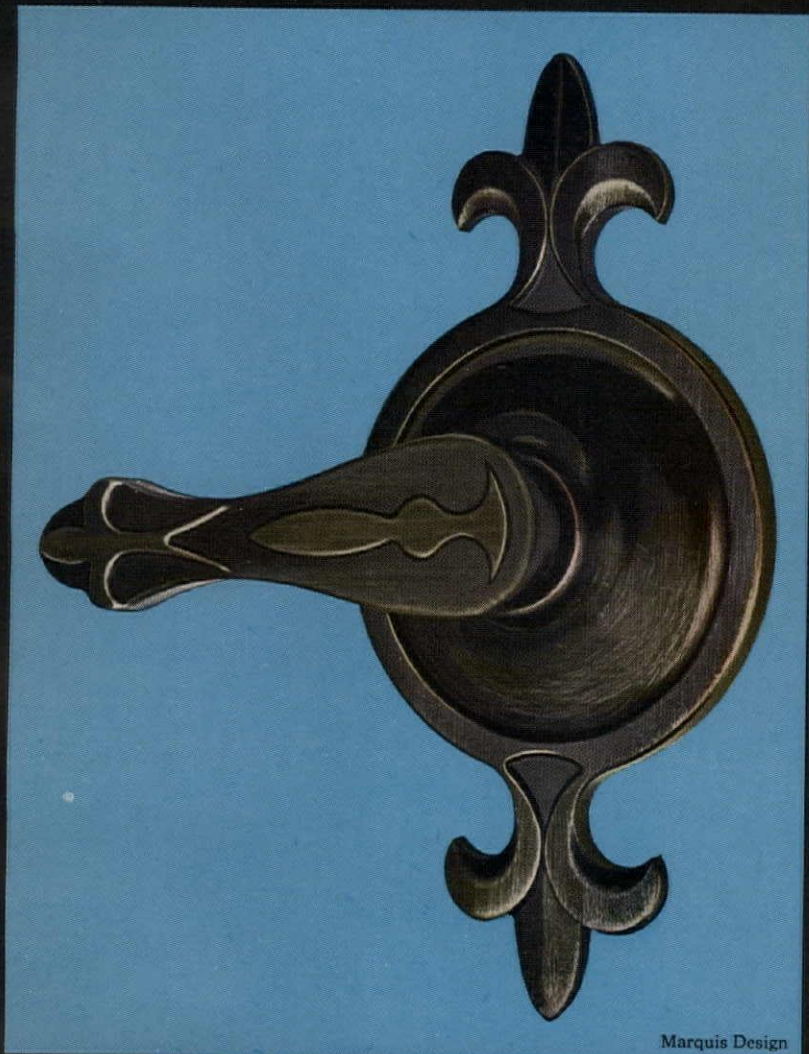
His move gave the stock market a one-day filip, even though analysts noted that Lincoln National has only \$43 million in deposits and is not influential.

—LISA LAZORKO

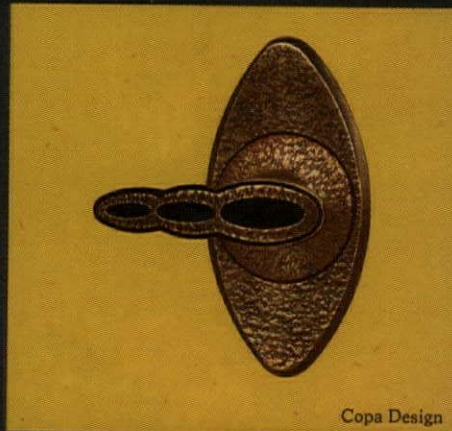
McGraw-Hill World News, Philadelphia

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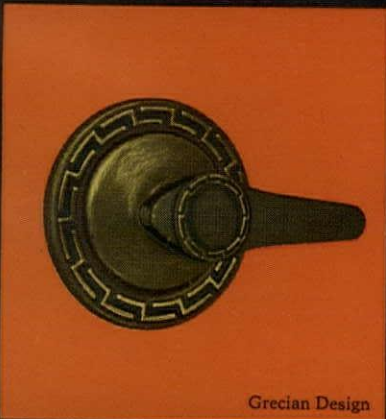
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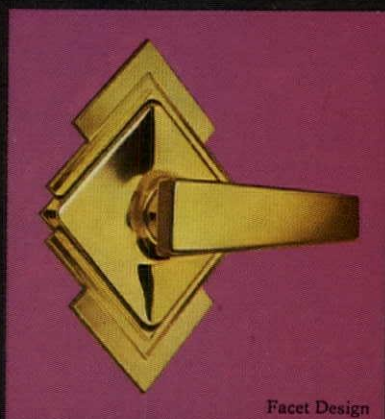
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MASONITE PRODUCTS BEAUTIFY THE AMERICAN SCENE

Mortgage-backed security on stream—big bond is next

Richard D. Mowrey

It took one year, six months and 19 days, but mortgage-backed securities are here.

Two issues—one for \$2 million and another for \$7.5 million—were announced Feb. 19 by Secretary George Romney of HUD. He hailed the concept as an effective device for obtaining pension-fund participation in the mortgage market.

The small initial issues will not generate much money for housing investment, but Romney later announced he was about to issue regulations for the large mortgage bonds that, like the smaller private-placement issues, are to be backed by the Government National Mortgage Assn.

The bond, which experts say could channel billions a year into mortgages, is likely to appear this spring, when the Home Loan Bank System makes a \$200 million offering.

Mortgages sold at home. The first transaction in the mortgage-backed securities was a \$2 million issue sold by Associated Mortgage Companies of Washington and New York and by its subsidiary, South Jersey Mortgage of Camden, N.J.

The issue was sold to three pension funds in the mortgage company's home state: the New Jersey Police and Firemen's Retirement System, which bought \$500,000; the New Jersey Public Employees Retirement System, which took \$700,000; and the New Jersey Teachers' Pension and Annuity System, which came in for \$800,000.

President Woodward Kingman of GNMA said the three funds were "delighted about the investment" adding: "Not only is the yield equal to other market securities, but the mortgages are all on properties in New Jersey. This was very attractive to the funds."

The securities were sold against a pool of 8½ per cent FHA and VA mortgages valued at the \$2 million issue level. An 8 per cent coupon was set on the securities, and they were discounted to 94.75 to yield 8.58 per cent at maturity in 30 years.

One HUD spokesman said the securities will probably yield more. On a 12-year life, for example, they will yield 8.75 per cent.

A second issue. Sharing the spotlight with South Jersey Mortgage was the IDS Mortgage Corp., subsidiary of Investors Diversified Services of Minneapolis, which offered \$7.5 million of mortgage-backed securities bearing 7 per cent coupon.

President Bernie Snoddy of IDS said the yield would be commensurate with that of U.S. Treasury securities and securities of other government agencies.

The IDS securities, like those of South Jersey Mortgage, are of the modified pass-through type. They provide for guaranteed monthly payments of a specified sum, composed of principal and interest, whether the latter is collected or not. All prepayments are passed through to the investors as collected.

Both issues were offered in minimum denominations of \$50,000—and from early indications pension funds appear willing, if not eager, to get in on the new scheme.



FIRST PURCHASE of mortgage-backed securities is made by Joseph McCrane (left), New Jersey treasurer, who receives from Louis H. Meyer (right), president of Associated Mortgage Cos., three certificates representing \$2 million bundle of loans. Others (from left): Woodward Kingman, president of GNMA, which guarantees the new securities, Secretary Romney and Richard L. Stoddard, New Jersey investment official.

The IDS issue, too, was expected to appeal to pension-fund managers. Funds have been reluctant to move into the mortgage market because of the unwieldy nature of the instrument, but mortgage-backed securities help eliminate this drawback.

Easier to handle. "Now these managers can obtain the investment results of a geographically diversified portfolio of mortgage loans on residential real estate without the cumbersome and expensive acquisition, servicing, and supervision requirements ordinarily associated with such loans," Snoddy notes.

If the pass-through securities prove successful—and President Kingman says he already has made commitments for GNMA to guarantee several additional issues—the mortgage market could be improved substantially.

Pension funds have been courted for years by mortgage companies—without much success. But Congress is now eyeing tax plans that would reward funds that place some of their assets in mortgages—a sort of indirect coercion.

Secretary Romney believes, however, that the funds may become willing investors in mortgage-backed securities.

The bond. The small pass-through issues may have special appeal to pension managers who want to pump mortgage money into their own areas, as the New Jersey issue did, but HUD officials believe the larger issues of mortgage bonds may have even more appeal.

Chairman Preston Martin of the HLBB, testifying before Congress, said the funds will be attracted to the bond-type securities because they will be tailored to fund requirements.

In objecting to legislation that would force the funds to invest in mortgages, Martin said: "I agree with the objective of encouraging pension funds to invest a larger share of their funds in mortgages. This board urges the managers of these funds to purchase GNMA-guaranteed bonds, an investment medium that will be suited to the needs of pension funds and will encourage them indirectly to finance mortgages."

Martin also disclosed that the HLBB will offer \$200 million in GNMA-backed mortgage bonds for sale this spring. It is likely to be the first mortgage bond backed by the full faith and credit of the U.S. government.

This larger issue by the Bank Board and, simultaneously, another by Fanny May, are expected to provide the mortgage lenders a ready means of tapping the nation's capital market. —A. M.

Lapin drops Fanny May suit to re-enter private business

Raymond H. Lapin, former president of the Federal National Mortgage Assn., has given up his court battle to win back the seat President Nixon took from him in December.

In ending the suit, Lapin said he wants to "return to business, and the time has now come to do this." He added:

"Every fight must come to an end, and it is unlikely that the lawsuit will restore me to my position before my term expires in May.

"All that I can win by continued litigation is theoretical vindication, and since the government's failure to produce any factual basis for removal has already vindicated me, there seems little point to investing more time and money."

New chief will preserve Fanny May's ties to government

Morton Broffman

Fanny May's new boss is moving cautiously, viewing his immediate role as that of a practitioner who will keep present operations moving smoothly.

Allan Oakley Hunter has no intention of moving at the breakneck speed that characterized the Federal National Mortgage Association under Raymond H. Lapin.

Hunter, a California Republican, was appointed FNMA president to replace Lapin, a California Democrat, who was removed by President Nixon in December.

Hunter does not intend to reduce FNMA support of the mortgage market. He insists that Fanny May will continue as the major force in FHA-VA lending.

But the sharp differences between Hunter and Lapin—in both style and philosophy—point to changes for FNMA.

Lapin said bluntly: "I don't work for George Romney."

Hunter says firmly: "I regard Romney as a senior partner in a fraternity that includes public and private interests."

Lapin felt that Fanny May's private role was nearly sacred; the new president believes FNMA can never be truly free of the government.

Policies unchanged. Hunter's views, given in an interview, signal a shift in emphasis at Fanny May. He is a consensus man, where Lapin moved to implement new ideas as quickly as possible—and, according to his detractors, without bothering to check with Romney. But today, where Lapin has implemented, Hunter plans to carry on. He told the Senate Banking and Currency Committee that he had no plans to change any of Lapin's policies.

This should be good news to the quasi-private corporation's stockholders, who had watched their stock plummet from \$200 per share to \$120 after Lapin departed. The price has since crept back into the mid-\$160s.

For Hunter, next month is important, Shareholders will decide upon his tenure when FNMA completes its transition to private status.

Under the law—now that stockholders related to the housing industry own more than one third of the outstanding shares—the FNMA board will be expanded to 15 directors, with ten elected by stockholders.

Election. Hunter, who left his law practice in Fresno to take the \$42,200 post in January, wants to stay—and there is little doubt that he will. The present board of directors will put up a "management slate" of directors to be voted on by shareholders at the annual meeting. Hunter will be on that slate.

Of course, some two thirds of the outstanding FNMA stock is held by Wall Street interests, and it is here that the question, "Who controls FNMA, shareholders or the federal government?" may have real importance.

Hunter maintains that FNMA will always be a quasi-private corporation. "Our effect on the FHA-VA market, as well as our effect on the money markets, is of such a magnitude that we must coordinate our activities



FANNY MAY's HUNTER

New skipper's order: Steady as she goes

with both the Treasury and with HUD."

He points out that the \$2.25-billion tie FNMA has to the Treasury is "very important in the marketing of our obligations," and he believes that if that were taken away, "it couldn't help but make a difference in our market rates."

The new board. Of the 15 directors on FNMA's new board, President Nixon will appoint five. These will be representatives of the mortgage banking, homebuilding, and real estate industries, as well as one man each from HUD and Treasury. Those government slots are now filled by general counsel Sherman Unger of HUD and under secretary Paul A. Volcker of the Treasury.

The list of ten members of the board selected by shareholders, which is the management slate, is likely to contain, in addition to Hunter, current board chairman William B. Ross, who also is a deputy assistant secretary of HUD. The remaining eight are to be chosen from industry. Says Hunter, "We expect to recommend individ-

uals from mortgage banking firms, investment bankers, commercial bankers, life insurance companies, stock brokers, and thrift institutions. Perhaps, too, we might consider a representative of a foundation."

The new FNMA president does not believe the board of directors should be made up of group types solely because they own a large percentage of Fanny May stock.

"While the interests of shareholders must be considered and they must be properly represented," he says, "that doesn't mean that any group need have on the board a number of directors in proportion to the number of shares they control."

The future. Looking past the stockholders' meeting in May, Hunter sees Fanny May continuing to support the FHA and VA markets to a large extent. He wants authority to deal in conventional loans, but he will move slowly in this field. Governor Sherman Maisel of the Federal Reserve Board is the latest official to state his opposition to this plan, and Secretary Romney has indicated that the Home Loan Bank Board is perhaps better equipped to undertake the secondary market for conventionals.

The Fanny May president is unsure whether the proposed new mortgage bond will become a major device used by FNMA to secure funds: "We want to test the market and determine to what extent it fits our needs. We're ready to get into this field when market conditions warrant it, but I don't think anyone knows for sure how much activity there'll be in this area."

—ANDREW R. MANDALA
Washington

HOMEBUILDERS' MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending Mar. 20.

FNMA Auction Prices Mar. 9 8½%	City	FHA Sec. 203b— Min.-Down* 30-year immed. w/ Discount paid by builder		Conventional Loan Interest Rates			Construction Loan Rates
		Private mkt. 8½%	Trend	Comm. banks, ins. Cos. 75%	Savings banks, S&Ls 80%	Savings banks, S&Ls Over 80%	
90-day commitment Average 95.50 Accepted bid range 95.00-95.97	Atlanta	5½-6	Down ¼	a	8½-9+2	8½-9+2	9½-10+2
	Boston	1	Steady	8½	b	a	8½+1
	Chicago	4-5	Steady	b	7½-8+1½-2	a	b
	Cleveland	10-12b	Steady	a	8-8½+1-3b	a	9-9½+1-3
	Dallas	4½-6	Steady	a	9+½	9½+½	9½+1
	Denver	5-5½	Down ½	9¼+1	9¼-9½+1	a	9+1½-2
	Detroit	4-5	Steady	b	8½-8¾	a	9½-10+1-2
	Honolulu	6-7	Steady	9-9½	9-9½+2-3	b	10+2-3
	Houston	5-6	Steady	a	9½b	b	10+1-2
	Los Angeles	5	Down ½	b	8-7-9-6	9½	9¼-9½+1½-3
180-day commitment Average 95.50 Accepted bid range 95.00-95.99	Miami	4	Down 2½	a	8½+3½	8½-9+4	10+1-2
	Minn.-St. Paul	5-7	Down 1	a	a	a	b
	Newark	5-6	Steady	a	a	a	10+1½-3
	New York	4-5b	Down ½	7½b	7½b	a	9½-10+1½-2
12-18 month commitment Average 96.21 Accepted bid range 95.39-96.60	Okla. City	4-6	Down 1	a	9+2	9½+3	10+1-2
	Philadelphia	6	Steady	7+7b	7+7b	a	10½+2
	San Francisco	4½-5	Down 1	a	9-9½+1½-2	a	9-10+2½-3½
	St. Louis	5-6	Steady	a	a	a	10½-10¾+1-2
	Seattle	5-5½	Up ¼	a	8¾-9½	a	9½-9¾+1½-2½
	Wash., D.C.	5½-6½	Steady	8b	8b	8b	9½-10+2-3

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

• Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones.

• Quotations refer to houses of average local quality.

* 3% down on first \$15,000; 10% of next \$5,000; 20% of balance. Footnotes: a—no activity. b—limited activity. c—Net yield to investor of 8½% mortgage plus extra fees. w—for comparable VA loans also.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, chairman, Boston 5¢ Savings Bank; Chicago, Robert H. Pease, senior vice pres., Draper & Kramer Inc.; Cleveland, David E. O'Neill, vice pres., Jay F. Zook, Inc.; Dallas, M.J. Greene, pres., Southern Trust & Mortgage Co.; Denver, Clair A. Bacon, sr.

vice pres., First National Bank; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, sr. vice pres., Lomas & Nettleton West; Los Angeles, Robert E. Morgan, senior vice pres., Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Minneapolis-St. Paul, Walter C. Nelson, pres., Eberhardt Co.; Newark, William W. Curran, vice pres., Franklin Capital Corp.; New York, Sigfred L. Solem, sr. vice pres., Dime Savings Bank; Oklahoma City, B. B. Bass, pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Banking & Trust Co.; St. Louis, Charles A. Keller, vice pres., Mercantile Mortgage Co.; San Francisco, John Jensen, senior vice pres., Bankers Mortgage Co. of California; Seattle, Kirby D. Walker, vice pres., Continental, Inc.; Washington, Don DeFranceaux, pres., the Berens Cos.

NEWS continued on p. 12



SL-8031
about \$14.00



M-2096
about \$35.00



M-2019
about \$45.00



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about \$99.00



SL-8023
about \$24.00



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(Prices slightly higher west of Denver)

How Canada solved some of housing's money problems

Mortgage finance doesn't have to settle for last place in a credit crisis.

Canada has proved that structural changes in the mortgage market will enable home finance to compete in the capital market instead of having to accept the residual after other needs are satisfied.

Compare 1966 with last year; money was tight and a housing downturn could be expected in both periods.

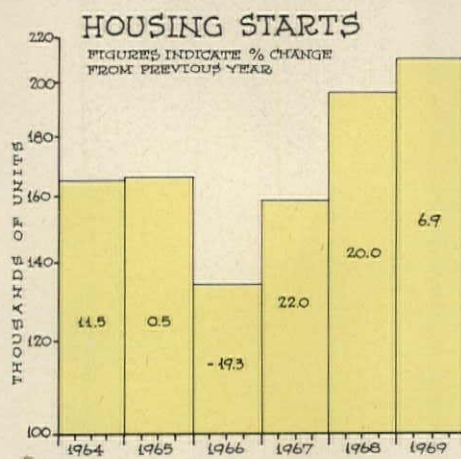
In 1966, Canadian housing starts dipped almost 20% from the previous year. But in 1969 there was a 7 per cent increase in starts, which had already recovered from the 1966 experience (see chart).

A market rate. The Bank of Montreal, in a new analysis of Canadian housing problems, attributes the improvement to structural reforms in the mortgage market, among them the complete removal of interest ceilings.

The National Housing Act was changed last June to remove the interest ceiling on NHA loans, which had been tied to bond yields. The government-insured NHA mortgage is Canada's equivalent of an FHA.

Concurrently, banks were authorized for the first time to enter the conventional loan market. (It was not until 1954 that banks were permitted any home mortgage activity at all.)

The Bank of Montreal cites these changes as the most significant improvements in the mortgage market, emphasizing that removal of the interest ceiling "has permitted market forces to determine the spread between mortgages and such competing instruments



as government and corporate bonds."

The price paid for this new system of free rates is high. Interest on NHA loans, which finance new construction, have risen to 10¼-10½ per cent. For a conventional loan on an existing house, the borrower may find 10½ per cent money if he has prime property, but he will otherwise pay up to 11 per cent.

Even at these rates, it is the borrower who is seeking out the mortgagee.

But the market mechanism for channeling money to mortgages is in place. For example, the Royal Trust Co. recently began offering depositors 9 per cent, apparently to take advantage of imminent legislation authorizing wider mortgage investment.

Besides having a market rates, Canadian mortgages are now subject to renegotiation

after five years—another 1969 reform.

There have been no consumer complaints about this provision that insures both borrower and lender against being locked into a fixed interest rate for the life of the loan. Amortization is still figured over the life.

Last June's legislation also stretched the term on NHA mortgages from 35 to 40 years, and that helped reduce rates.

A record for starts. The mortgage reforms, the Bank of Montreal says, permitted the country to increase housing starts in 1969 above 200,000 for the first time.

Much of the reason was increased bank activity, which accounted for \$300 million of new residential financing in 1969.

In 1970, practically all forecasts call for a decline in starts; but it will not be as severe as in 1966 because of the improved financial aspects of housing, the bank states.

Compulsion. Self-defeating is the way the Bank of Montreal describes a proposal—advanced in Canada as well as the U.S.—that some institutions be required to invest a part of their assets in mortgages.

By restricting the flow of funds to satisfy competing demands, the bank reasons, other interest rates might be bid up, making mortgages less attractive.

"The eventual effect might easily be a smaller, rather than a larger pool of mortgage funds," the bank says. It also raises a question that strikes at the foundation of a market economy: If more funds are directed to housing, whose loans would be cut back? Deciding this would be possible only in a managed economy. —T.M.

The House chops down the chop-more-trees bill

Last year there might have been a chance, but this year the conservation tide ran too strong.

The National Forest Timber Conservation and Management Act suffered an unusual defeat in the House of Representatives.

In a procedure rarely used, the House voted 225-150 against a "rule" to bring the bill to the floor. The chamber, in effect, refused even to hear debate.

The result is that the bill remains on the calendar technically, but in a limbo for which there is no parliamentary name. Chances for bringing it to a vote are considered nil.

The bill would have opened 97 million acres of federal land to heavier logging. The measure had the support of the National Forest Products Assn. and the NAHB, and it cleared its House committee last fall.

By the time a vote was scheduled, however, conservation sentiment had swept the country. The bill's sponsors decided against risking outright defeat and postponed a ballot set for Feb. 5.

The bill's floor manager, Rep. John L. McMillan (D., S.C.), waited three weeks and then tried to move the measure to the floor. The result was the vote that most

observers described as a humiliating defeat.

No less than 10 conservation groups had marshaled forces to battle the timber bill. A key point in their arguments was that it would upset the long-standing "multiple use" doctrine for the federal lands. This approach seeks to balance the conflicting goals of timbering, water control, fish and wildlife protection, grazing and recreation.

Colwell selling its mortgages through own New York office

The Colwell Co. of Los Angeles has just set up its own New York City office to sell its mortgages along the Atlantic Seaboard.

Hunter A. Copeland, former president of the New York brokerage of Huntoon-Copeland-Hedin, directs the operation from a suite in the Bowery Savings Bank Building at 110 East 42nd Street. He becomes a Colwell vice president.

The step represents a strong deemphasis of Colwell's relations with New York mortgage brokers, through whom the company dealt primarily in the past. The move is Colwell's first outside California, where it originates loans through eight branches.

Colwell is the nation's fifth largest mortgage banking company.

Bank of America reduces mortgage discount 2 points

The biggest bank of all lowered the discount on the FHA-VA mortgages it buys by two points, from six to four, last month, but the rest of the nation's lenders did not fall in line.

The financial press had speculated—correctly—that the Federal Reserve was loosening the cash strings, and some lenders were beginning to expect a spring that would bring some relief from the dour conditions of recent months.

But nowhere, especially in the readily available thermometer of weekly FNMA prices, was there a sign that the private market was ready for a 96 price on government backed loans. The FNMA price on 180-day commitments came up at only 95.50 the same day the bank moved.

So major mortgage lenders across the nation did not raise their prices in response to the BofA move. Mortgage men said the 96 price is not the market, even though prices appeared headed in that direction.

Last month's action recalled the spring of 1967, when BofA jolted the market by raising its prices 2½%, to par, on FHA-VAS throughout California (NEWS, May '67). The bank went back to a 2-point discount three months later. —JENNESS M. KEENE

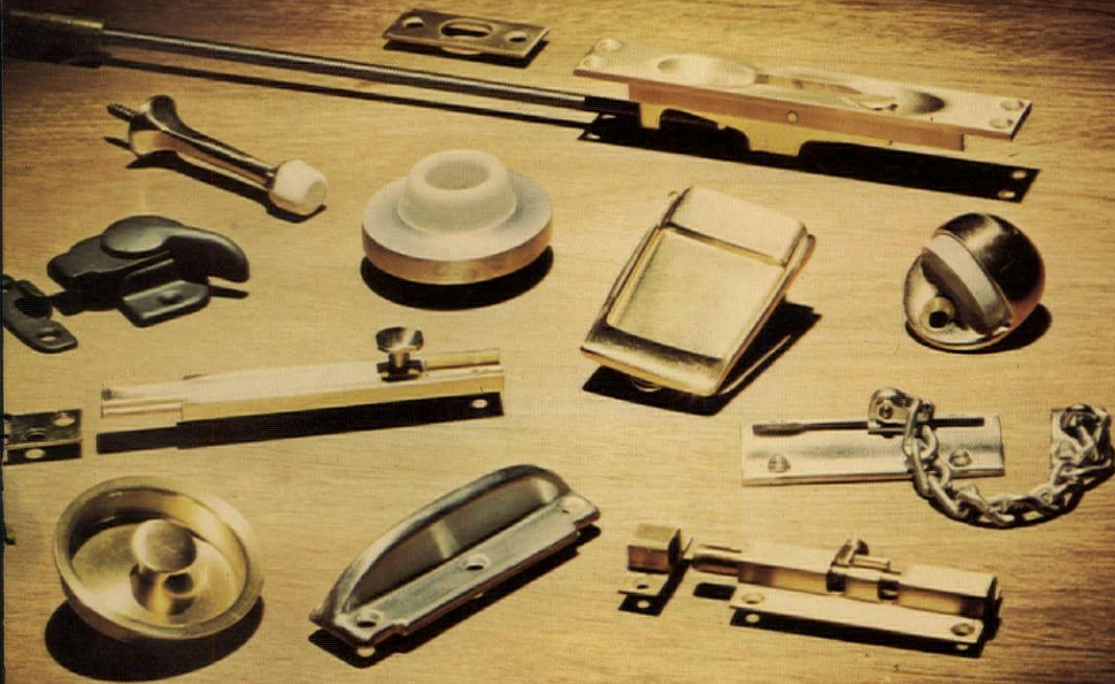
McGraw-Hill World News, San Francisco

NEWS continued on p. 16



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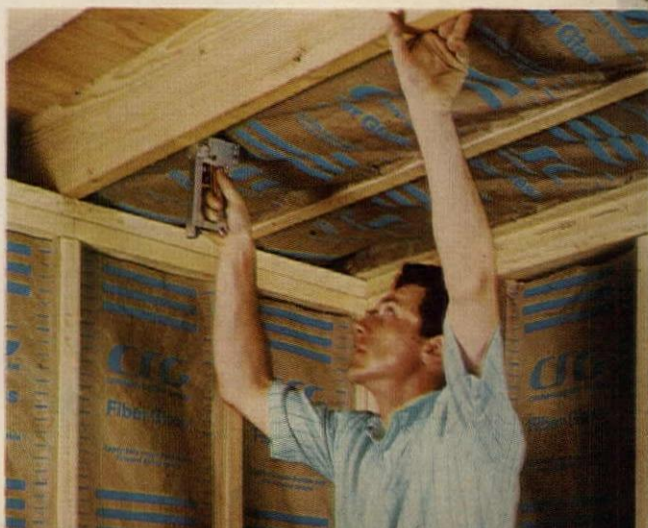


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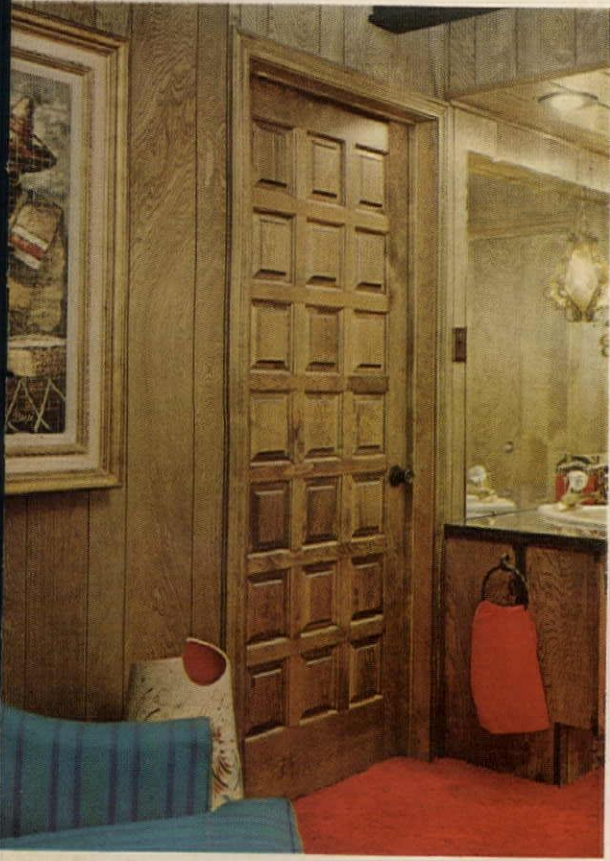
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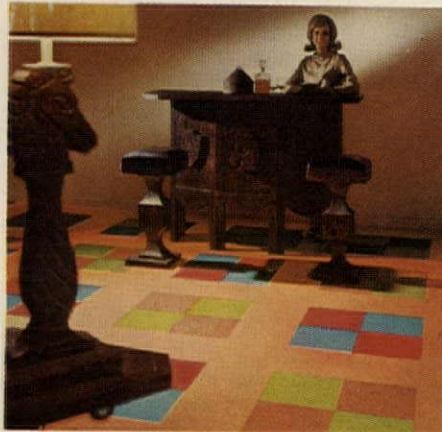


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HH-4

Calmly, out in Lytton land, the big losses are reported

Regulatory agencies clamored, but the public is keeping its cool.

The Bart Lytton financial empire has left difficulties that are attracting the Securities and Exchange Commission, the Federal Home Loan Bank Board, the Home Loan Bank of San Francisco, the s&L surgeon Charles A. Wellman and the big-league accounting firm of Price Waterhouse.

The troubles have also triggered a batch of sell orders for the shares of LFC Financial of Los Angeles, the s&L holding company that emerged from the collapse of Bart Lytton's own Lytton Financial Corp. (NEWS, June '68 *et seq.*)

But the panic that some of these interested parties apparently feared—a run on the bank—failed to materialize.

The public seems to have taken seriously the emblem of the Federal Savings & Loan Deposit Insurance Corp. All accounts are insured up to \$20,000 in LFC Financial's two s&L associations.

The big headlines. Depositors simply took in stride an announcement that LFC would have to set up reserves for "between \$5 million and \$8 million" of additional losses on real estate owned via foreclosure.

But the financial press, remembering that 1968 losses of \$12,696,000 had been considered severe enough to account for all past lending mistakes, gave the announcement big play.

In the first place, the announcement had been made under pressure. The Securities and Exchange Commission had been adamant, following its basic rule that the public

must be informed as soon as insiders learn vital information.

"No," had said the Home Loan Bank Board, but the SEC carried the day, and out went a release disclosing the large losses.

The financial press picked up the hand-out and perked up its memories of Bart Lytton and the s&L specialist called in after Lytton was forced out of his holding company.

Decline in stock. Between the name Lytton and the recollection that profits had been forecast by President Wellman as late as last May, there was a story that carried across the country. On the New York Stock Exchange the LFC shares fell 2 $\frac{7}{8}$ to close at 8 on Feb. 27, the day the story appeared in New York City.

With all the bad news out, it was time for repairs—of the kind possible in such situations, public statements.

George A. Edwards, executive vice president, said there was no cause for serious concern about LFC. Sales of foreclosed real estate "are now being completed," he said, and these will put the asset structure in much better shape.

Edwards maintained that the company's two associations had suffered no greater loss of savings than most other s&Ls, considering the nation-wide scarcity of money.

Reassuring voices. Both associations are named Equitable. The s&L in northern California, assets \$220 million, had a 1969 deposit decline of 15.6 per cent; the southern California s&L, assets \$855 million, had a 1969 deposit decline of 8 $\frac{1}{2}$ per cent.

Chairman Preston Martin of the HLBB said in Washington:

"There's no concern on the part of the board that (LFC's 1969) losses might impair the insured associations in carrying on their normal services to their savings customers."

And California's s&L commissioner, Michael F. B. MacBan, added: "I see no reason why the associations can't remain healthy. Their net worth is adequate and above the required minimum."

Public endorsement was matched by private statements that LFC could in time work itself out of the woods. The fact that it still had so far to go was the big disappointment.

Progress of sorts. Since Bart Lytton's time, when the holding company had back-to-back losses of \$7.6 million in 1966 and \$3.2 million in 1967, progress has been made under Wellman.

In one quarter there was even a small profit, and the overhang of foreclosures was being worked off. During 1969, the \$75 million worth of property was reduced to \$41.8 million.

Last year, when Wellman set up the \$12.7 million loss reserve, there was talk that he had gone overboard to insure a profit in future years.

Whether he had or not, there was no profit in 1969. But when LFC auditors finally settled on a figure for the loss, it seemed a bit anti-climactic. By then even the regulatory agencies had regained the cool displayed by depositors all along.

—T.M.

No Branch Rickey needed for United Mortgage Bankers...

The New York Times

Because Negro mortgage bankers are entering the big league aided by their United Mortgage Bankers Assn. of America.

Eight years ago, the UMBA boasted exactly one mortgage banking firm among the 19 founders. That was Sivart Mortgage Corp., headed by Dempsey J. Travis, who was instrumental in organizing the Negro trade association and who still serves as president.

The UMBA now has 52 members, 16 of them FHA-VA approved mortgagees, and its mid-winter meeting in New York's Waldorf Astoria gave proof of the trade group's new stature.

J. Henry Smith, president and chief executive of the nation's third largest life insurance company, chose the meeting to announce that Equitable was committing a half million for Brooklyn investment through a new Negro mortgage company headed by Stanley Alexander.

Alexander, first Negro mortgage banker in Brooklyn, is a native of Kingston, Jamaica. He is president of the Bedford-Stuyvesant Real Estate Board and a director of the Queens NAACP.

The NAACP also gave UMBA a pat on the back for its progress. William R. Morris, the association's housing director, praised the mortgage group as the most influential



PRESS CONFERENCE at UMBA meeting featured J. Henry Smith (at left) and Dempsey J. Travis.

Negro trade association in the country.

White man's conscience. Saul Klaman, who has addressed the group at each of its seven New York meetings, urged the UMBA to continue its activities even though a number of early objectives have been realized. One reason for a strong and active UMBA is to serve as the conscience for white mortgage banking, said Klaman, the economist and vice president for the National Assn. of Mutual Savings Banks.

The audience was not only far larger (about 100) than at past meetings; it was composed of younger men.

For much of the meeting, the center of the stage was taken by a Federal Reserve governor who was not even present. The suggestion of Andrew Brimmer that Negroes will find their greatest economic opportunities in white companies was challenged from the podium and in the corridors.

Said Edwin D. Irons, chairman of business administration at Howard University: "I differ diametrically. Temperament, not color, is the most important factor in determining whether a man should seek to be an entrepreneur or an employee." The audience applauded.

The future. The progress made by UMBA since 1962 is considerable but there is a long way to go, participants in the mid-winter conference emphasized. And they have no illusions about how to reach their goal, which is parity with the white mortgage banker.

How to get there was described concisely at a panel discussion:

"Acceptance of the black mortgage banker must be effected in the market place."

NEWS continued on p. 18



The Amberly as built by A. J. Magnuson & Associates, Rochester, Minnesota.

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How a professional engineer profited from the help of another professional: The Kingsberry Man.

When graduate engineer Ed Magnuson started his construction business, no one had to sell him on manufactured homes. He knew that an engineered home is bound to be better than a stick-built home. But the Kingsberry Man sold him on the Kingsberry way.

First, he showed Ed a Kingsberry Home under construction. Ed saw for himself the precision fit of all parts, the efficient assembly procedures, the excellence of materials. Then the Kingsberry Man explained how he would help train crews, plan administrative procedures, and maintain top quality control. He told Ed how Kingsberry provides merchandising aids for builders, plus a cooperative advertising program. That was enough. Ed Magnuson was sold.

Ed has now enjoyed two successful years as a Kingsberry builder. And this year, he plans to double last year's production. The Kingsberry Man is ready to help *you*. Mail the coupon to find out how.



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Kingsberry serves leading builders in 35 Midwestern, Mid-Atlantic, Southeastern and New England states.

Centex enters Chicago; Brown & Kauffmann plans to sell

Centex has acquired a Chicago-based home-builder grossing \$30 million annually.

Winston Development Corp. agreed to merge into the Dallas builder-developer corporation in return for 358,000 new Centex shares paid to Winston's parent, the N.K. Winston Corp. of New York City (shopping centers).

The stock was worth about \$15.7 million at the time of the deal. The corporation received 250,000 of the new shares, and its principals got 108,000, part of those escrowed against future earnings.

Winston Development, with offices in Palatine, Ill., builds single-family houses and has erected high-rise condominium apartments in Chicago and Miami.

Winston earned \$839,000 on \$15 million sales in the six months ended Aug. 31, 1969, the most recent period reported. Centex earnings were \$2.8 million, or \$1.11 a share, on gross of \$77.1 million for the nine months ended Dec. 31, 1969.

Brown & Kauffmann. Potlatch Forests plans to swap stock for 80% of Brown & Kauffmann. The two San Francisco concerns expect completion of the transaction this month.

Brown & Kauffmann will continue to operate under S.H. Kauffmann and Wayne Brown. They have built \$100 million worth of housing, including Rinconada Hills in Los Gatos, an outstanding example of planned unit development. Kauffmann says



BROWN AND KAUFFMANN

the company will go on building luxury homes but will concern itself increasingly with problem areas of housing.

President Benton R. Cancell of Potlatch says the acquisition will give the company important capability in land development. Potlatch employs 12,000 people in the manufacture and marketing of lumber, plywood, paperboard, packaging, paper and factory built housing, mostly for school buildings.

Alcoa and Kaiser. The Aluminum Co. of America and Kaiser Aluminum & Chemical Corp. have upped the ante in their real estate involvement.

Alcoa has acquired a major interest in Challenge Developments Inc., San Francisco area land developer. O.M. Mader, president of Alcoa's new Alcoa Building Industries division, did not disclose details.

Challenge has concentrated on medium-priced housing during its 23 years and has developed 112 residential subdivisions. President Gordon W. Hanson continues to operate the company.

Kaiser Aetna, the realty partnership

owned by Kaiser Aluminum & Chemical and Aetna Life & Casualty, has acquired Ponderosa Homes of Newport Beach, Calif., for an undisclosed sum. President James M. Peters Jr. of Ponderosa will operate the concern as an autonomous unit of Kaiser Aetna, whose headquarters are in Oakland, Calif.

Pillsbury's mix. Pillsbury of Minneapolis plans another of its rare moves outside the food industry. It will buy 40% of Pentom, a builder-developer in Bloomington, Minn., for stock and debentures. Pentom is one of the 22 Breakthrough winners. (*For other news of Pentom, see p. 93.*)

An S&L merger. Five individual S&Ls with assets of \$1.3 billion will be consolidated under a pending merger.

Gibraltar Financial of Beverly Hills and Wesco Financial of Pasadena, the holding companies controlling the five, expect regulatory and shareholder approval of their plan to merge. Gibraltar would survive.

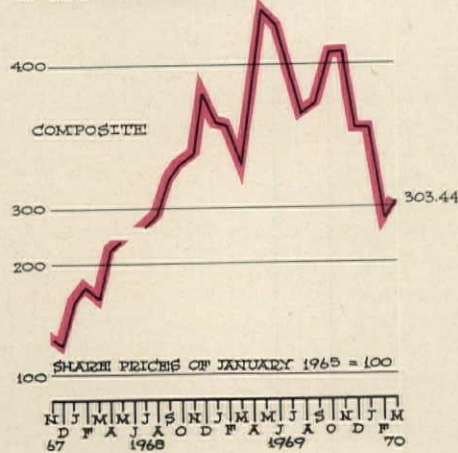
Gibraltar assets were \$820 million and Wesco assets were \$450 million at year end. The proposed acquisition calls for 1.2 million shares of Gibraltar to be exchanged for Wesco's 2,050,000 outstanding shares. The Gibraltar shares have a market value of about \$55 million.

Gibraltar earned \$5 million, or \$2.25 a share, on its 1969 revenues of \$47.3 million. Wesco's 1969 earnings were about \$4 million, or \$2.04 a share, on \$30.7 million.

Housing stocks turn back up on signs of easier money

All five categories of housing stocks on HOUSE & HOME's index rose with the general stock market on signs that the Fed was easing monetary policy. The magazine's composite of 25 issues rose to 303.44 from 290.24 in the month ended March 9.

HOUSE & HOME VALUE INDEX OF 25 BUILDING STOCKS



How the top five did in each category:

	Mar. '69	Feb. '70	Mar. '70
Builders	410.41	380.50	391.47
Land develop.	509.00	440.16	448.00
Mortgage cos.	533.19	541.70	557.36
Mobile homes	576.10	518.68	526.80
S&Ls	152.00	123.76	138.67

HOUSING'S STOCK PRICES

COMPANY	March 9 Bid/Close	Chng. Prev. Month	COMPANY	March 9 Bid/Close	Chng. Prev. Month	COMPANY	March 9 Bid/Close	Chng. Prev. Month
BUILDING			United Fin. Cal. ^a	12½	+ 2½	Citizens Financ a ^b	14¼	- 1¼
Bramalea Cons (Can.).....	5.25	+ .85	Wesco Fin. ^c	23¾	+ 5½	City Invest. ^e	16½	- 3¾
Capital Divers. (Can.).....	2.50	+ .45	MORTGAGE BANKING			Cousins Props.....	42½	+ 3½
Centex Corp.....	49¼	+ 8¼	-Advance.....	16½		Forest City Entr. ^b	23	+ 6½
Christiana Oil ^b	16¼	+ ½	-Charter Co.....	13½	+ 2½	Great Southwest Corp.....	13¼	- 4½
Cons. Bldg. (Can.).....	1.25	- .25	-Colwell.....	23	+ 4¼	Investors Funding ^b	19½	- ½
Dev. Corp. Amer.....	13½	- 2	-Cont. Mtg Investors ^c	21½	+ ½	Midwestern Fin. ^b	13½	+ 2
Dev. Int. Corp.....	13	- 1¼	-Cont. Mtg. Insurance.....	21¼	+ ¼	Rouse Co.....	41½	+ 4
Edwards Indus.....	9¼	+ 1¼	Excel Investment.....	3½	+ ¾	Tishman Realty ^a	23½	+ ¾
First Hartford Rlty.....	6¼	+ ¼	FNMA.....	166	+42			
First Nat. Rlty. ^b	4¾	+ ¼	First Mtg. Ins. Co.....	8½	- ½	MOBILE HOMES & PREFAB		
Frouge ^d	2½	- ¾	First Mtg. Investors.....	26¼	+ 3	Con. Chem. Co. ^b	9¼	- 1¼
-General Bldrs. ^b	7¼	+ 2¼	-Lomas & Net Fin.....	11	+ 2	-Champion Homes ^b	18½	- 1
-Kaufman & Bd. ^o z.....	35¼	+ ¼	-MGIC Invest. Corp. ^e	51½	+ ½	-Commodore Corp. ^b	10¼	- 3½
Key Co. ^b	7¼	+ ¼	-Mortg Associates.....	16	- 1½	-DMH (Detroit) ^b	13¾	- 1½
(Kavanagh-Smith)			North Amer Mtg. Inv. ^b	26½	+ 3¼	-Fleetwood ^b	21¼	+ ¾
Leisure Technology Corp. ^b	22½	- 4¼	Palomar Finan.....	8¾	+ ¾	-Guerdon ^b	17½	- 3½
McGrath Corp.....	16	+ 2	UIP Corp. ^b	7¾	+ ¼	Mobile Home Industries ^b	11¼	- 5
National Environment.....	7¾	- 2½	Universal Inv. Trust.....	2½	+ ¼	Monarch Ind. ^o	24½	+ 1½
(Sproul Homes)			(United Imp. & Inv.)			Redman Indus. ^c	23¾	- ¾
Nationwide Homes ^d	6¼	+ 1	(Southeast Mtg. Inv.)			Rex-Noreco ^b	18¾	+ 1½
-Presidential Realty ^b d.....	12	+ ¼	LAND DEVELOPMENT			-Skylines ^e	24½	+ 2½
Pulte Homes.....	10¼		All-State Properties.....	13		Town & Country Mobile ^b	8½	- 2½
Ryan Homes.....	37¼	+ 2½	American Land.....	¾		Zimmer Homes ^b	19¼	- 3½
Standard Pacific Corp. ^b	9¼	+ 1½	-AMREP ^b	27¾	- 5½	Hodgson Houses.....	6½	- ½
U.S. Home & Dev. ^b	30¾	+ 6	Arvida.....	18	+ 1½	Modular Housing Systems Inc. ^a	38¼	
-Jim Walter ^e	29½	+ 5¼	Canaverl Int. ^b	8¼	+ ¼	Nat. Homes A. ^o	16¾	- 5½
-Del E. Webb ^e	10¼	+ 1¼	Crawford Corp d.....	3¾	+ ¾	Swift Industries.....	4½	- ½
Washington Homes.....	11¼		-Deltona Corp. ^b	39½	- 3½			
Western Orbis ^b	6	- ½	Disc Inc.....	5¾	+ ¼			
S&Ls			Don the Beachcomber Ent. (Garden Land).....	13½	+ 1¼			
American Fin. ^z	20½	+ 1½	FPA Corp.....	16½	+ ½			
Calif. Fin. ^e	10¼	+ 1¼	(Fla. Palm-Aire)					
Empire Fin. ^b	18	+ 3	-Gen. Devel. ^e	23¼	+ 2½			
Far West Fin. ^e	15¾	+ 2½	-Holly Corp. ^b	2¾	- ½			
-Fin Fed. ^o	19	+ 3½	-Horizon Corp.....	33¼	- 5¼			
First Char. Fin. ^o	33½	+ 4¼	Laguna Niguel ^b	6½	- ½			
First Lincoln Fin. ^o	7¼	+ ¾	Major Realty.....	10¼	+ 2¼			
First S&L Shares ^b	16½	+ 2¼	-McCulloch Oil ^b	33¾	+ 2¼			
First Surety.....	6¼	+ ½	Scientific Resources ^e	8½	- 3½			
First West Fin. ^o	20¼	+ 2¼	(Sunasco)					
Gibraltar Fin. ^e	19¾	+ 2¼	So. Rlty. & Util. ^b	8	+ 2			
-Great West Fin. ^e	10¼	+ 2						
Hawthorne Fin. ^o	12½	+ 1½						
-Imperial Corp. ^e	7	- 1¼						
-LFC Financial (Lytton) ^o	7	+ ½						
Trans-Cst. Inv. ^o	5¼	+ ½						
Trans World Fin. ^o	11¾	+ 1½						
Union Fin. ^b	11¾	+ ¾						
DIVERSIFIED COMPANIES			Boise Cascade ^o	69	+ 2¼			

a—stock newly added to table. b—closing price ASE. c—closing price NYSE. d—not traded on date quoted. g—closing price MSE. h—closing price PCSE. k—not available. —Computed in HOUSE & HOME's 25-stock value index. y—adjusted for 2-for-1 split. z—adjusted for 3 for 2 split. NA—not applicable.

Sources: New York Hanseatic Corp. Gairdner & Co., National Assn. of Securities Dealers, Philip Beer of Russell & Saxe, American Stock Exchange, New York Stock Exchange, Midwest Stock Exchange, Pacific Coast Stock Exchange. Listings include only companies which derive a major part of their income from housing activity and are actively traded.

NEWS continued on p. 20



The Beautiful Alternative

Team "Tedlar" surfaced siding with brick for total low maintenance and reduced construction costs.

Now, long-lasting, low maintenance has a bold new face—brick used in conjunction with siding pre-finished with Du Pont TEDLAR®. It's a combination that offers unlimited design possibilities. It's practical — outstanding in low-maintenance performance. And siding surfaced with "Tedlar", installed, costs less than half as much as brick in most areas.

"Tedlar" is a solid-sheet vinyl fluoride film finish. It's factory-applied to siding at the time of manufacture. It's 8 to 10 times more fade-resistant than field-applied, oil-based paints and 3 to 4 times more so than ordinary baked-enamel finishes.

Nothing can permanently stain "Tedlar"—even mildew, tar and cement splatter clean off easily. And it's amazingly resistant to weathering and erosion. Even after 20 years of exposure, the protective finish of "Tedlar" should be thicker and stronger than ordinary baked-enamel finishes when new.

It all adds up to a beautiful exterior that is going to stay beautiful and new-looking for decades — and practically take care of itself. And that, with lower installed cost, is the real beauty of TEDLAR.

"Tedlar" surfaced sidings are available in nine contemporary colors and

white in lap, board and batten, and sheet styles, and also in fascia and trim.

So consider the beautiful and practical alternative—"Tedlar" surfaced siding and brick for your next apartment or turn-key building. For further information, including cost-saving case-history reports, write Du Pont Company, Room 8651, A Wilmington, Delaware.

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TEDLAR®
The solid-sheet vinyl fluoride
finish for
pre-finished house siding.

Landmark: Detroit builders achieve multi-union accord

Builders and unions in Detroit are setting a new—and hopefully—improved pattern for bargaining.

The multi-trade agreement just negotiated by 24 unions and 18 employer groups is the realization of a goal sought for years and almost reached in 1968.

Previous negotiations, despite progress over the years, were fragmented on both sides of the table.

"The multi-trade bargaining concept is off the ground," says Irvin Yackness, executive officer of Detroit HBA.

"This concept is essential if construction is ever to escape the hazards that grip a fractionized industry."

Only six negotiators represented each side in the Detroit agreement. Among employer groups was the Detroit HBA. Among the trades were the carpenters, bricklayers, laborers, painters, and cement masons.

Uniform wage raise. The contract breaks with past practice in several ways:

1. The money package is the same for all participating trades—a \$2 hourly wage and fringe increase over two years.

2. The unions have agreed not to strike over working conditions for the term of the contract. The conditions will be considered separately by each employer and union group. Final and binding arbitration will settle any differences.

3. The cost of any change in work conditions will be deducted from the monetary settlement. In no case will any settlement exceed \$2 over two years.

4. The unions, whose old contracts had differing expiration dates, have agreed to a common date, June 1, 1972, for the new contract.

Early birds. The agreement was reached more than two months before expiration of present contracts. The 24 unions involved in the settlement represent 40,000 workmen.

Unions not covered include 15,000 craftsmen in the electrical, ironworker, plumber, and boiler maker unions.

The settlement came after months of discussion between the Building Trades Council and the Detroit Construction Employers Council, an umbrella group for all building trades employers.

Yackness, a member of the builders' negotiating committee, stressed that the accord represents a longtime goal. The employers' association had tried to establish multi-trade bargaining in 1968, but the attempt fell apart when one employer group broke ranks and reached a separate settlement.

"Of course the money package is high, but I believe it would have been much higher if we had gone into negotiations on a piecemeal basis," Yackness said. "We

would have had to have a strike to find it out."

Plus factors. "The homebuilders have mixed emotions about the settlement," Yackness added. "They feel that it represents an awful lot of money. But they know there will be no work interruption during the building season. And knowing now what costs will be in July is a relief."

Yackness pointed out that the dollar-a-year hourly increase has already been agreed upon in other places—in Chicago, where agreements ran to that amount, and in Buffalo, where the 1969 settlement called for \$3.10 over three years. Under the new agreement, by 1971, Detroit bricklayers will be earning \$10.28 an hour including fringes and benefits, carpenters \$9.87, painters \$9.40 and laborers \$7.85.

The employer and union groups—chiefly the mechanical trades—that have not reached agreement will continue to bargain separately.

There is no assurance that spring will not bring strikes, but observers believe present conditions point to labor peace. Detroit is undergoing a building slowdown and unemployment is rising. No one wants a repeat of the 90-day strike of 1968.

—MARIANNE FRIEDLAND
McGraw-Hill World News, Detroit
NEWS continued on p. 24

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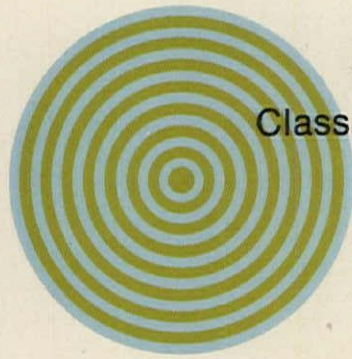
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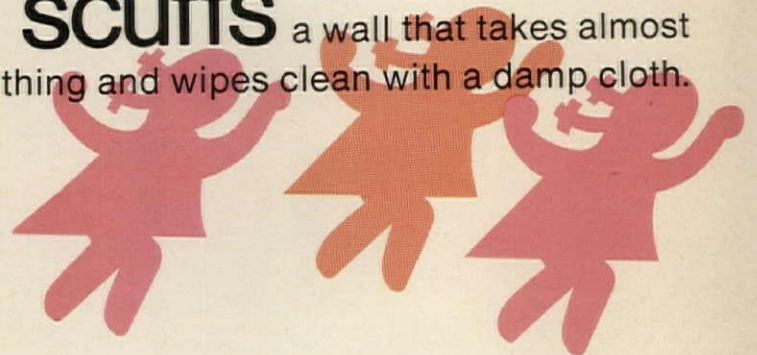
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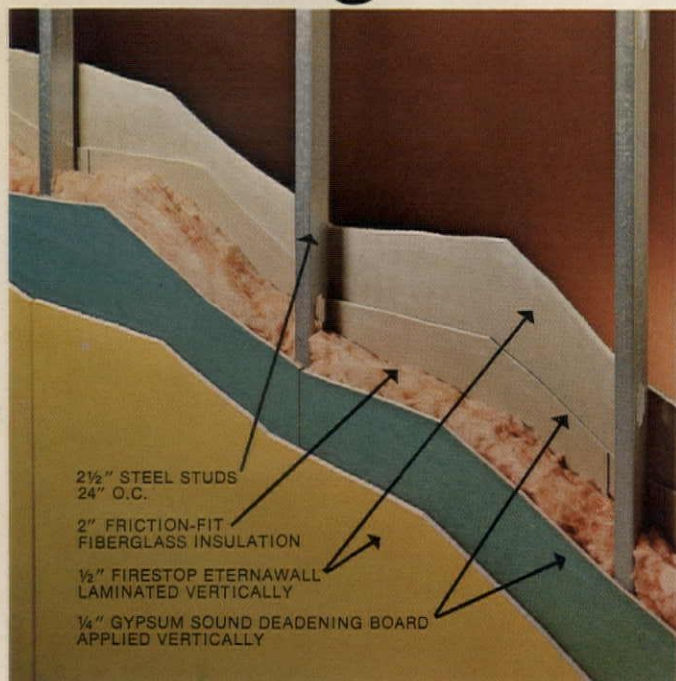
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PROJECTS managed by Great Atlantic Real Estate get special attention from President Edwin A. Joseph (*left*) and property manager Robert Kuhn.



A MODEL APARTMENT is imperative in Great Atlantic's operation. A resident manager, Mrs. Pam Haskins (*right*), welcomes a prospect to building in Hampton.

Apartment management—a system approach is for sale

The computer makes it easy to see what deviates from the norm, and the way we deal with these exceptions determines profits.

That is Edwin A. Joseph's description of how he has applied the technique of management by exception* to turn deficit apartment projects into paying propositions.

Joseph is now offering the system, comprising 18 programs for the Litton 1231, for \$1,950 (*story on facing page*).

Joseph, a former builder, started Great Atlantic Real Estate Corp. in 1960. Until 1966 it managed zero apartments, but today it has 4,728 under contract, and Joseph is confident of reaching 10,000 before 1975.

The system itself. Joseph's basic system breaks into two steps:

1. Analysis of each project to identify the factors that cause it to vary from the typical.

2. Decision on how to treat these exceptions to produce maximum profits.

Joseph views his system as a grid onto which a project is fitted—via computer—to see in detail the elements that distinguish it from others.

The manager must then decide how to deal with the exception. At Great Atlantic the telephones have just been removed from the desks of girls who would normally answer questions from the field. Joseph explains:

"We want all the problems to flow upward to a point of responsibility. This may mean answering some questions that take more time than they are worth, but it is necessary if we are going to find ways to change for greater efficiency."

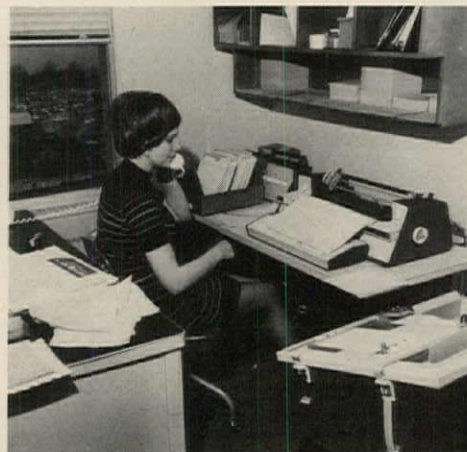
Linear management. Besides using management by exception, a technique on

which there is considerable literature, Joseph uses what he calls linear management.†

Instead of the usual pyramid, capped by a person responsible for a project or a number of projects, he has divided all management into five functions. The people handling these functions operate on the same level of responsibility, no matter where they stand in the organization of Great Atlantic (200-plus employees). Their places are on the same line, hence the term linear management.

The five areas are marketing, maintenance, purchasing, tenant relations, and systems. Systems includes rent collection, bookkeeping, statements to owners, and similar in-house activity. Rent collection becomes an in-house job under Joseph's approach.

†A term that Joseph may have coined. The concept bears a relation to linear responsibility charting. See "Linear Responsibility Charting," Alfred G. Larke, *Dun's Review and Modern Industry*, Sept. 1954.



TELEPHONE is now gone from desk of Charon Cooke. Management wants problems to bypass all lower-echelon employees, flow up to specialists.

The computer's role. Great Atlantic, in constant pursuit of maximum cash flow for its investors, finds the computer essential to its system.

Great Atlantic's first use of computers was on a time-sharing basis. Next it tried a Royal McBee and then an NCR before the present Litton 1231. Joseph expects the company to outgrow the 1231 within three years and is already looking at more sophisticated Litton and IBM equipment.

The computer is vital, but it is easy to misuse. Joseph explains that just as owners fall in love with their projects, managers become obsessed with turning out information instead of limiting the computer to activity that will maximize profits.

As an example, he points to another company's printout of an expense schedule that shows how much was spent for "tile, soft," and for "tile, ceramic," in maintaining a project. It's easy to get your computer to tell you more than you should know, he observes. With so many details on instant call, you have to exercise judgment.

Business relations. If the owner can look at his property dispassionately and the manager can view his role with equivalent cool, they are in excellent shape to establish the fiduciary-type relationship that Joseph believes should govern property management.

This relationship is best maintained at arm's length. And Joseph prefers to limit the company's involvement with clients. With a purely professional relationship, the manager is able to exploit his techniques to the maximum benefit of the property owner, he says.

Rents are for some owners an emotional item, Joseph says. The owner of a 160-unit project wanted to raise rents by \$5 a month, but Great Atlantic said \$10, based on its analysis of tenant income. In this instance, the increase did not cost the owner a vacancy loss on so much as one

*See Frank B. Gilbreth, "Graphical Control on the Exception Principle for Executives," paper 1573a, American Society of Mechanical Engineers, New York, Dec. 1916. Also, *Management by Exception*, by Lester B. Bittel, McGraw-Hill, New York.

ACCT.	DESCRIPTION	SCHEDULES OF OPERATING STATEMENT FROM 1/1/69 THRU DATE AND PERIOD SHOWN						SCHEDULES OF OPERATING STATEMENT FROM 1/1/69 THRU DATE AND PERIOD SHOWN				
		ACTUAL MONTH ENDING 12/31/69	BUDGET MONTH ENDING 12/31/69	ACTUAL YEAR TO DATE ENDING 12/31/69	BUDGET YEAR TO DATE ENDING 12/31/69	AMOUNT OVER- UNDER BUDGET YEAR TO DATE	PER- CENTAGE OVER- UNDR BUDGET YEAR TO DATE	UNIT COST YEAR 12/31/69	AMOUNT OVER- UNDER BUDGET MONTH	PER- CENTAGE OVER- UNDER BUDGET MONTH	UNIT COST MONTH	
RECAP OF SCHEDULES A THRU I												
RECEIPTS												
	NET RENT RECEIPTS	A	35,201.72	31,833.33	403,282.26	381,999.96	21,202.30	105.6	1,527.58	3,428.39	110.6	127.30
	OTHER RECEIPTS	B	1,106.00	711.34	15,116.03	8,536.00	6,579.95	177.1	57.26	394.66	155.5	4.77
	TOTAL RECEIPTS		36,367.72	32,544.67	418,398.29	390,536.04	27,862.25	107.1	1,584.84	3,823.05	111.7	132.07
DISBURSEMENTS												
	ADMINISTRATIVE EXPENSE	C	2,412.26	1,828.33	23,659.96	21,939.96	1,720.00	107.8	89.62	583.93	131.9	7.47
	DEBT SERVICE	D	15,102.06	15,017.64	180,549.46	180,211.68	337.78	100.2	683.90	84.44	100.6	56.99
	SALARIES & WAGES	E	2,524.76	1,857.50	25,115.06	22,290.00	2,825.06	112.7	95.13	667.28	135.9	7.93
	MATERIALS	F	464.46	399.99	5,923.84	4,799.88	1,123.96	123.4	22.44	64.46	116.1	1.87
	CONTRACT REPAIRS	G	598.73	881.66	7,128.63	10,579.92	3,451.25	67.4	27.00	282.93	67.5	2.26
	UTILITIES	H	8,783.70	5,075.00	59,372.20	60,900.00	1,527.71	97.5	224.90	3,708.70	173.1	18.74
	OTHER DISBURSEMENTS	I	1,373.31	1,850.00	25,108.62	22,200.00	2,909.62	113.1	95.11	125.31	106.8	7.93
	TOTAL DISBURSEMENTS		31,861.31	26,910.12	326,857.85	322,921.44	3,936.41	101.2	1,238.10	4,951.19	118.4	103.17
	NET CASH FLOW		4,506.41	5,634.56	91,540.44	67,614.60	23,925.84	135.4	346.74	1,128.14	80.0	28.90
	CASH IN ACCOUNT			ADVANCES TO OWNERS		CASH FUNDS TO OWNERS	CASH FUNDS FROM OWNERS	CASH BALANCE ENDING				
CASH FLOW INFORMATION			.00		.00	4,506.41	.00	.00				

How the computer tells the profit story

The apartment owner receives a six-page printout along with his income check each month.

On the first page (example above) he finds a summary of some 50 items of income and expenditure on the project. These are covered in detail by the breakdown of Schedules A through I on succeeding pages of the six-page statement.

The overall project. The first column of figures shows actual dollars received and spent during the month, with cash flow netted at the bottom, \$4,506.41 in this instance. The next column tells what had been budgeted for the month. The third column gives actual year-to-date figures and the fourth shows what had been budgeted.

The next two columns tell how much over or under budget—in terms of dollars and percentage—the project is for the year to date.

Unit analysis. The last four columns present data on a unit basis. The first gives year-to-date actual figures. The next two columns show by dollar and percent how actual and budgeted figures compare. The last column gives actual figures.

The item breakdown. Schedules on succeeding pages break down the components of items on the first page.

Under Schedule A, net rent receipts, appear the cost of model apartment and resident manager's apartment, both of which Joseph considers vital.

Schedule B, other receipts, includes laundry commissions, security deposits retained, and for some projects a \$5-a-month pet fee and rental for boat slips.

Under Schedule C, administrative expense, the \$16,735.92 one-year fee for managing this \$800,000 property is the largest item.

Schedule D contains escrow accounts and Schedule E includes the resident manager's salary and that of the lifeguard if there is a swimming pool.

Schedule F, materials, has only seven items, following the philosophy of avoiding excessive detail. Schedule G, contract repairs, has eight. Schedule H, utilities, has four. Schedule I, other disbursements, includes computer time, furniture expense, and, where applicable, such items as land lease fees.

—T.M.

The management system and what it provides

The purchaser of Great Atlantic's system of apartment management will receive:

1. Mylar tapes on which are stored 18 programs.
2. Operator's instructions in a 70-page booklet.
3. Sample forms.
4. An explanation of how the forms flow through the system to guide clerical help.

The system can accommodate 50 totals on the income side of the ledger and 300 accounts on the disbursement side.

Great Atlantic uses 22 entries on the income ledger (plus 13 entries for furniture leases). A sample of the 22 entries:

- Penalty charges, amount paid in apartment rent, amount paid in furniture rent.
- Late charges due, late charges paid, project income potential if full, miscellaneous potential, amount uncollected from prior month, amount of rent prepaid prior to this month, total rent collected this month, vacancy loss this month, prepaid rent this month.
- Prepaid charges from all sources, collected this month.

... Apartment management—a system approach is for sale (continued)

unit, indicating that the company had provided the more accurate analysis.

The decision for a \$10 increase was based on information from the tenant "move in" form filled out by the resident manager. That and two "move out" forms—for tenant and for manager—provide enough raw information to keep computers running overtime. It is here that discretion determines profitability. Instead of overwhelming the apartment owner (and itself) with printouts that try to tell all, Great Atlantic leaves most data in dead storage for use if needed.

The owner receives a weekly memorandum reporting traffic and lease activity in his project, a few figures that can be read and digested in a moment. Monthly, he receives a statement with his income check, and once a year, an analysis of occupancy. In December the owner receives a budget for next year, and if he does not take exception to it within three weeks it becomes the target.

And business logic. "The first thing we do when talking to a possible customer is look at the airline schedules to see if a round-trip visit can be made in a day,"

said Joseph. The one-day limit is arbitrary and can be changed, Joseph explains, but he adds: For the present, sending people out of the office for more than one day doesn't promise a high return.

This pragmatic approach is followed at all levels and is a first principle of the Great Atlantic operation.

"Why are you charging \$1,950?"

"Because that's what my computer man said, and I have no reason to argue with him," replies Joseph, who pays more than lip service to some of the economic princi-

STORY continued on p. 26

... Apartment management—a system approach is for sale (continued)

ples known to everyone, but—in his opinion—practiced by few in the apartment management business.

At the front end of real estate you find the imaginative, swinging entrepreneur, he says, but by the time you reach the merchandising stage, all is static. Hence, he contends, any number of owners fall in love with their projects and lose sight of maximizing cash flow.

On top of this, there have been insufficient criteria to measure the performance of property managers. So, Joseph explains, many owners have a maintenance mentality when they should have a marketing mentality.

Salesmanship. Two essentials for effective marketing are a model apartment and a resident saleslady, according to Joseph. He prefers women over men, but he insists that these women be salesmen in the best sense of the term.

Probably the severest mistake in apartment marketing is to have the resident manager collect rents, Joseph maintains. He cites half a dozen reasons ranging from exposure to robbery or embezzlement to the difficulty of establishing uniform collection systems in all projects.

But most important, the function of the resident manager is to sell, and this is a full-time job if done properly.

The selling job does not end when the prospect becomes a tenant. The resident manager is expected to identify with the tenant, and be his "friend" in any dealings with management.

Lock box. Great Atlantic collects rents by mail and has found no resistance to this, or to its insistence on check or money order.

The new tenant gets a booklet of coupons, a product of the computer. Each shows the amount of monthly rent, and the Great Atlantic address for payment. But the address is not the company's office. It's a lock box for the bank that handles this account and notifies the company of receipts.

Under Robert D. Kuhn, who reports to Joseph, a staff of 13 collects \$3 million a year in rents. Fees are usually 4% of gross, and income to owners ranges from 11% to 20% depending on risk.

The collection system illustrates Great Atlantic's basic pragmatism: "We tried rent collection by resident managers but it didn't work well," says Joseph.

Theorizing is so completely out of place at Great Atlantic that, during a lengthy interview, the term "job analysis" was never used. Yet it has been as vital as the computer in enabling the company to build its management business to the point where management revenues total a quarter of an-

nual gross—a figure that Joseph, as sole owner, does not disclose.

Reason for selling. From its office overlooking the historic port of Hampton Roads the company manages \$50 million worth of real estate in Tidewater Virginia.

On the way to black-ink territory, Great Atlantic indulged in copious hit-and-miss experimentation. Part of the reason for making a salable package of the 18 programs is the desire to recapture some of the \$75,000 spent developing them in the last three years.

A second reason, says Joseph, is his belief that the apartment management industry will benefit from greater rationalization of its activity. Great Atlantic is confident of becoming an important factor in the industry and Joseph reasons that improved standards for judging management will enable the company to prosper.

Once the apartment investor is armed with improved criteria for judging performance, selecting an efficient management company will be easier. And the level of efficiency is determined by the way management reacts to the exceptions, not its use of a system for finding exceptions, Joseph emphasizes. He is eager to compete against others armed with his sum of the exceptions and linear management techniques.

—TREVETT MATTHEWS

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THE APARTMENT SCENE

By H. Clarke Wells*

Are you sure you want your own computer?

You're a growing developer/manager, adding hundreds of new units a year to your management division and continually cranking up a few thousand more in the development department. You're swamped with details, so you decide you need your own computer.

A computer, you think, will not only take a big load off the accounting department by automating rental receipts, apartment records, payables, etc., but will give the development division a superbrain for analyzing new deals. Besides, a computer clicking away in the back room is a good thing to show visitors, particularly lenders and investors.

You're right about the computer's worth as a showpiece. But don't expect any overnight miracles in terms of performance.

In fact, before you spend the money, make sure you really do need a computer. Because if it's just bare record-keeping you want, for receipts and payables, maybe all you need is a punched-card system. Punch a card for each transaction, and you can turn out a variety of reports by sorting the cards into different sequences.

If you want a machine to *analyze* your records, then you need something more sophisticated. You can either share the operating time of a large computer in somebody else's data-processing center, or buy or lease a computer of your own.

Best of two worlds. We decided the best bet is a system that provides the advantages of both approaches. So we bought a compact, internally programmed computer that can be linked up remotely with a much larger data-processor in a time-sharing arrangement.

The fact that our little back-room computer has a limited memory capacity doesn't make any difference, because we can operate it in tandem with machines that have voluminous memories and powerful computing abilities. We can store large volumes of auxiliary information in someone else's million-dollar electronic brain, and have automatic access to it through the print-out facilities of our own computer. Our machinery handles all the data preparation and processes low-volume reports. But for



WELLS

large-volume reports, the data is processed at a remote computer center and only printed out on our machine.

The setup makes economic sense. It gives you a total-system approach to automated data processing for a mini-system price. The only trouble is, the system takes a long time to reach full performance.

At first the machine functions strictly as an electronic accounting system. It prints out monthly rental summaries, writes checks and produces financial statements of cash receipts and disbursements. Our setup, costing about \$30,000, includes a card-punch machine, card sorter, and punched-card reader. The data processing is controlled automatically by programs recorded in punched paper tape or cards. Insert a new program and you automatically reset the controls that dictate computation, print format, printer positioning and movement of forms.

Electronic accounting is a great time saver. But a computer's ultimate contribution is supposed to be providing information that is very difficult or impossible to acquire manually. You want it to compile analyses and reports that reflect subtle economic factors and business trends through the application of sophisticated mathematical formulas.

Shakedown cruise. Don't count on that kind of help too soon. In fact, figure on six months to a year just to shake out all the mechanical bugs. If your bugs are similar to ours, they'll include aggravations like columns of figures that don't line up vertically, frequent breakdowns, trial-and-error programming, slower-than-specified print-out speed, and generally inconsistent performance. During the first few months, downtime on the machine is likely to be so high that you'll have to keep your books two ways, manually and electronically.

One hangup that slows down the small-computer owner's progress toward automated data processing is the amount of time the supplier needs to prepare and de-bug new programs. We started out with programs for trial balance, general ledger posting, and financial statements. Then we waited several months for a payroll program that includes the mechanics of check writing and the prep-

aration of quarterly and annual reports. Now we're waiting for a furniture control program and one for cash disbursement. We spend about \$600 apiece for the programs, and after waiting months to receive them, we then live through a shakedown period before each one is functioning accurately.

We felt put upon by some of our machine's initial shortcomings until we heard about the computer headaches that our neighboring Stanford University has been having. Stanford is suing a computer manufacturer for more than a half-million dollars because it can't get enough work out of a new \$314,000 automated file system it bought for the school's library. Stanford claims the machine can't store enough data, can't store data long enough, has too much margin of error and takes too much operator time. The manufacturer tried to make the machine live up to specifications, but after 48 days of off-and-on repair work, says Stanford, the problems were not solved. The school wants \$230,000 for loss of computer time and \$37,000 paid for outside computer services while repairs were being made.

Tangible results. Our own annoyances didn't reach that level. By the sixth month we were sold on our own machine's capabilities. At that point the property management division was benefiting directly from automated apartment-occupancy and income reports, and the property development people were getting impressive looking records for financial presentations.

But to elevate this system from mere bookkeeper to a key decision-making tool for development work takes at least two years. First, it takes that long to install all the programs you should have for income and expense records. And second, even after you wed the machine to a large-scale computer, it takes time to store up enough past-performance data to make reliable decisions about proposed apartment deals—e.g., unit mix, rental range, potential market.

Moral of the story: Don't count on immediate support from a new in-house computer. The benefits of owning your own computer are strictly long-range, and don't come without a lot of nurturing.

And don't expect your computer to ease your personnel needs. Your existing staff won't adjust to it easily, and the first thing you'll have to do after the machine starts performing consistently is hire a new employee—a data-systems operator.

* Columnist Wells, formerly a House & Home senior editor, is marketing manager of L.B. Nelson Corp., a large apartment builder based in Palo Alto, Calif.

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New York City gets its first big planned unit development

Jim Romano

Open-space living is coming to Checkerboard Square.

Staten Island, where subdivisions multiply in vast grids of tick-tack houses on tiny lots, is getting New York City's first big planned unit development. That means greenbelts and breathing space.

All this will be a new departure for Staten Island, the city's forgotten borough before the Verrazano Bridge brought it into close contact in 1964. The bridge also brought developers whose only guideline seemed to be greed, and they wrote a modern lesson in how to uglify the urban scene.

The island developed its own patented horror of up-to-date land crowding—detached houses skewed sideways onto lots 25 feet wide. Each house thus preserved the fiction of a sideyard; it mattered not that the space was seldom wide enough to accommodate passage of a well fed watchdog.

The \$100 million project. The development that will relieve this regimented tedium is to be called Village Greens. The \$100 million development will be a joint venture between Loew's Inc., the tobacco-hotel-movie conglomerate, and Jerome H. Snyder, 41, who returns home to Brooklyn after two decades of building houses in southern California.



PAST AND FUTURE on Staten Island. The chessboard routine typified by Seaview section's houses (left) will be relieved by a planned unit development of townhouses clustered around open spaces and wide greenbelts.

The team will build 2,025 three- and four-bedroom townhouses on the \$9.5 million site of 160 acres. Prices will run from \$29,000 to \$38,000.

Open space. Chairman Laurence A. Tisch of Loew's emphasized that an open greenbelt will wind through the development and that the land will be set aside for playgrounds, a school, a pool, tennis courts, and community centers.

But Village Greens will still get 13 dwelling units to the acre, which is more than a conventional development could accommodate on the same tract. The new project's cluster arrangement of row houses omits the useless sideyards. Exteriors will be of wood and stone, and trees will be

preserved by relocating them on the site.

Self-funding. The developers will use corporate funds rather than trying to borrow in today's tight money market. They are confident that local banks will provide FHA-VA mortgages to buyers, although a Loew's spokesman admitted that the group had no commitments for this permanent financing.

That might be a problem. An officer of one New York City savings bank warned:

"I don't know of any bank that can commit for a project that large at this time. Most lenders are restricting loans to long-time depositors."

—JAMES P. GALLAGHER
NEWS continued on p. 34

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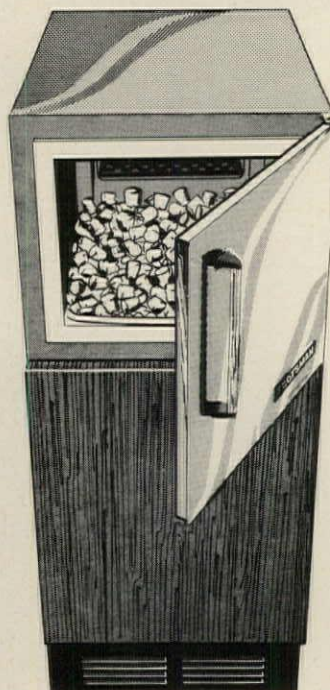
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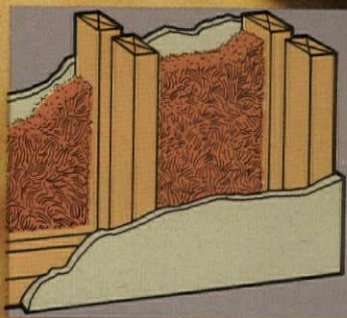
It's effective. Double wood stud walls with separate plates, single layer drywall each side, and 3½" of Fiberglas insulation gives an STC of 55 (see illustration). With

single steel studs, Fiberglas insulation between a double layer of drywall on one side and a single layer on the other provides an STC of 51.

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NEWS/People

Gulledge whispers loud and clear: Curb housing's nonprofit sponsors

Tom Hoy

Gene Gulledge has passed the word:

"The nonprofit sponsor does not belong in housing production except under a very limited set of circumstances . . ."

That was what Gulledge told a group of FHA officials in Fort Worth, Texas, not long after his appointment as FHA commissioner last autumn.

The speech was not circulated by the HUD publicity apparatus, there being no text readily available. But subsequently the transcript of a tape recording began to circulate, and generous portions of it turned up on the front page of *The New York Times*.

Sponsors were created under the Housing Act of 1961 on the assumption that private enterprise was neglecting low-cost housing, Gulledge explained, but he added:

"Since then, we've found ourselves more and more working out ways to increase the role of the nonprofit sponsor in housing production.

"I want to have that role reversed."

The only reason for having nonprofit sponsors is to aid minority efforts in housing in some parts of the country, Gulledge said. Many minority craftsmen, tradesmen, and builders are "strong on desire and weak on expertise," and nonprofit sponsors help them band together and learn how to do the job. But he went on:

"As we develop the minority businessman (which must come first), and create a more open feeling and climate in America, then we should be able to reach a point where any business can per-



FHA's GULLEDGE

'I want that role reversed'

form a logical function and role anywhere in the country."

At that point the nonprofit sponsor should have worked himself out of existence, Gulledge says.

The National Association of Nonprofit Sponsors, said Gulledge, agrees with this aim if one is to believe its literature.

Neither Gulledge nor the association gave a timetable for the takeover by private enterprise.

Gulledge extended his criticism to the consultants employed by nonprofit sponsors. "We have succeeded in helping create this new 'profession,'" he said, but he added:

"If you are doing your job, there is not one time in 100 when any outside consultant is needed. If there remains any necessity to keep consultants, we're going to restrict their activity, the way in which they'll get their money, somewhat. But more importantly, I would hope we could eliminate the need for consultants."

Watt to leave Housing Partnerships

Ray Watt, the California homebuilder who came to Washington to become the FHA commissioner and wound up as head of the National Corporation for Housing Partnerships, is eyeing the Coast again.

Watt says he came for a two-year tour of duty, "and I don't intend to stay here (in Washington) forever."

Just when he plans to leave is not yet known, but Watt says "it won't be until after we raise some more money and until the organization is under way."

The NCHP floated a \$50 million stock issue in late January and has had trouble selling the shares. Six weeks after issuance, only \$21 million had been sold. Under terms set by the board, unless \$37.5 million is sold by May 17, the corporation cannot go ahead with its seed-capital building program.

Watt indicated that the corporation was told the investment banking community would handle all funding, but it is known that chair-

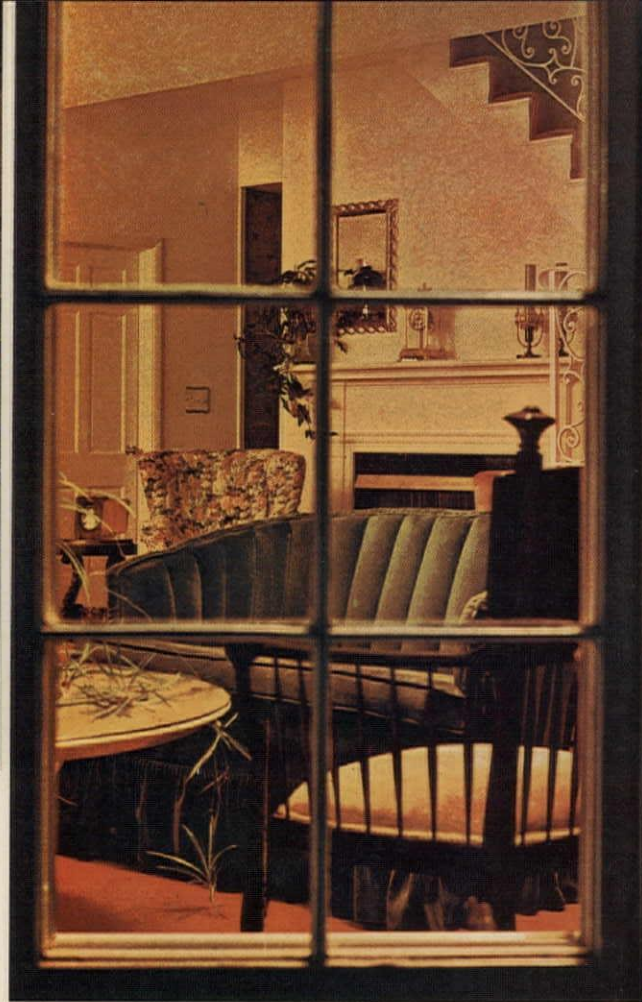
man Carter Burgess and vice president George DeFranceaux have been out trying to drum up business for the stock.

The California homebuilder ran into trouble early after coming to Washington. Although he was slated to become assistant HUD secretary for mortgage credit and chief of FHA, conflict-of-interest troubles plagued him. The Senate let it be known that he would not be confirmed if nominated, and the Nixon administration backed away from the appointment. Watt was then appointed as president of the NCHP. —A. M.

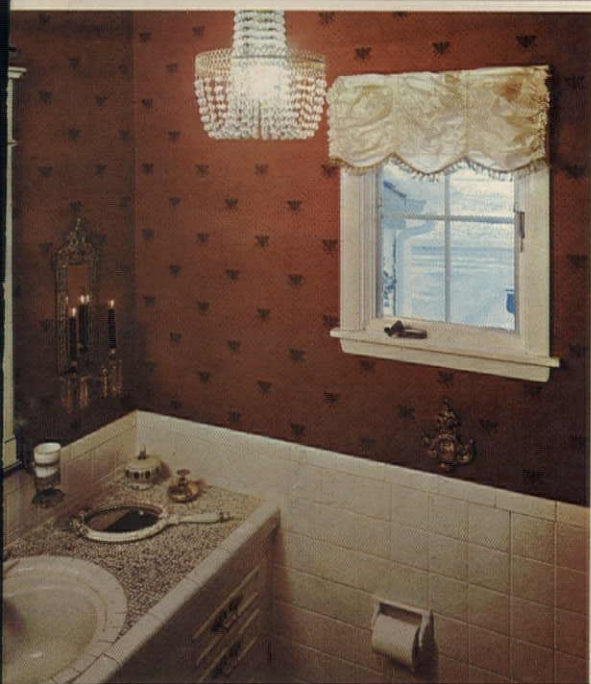
ASSOCIATIONS: Nathaniel Rogg, executive vice president of the National Association of Homebuilders, was ordered to bed by his doctor after the annual convention in Houston in January. An NAHB spokesman said: "Rogg simply needed a rest after the strain of the meeting." He spent about a week at his Washington home. *NEWS continued on p. 40*



Upper left. Wall of Andersen Gliders helps make porch a year-round, lake-view room.



Upper right. Divided light Andersen Casements complement a traditionally styled living room.



Left. Elegant half bath is enhanced by small Casement unit.



Right. Doesn't this Casement bay-window combination brighten a cheery dinette?

Below left. Casements flank picture window in this dramatic treatment.

Below right. Window seat makes a perfect spot for a young girl to dream her dreams.



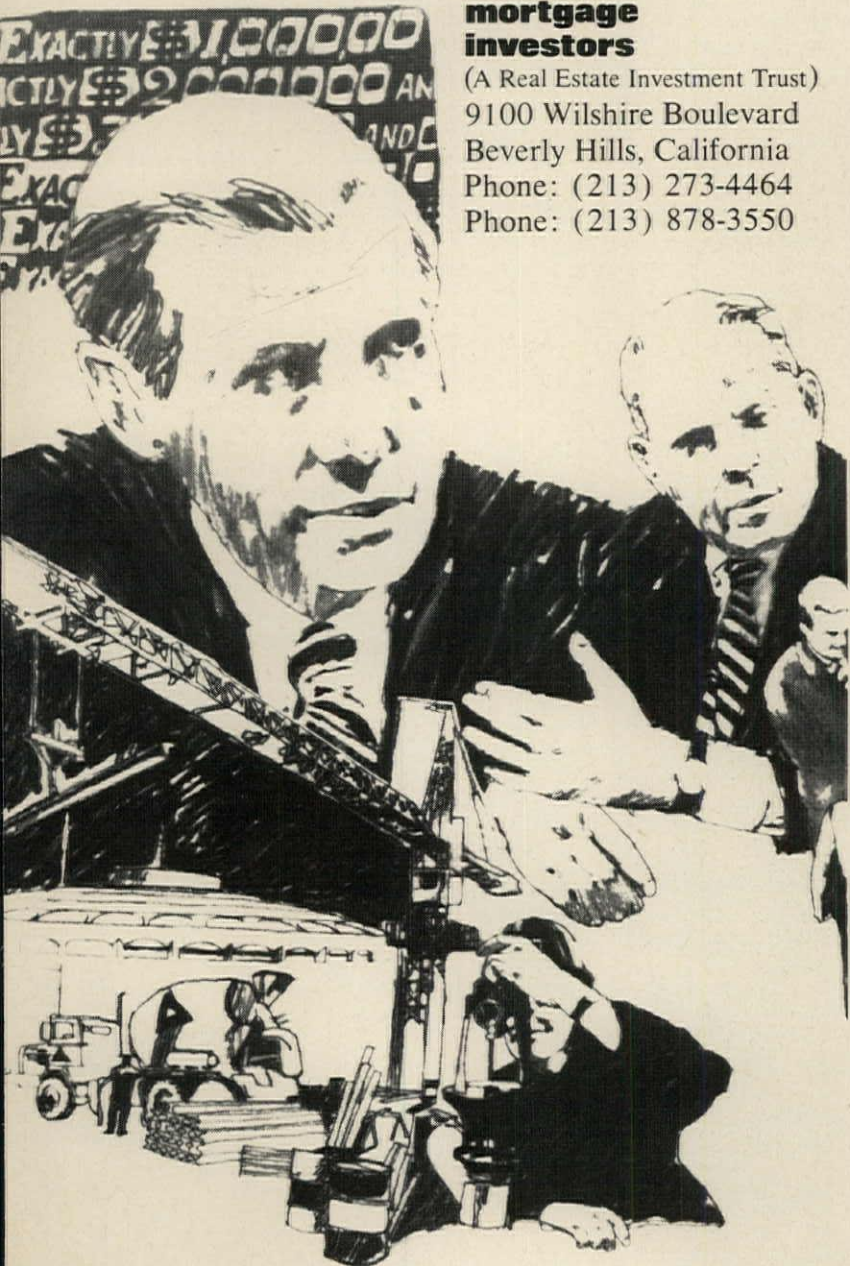
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Builders bounce into pro basketball

HGH staff

Starting at center, with 40 per cent of the new Portland franchise, is 6'1" **Herman Sarkowsky**. And at the forwards, with 25 per cent each, are 6'3" **Lawrence Weinberg** of California's Larwin Group and 5'11" **Bob Schmerz** of New Jersey's Leisure Technology.

That's the line-up for the home-builder team of investors who are shelling out \$3.7 million, including \$1.5 million in cash, for one of the four new National Basketball Assn. franchises. The other investor is the team's general manager, **Harry Glickman**.

"My 12-year-old son thinks I bought the team for him," says Sarkowsky, president of Seattle's United Homes. "But the truth is that I'm a sports nut."

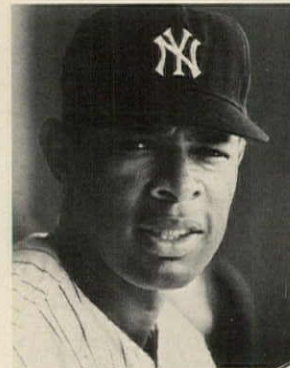
His pals are along for the ride. Says Weinberg: "Herman will do all the work. I'll devote a lot of time to the team between 8 p.m.



UNITED HOMES' SARKOWSKY
A backyard player turns pro

and 5 a.m." Yet, Weinberg has already made a contribution by proposing a catchy name for the team—The Portland Hookers.

The team will need all the help it can get. According to experts, only five of the NBA's 14 existing teams are profitable. —FRANK LALLI



Yankee Horace Clarke:

Ballplayer who can't quite swing it

The N.Y. Yankees' second baseman can handle a bat; he hit .285 last season. It's apartments that give him trouble.

Horace Clarke wants to build an apartment near his home in the Virgin Islands. But he hasn't been able to pin down a \$1 million development loan.

Finally, last month, Clarke turned to his employer. He requested a two-part contract for 1970—a cash salary close to the \$24,000 he got last season, plus help in arranging the apartment loan. The Yankees refused, and after a short-lived holdout Clarke signed strictly for cash (\$37,000).

In declining to arrange the loan, general manager **Lee MacPhail** argued that the Yankees' owner, the Columbia Broadcasting System, wasn't in the building business. Poor Clarke. His time came

five years late. For the man who sold the club to C.B.S. is **Del Webb**.

Clarke isn't the only ballplayer suffering the chill of tight money. Take the case of **Jerry Lucas**, an All-Star basketball player and would-be food tycoon who built a chain of eight "Beef 'N Shake" restaurants worth millions.

Today he's broke. The business administration whiz kid at Ohio State presumably dozed during the lecture on collapsible corporations. Last year, he failed to raise mortgage loans for three new restaurants and found himself personally liable for everything. And it was everything he had—\$450,000, including the deed to a \$150,000 house, all his stock and the restaurants.

NEWS continued on p. 44

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Ultra® Lavatory

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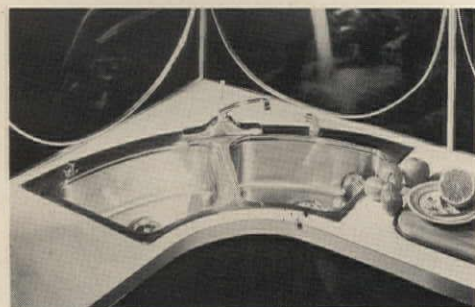
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The housing shortage

More people take partners, not necessarily in marriage

Vacancy rates have now fallen so low that they indicate extensive doubling up among residents in the major East Coast cities and in San Francisco.

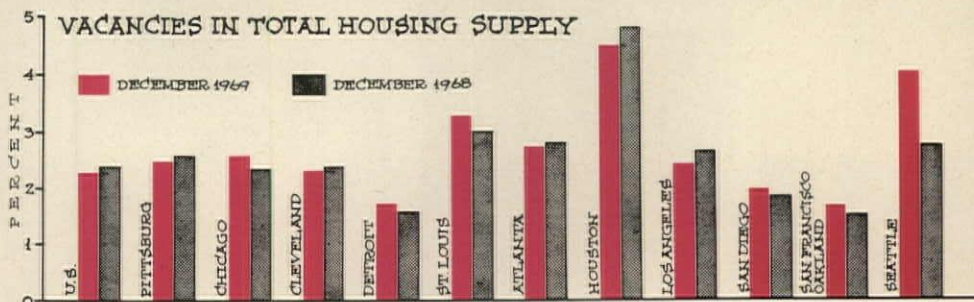
The latest national housing survey by Detroit's Advance Mortgage Co. finds the rate of overall vacancies, rental and sale, is now about 1½% in Boston and Philadelphia, less than 1% in Washington and less than ½% in New York. It was 1.6% in San Francisco at year end.

These markets are particularly subject to doubling because of their large concentrations of unattached individuals, Advance says in its best sociologist's bedside manner. And the doubling is on the increase.

Doubling can be inferred whenever a market is absorbing significantly fewer units than its historical pattern and there is no reason to suspect a slowdown in in-migration, Advance goes on. This inference is clearest in New York, San Francisco and Washington, where vacancy rates would actually be less than zero if units were still being absorbed at the rate of two years ago.

The scene nationwide. The national vacancy rate was 2.3% at year end, lowest since 1950. So the relatively good output of 1.5 million completed units in 1969 failed utterly to satisfy the growing demand for shelter, the survey says.

President Irving Rose of Advance predicts a further decline in vacancies this year, based on his forecast of a drop in comple-



tions to a total of about 1.1 million.

Rose traces most of housing's woes to the current money shortage, but he points out that much of the inflation that afflicts the industry is actually a hangover from the 1966 credit crisis.

The 1966 shakedown reduced the ranks of both labor and builders, Rose says, "and we are now again depleting these forces at a time when the industry needs to be larger than ever."

Two crises. The present pinch is not only more severe than 1966, Rose says: it is more complicated. He explains:

There was a housing surplus in 1966 to cushion the cutback in building, but there is no surplus today. And when the thrift industry's loss of funds to direct investment was heaviest in mid-1966, many builders had mortgage commitments covering them to year's end. The same institutions are now

out of funds at the same time builders are out of commitments.

Extent of shortage. "The conjunction of events in today's housing market is the most unfortunate that could be imagined," Rose concludes.

"We are facing, at the same time, a crisis in unsatisfied housing demand, in housing credit, in costs, and in builder resources. The institutions that serve housing are under strain.

"National economic policy has been made as though housing was expendable, but after this year there will be less patience with the consequent failure in housing.

"We may start with a goal of a well-housed America, and tailor our fiscal and monetary policies, our budget and all that goes with them, accordingly.

"Even then, it may not be easy to break housing's stop and go cycles."

Levitt comes to southern California in a blaze of light

Taking a cue from Hollywood's spectacular movie previews, the nation's largest homebuilder, Levitt & Sons, has ringed the model complex of its first West Coast development with blazing theatrical lighting from dusk to 9 p.m.

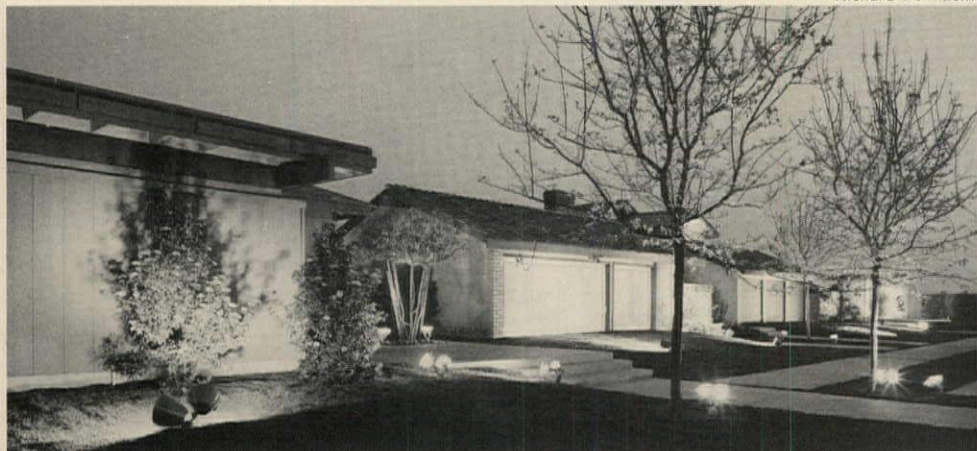
Back of the attention-getting illumination is an effort to expand the effective selling hours—now heavily concentrated on week ends—into weekday evenings, when families can house-hunt after dinner.

The 290-unit subdivision is located in Orange County's 8,000-acre Diamond Bar

Ranch, now being developed by Transamerica Development Co. A larger, second Levitt project will open early in August on a 200-acre site, also in Diamond Bar. Four other homebuilders are already operating at Diamond Bar, and some 13,000 people already live within its boundaries, some 40 miles southeast of downtown Los Angeles.

The move west. The Levitt organization, with headquarters on New York's Long Island, leans heavily on West Coast expertise in its initial run at the country's largest new-house market.

Richard A. Pucillo



FLOODLIGHTS help Levitt sell houses by night in the company's first development in California market.

The president of Levitt & Sons of California is Herman Sarkowsky, whose Seattle-based United Homes Corp. was acquired by International Telephone & Telegraph early last year. Sarkowsky named Alfred Dayan, architect and former head of design for Kaufman & Broad, as vice president and general manager of the California division; Walter Richardson & Associates designed the houses; model house expert Hamilton-Howe Inc. directed the merchandising effort; and Courtland Paul/Arthur Beggs & Associates did the landscape architecture.

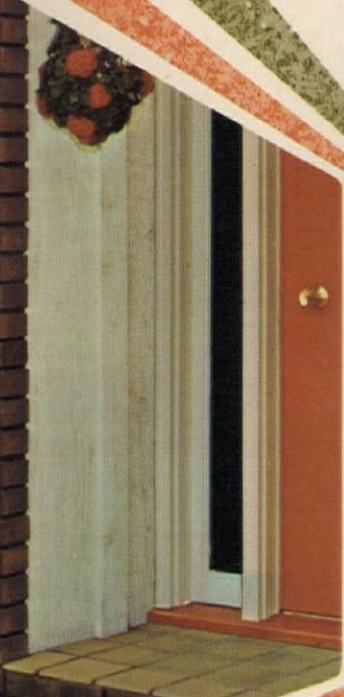
Prices from \$28,990. The five model houses will be offered with three different elevations, with prices ranging upward from \$28,990. California's influence will be felt in the extensive garden courts and patios, the wood-burning fireplaces, two- and three-car garages, and double-door vaulted entries. In keeping with local preference, all but one model will be one-story.

Last year, Levitt built more than 8,000 houses and had a sales volume of \$225 million in 28 locations throughout the U.S. and in Puerto Rico and France. A month ago, the company announced its entry into the modular housing field (NEWS, Mar.) with a factory to be built near Battle Creek, Mich. Levitt has built more than 90,000 houses since its founding in 1929.

NEWS continued on p. 46

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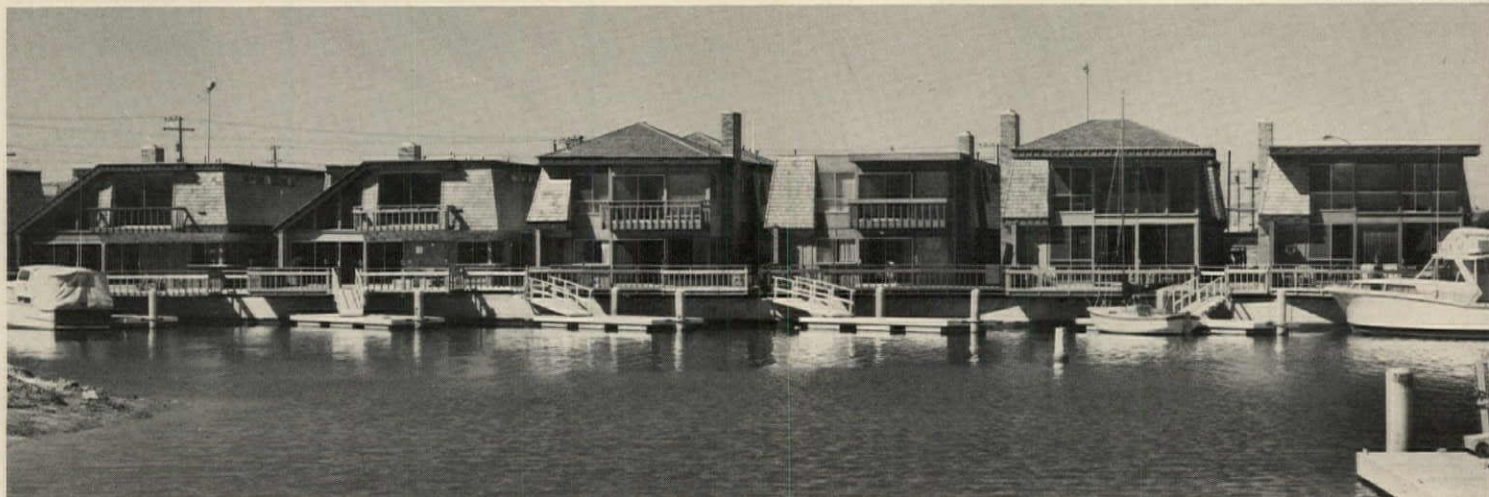
SOUTHERN ESTATES RESIDENCE, Brecksville, Ohio. Designers & Builders: Pate Homes, Inc., Cleveland, Ohio. Masonry Contractor: Pat Kilbane, Cleveland, Ohio. **WESTAB, INC.**, Kalamazoo, Mich. Designer, Engineer, Builder: Cunningham-Limp Co., Birmingham, Mich. Masonry Contractor: Vandermay Construction Co., Kalamazoo, Mich. **MARTIN LUTHER KING, JR. ELEMENTARY SCHOOL**, Providence, R. I. Architect: Robinson, Green & Beretta, Providence, R. I. General Contractor: Nanni Builders, Providence, R. I. Masonry Contractor: Frank Spirito & Sons, Cranston, R. I.



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A design scheme for a group of almost townhouses

This long, narrow, waterfront site in Huntington Harbour, Calif., posed a land-planning problem for designers B.A. Berkus Associates. The high density—10 units on one acre—dictated the simple lot layout (see H&H, Aug.). And the designers wanted all units to face the project's waterfront side.

Townhouses would have served as a solution to the problem. But local zoning ordinances did not allow townhouses to be built; they called for the standard five foot setbacks.

The solution was a group of 10 detached houses that are almost townhouses. A five-

foot easement was made on each lot. This allowed each between-house alley to be used for private outdoor living by one home, rather than being uselessly shared by two homes. The houses are all long and narrow, with entrances in back, and front orientation to the water.

On the inside, the houses are all basically the same, with just enough variation to give each originality.

Plans are all informal, with family, kitchen/dining, and other heavy traffic areas generally on one floor, and bedrooms and living areas at the back of units. Living areas and master bedrooms are in the front,

taking full advantage of the splendid water views. Most units have windowless sides to preserve outdoor privacy; the windows of one house do not look onto the patio of its neighbor. To compensate for the closeness, many units have two-story living rooms, entrances, and dining areas which allow in a great deal of light and create a spacious feeling.

On the water side, each house has a deck and a tide bridge leading to the boat-docking areas. All houses are very similar in design (mansard roofs) and finish (wood shingle).

Builder: Mar-Crest Development Co. Houses sold for from \$57,000-\$62,000.



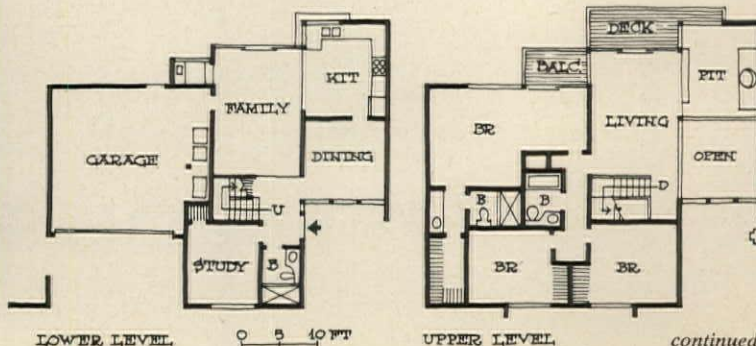
ENTRANCE VIEW shows unity of design in project; units all have same basic shape and wood-shingle finish. Cobblestones were used to pave all walkways and driveways.



OPEN PLANNING, including two-story living areas, adds light and interest to interior.



FAMILY ZONING locates family- and heavy-traffic areas on lower floor, while three bedrooms and multi-level living room are on second story.



Take the easy way out with a Westinghouse filter clean dishwasher

You'll like the way easy installation saves you time and money.

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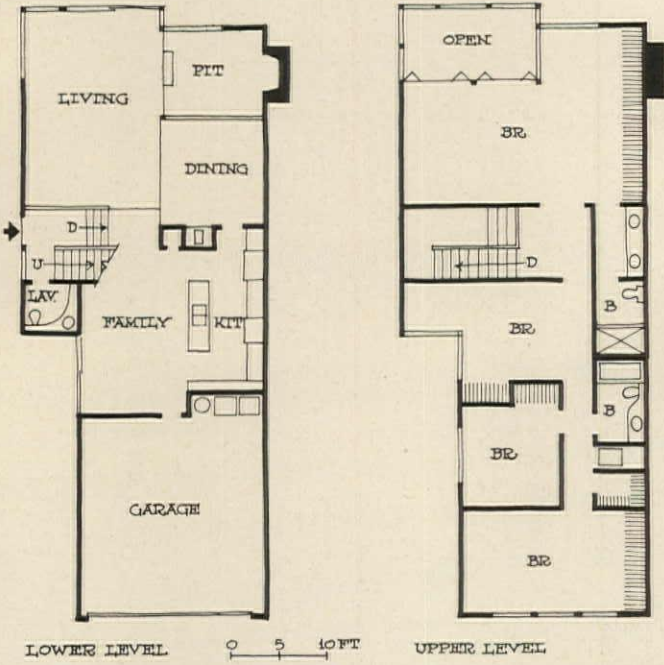
And to make it an even easier sale, this Westinghouse dishwasher offers a rust-proof, porcelain-on-steel interior, exclusive Air Stream drying system, wetting agent dispenser for spotless results, and extra quiet operation.

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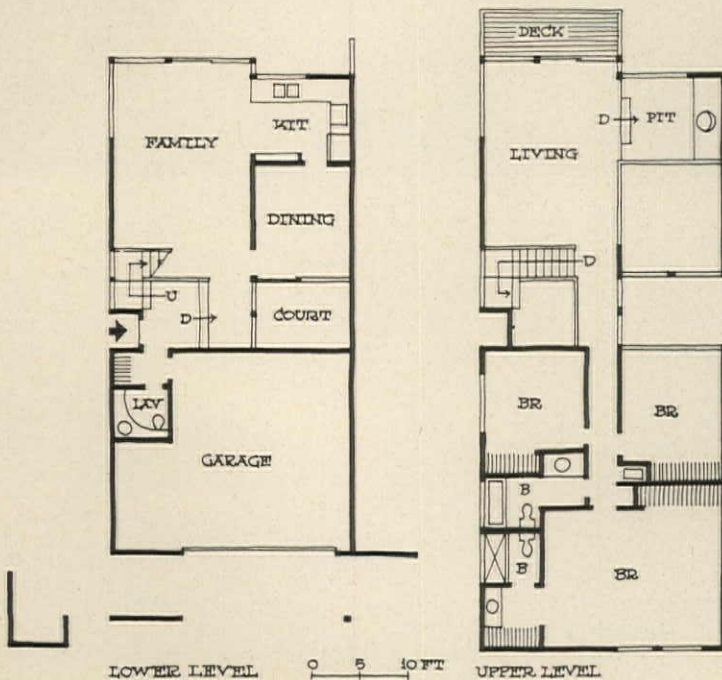
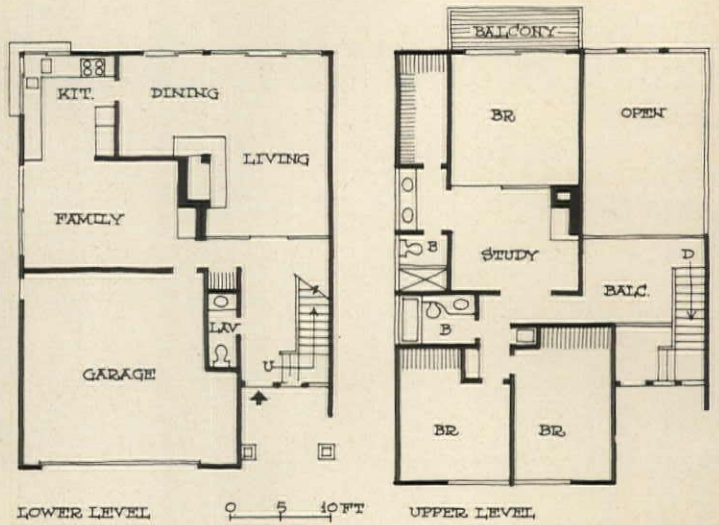
Waterfront houses *continued*



FOUR BEDROOMS in this large model are located on second floor. House features two-story entrance area.



MASTER-BEDROOM SUITE, with deck overlooking water, is isolated on second story of this three-bedroom model.

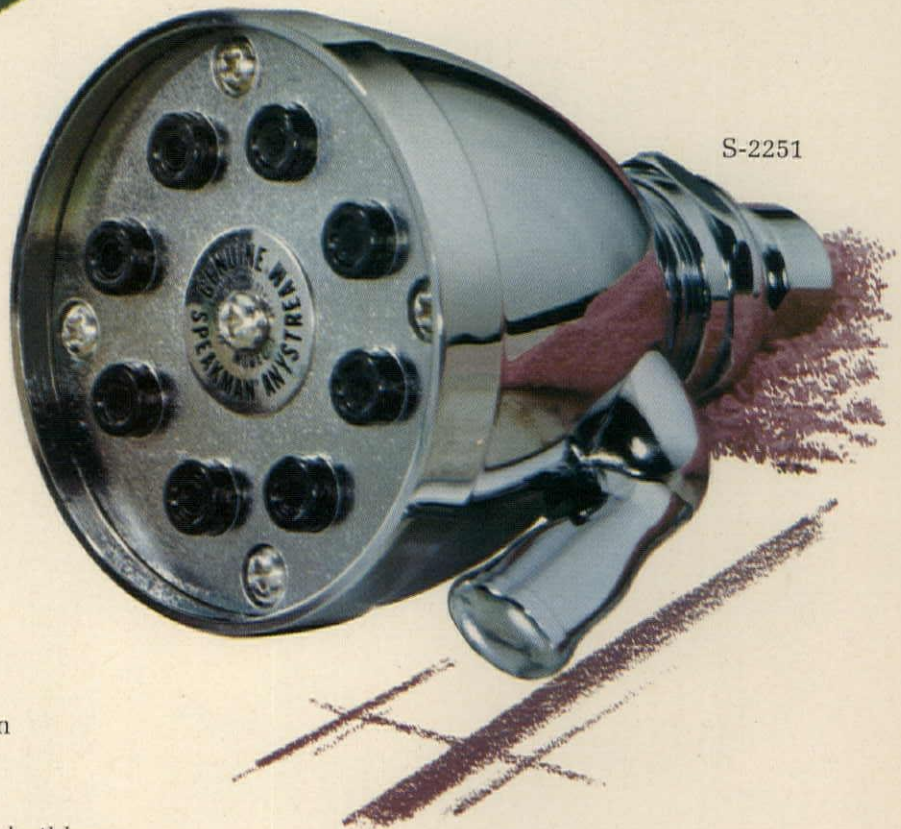
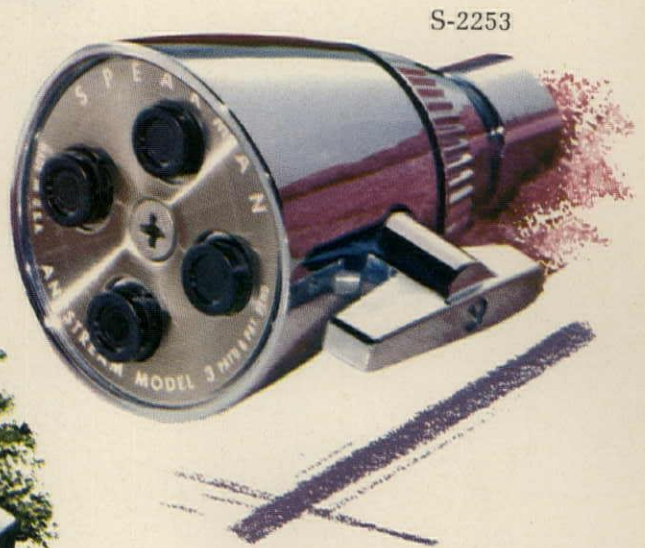
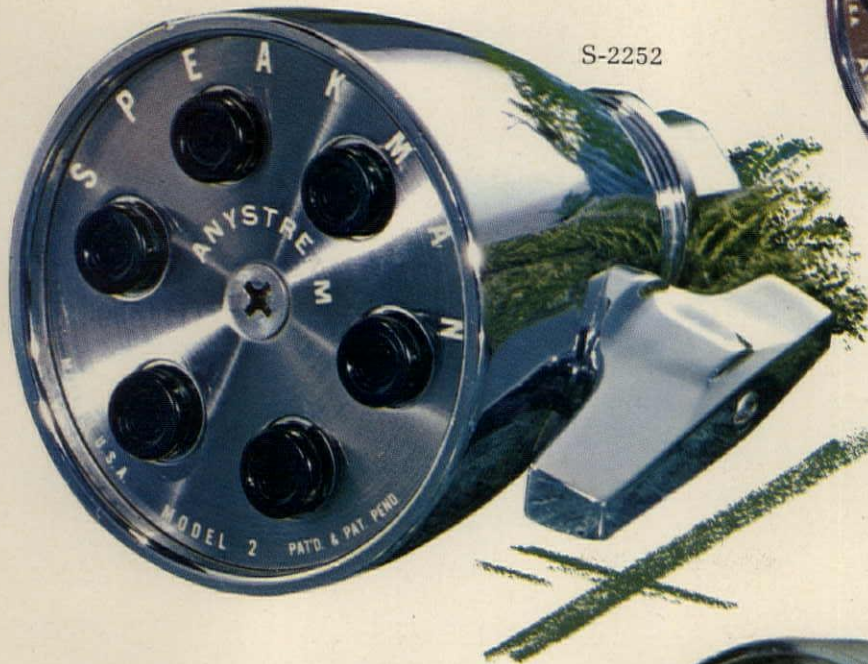


FRONT TO BACK ZONING locates bedrooms in front of house, while living and family/dining areas enjoy waterfront views.

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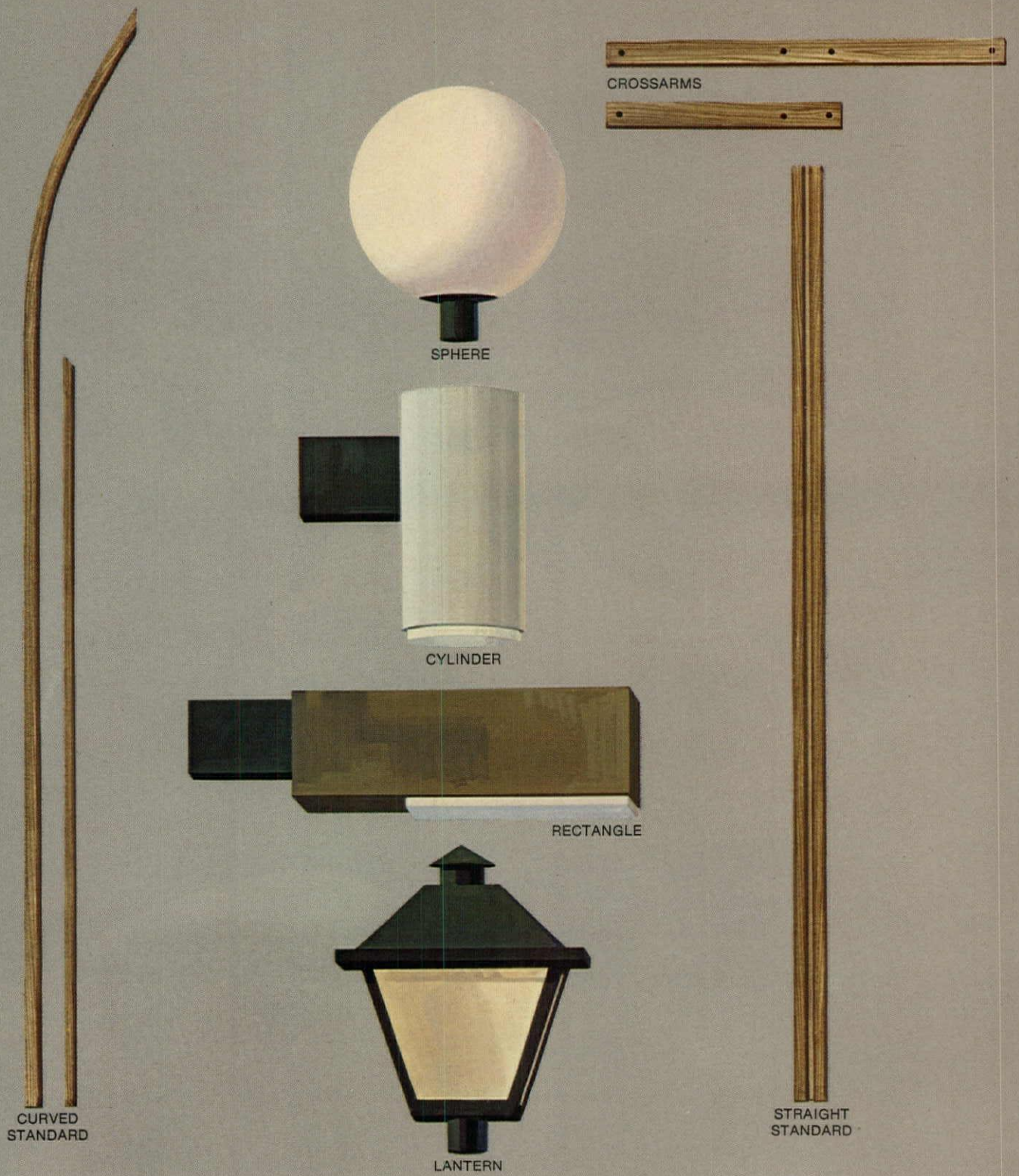
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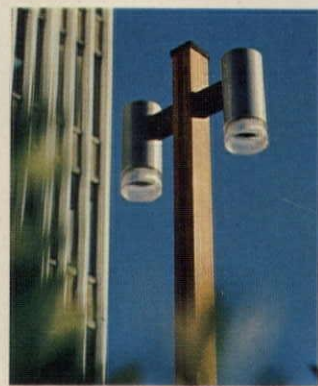
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Warning to builders: Look before crossing over to modules

Photos: HGH staff

There may be too many small builders working the modular side of the street already.

That was one of the major conclusions of a two-day California seminar on the potential of mobiles and modules. The speakers proclaimed the promise of the new building system, but they also struck more than one negative note.

- Although the modules have a bright future, today modular builders can't match the costs of efficient on-site homebuilders.

- Builders are ill-advised to switch to modules unless they have "excellent staying power," according to Robert Byrd of San Francisco's Transamerica Research Corp.

- A shake-out of amateurish modular builders may have already begun. Seminar speakers told of two early losers.

One producer glued his drywall to plywood backing to prevent his units from cracking on the road. The result: the units needed 15% more plywood than a conventionally built house.

The second man made an even more unbelievable mistake. He built his units in one piece in the factory to assure that the joints would meet—and then sawed the units in half for transporting.

Transamerica's Byrd added that factory building itself is plagued by the same problems that disrupt conventional building—bad weather, production foul-ups and the shortage of manpower. Weather can delay arrival of units moving on highways and the completion of such on-site improvements as driveways and foundations. And the shortage of workers can cut factory production, for each unit requires 400 man-hours of labor.

The bright side. Warnings aside, the seminar proved that today's homebuilders are receptive to new ideas. The hidebound builder who would rather take a loss than change a design is disappearing.

More than 500 southern California builders attended the Anaheim session, and another 350 builders paid \$69 registration fees to attend the seminar when it moved north



DAVIDSON



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BYRD

to make its stand in San Francisco.

The turnout, which provided standing-room-only crowds at many sessions, surprised even the sponsors—the Building Industry Assn. of California, San Diego Building Contractors Assn., and the Associated Homebuilders of the Greater East-bay.

One veteran homebuilder seemed to speak for the others: "If we are going to survive, we had better get on the ball and study the new ideas."

Burying small builders? Some of the builders, no doubt, attended the seminar out of a morbid curiosity about the future.

A common question among those builders was: Will industrialization put the coffin lid on the little builder?

Alfred Perry, national director of Operation Breakthrough, offered this hopeful reply:

"Breakthrough does not deal the builder out. Let's be fair—it's fighting a battle for the smaller builder. It has focused attention on the crisis in the industry, created pressures on Congress and the Administration to start finding ways to solve problems."

Perry feels that Breakthrough has already solved one problem, that of bringing other talent into housing. "Management systems," he said, "are a major addition because big companies think in terms of the year-round line and can't afford seasonality. This influence in homebuilding has got to be healthy."

Perry added that many big companies don't have the complete homebuilding capability. So he predicts even more mergers of small builders, land developers, medium-size merchant builders and capital-rich companies from outside the housing industry.

"Building the box is the easy part," he says. "The real problems are: How do you marry the unit to the land and how do you get the units to the customer? So there's room for homebuilders to play a major role."

Design. Most experts agreed that builders will be needed to assure that modules suit the buyers' tastes in housing.

Transamerica's Byrd explained that the challenge was to "achieve design flexibility and yet maintain factory efficiency." He explained:

"The market place simply won't accept products that look factory-made. Yet the module must be standardized to achieve factory economies."

The trick, according to experts, is to overcome the modules' sameness at the site by adding false gables, porch attachments, and good land planning.

Site planning. California architect Barry Berkus of Environmental Systems International points out that the planning must be highly sophisticated.

"If it isn't done properly, we will get some extremely ugly products," he says. "If some products I've seen recently on the line are just plunked down in the field, we are going to have instant slums. But if the module builder teams with the land developer and site planning is done with sensitivity, I think we'll get an environment that is superior to what we have today in low-income housing."

In summary. The best summation of the two-day conference came from Colin H. Davidson, who's not only an architect but a professor (University of Montreal and Washington University), a consultant, and an editor (*Industrialization Forum*):

"We must realize that traditional housing construction is extremely productive and efficient, and that it already bears many trappings of industrialization. We cannot rush headlong into changing building methods. We must make a systematic analysis. Otherwise, I'm afraid we're going to learn some pretty harsh lessons."

—BARBARA LAMB

McGraw-Hill World News, Los Angeles

Today's mobile parks for fat cats

There is a pent-up demand for mobile home parks, but only fat cats will get the cream.

Experts at the mobile and modules seminar in California pointed out that builders have to make 40 per cent cash investments to develop a park from scratch. And in this time of tight money, buyers of the finished park are putting up only 15 per cent cash down payments. The remainder of the price is in notes.

Only the cash-rich investor can stay.

For those at the seminar who still wanted to try development, Neil Norlander of the Western Mobile Home Assn. of Riverside, Calif., offered tips:

- Design your park for the large double-wide units that are becoming increasingly popular.

- Try to get an 8 to 8½-unit density per acre. Anything less probably won't yield much profit.

- Determine who your customers will be before building. In California, 49.5 per cent of those living in mobile parks are retirees with above-average incomes.

- Put your park as close to urban locales as possible.

- And subdivide any large parcels into small neighborhoods, for mobile home owners like a small-town atmosphere.

—B.L.



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Exterior surfaces are in pecan grain Vinyl overlaid with clear Vinyl for added protection. Interiors are made light and bright by the use of an attractive buff colored Vinyl — no need to use shelf paper! Drawers glide smoothly at all times; made of high strength polystyrene with rounded corners for easy cleaning (patent pending). Self-closing hinges (our specifications, patent pending). On display *now* at your Scheirich Distributor's showroom.

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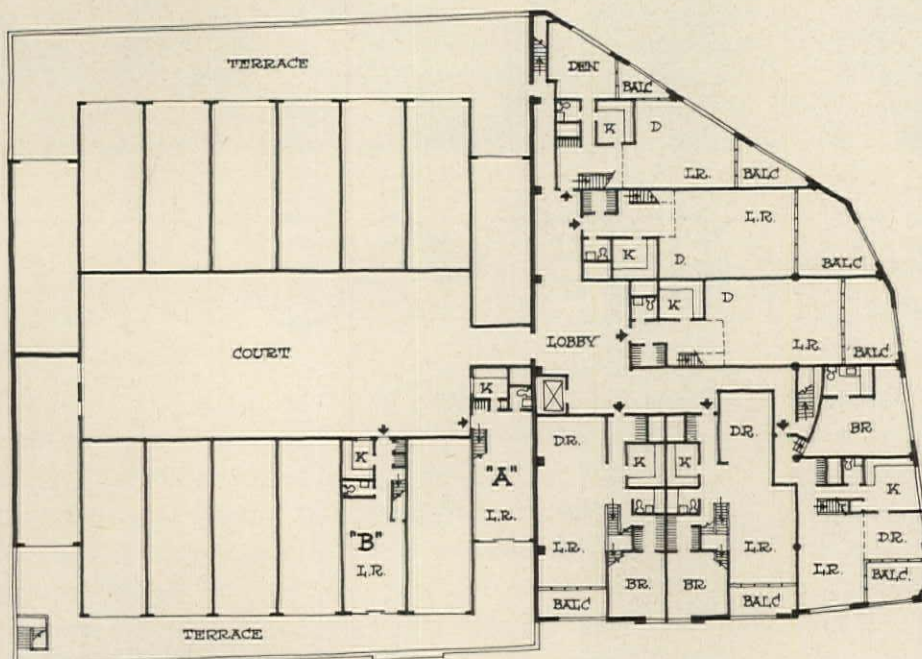
TWO-STORY LIVING ROOM opens to dining area at rear. Door under balcony leads to kitchen. Area on balcony can serve as bedroom or den.

The building above left was an eyesore in an otherwise good neighborhood in Brookline, Mass. It was purchased by Glenoia Management Co. for \$200,000, architects Chapman & Goyette were retained to do a \$650,000 renovating job (*above, right*), and now the owners get an average of \$355 a month for each of the building's 30 units.

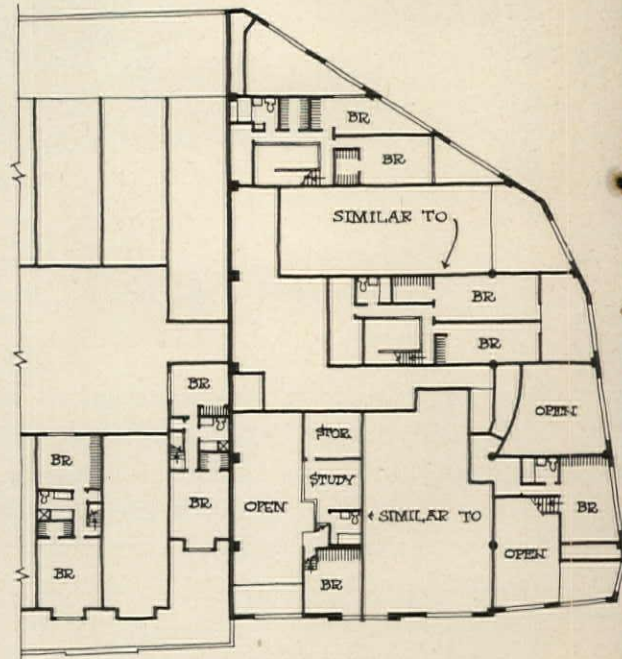
Originally, two buildings were joined together: the left portion had one level, the right portion two, and both portions had 17-ft. ceilings. In remodeling, each level was divided into two floors, a two-floor 16-unit addition was built above the left portion, and three more units were put downstairs in the area that serves as a garage.

The righthand portion proved to be much harder to lay out—it curves around with the property line and a street (*plan, below*). So the architects created 6 two-level townhouses above and five below—most of them custom-shaped to fit into the building's form. Features in these units include cathedral ceilings and balconies overlooking the two-story living rooms. In addition, there are balconies or terraces outside of each unit.

Rents for the 6 one-bedroom units are \$265; for the 18 two-bedroom units, \$355; and for the six three-bedroom units, \$455.



UPPER LEVEL - FIRST FLOOR



UPPER LEVEL - SECOND FLOOR

UPPER-LEVEL UNITS include 16 two-story townhouses (available in two models) and six custom units. Second-story bedroom plans are at right.

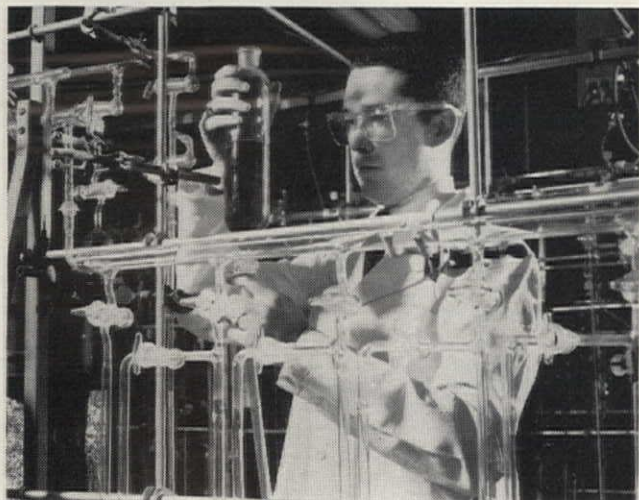
This could be the greatest single improvement in DWV systems since plumbing came indoors.



Now that PVC is fast growing in acceptance for drain/waste/vent systems in new construction as well as rehabilitation, the builder who hasn't looked into its advantages stands a chance of falling behind.

76%

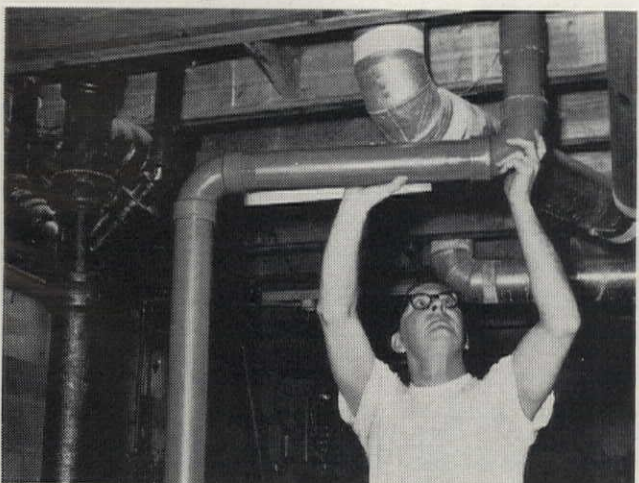
Take costs. Drainage lines account for about 76% of the piping costs inside an average house. This alone is reason enough to consider DWV made of PVC (vinyl), which offers appreciable savings.



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PVC pipe is self-extinguishing and thus prevents flame from spreading along pipes between walls. It also resists abuse and does not allow scale to build up inside pipe or fittings.

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FOREST CITY ENTERPRISES, INC., Cleveland, Ohio. Low-rise buildings will have precast concrete bearing walls and floors and prefabricated wood framing for infill on other walls and the roof. High-rises will utilize a new factory-made hollow concrete panel that is filled with concrete at the site (*photo*).

The company's concept includes the use of air rights over the parking areas for community facilities. With this idea they hope to develop the total potential of a particular site.

Architects are Barbitta—James & Assoc.



GENERAL ELECTRIC CO., Philadelphia, Pa. The system will utilize a honeycomb panel with stressed plywood skins for the floor and prefabricated metal studs in the walls. All units will be factory-produced in mobile factories. Interiors will be plaster that has been precast at the factory. Utilities will be in core assemblies ready for



insertion into the structure.

The system is primarily directed at single-family attached and detached and multi-family low-rise dwellings (*drawing*).

Architects are Hugh Gibbs, FAIA, and Donald Gibbs, AIA.



HERCULES INC., Wilmington, Del. A factory-produced wood module will be used for single-family attached and detached and multifamily low-rise homes (*photo*). For high-rises, plans are to use a metal module frame and panel system covered with lightweight concrete.

Cluster arrangements of units are

planned, and steep or irregular terrain will require the use of stilts.

A division of Hercules, Modular Structures Inc., will build the units from designs by Armstrong & Salmonsky.

HOME BUILDING CORP., Sedalia, Mo. Factory-built wood modular units that are 12' wide will be used to build single-family detached homes (*photo*). Each house has a field-built middle section that acts as a corridor. Models can have up to six bedrooms.

The company says that flexibility in de-

sign is the main feature of its system. Customers will be able to choose the features they want in their homes.

Wood is the principal material used. However, other materials could be used, as cost and availability dictate.



KEENE CORPORATION, New York. The Townland Housing System (*drawing*)—a precast concrete frame with metal modules and panels—uses existing materials, but in a new configuration. It is a high-rise system and can go up to 15 stories.

The system stresses the life-style of the residents and involves the creation of syn-

thetic land including elevated "streets" and "backyards." The company says it can be built in the inner city with a minimum amount of relocation by using air rights.

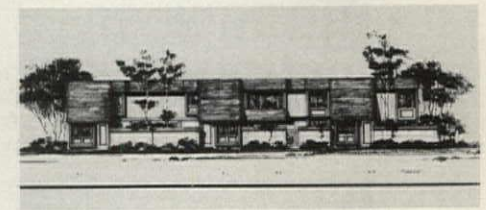
The consortium includes Grumman, Lennox Industries, The Portland Cement Assoc., and architects Warner, Burns, Toan & Lunde.

LEVITT TECHNOLOGY, Lake Success, N.Y. The company will build a factory-produced, wood modular system that uses stressed-skin panels (*drawing*). Exterior elements such as windows, pitched roofs, and balconies will not be fixed, but rather will slide or fold out.

The company plans two basic types of

modules: "wet" for baths, kitchens, and heating equipment and "dry" for living areas. They expect to be able to build 2,000 units per year in their Battle Creek, Mich., factory.

Working with Levitt are The Stanley Works, Simpson Timber Co., and architects Barry A. Berkus Assoc.



MATERIAL SYSTEMS CORP., Washington, D.C. This is primarily a technology of materials: fibers and resins are combined to form a structural panel for single-family detached houses (*photo*). The panels can be used for both walls and the roof.

The company has set up a test factory on an Indian reservation and has proved



to its own satisfaction the viability of using unskilled labor both in the factory and in field erection.

Architects are the Chicago office of Skidmore, Owings & Merrill.

MODULE COMMUNITIES INC., Yonkers, N.Y. The Tracoba precast concrete system, which originated in France (*photo*), will be used to build a variety of housing types including detached units, townhouses, garden and high-rise apartments.

The system, in which panels and slabs are factory-produced at the site, is cur-

rently being adapted to American usage. The firm is building a factory in New York to handle other projects using the system.

The consortium includes Celanese Corp., American Standard Corp., Industrialized Building Systems Inc., and architects Skidmore, Owings & Merrill, among others.



From yard to job site... a one-man operation



The 8,000-lb. Baker-York TM can lift 30 feet high... unloaded it moves easily over rough terrain because of its extra wide frame and flotation tires. Completely towable at highway speeds. TM capacities from 6,000 to 12,000 lbs.

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Towing equipment includes vacuum or air over hydraulic brakes, towing lights, towbar, fork storage brackets, transmission lockout plate, and safety breakaway system. There is a lot more, too. The steer axle is spring mounted to soak up the bumps when operating over rough terrain. Perfect tracking eliminates side sway and gives greater pulling power to the towing vehicle.

Many other features, such as the all-roller, interlocking, friction-free mast, extra-wide carriage, and four-speed transmission are standard equipment on all towable trucks. UT models available in capacities 4,000 through 7,000 lbs. Mast heights to 21 feet.

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Rent, lease or buy. There's a dealer near you. He's listed in the Yellow Pages (under Trucks, Industrial).

Send for Bulletin 901 for Case History on the Baker-York towable trucks. Write Otis Material Handling, P. O. Box 6659, Cleveland, Ohio 44101.



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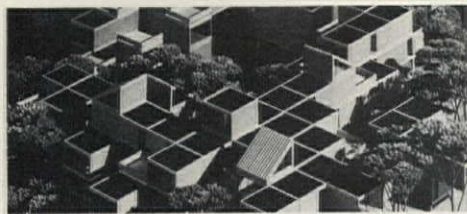
NATIONAL HOMES, Lafayette, Ind. A 14'-wide metal module suitable for either low- or high-rise use is this firm's system (*drawing*). In townhouses and garden apartments, the modules can be stacked up to six stories; in high-rise, a separate structural system is needed.

Three basic modules are to be used:



living, utility core, and bedroom. They can be combined both horizontally and vertically. A new lightweight cellular concrete, Ytong, may be used in place of steel for the walls.

Among those working with National Homes are architect Edward Durrell Stone & Assoc. and Semer, White & Jacobsen.



PENTOM INC., Bloomington, Minn. Factory-produced, wood-frame modules with stressed plywood skins (**UNIMOD**) (*photo*), will be used to make up living units ranging from single-family homes to apartments up to three floors. The skins and modules are attached with a polymer bond.

A wide variation of designs is possible with combinations of different elements such as pitched roofs and decks. The boxes can also be cantilevered and half-modules will be available.

Supplying most of the components and materials will be the 3M Company. The architects are InterDesign Inc.

REPUBLIC STEEL CORP., Youngstown, Ohio. Single-family houses will be constructed of prefabricated steel components by individual contractors.

All sub-systems are to be built and assembled prior to installation. These include bathrooms, kitchen, and the heating/electrical system. Sliding glass doors look out

into interior courtyards (*drawing*), but there are no windows on the outside walls.

The consortium includes The Tappan Co., American Standard Inc., Climatrol Industries Inc., Emerson Electric Co., Bob Schmitt Homes Inc., and Edward A. Schmitt, architect.



ROUSE-WATES, Columbia, Md. The company will use the English Wates system (*photo*), precast concrete panels, to create low- and high-rise structures. Wall panels have a variety of architectural treatments, are fully glazed and ready to be painted inside.

Interior partitions and sub-systems will



be preassembled and ready for installation. A packaged elevator system in which the cars, entrances, wiring, and machine room are all prefabricated will be used.

The Rouse Development Co. and Wates Systems Inc. comprise the consortium.

SCHOLZ HOMES INC., Toledo, Ohio. The firm will use the same sectional housing system it now uses for its prefab system (*photo*). It is adaptable to both single-family homes and apartments. The wood sections are built in the factory and shipped to the site.

Plumbing, heating, and electrical work

are all in place, and all walls, ceilings, and floors completely finished. The sections can be placed on a crawl space or full foundation with either a crane or special device developed by the company for one-day erections.



SHELLEY SYSTEM, San Juan, P.R. The company has developed a precast concrete module that is erected by crane and placed in a vertical checkerboard pattern (*photo*). Thus every unit has an open space next to it. The system can be built up to 22 stories.

Each module is completely finished on



the interior with doors, windows, and all utilities. Stairs, waste disposal shafts, elevators, and corridors are all built into the system.

Load-bearing columns and post-tensioned boxes are two of the main structural features.



STIRLING HOMEX, Avon, N.Y. The company will use its wood-framed modular system for low-rise buildings and has developed a new concrete and steel system for high-rise structures (*drawing*).

The low-rise system is the same one it has been using for several years, with some changes. Housing units are made up of

three or four 12-ft.-wide by 24-ft.-long modules. The new system, 90 per cent factory-produced, employs a reverse erection procedure in which the top floor is completed first and lifted on jacks to the top level. It is suitable for buildings up to 20 stories.

TRW SYSTEMS GROUP, Redondo Beach, Calif. This company has developed a system in which mandrel-wrapped, fiber shell modules will be used to build single-family houses, townhouses, low-rise apartments (*drawing*), and eventually high-rise units.

The system uses fibrous glass, reinforced

plastic, cellulose honeycomb, and gypsum board that can be combined to make modules and panels in off- and on-site factories. Their site features a planned unit development with clustered units.

Among those working with TRW are Kaufman & Broad Inc. and architects Building Systems Development Inc.



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29" Trowel
(with 3 HP engine)


This little number is just the right size and the right weight to be carried around, or up and down stairways, by one man. Stow's new trowel is only 29" in diameter at the guard ring, which lets you float and finish your concrete through doorways or work closely into narrow, hard-to-get-at areas, such as cellars. Powerful and fast, this trowel features combination float and finish blades that are reversible for double life; the dead-man clutch control which stops the trowel the instant you let go the handle (but leaves the engine running); the convenient blade pitch control on top of the handle which lets you adjust blade pitch angle **while the trowel is in motion!** And the 29" trowel includes the same heavy-duty sliding sheave clutch as the large Stow trowels and has a rugged 3 HP engine.

Like we said, the right size is important. And this trowel is the right size for finishing inside buildings or wherever the areas are small or narrow.

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Stow Manufacturing Co.
Dept. D2, 692 Shear St.,
Binghamton, N. Y. 13902

Send me information on your trowels and complete line of concrete equipment.

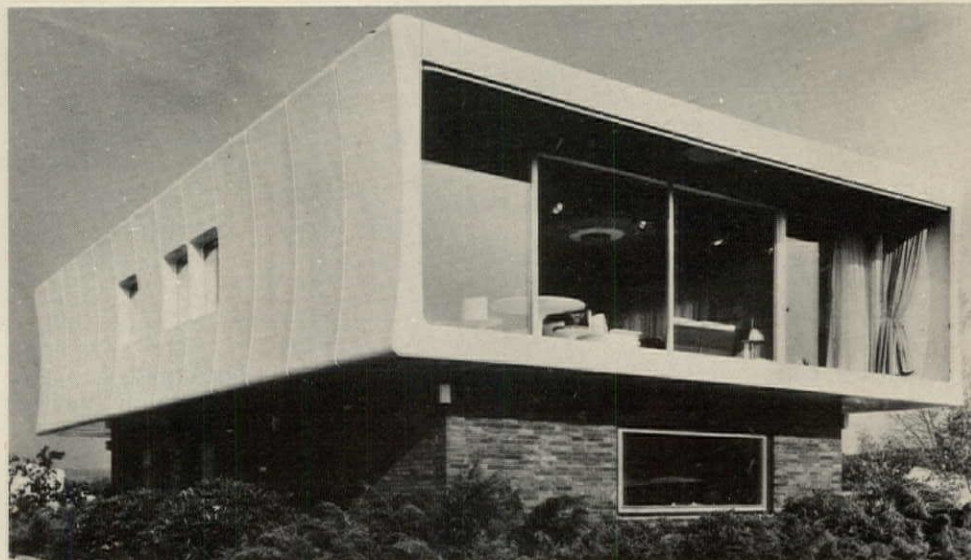
Yes, I'd like to see a Stow trowel in action.
(Please Print)

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Company _____

Street _____

City _____ State _____ Zip _____



PLASTIC HOUSE rests on slab roof of German designer/owner's office. It was built in 11 hours.



THREE-COMPONENT SYSTEM has wall panels with and without windows (left) and roof panel (right).

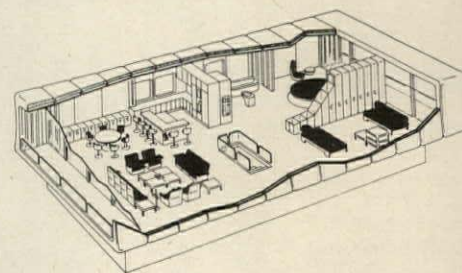
From Germany, here's a new system that's a cross between a modular and a prefab

Wolfgang Feierbach, an engineer and designer, has taken those two housing concepts and combined them into a three-panel system that, he says, is easy to construct and easy to expand. The three foam-filled panels—roof, solid wall, and wall with window—are bolted and then glued together. Wall panels are four-ft. wide and 12-ft. high, roof panels are four-ft. wide and 32-ft. long. The prototype Kunststoffhaus fg 2000 (above) rests on the concrete slab roof of the designer/owner's office in Altenstadt, West Germany. It was built in 11 hours with no mechanical equipment.

The designer points out that the entire system is self-supporting, thus removing the need for interior partitions. And since they aren't needed, his model doesn't have any. Curtains on ceiling tracks divide the various living areas.

Feierbach, who builds plastic furniture, has also used his house to introduce several startling design innovations which may not seem so wild five years hence. They include:

Wall-to-wall ceiling carpets. Feierbach says they not only cut down noise and are a good insulator, but they also remove the gloom of most ceilings by adding bright



color (his are red, yellow, and blue). The carpets are responsible for almost half of the cost of the \$50,000 model he has built and lives in. When asked how the carpets would be cleaned, he replied that there was now a market for upside-down vacuum cleaners.

Zippered wall paper. Actually it is an acrylic fiber and comes in several colors that can be zipped on or off for either cleaning or changing. Thus the owner can change his interiors with the seasons.

And there is no reason, other than money, why the house couldn't be expanded ad infinitum by just adding panels. Let's see—to go around the world, four feet goes into 25,000 miles. . .



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easy to install and maintenance free, that maintains the hot-to-cold water ratio right through the shower. No matter what happens to the water supply, nobody ever gets burned (nobody who uses it, nobody who specifies it, nobody who installs it).

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Celotex Hardboard Paneling

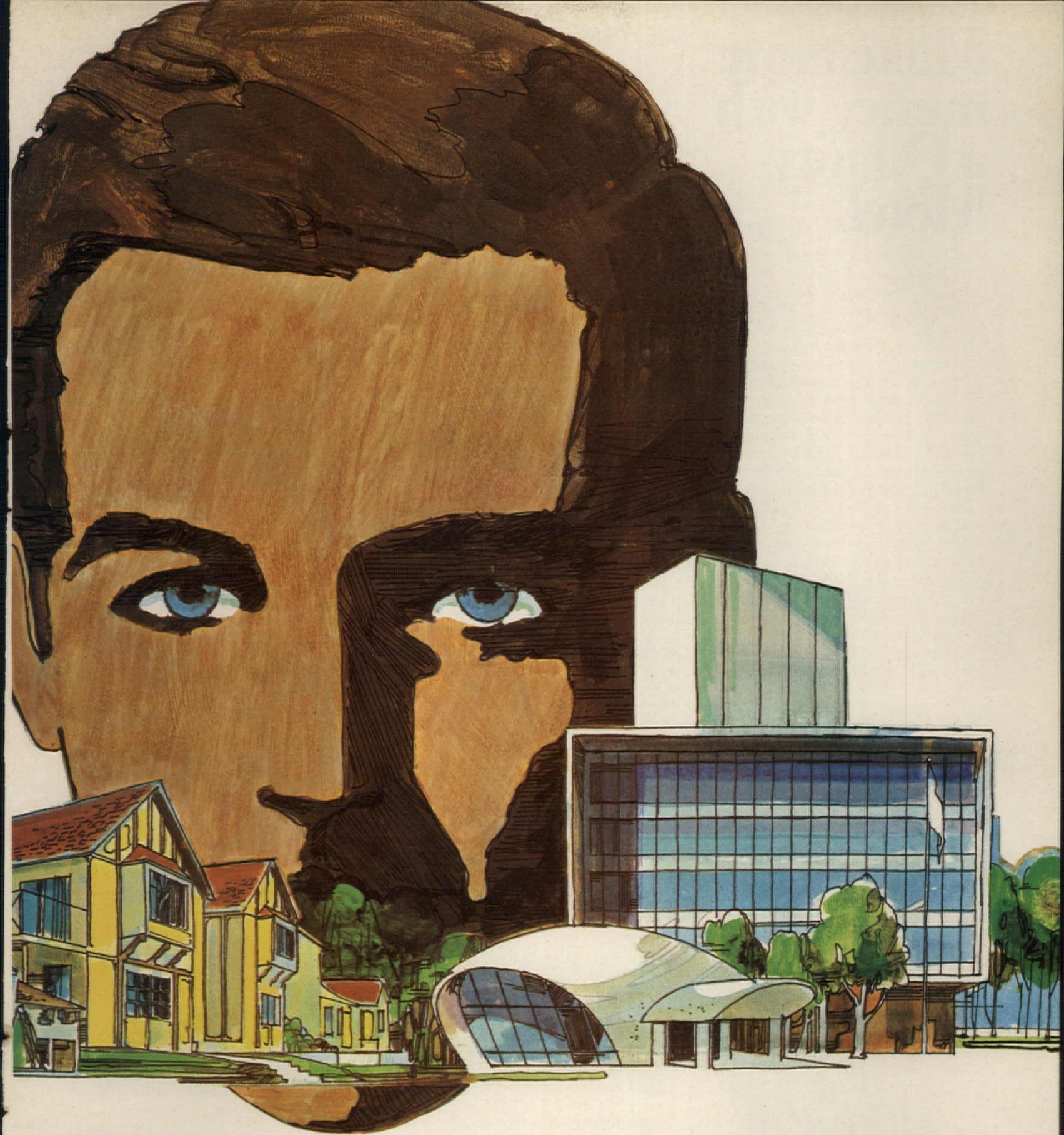
Handsome, wide-groove paneling in a wide choice of authentic woodgrain finishes. From the huge new Celotex hardboard plant in Paris, Tennessee. Matching wood moldings.

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Now you can build multi-family partitions with STC 58 or 61... or one of 59 other test-proved noise-reducing wall and floor/ceiling systems using Celotex Gypsum Wallboards, Celotex Hardboard Paneling, Soundstop Board, Fiberglas* blankets.

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**And before you build, let
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Our computerized Construction Marketing Service is yours for the asking—without charge. It makes recommendations for both single-family and apartment builders: operating budgets, price or rental ranges, sizes, other helpful planning data. Prepared for you on a confidential basis by renowned consultants, Wm. R. Smolkin and Associates, Inc., courtesy of Celotex.

Make more money with a Quality Motel.

Don't just build. Own it.

You've got a lot going for you already. The inside track on the right piece of real estate. The ability to build your own motel for less. The money. And the market.

Last year, 492 motels were built. 57,836 rooms. Yet, according to one firm with more than \$200,000,000 invested in motel loans, the business is nowhere near saturation. 40,000 additional hotel and motel rooms are needed each year just to keep pace with population growth.

But even in the face of booming demand, you need more than a likely location and the wherewithal to insure success. You need computerized reservations, a national referral system and a well designed, well conceived, proven product.

Like Quality offers.

There are over 400 Quality Motels now, with 16 more under construction and 66 additional in the planning stage. And Quality is moving full throttle West to firm up its already powerful representation in the U.S., Europe & Canada.

One more point: With today's money crunch, an investment in a Quality Motel makes high interest costs more affordable than shopping centers and apartments because the return would be quicker and bigger.

Contact W. S. Bach, General Manager, Franchise Sales, Quality Motels, 11161 New Hampshire Ave., Silver Spring, Md. 20904. Phone: (301) 593-5600. Or Leon Levine, Quality Motels of Canada, Ltd., 550 Sherbrooke St. West, Montreal, Quebec, Canada. Phone: (514) 849-1301.

The motel with the sunny disposition



NEWS/Comment

Labor notes from all over

It may be consoling for U.S. builders hard-pressed by record-breaking wage settlements to learn that others have their troubles, too. In Hongkong the Scaffolding Trade Workers' Union has just won an 80¢ per day raise to \$5 (that's right—per day!). But even in this inflationary spiral, it makes no sense to introduce steel scaffolding. Economics are all on the side of Hong Kong's traditional bamboo latticework. So skilled is the engineering of this frail-looking scaffolding that it can be extended to the tops of the tallest commercial or apartment buildings.

Ancient history

Which is the country's oldest homebuilder association? A recent bulletin from Minneapolis says an organization called the Minnesota Master Builders Assn. was formed in 1927, with the hope of becoming a state-wide group, although most of the members were from the Minneapolis area. Unfortunately, the Depression (ask your dad to tell you about that, you young tigers) brought homebuilding to a shuddering stop, and the association disappeared during the early '30s, to be revised as the present Minneapolis HBA in 1936.

What city can come up with an earlier homebuilder organization? If you know of an older group than Minnesota's, drop a note with the details to Senior Editor Jim Gallagher.

The inscrutable East

In the midst of the worst housing shortage that New York City has ever seen, the city has more than 50,000 abandoned buildings, mostly tenements. But an empty dilapidated building doesn't stay that way long in Chinatown in lower Manhattan. Under the pressure of new families coming in from Hong Kong and Formosa every month, the Chi-

nese community keeps pushing out into adjoining streets where buildings are under-used or vacant.

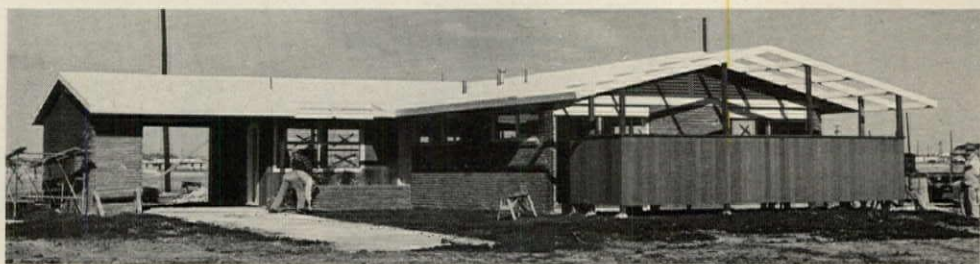
As fast as possession can be gained, the four- and five-story loft buildings are gutted and then rebuilt with apartments on all the upper floors and a restaurant—what else?—on the street floor. Without knowing the answer, we ask a question: Why can't the 50,000 abandoned buildings be renovated the same way? Are the economics different in other neighborhoods?

Eureka! I've found it

One of the great satisfactions of publishing a magazine like *HOUSE & HOME* is uncovering new talent. Editors love to find builders and architects doing outstanding houses and apartments that have never been seen nationally. And one of the biggest sources of such satisfaction is the Homes For Better Living design awards program, which we have sponsored for 15 years.

Some finds are particularly memorable: the partners (architects Ray Crites and Dick McConnell) from Cedar Rapids, Iowa, who won three awards in one year; the winner we thought might be a gingham-aproned Arkansas girl, Euine Fay Jones, who turned out to be a modest professor-architect from Fayetteville; the public housing and low-income housing of architects like Bill Kessler and Steve Oppenheimer, who proved that bureaucracy can't stifle talented design; the many great houses by builder Joe Eichler; the perfect blending of traditional and contemporary design by architect George W. W. Brewster; and so many more.

If the number of entries runs true to form again this year, we'll look at another 500 custom houses, built-for-sale houses, garden apartments, and townhouses. Waiting to see these entries—and to find out which ones the judges will premiate—is a little like waiting to open Christmas presents.



Remember this house?

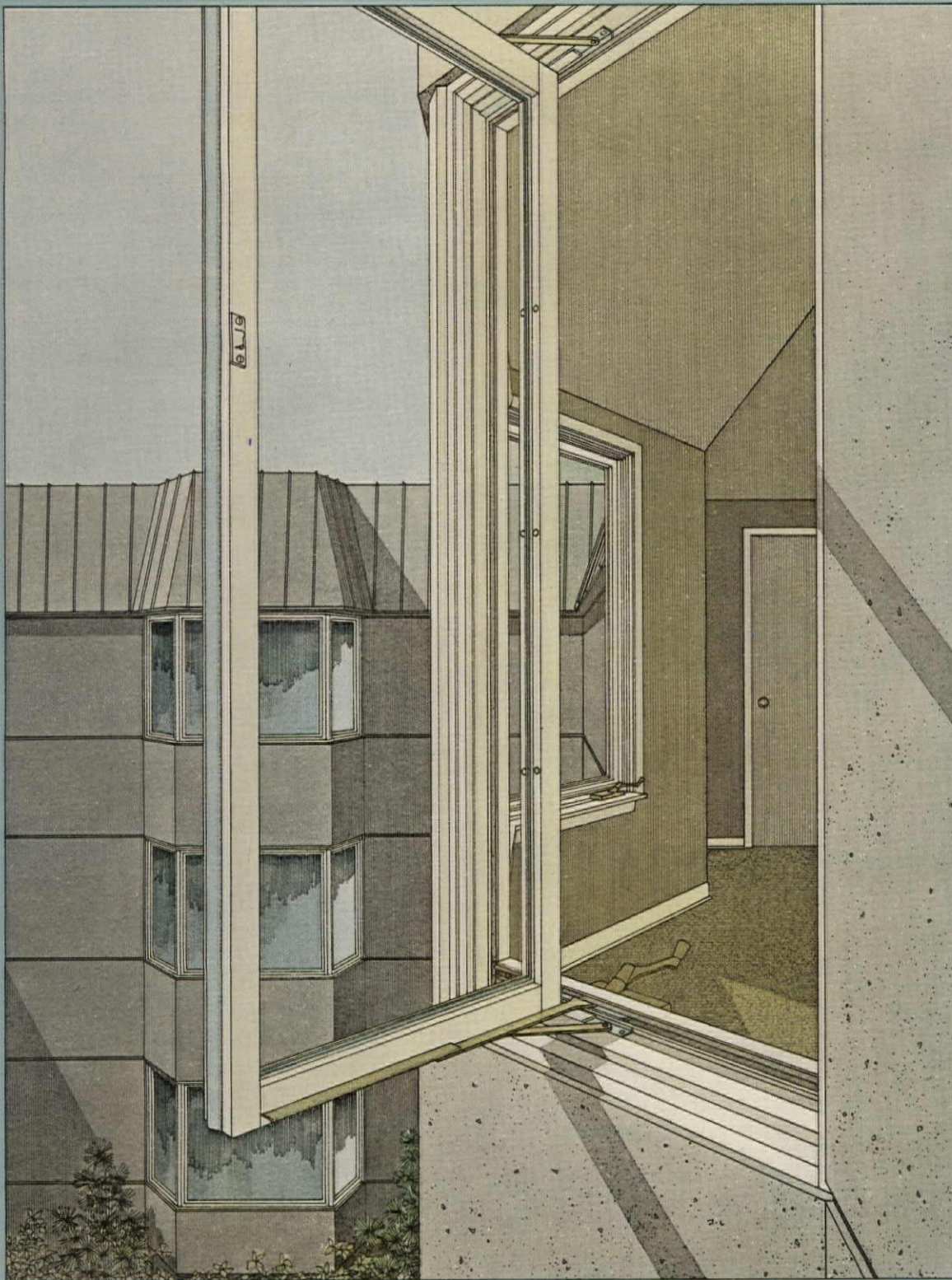
It might not look very earth-shaking now, but in 1952 builders all over the country were talking about NAHB's Trade Secrets House, a collection of the most advanced planning and technology of the day.

Builders Martin Bartling, Andrew Place, and David Slipper and Architects Ned Cole and Leonard Haeger planned the house with the cooperation of *Life* magazine. It was built in 23 cities, viewed by hundreds of thousands of families, and featured on the covers of *Life* and *HOUSE & HOME*. Its advanced construction ideas included the use

of pre-cut lumber, tilt-up construction, and a trussed roof. And it had an open kitchen, a 34' window wall, storage-wall partitions, and, luxury of luxuries, an extra half-bath.

Looking back on the Trade Secrets House brings on the kind of nostalgia that comes with looking at a picture of your great-grandfather as a young man. He might look strange, but what you are is part of who and what he was. Anyway, Happy 18th birthday, Trade Secrets House, and you, too, Martin, Andy, Dave, Ned, and Len.

—JAMES P. GALLAGHER



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How our readers reacted to . . .

House & Home
THE MARKETING AND MANAGEMENT PUBLICATION OF HOUSING AND LIGHT CONSTRUCTION
**AN OPEN
LETTER
TO THE PRESIDENT
THE CONGRESS
THE SECRETARY
OF HUD**

GENTLEMEN:
In the face of the worst housing crisis this country has seen since the 1940s, the Department of Housing and Urban Development has put forth a remedy—Operation Breakthrough—that may well do more harm than good. The real problems have

continued on page 51

Most readers agreed with us . . .

H&H: You have done the housing industry a great service with your "Open Letter" in the February issue. We members of the home and apartment-building industry are ready, willing, and able to solve the production problems facing our industry.

We can solve the production problems, but as you pointed out, we must have help on the major problems.

Thanks for helping blow the smoke away so maybe we can see the fire.

JESSE S. HARRIS

Jesse Harris Construction Co.
Dallas, Tex.

H&H: Congratulations! It is refreshing to know that some people still have the guts to lay out the plain unvarnished truth.

I wonder of Breakthrough might present us with the problem of disposing with throw-away housing as we have with other manufactured items.

HENRY J. PAPAZZO, president
Heritage Village
Southbury, Conn.

H&H: I have just finished reading your open letter in the February issue.

Whatever criticism you may have received in the past, right or wrong, you have corrected in spades. This is probably the finest article ever written on the subject. I only wish there were some way that the President, his cabinet, both houses of Congress, and the entire HUD department could be made to not only read every word, but memorize and follow all of your recommendations.

DUDLEY A. SMITH, president
Dudley A. Smith Co.
Las Vegas, Nev.

H&H: There is only one word to describe your open letter on "Operation Breakthrough"—magnificent.

It is the best presentation on the total housing situation that I have ever read.

HAROLD OSTROFF
Executive vice president
United Housing Foundation
New York, N.Y.

H&H: You are certainly to be commended on such a fine piece of work.

REP. GRAHAM PURCELL
13th District of Texas

H&H: Many thanks for the February issue of HOUSE & HOME concerning Operation Breakthrough.

Your remarks and conclusions on this program are deeply appreciated.

REP. WM. JENNINGS BRYAN DORN
Third District, South Carolina

H&H: Beautiful.

JOHN SLAYTER, president
John Slayter & Assoc.
Elkart, Ind.

H&H: Having just read your "Open Letter" I wanted to ask if there were reprints available.

Your views as stated in the article on this subject coincide with some developed by us over the past few months, and it had seemed to me that perhaps we were missing some significant facts. Pleased to know there is someone able to put together so well what seems to be an important side of the "housing crisis story."

Congratulations on a fine article.

J.R. BORN, manager
Building Products Division
E.I. Du Pont De Nemours & Co.
Wilmington, Del.

H&H: Congratulations on your February issue!

I don't think you are going to win any popularity contests for it, but I guess the reason I am so enthusiastic about it is because—I agree!

FRED G. BARNET, vice president
Float-Away Door Company
Atlanta, Ga.

H&H: HOUSE & HOME's Open Letter is exceptional reporting. Especially important (and exact) is your point that "we as a nation have made almost no commitment to housing our low-income families."

The National Rural Housing Coalition has just been created to deal specifically with that realization.

JIM HIGHTOWER
Executive director
National Rural Housing Coalition
Washington, D.C.

H&H: I think the Open Letter in the February, 1970 issue of HOUSE & HOME really points up the crux of the problem that we are today having in the housing industry.

I cannot congratulate you enough. I would appreciate having you send me one hundred copies of this article so I can send it to our various Representatives and Congressmen, Senators, etc.

ROBERT J. SCHMERTZ, president
Leisure Technology Corp.
Lakewood, N.J.

H&H: Your "Open Letter" issue clarifying the limitations and defining the tasks of "Operation Breakthrough" is well done and timely.

Our industry is deeply indebted to you for this service, and I wish to acknowledge it.

J. B. BELL, executive director
Home Builders Assn. of Memphis

A few had added comments . . .

H&H: I want to congratulate you on your excellent issue. It is certainly refreshing to see

someone stand back and get the overall picture in the proper perspective. Unfortunately, some of the problems are even worse than you outline in your article.

To assume that the money situation will ease significantly with the termination of Viet Nam, in view of the pent-up demands of our industry, our communities, and our Federal Government for funds, is unrealistic.

You may have noticed Mr. Paul McCracken, Chairman of the Council of Economic Advisers, the other day said the only way that we would get an adequate commitment would be a willingness to have a major surplus in the budget. This, of course, is wishful thinking.

The most impressive thing about your article is that you call a spade a spade and point out the fact that the industrialized housing of Operation Breakthrough will not produce low-cost housing, but merely increase the supply of housing.

There is no question that time is running out. The hour is at hand where we must come to grips with the housing problem or see our nation—the most powerful in the world—have to accept lower standards of housing for its residents in the years ahead.

JENARD M. GROSS, president
National Apartment Assn.
Houston, Tex.

H&H: May I congratulate you intensely on your February issue of HOUSE & HOME.

On page 65, total outlay for the developer poses a formidable barrier. A \$20,000 apartment at 100% loan of the same amount at 9% interest for 25 years would be amortized out at 10.08%. This would produce an annual amortization of \$2,016 for the first year including interest payment of \$1,800, which means that total payment for the \$20,000 loan is \$50,400 or 252% of the original capital sum.

There is no mystery why the housing wheels are slowly grinding to a halt. This problem goes beyond the power of you and I as citizens. It must be placed back in the hands of the money management fraternity of banking and currency, Federal Reserve, and the President of the United States.

The Building Industry can build at reasonable prices with respect to design amenities and labor and materials, but it absolutely has no control of the money ingredient which is out of all reasonable proportion to the original capital sum.

RUSSEL O. DEETER, director
Pennsylvania Region
American Institute of Architects

H&H: Bravo on your "Open Letter" on industrialized home building in your February 1970 issue of HOUSE & HOME. It was the most clearly and completely stated piece of writing yet to come forth on the subject.

We did not choose to enter into the National Breakthrough Sweepstakes, for we were already manufacturing and delivering houses by September of last year. While you placed greater emphasis on multifamily than on individual residences, the points you made were most telling. And your summary was great!

Factory-built housing must be the only solution to our residential building problem, even if it is not less expensive. (Ours is about the same as conventional.) The most important point you made can be summed up in "availability". Ours can be manufactured and erected quickly, with a minimum of skilled labor. (We secure a three bedroom house on site with one

Letters continued on p. 72

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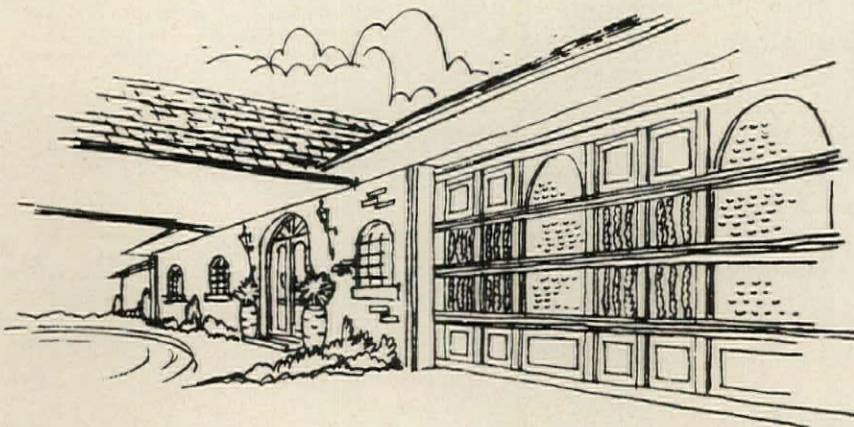
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Universal-Rundle "Build for Your Future with U/R Fiberglass"

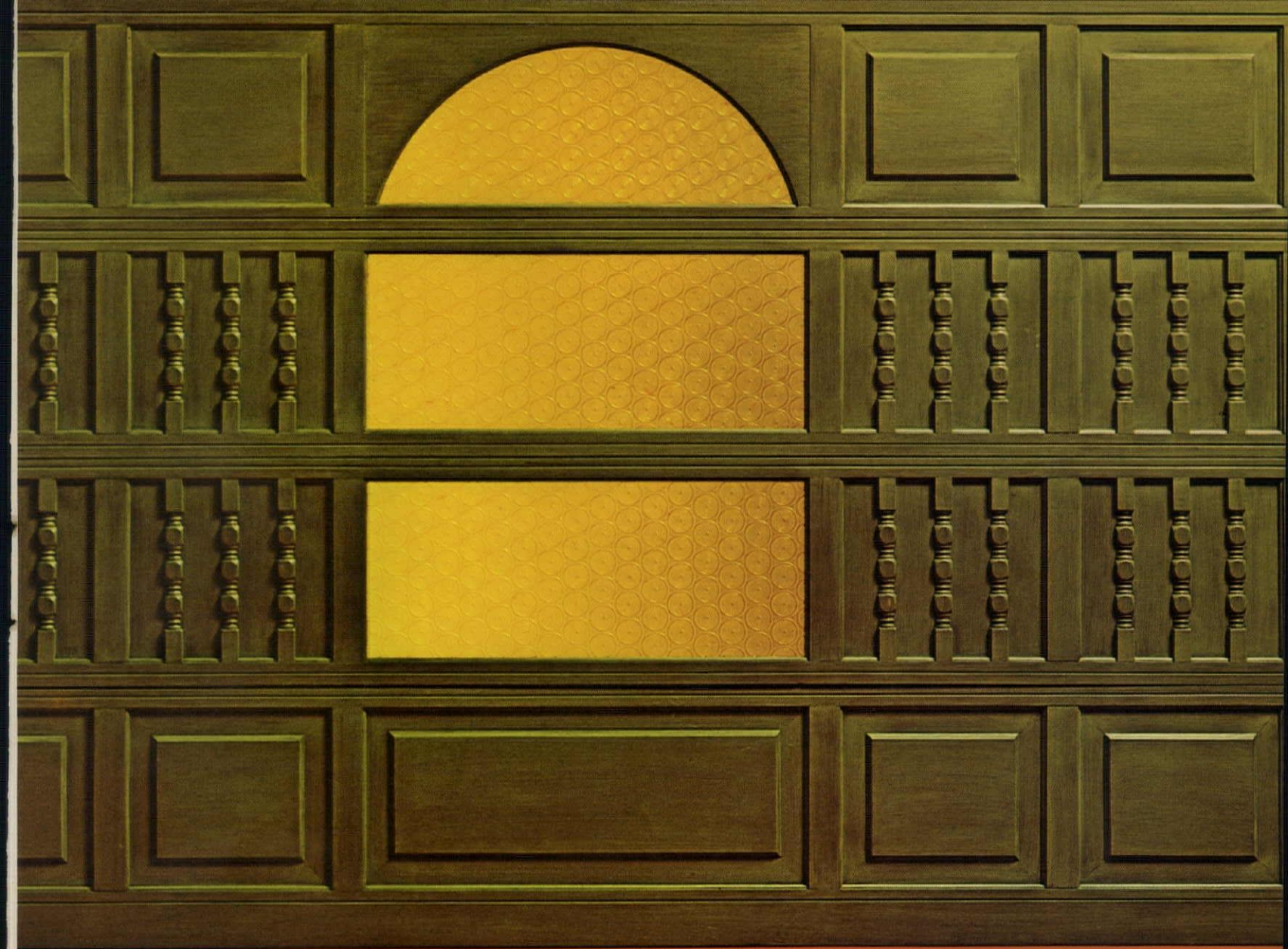


The "OVERHEAD DOOR" . . . when you want a garage door



Ideally, a garage door should reflect the architectural design of the house. If it disrupts or deviates from the design, the overall beauty of the house is seriously diminished.

We build doors that complement home designs, not disrupt them. The "OVERHEAD DOOR" can



that's truly a part of the home.

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We also market electric operators to go with our doors. Fingertip garage door control provides unprecedented

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Design by George Nemeny (F.A.I.A.)

You can do more, profitably, with ceramic tile.

What sells a house?

Assuming your designs meet basic needs, it's well known that women look for two things... the "feel" of the bathrooms and kitchen.

These are the most used, and often most abused rooms in a modern day home. And, particularly with today's trend toward personal luxury, bathrooms are taking on greater importance than ever.

Here's where ceramic tile can help you move houses faster. Tile Council certified tile is recognized as the symbol of quality, convincing evidence of quality construction throughout an entire house. And, unlike its imitators, ceramic tile won't burn, scratch or peel.

Ceramic tile can add more sales appeal at lower cost than almost any of the thousands of options you can select from. And, the more tile you use, the less it costs per foot.

Home buyers recognize ceramic tile as an investment that means higher re-sale value, rather than an expense that requires repair or replacement in a few years. Shouldn't you look into ceramic tile with new, improved grouts and faster installation techniques?

Tile Council of America Inc., 360 Lexington Ave., N.Y., N.Y. 10017



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Ceramic tile - as new as your next idea

LETTERS

continued from p. 66

carpenter and three common laborers in 12 hours of work. It then takes the balance of a work week to complete it.)

HENRY X. SALZBERGER
Executive vice president
Erentex Corporation
Euless, Tex.

H&H: I want to compliment you on the "Open Letter" in your February issue of HOUSE & HOME.

This is one of the first articles that I have seen that clearly and precisely covers the major obstacles restricting development of low-income housing in our country.

I admire your courage in printing this article; and it is also obvious that a great deal of investigation and thought went into its preparation. Regrettably, many articles are being written today by people with little knowledge of this industry.

If you have reprints of the article, I would appreciate your sending me about 20 in order that I may distribute them to certain management people in our company.

WAYNE S. DORAN, president
Ford Motor Land Development
Dearborn, Mich.

Some readers had reservations

H&H: There is much with which I agree in your Breakthrough article in the February H&H, but I am saddened to have to read 16½ pages of negative comment before I learn that H&H really believes that more industrialization will come in housing. Breakthrough is a start, and a very good one, toward focusing national attention on the very real problems of housing production generally and low-housing in particular and hence should properly be viewed more as a massive public relations or negotiating program. I'm with you on most of the technology, but Breakthrough does hold the promise of building up impressive public opinion clout behind industrialized housing and against some of the restrictive local code zonings and union rules that have played some part in the failures of the past. Granted that the industrialized house builders are trying to change the rules in one of the most hostile money environments in years, but they may have more public support and official support than any of their predecessors.

In short, H&H could have chosen a much more positive way of saying what it did.

KENNETH D. CAMPBELL
President
Audit Investment Research
New York, N.Y.

Mr. Campbell is one of many people who have expressed the belief that regardless of its drawbacks, Operation Breakthrough can be justified on the grounds that it is whipping up public interest in industrialized housing.

We disagree, chiefly because as things stand now, production is not housing's problem. There are many builders around the country with both the desire and the means to produce low-income housing under FHA Sections 235 and 236, as well as Turnkey. The reason they aren't is not due to production problems, but to lack of funding by the government. And it is this fact that has been smokescreened by all the hoopla attendant upon Breakthrough.

It will be a great day for housing and for the country when low-income units are going up so fast that production becomes a problem. And

as we said in February, we feel sure that such a demand would evoke all the industrialized housing necessary without an Operation Breakthrough.

The problem of codes and union practices is, as it has always been, vastly overrated. To date, modular housing producers already in production have reported surprisingly little trouble in either area. Zoning, on the other hand, is often a problem but one that has nothing to do with industrialized housing.

Finally, we submit that \$15 million is a cynically high bill (and one that may go much higher) for a public relations program. The money would be much better spent funding low-income housing.—ED

H&H: Congratulations on your thoughtful, courageous, and perceptive "Open Letter". It was obviously written with a broad background of understanding and experience.

I take exception only to a few points presented. While it is true that money is our current number-one problem, obviously due to our excessive defense expenditures, it is also true that manpower will jump to number one position when the money market turns around.

It is also true that Modular Housing Systems and other companies have moved aggressively ahead toward industrialization without Breakthrough. However, Breakthrough has created a broad national awareness of our need to industrialize, and I have no doubt that in the next twenty years factory housing will grow into a new industry larger in size and scope than the automotive industry.

JOSEPH C. GRASSO
Vice president—Operations
Modular Housing Systems
Northumberland, Pa.

... and some disagreed

H&H: The February issue of HOUSE & HOME once again demonstrated a preoccupation with single- and multifamily residences—a concern and market for developers and builders, your subscribers. Viewed in this narrow sense, your recommendations regarding Breakthrough are understandable. However, it is increasingly evident that urban sprawl is something this country can no longer afford. In Europe, multistory housing is forced by municipal and provincial bodies to conserve land.

Secondly, you fall into the trap of regarding industrialization as largely a factory procedure. The Swedes have long practiced site prefabrication—moving the "plant" as needed. In this way they have caused employment of the majority of unskilled labor rather than the reverse as in this country.

Finally, if you consider combining multi-story, site prefabrication, and industrialization by use of lightweight pre-manufactured components, you have something working for you in the direction of lower cost.

LESTER GORSLINE
President
Suspended Structures Inc.
San Francisco, Calif.

We are indeed preoccupied with builders and developers, and not merely because they are our subscribers. Housing is not just a matter of turning out structures: it includes everything from buying land, financing, making surveys, etc., to selling and maintenance. It is this process which the builder and developer are uniquely qualified to handle. Without them, nothing

will be built, regardless of how many industrialized systems Operation Breakthrough approves.

We agree that urban sprawl no longer can be tolerated. But Breakthrough offers no solution here; indeed, it is builders and developers who have pressed for better land use, often in the face of resistance from municipal and provincial bodies.

We agree that industrialization is not necessarily a factory procedure, nor did we say it was. But in the case of frame construction, factory building is almost always the most efficient, while concrete, with its high weight, is usually better fabricated on site.

Finally, we point out that no method of off-site or on-site prefabrication has yet demonstrated any appreciable savings in either frame or concrete construction.—ED

H&H: The discussion on the nature of the housing crisis in the February issue contains some very good points on the money problem. But it has a biased undertone in respect to industrialization.

The statement that "the kind of quality cutting that helps the mass production of other consumer goods simply won't go in housing" confirms that the writer of the article fails to make a distinction between one family prefabs or modules made of combustible materials, and multifamily housing produced with fire resistant concrete systems.

GUY G. ROTHENSTEIN
Balency-MBM-US Corporation
New York, N.Y.

To compare concrete systems with wood frame systems, and downgrade the latter because it is not fireproof, is something like downgrading an apple because it isn't an orange. Wood frame construction is used for most low-rise buildings because it is far cheaper than concrete. Built according to good fire codes, it has long been accepted as safe. Concrete is used for high-rise buildings because it is much stronger than wood frame, and because high-rise obviously must be completely fireproof.

Both types of construction have their place in low-income housing.

Finally, let it be noted that concrete construction is no guarantee against quality cutting. Just like frame, it can be built well or badly.—ED

H&H: Your letter typifies the befuddled thinking which created the mess in the first place.

Congratulations for nothing! Why not try to be helpful instead?

W.T. JOHNSON
Plumbing and Heating Service
Las Cruces, N.M.

But most sounded like this

H&H: Your "Open Letter" in the February HOUSE & HOME is the finest report possible. And equally timely!

I am biased, considering what it could mean to our very sick industry—lumber—but you and your staff deserve the highest praise for a sophisticated attack on an overly exaggerated project, which will leave many disillusioned.

T. EVANS WYCKOFF
Seaboard Lumber Co.
Seattle, Wash.

p.s. If reprints are available, please send me 25. I will personally plant them on the politicians and key business people.

Even more important today...

H&H: Congratulations on your Open Letter. I agree with you wholeheartedly. We need money, regionalized building codes, and reasonable zoning, and will then do our own Breaking Through. We can produce two and a half million units without a giant and without ill-conceived government programs.

KEVORK S. HOVNIANIAN
Hovnianian Enterprises
Englishtown, N.J.

H&H: Your "Open Letter" cover story is so good, we wondered whether reprints might be available. Because it puts Operation Break-through in such clear perspective, we would like to see that it gets into the hands of our congressional delegation, our governor, and city and town officials around the state.

CLIFFORD A. SHAW
Rhode Island Builders Assn.
Biltmore Hotel-Motor Inn, Providence, R.I.

H&H: Let me take this opportunity to congratulate you on the February issue. It will probably prove to be a major contribution towards the solution of complex problems confronting us all.

W.D. PETERS, president
Reynolds Metals Development Corp.
Richmond, Va.

H&H: We have just received the February, 1970 issue of HOUSE & HOME with the open letter to the President starting on the front cover. It is felt that this article, even though not agreed with in every point, does bring out many facets to be considered in Operation Breakthrough.

We would very much like to give copies of the open letter to our Planning Commission.

MISS PATRICIA BECKLEY
Planning Aide
Community Development
Santa Maria, Calif.

H&H: We were very impressed with your article appearing in the February issue of your magazine.

This Authority is presently faced with a referendum in order to increase our low-rent housing program. We would appreciate reproducing the above article because of the facts and figures that are presented and the critical need for more housing in this country.

ROBERT C. CLARK
Executive director
Springfield Housing Authority
Springfield, Mo.

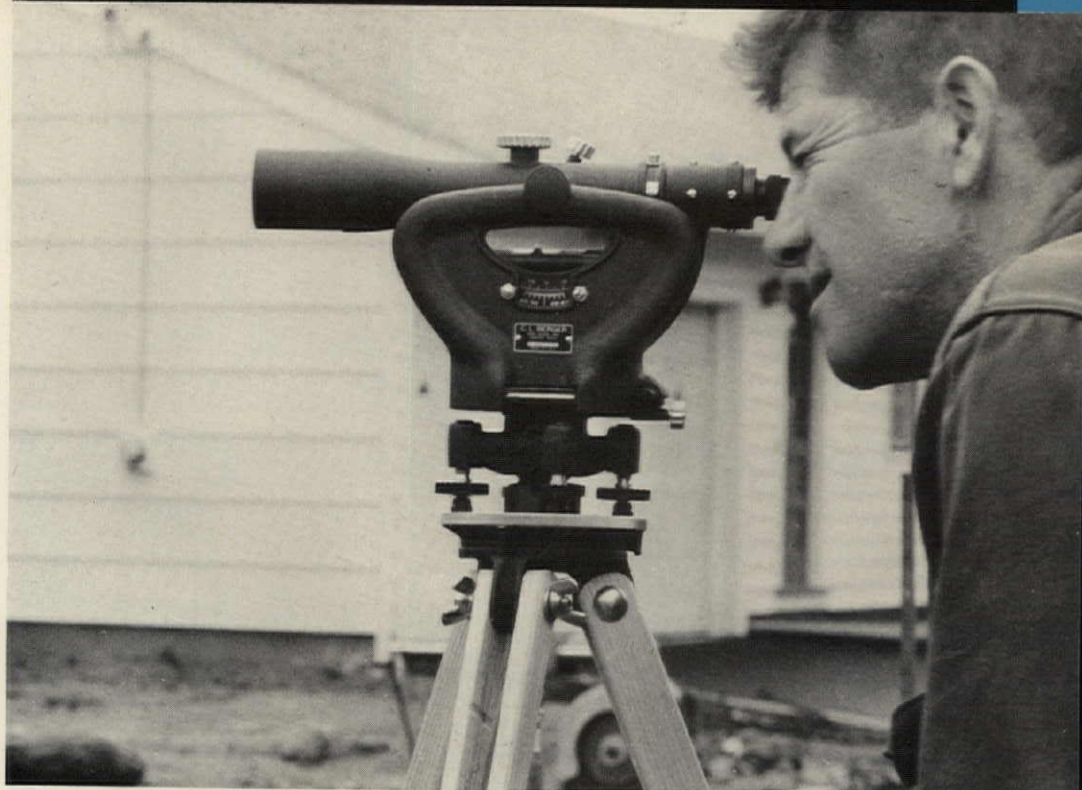
H&H: Your evaluation of Operation Break-through and your alternatives for providing adequate housing for low-income families are thought provoking.

REP. CORNELIUS E. GALLAGHER, M.C.
13th District, New Jersey

H&H: This, I think, is the best article I have ever read on prefab (history, facts, etc.) and housing problems. It is objective and you point out the facts.

Would you please send me 10 copies of this article that I can send to our Prime Minister, Ministers, and a few friends involved in construction. Because, let me tell you, we have the same problems in Canada.

JEAN LUC GIROUX, Eng.,
Vice pres.-Construction
Tresco Ltd., St. Romauld, Que.



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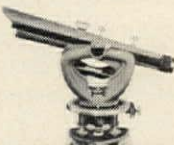
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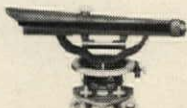
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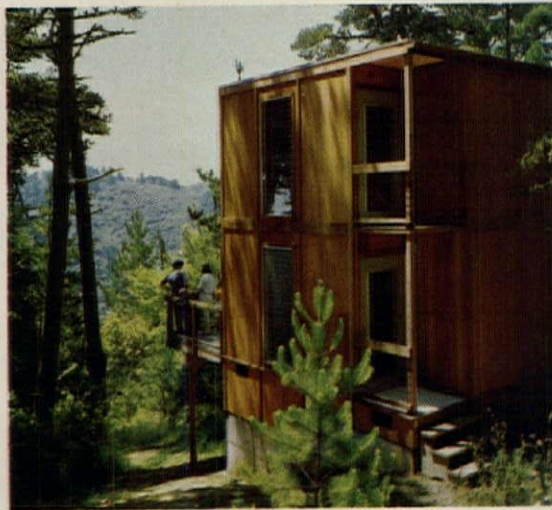
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*Keeping the record straight***Industrialization is here to stay . . . But there is no magic in the assembly line, so there will be no cost miracles**

In our February issue, we strongly criticized Operation Breakthrough for not coming to grips with the real problems of low-income housing. The reaction has been extraordinarily favorable. A few of the many letters we've received are shown on page 66, 72, and 73—and several Breakthrough winners have told us they found the February issue excellent.

But a few people have misinterpreted our position on industrialization, so we think some further comments are necessary.

We are not anti-industrialization, but we are anti-smokescreen

The trouble with Operation Breakthrough is that it has given, and still gives, many well-meaning people the idea that it can solve the problems of adequate housing for low-income families. It can't—as we showed clearly in February. But the fact that many people think it can effectively delays all of us in facing the real problems of housing our low-income families.

Now, maybe that's just what the Nixon administration wants to do. Economic policies currently being followed by the federal establishment have succeeded in cutting back housing to 1946 levels, and at a time when we have a housing shortage as severe as any since the first post-World-War II years. As House majority leader Carl Albert (D., Okla.) pointed out some weeks ago:

"Last year's housing legislation, approved by the House 339 to 9, contained a provision which makes available \$2 billion for GNMA to purchase FHA and VA mortgages on low-cost housing . . . the President refuses to use these funds."

There are a number of things grievously wrong in thus using Operation Breakthrough as a smoke screen to cover up federal foot-dragging.

For one thing, it obviously keeps production of low-income units almost at a standstill. Considering the need, that is indefensible—particularly in the most affluent nation in the world.

Not so obvious is Breakthrough's politically dangerous buildup of anticipations among low-income families that the program will produce a lot of housing. It won't.

There are two reasons why Breakthrough will not produce much of anything

First, there isn't enough money in the program today to do much of anything. And second, the program can't create enough cost savings to permit production of more units with what money there is available.

That conclusion derives from the nature of material handling

versus the nature of manufacturing. A manufacturer of refrigerators or shoes may add in his plant anywhere from 200% to 500% to the value of the materials and parts he buys. That added value justifies investment in plant and equipment, plus overhead, profit, and payroll.

But a mobile-home manufacturer adds only about 16% value in his plant and a prefabricator 50% in his plant, while an on-site builder adds 100% in his "plant" (which is actually an assemblage of men, parts, and materials at the site).

The low margins in mobiles and prefabs mean that many firms in both fields have very low capital investments. (And the margins also produce great numbers of failures.)

Currently the best margin is in large-volume, on-site building, which is precisely why most builders today build a "plant" to make their product and then tear the "plant" down.

Now none of this means that prefabs and modulars and mobiles don't make sense. On the contrary, they will be with us in ever-increasing numbers as it becomes harder and more expensive to create our traditional "plant" at the site. It simply means they will not cut costs appreciably for anybody.

But a real zinger in Operation Breakthrough may prevent anything from happening

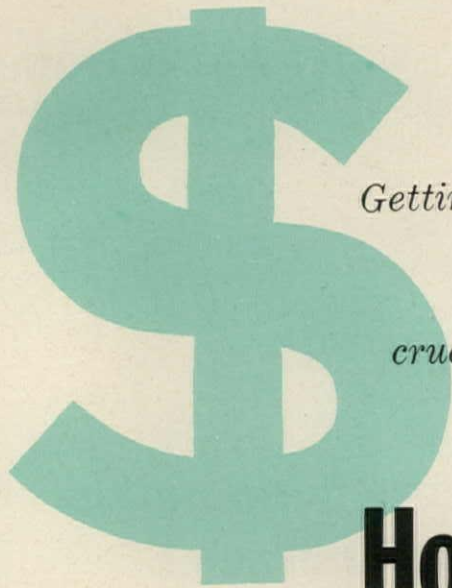
Presumably, HUD will pay Operation Breakthrough winners the difference between the low-income-market value of their units and the actual cost. Now to produce a prototype project, many of the winners must go through design, engineering, submission, redesign, conferences, prototype construction, and political in-fighting. All that is very expensive.

Let's say conservatively that Operation Breakthrough's presently planned 2,000 units would cost an average of \$50,000 apiece, or \$100,000,000. If the low-income-market value is roughly \$15,000 per unit, HUD would have to fork over \$70,000,000 to the developers.

Obviously, HUD doesn't have that kind of money for Breakthrough. It's very doubtful that Congress would stand still for such an appropriation. So don't be surprised if corporate managers of at least some of the winning firms stop their involvement before ground is actually broken.

Or suppose HUD actually can get that \$100,000,000. Instead of Operation Breakthrough's 2,000 units, the money could be used to leverage construction of up to 50,000 units under present subsidy programs. How about that, Virginia?*

—RICHARD W. O'NEILL



Getting the best possible apartment loan is always important; when money is tight, it can be crucial. A top building team tells you...

How to put your apartment design to the lender's test

The lender applies his own yardstick to a loan submission, and if your proposed project doesn't measure up, either you'll fail to get financing or face substantially higher equity requirements than you anticipated.

So say Jim Bynan and Dave Gambrell, multi-city apartment builders operating out of Kansas City.

"If a lender doesn't like our plans," says Bynan, "we don't like them either."

Lenders have liked Bynan's plans often enough to enable him to put 991 units into construction during the last 12 months. And in the more than 500 other units Bynan and Gambrell have completed, there have been virtually no vacancies, despite design and land planning that can be called no better than average, and in the face of a soft rental market for at least one project.

Over the past five years, Bynan and Gambrell have earned a reputation for their ability to produce bread-and-butter apartment projects at exactly the right cost and rent levels. They have demonstrated this ability in several markets—Kalamazoo, Mich., Wichita and Topeka, Kans., and Kansas City, Columbia, and Springfield, Mo.—and there is a growing list of builders who have called on them to build apartments on a fee basis.

Bynan and Gambrell have accomplished

this thanks in part to an ability to attend more to details than to sophisticated techniques. They use no formal market research, and only recently turned to electronic data processing to help them keep track of construction costs.

But if there is any one factor which explains their success, it is an uncanny ability to predict what lenders will do on any given loan submission. And this in turn is because the builders plan every project around the lender's requirements.

The first step: study the comparables

The comparables—similar apartments in the same general area—will determine whether you will get a loan and how much it will be.

Comments Gambrell: "After the land is zeroed in, we go back to the mortgage broker's office to determine what kind of loan he can sell to a lender. You know what he uses as his basis? Comparables. Guess what we use as *our* basis."

If you know the comparables, you don't need elaborate market studies. "When you've shopped the competition," says Gambrell, "you know what's going on in the market—and you know what your

lender is going to accept. If a lender doesn't like something, the chances are you're not going to include it in your project no matter what your research indicates."

Knowing the comparables will also indicate whether the market is strong or soft. It's possible, of course, that the comparables will show low vacancy rates even when a market is about to be overbuilt. But Bynan and Gambrell don't worry about that.

"The lender knows whether the market will absorb the units we want to build," says Gambrell. "He'll provide the checks and balances—if we listen to him."

Rejection by a lender does not cause Bynan and Gambrell to fold their plans and start work on another site. "We'll try it out on another lender, says Bynan. "But if several lenders give us the same answers, we know enough to start asking different questions."

You have to know the lender's grading system

Apartment planning begins with a budget, and the budget is derived from the amount of the loan. Bynan and Gambrell have usually been able to guess (sometimes within a few hundred dollars) the loan

they will be able to obtain on the projects they have proposed. Their formula is simple. Using comparables, they establish the gross rents they will be able to achieve. From that, they deduct 7%, the assumed vacancy rate. Then they deduct another 35% for estimated operating expenses, and come up with an income before amortization of the loan.

Dividing the income-before-amortization by the capitalization rate their lender is using, they arrive at a total property value. The amount of the loan will be (in today's money market) 75% of the total property value.

For example, take a proposed apartment project designed to yield an income of \$100,000 before amortization. With an 8.5% cap rate, the total property value is \$1.2 million, and the amount of the loan will be \$900,000.

Bynan and Gambrell will not make an offer to purchase a piece of land before checking out the comparables.

"To know what you can pay for the land," says Bynan, "you have to know first what the land will take. You have to know if the maximum density is 10 or 15 units per acre, if a two-bedroom, one-bath unit will bring \$150 or \$175. When you know those things, you know what to pay for the land. And the way you find out about those things is to determine the comparables."

The loan will determine your basic design

Once you've established the comparables, and the amount of the loan you're likely to get, you know how much you can invest in design. At this point, Bynan and Gambrell begin to work closely with architect Don Osbourn.

"We've worked together long enough," says Gambrell, "for Don to know how to design a project so that the numbers will come out right."

Several aspects of the evolution of the design of a project built by Bynan and Gambrell in Johnson County, Kansas, part of the Kansas City Metropolitan area, illustrate both the builders' awareness of the lender and how the lender's test affects the design of apartments.

The project was built in two phases. The first phase consisted of 132 apartments. Bynan told architect Osbourn the approximate number of units he wanted to build on the site, the mix, and the proposed rental scale.

"He asked for a mix of two-to-one [two-bedroom units to one-bedroom units]," says Osbourn, "and he wanted one-third of

An unlikely but highly successful partnership

If anyone had told Jim Bynan and Dave Gambrell 10 years ago that they would be partners in a large-volume apartment building operation, they would have laughed. Bynan was an airline pilot with no building experience, and Gambrell had only recently given up a career as a professional musician.

But in 1964, Bynan began investing in real estate, and Gambrell was an experienced apartment man. Bynan asked Gambrell to join him in an apartment venture. Gambrell declined, but the next time Bynan made the request it was accepted.

Since then, they've built more than 500 apartments for their own account and several hundred for other investors, many of whom are single-family builders seeking a safe entry into the apartment market.

Although they have not built a management team, Bynan and Gambrell have assembled a strong field organization. Russ Rees, a 41-year-old former builder, is general superintendent, and

under him are four field superintendents, each of whom is responsible for a particular apartment project.

Most of Bynan and Gambrell's work is in the Kansas City metropolitan area. But they have built several hundred units in other markets, and in the planning stage now are more than 450 units in Denver and Colorado Springs, nearly 1,000 units in Michigan for developer Judd Kassuba, and 208 units in Winter Park, Fla.

Bynan, 38 years old, flies the company's twin-engine plane to out-of-town projects, enabling him to indulge his appetite for flying. Gambrell, 45, says that his musical background gave him his mathematical ability. ("The man must have a slide rule in his head," says one sub.) He still plays the piano well enough to "sit in" whenever he finds himself near a musical group.

Bynan and Gambrell have an agreement in principle to merge with U.S. Home & Development Corp., a publicly held company.

the two-bedroom apartments to have two baths. He gave me the approximate sizes of the units: 750 sq. ft. for a one-bedroom, 900 sq. ft. for a two-bedroom, one-bath, and 950 sq. ft. for a two-bedroom, two-bath unit.

"He told me the rent range would be \$140 to \$180, and I got from that an estimate of the annual rent. On Jim's apartments, I use five times the annual rent as the cost of a unit. I deduct 15% to 20% for site development costs, and then I know what I'm working with for the buildings."

Osbourn gave Bynan 68 two-bedroom, two-bath units, 24 two-bedroom units with one bath, and 40 one-bedroom units in 10 buildings.

Although the design held unrentable space to a minimum, it was not the most economical plan, as Osbourn was soon to prove.

"My preference is for a lot of small buildings," Osbourn says, "instead of a few large buildings. Curb appeal is important, and so is the relationship of buildings to land. You can do more in both these areas with smaller buildings."

In one type of building, Osbourn put four two-bedroom units on each level, giving each apartment the two exposures a two-bedroom unit needs (and can get only by being placed on a corner of the building). He used a central hallway, giving tenants front and back entrances, and he gave each apartment an entryway.

Osbourn, Bynan, and Gambrell were all satisfied with the results of the design, and they had improvements in mind for the second phase. But—as you'll see further on—tight money intervened.

The loan will determine the amenities you add

Bynan and Gambrell divide all amenities into three basic categories:

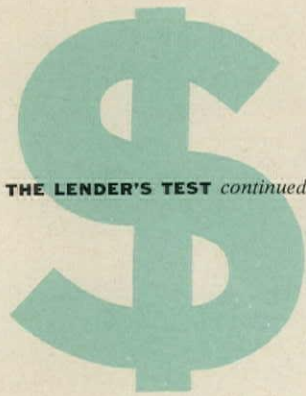
Into the first group go the amenities needed to make the apartments competitive.

Into the second group go the amenities that will bring a higher rent and a bigger loan.

Into the third group go the amenities that will reduce tenant turnover, lower maintenance costs, or help accelerate the initial rent-up.

The number of amenities needed to make the apartments competitive is increasing. "There's been a continuous upgrading of the kind of bread-and-butter apartments that Bynan and Gambrell build," says architect Osbourn. "Apartment amenities go through three stages. First, an innovator introduces them. A year or so later, you see them offered as options, for extra rent. A few years after that, they're standard features in every apartment built in the area. During the past two years, a lot of features that once were optional have

continued



THE LENDER'S TEST *continued*

become standard in this way."

Example: Bynan once offered a 12-cu.-ft. refrigerator as an option for an additional \$5 a month rent. Today, the refrigerator is standard. The market requires it, and he knows it because he's surveyed the comparables.

As a result, the number of amenities that will bring higher rents is diminishing. There are still a few: fireplaces and carports are currently Bynan's and Gambrell's favorite rent-boosters. A prefabricated fireplace, says Bynan, costs \$400 installed and brings approximately \$7.50 a month in extra rent. The lender will add 80% to 85% of the cost of the fireplace to the amount of the basic loan.

A carport, he says, costs \$300 in place and will bring from \$7.50 to \$10 a month in extra rent. Currently in favor with Bynan's lenders, the carport will bring at least its cost in the loan.

The comparables will determine how far amenities can boost rents. In the bread-and-butter apartments built by Bynan and Gambrell, rents will sooner or later bump against a ceiling, regardless of the number of amenities they contain. The lender will have that ceiling in mind when he evaluates the design.

Bynan and Gambrell are unconcerned about the design limitations imposed by lenders. "How much design is there in apartments today?" asks Bynan. "Not much. It's all pretty much standard."

The mix? Follow the comparables, they say, and as a rule of thumb, try to build twice as many two-bedroom as one-bedroom units.

From their experience with lenders and lenders' use of comparables, Bynan and Gambrell can justify every design feature in their apartments—or reject a feature proposed by one of their builder-clients.

Case in point is a project built for a large apartment developer. Bynan was asked to make substantial changes in the second phase. Rather than give the client a simple rejection or acceptance, Bynan submitted an item-by-item analysis which re-



TYPICAL BREAD-AND-BUTTER APARTMENT by Gambrell and Bynan balances amenities against cost.

flects his informal but thorough approach to all apartment design.

- The client wanted to add to the usual mix of apartments a one-bedroom unit with a den. Bynan's reaction: "Although the extra square footage (125) can be built at an additional lesser cost, you would be wiser to separate the units simply as one- and two-bedroom apartments. Anyone willing to pay that price for a one-bedroom apartment (\$180) probably would pay the other \$5 or \$10 for a two-bedroom apartment to avoid having to make the den into a second bedroom when the need arose."

- The client proposed fireplaces for some apartments. Bynan: "Approximately 25% of the apartments . . . will bring at least \$5 per month higher rent, if not more . . . prefabricated metal fireplaces can be purchased and installed for under \$400 . . . It will be necessary to provide firewood without charge as most other projects do."

- Carports were proposed for 40% of the apartments. Bynan suggested 30% and commented: "They will cost approximately \$275 to \$300 each, and at an \$8 to \$10 increment in rent you can probably justify \$300 per unit in the loan."

- In the kitchens, the client suggested, among other items, a 14-cu.-ft. refrigerator (instead of a 12-cu.-ft. model), "padded kitchen tile," and a large fluorescent lighting fixture. Bynan estimated these items would add \$60 per unit to the cost of the project. The smaller refrigerators, he said, are adequate for one- and two-bedroom units. The fluorescent fixture, he said, would not affect the rent, the loan, or tenant acceptance. On the tile, he recommended a specific brand.

The critical question on kitchen design arose when the client requested an eating area, implying a larger kitchen. Bynan called it "an expensive amenity, and I do not think you will want to pay the price." And he came up with an alternate: a breakfast bar with a pass-through from kitchen to dining area.

"An eat-in kitchen," says Gambrell,

"means dead space in cabinets, a 45-degree angle on countertops, and living space taken away from other areas. We use a Pullman kitchen with the pass-through. It costs less, and we think it's more liveable than an eat-in kitchen."

- In the dining room, Bynan took exception to the client's proposal to cover one wall with vinyl or paneling. "Vinyl covering in the dining area is expensive, and results in higher maintenance costs."

- Adds Gambrell: "An accent wall in the dining room adds a nice touch, but unless it's white, it creates a psychological handicap in renting the apartment. At some point, every prospective tenant looks around for a reason *not* to follow his inclination to rent the apartment. Give him an accent wall with a strong pattern, and you've given him a reason to back out. He'll tell you he likes the unit but he doesn't like that color."

- In the bathroom, the client wanted a glass tub enclosure, "well-illuminated bathrooms with appropriate fixtures," a large mirror and recessed medicine cabinet, and a closet (in addition to the apartment's linen closet).

Bynan's reply: "Tub enclosures are not necessary, and in fact they are not generally used in this market. High-priced apartments provide only a shower rod. Enclosures are a high-maintenance item and I would recommend against them. The cost approximates \$40 each. On illuminating bathrooms, I would recommend that you do no more than the competition does—a wall surface-mounted combination light fixture and medicine cabinet. You can, of course, increase the quality by increasing the cost, but to do anything like separating a light fixture would result in a disproportionate increase in cost. We buy these packages from \$12 on up; you can spend as much as \$50. . . . Recessed medicine cabinets are not necessary . . . a closet in a bathroom is nice if there is room for it, but each time you talk about an additional door, you're talking about an additional \$20. . . ."

Tight money makes the test more important

Tight money shrinks your budget. It means high interest rates which in turn mean high interest rates which in turn mean high capitalization rates—and smaller loans.

Take as an example the apartment project discussed on page 77 that produces an income of \$100,000 before amortization:

With an 8.5% cap rate, the total property value is \$1.2 million, and the amount of the loan will be \$900,000.

With a 10% cap rate, the total property value is \$1 million, and the loan value is \$750,000.

An 11% cap rate yields a total property value of \$900,000 and a loan value of \$675,000.

So, under different conditions in the money market, the same project will qualify for a loan varying in size by as much as \$225,000.

Tight money reduces your safety margin. Or, stated another way, it increases your equity requirement. Two years ago, it was relatively easy for builders like Bynan and Gambrell to approach the point of mortgaging out. Today they have to invest between \$600 and \$1,400 per unit, and in recent months, says Gambrell, "it's more like \$1,400 than \$600."

The ideal of an apartment developer is a loan which exceeds actual costs. The difference goes into the developer's pocket as a tax-free profit.

"Before money became tight," says Bynan, "we could get loans which exceeded our costs. But we never asked for more than we needed. It wasn't that we weren't tempted by the availability of those tax-free dollars. We just preferred not to load up the debt service. We were willing to take the difference in increased cash flow per unit. Then if the market went soft, we could lower rents. That was our cushion."

Now that cushion is harder to come by.

And tight money forces cutbacks in design. Given the desire of any apartment builder to mortgage out—or come as close as he can—an apartment project bringing a loan of \$675,000 is going to have less in the way of design and amenities than a project which brings a loan of \$900,000. And there is little doubt that the tight money conditions which have prevailed during the past year have lowered the quality of apartment design.

For example, go back to the two-phase apartment project discussed earlier.

When Bynan and Gambrell went for the loan on the second phase, the money market had tightened up, and they found themselves with a budget which was a mismatch with the loan they could obtain.

Osborn had to forget the emphasis on small buildings. His original idea for the second phase was to place 190 units in 15 buildings. Instead, he put 220 units in 12 buildings.

Other changes had to be made. Asphalt shingles were substituted for the wood shingles in the original design. Fireplaces were eliminated. So were the entryways. The kitchen-dining areas were reduced in size. Coat closets were smaller. The apartments themselves are larger than their counterparts in the first phase, but not as large as they were in the original design.

"Our original design was more attractive," says Osborn, "but we couldn't build it within the budget we had. Costs had gone up and loans had gone down."

Bynan and Gambrell were required by zoning authorities to build duplexes around the perimeter of the site to create a buffer between the apartments and existing single-family homes. Osborn wanted to use a combination of stucco and rough-sawn

wood for the exteriors of the duplexes, but the lender wanted some brick. So, Osborn used brick and stucco. His comment: "The wood and stucco would have been less expensive and, in my opinion, more attractive. But the lender gets what he wants."

The cap rate has been rising during the past year, of course, and at the same time construction costs have been inexorably moving up, creating additional pressure to cut back design.

That creates another dilemma. Because the question of whether a builder should mortgage out or build in a cushion against a downturn in the market is now an exercise in nostalgia, protection against a soft market has to be found in good design and management. In Bynan's view, a tight money market requires, more than ever, an analysis of every design feature with these questions in mind:

—How will it affect the loan?

—How will it affect occupancy?

—How will it affect rents?

—DAVID THALER

Some tips on starting apartments in new territory

"The first thing you do when you move into a strange city," says Jim Bynan, "is to go out in the country and find a crow sitting on a telephone wire. Then you shoot him and carry him to the local building official between your teeth."

That, admits Bynan, is an exaggeration. But it illustrates the attitude necessary for a new builder in town to win the cooperation of local officials.

"You tell the building inspector you need and want his cooperation," says Bynan, "because you want to build apartments the way they're built in his town; you know the way they're built there is right for that town."

Bynan's first objective is to avoid a negative reaction. But he's also looking for positive contributions from the building inspector.

The key to setting up a building operation in a city far from his base of operations is lining up subs and suppliers. The building inspector can provide leads.

"He knows the subs who come to see him most often," says Bynan, "and nine times out of 10, they're better."

Also, the inspector can serve as a quick and usually accurate reference on the quality of a particular sub's work. "Do you know anyone else in town who can give you a better reading?" asks Bynan.

After establishing a relationship with local officials, Bynan or his partner,

Dave Gambrell, visits the city for a week, well in advance of the date construction is scheduled to start. He moves into a hotel room and starts calling subs. The names have been obtained from the building inspector or a large supplier.

"All you can hope to do that first week," says Gambrell, "is to put six or eight sets of plans into circulation."

When they talk to a sub for the first time, Bynan and Gambrell try to overcome two areas of scepticism.

"We have to convince him that we're actually going to build the job we're asking him to bid on. He wants to know that if he comes in with a good bid, he'll get work," says Gambrell.

"The second point," says Bynan, "is the question of whether we'll be able to pay him for the work. It's not unusual to find subs who have had unpleasant experiences with out-of-town builders."

On the first point, Bynan and Gambrell make it clear that they are apartment builders exclusively. Most of their out-of-town work is done for clients, and they have a contract or a commitment when they begin talking to subs.

On the second point, they have a track record. If they are building for their own account, they tell the sub they'll be around long after the project is completed. If they're building for clients, the argument is more difficult, but they can cite their experience in other cities.

TOWNHOUSES FOR FIVE DIFFERENT MARKETS

The townhouse is not, as many people still think, simply a planning device to crowd extra houses on a site.

It is actually a very versatile design tool that can bring higher densities—and better land use—to a wide variety of housing markets.

At right and on the following eight pages, you will find five cases in point.

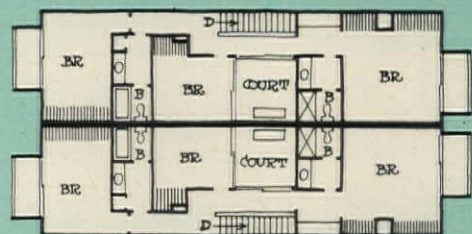




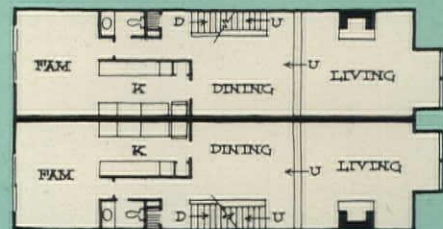
LIVING ROOM is down two steps from dining area. Stairs get light from interior court on top floor (plan below). Houses are 16½' wide.

1 Hillside condominiums for city lovers

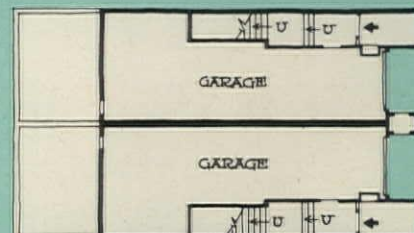
"Our buyers included young marrieds, retired people, bachelors, and families with children," says Sales Manager Chester C. Sutter. "But they all had one thing in common—a strong desire to live in the city rather than the suburbs." The 22 units, set along one side of a steep street, sold out in a year at from \$39,950 to \$42,950. They are part of Goldmine Hill, an urban renewal project atop Diamond Heights in San Francisco. The project, which also includes higher-priced attached houses, was designed by Fisher-Friedman Associates and built by American Housing Guild.



THIRD LEVEL



SECOND LEVEL



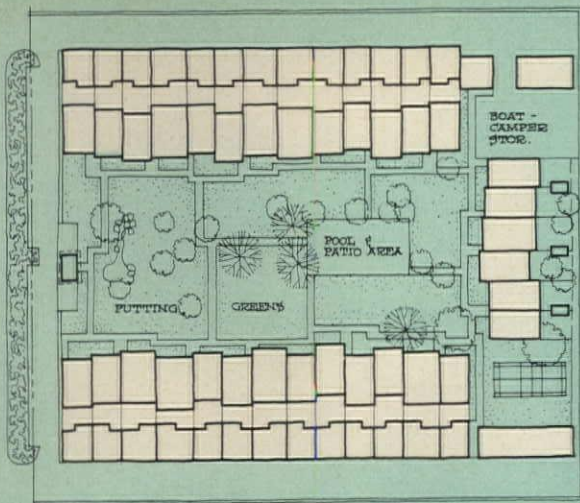
FIRST LEVEL

0 5 10 FT

Photos: Joshua Freiwald

continued





2 A secluded project for empty nesters

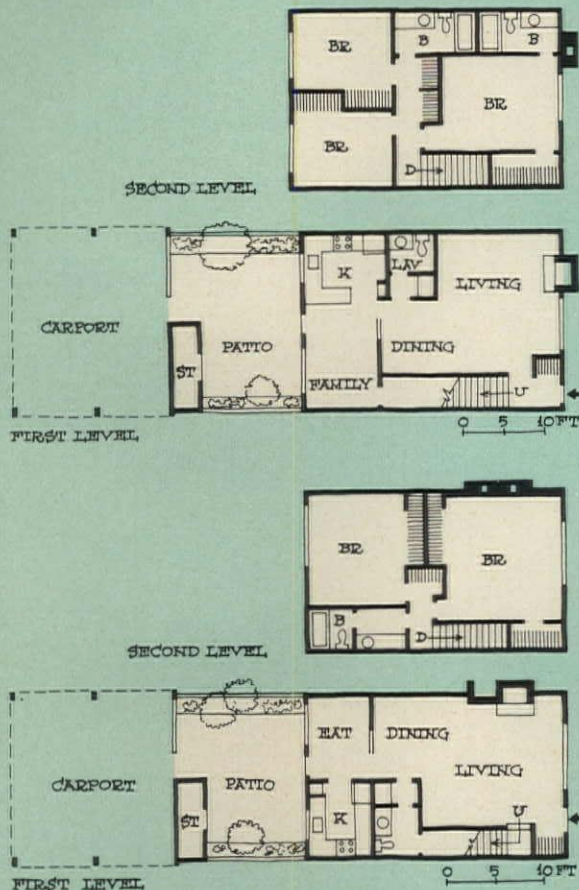
This 32-unit condominium in Bellevue, Wash., sold out in seven months—mostly to couples whose children had grown up and left home. And one of its strongest appeals was privacy. Side and rear fences and a front wall with an entry kiosk (right) enclose the 2½-acre site. A U-shaped layout frees maximum space for the central courtyard (upper left). And rear carports are separated from the houses to form private patio areas. The project, designed by John Anderson & Associates and built by Martin Construction Co., includes 24 two-bedroom units (\$22,750) and 8 three-bedroom units (\$25,750).



ENTRY KIOSK, seen from street (above) and from interior courtyard (below), has a locked door with buzzers to announce visitors to each house.

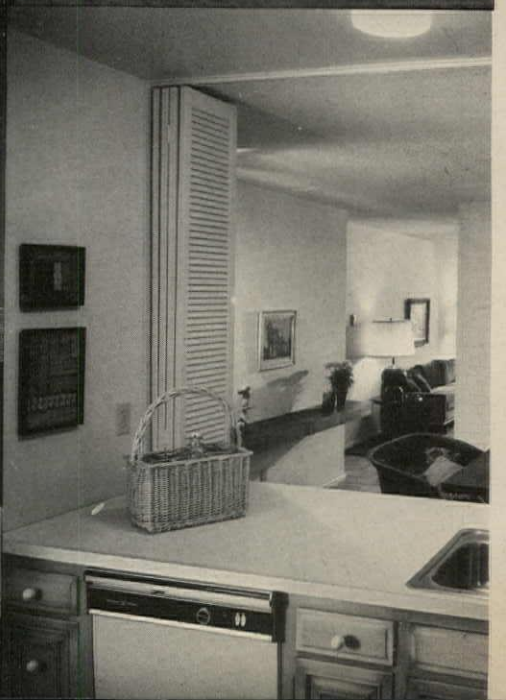


DETACHED CARPORTS behind houses are entered from driveways at perimeter of site. One of two side fences is at left; front wall is at right.



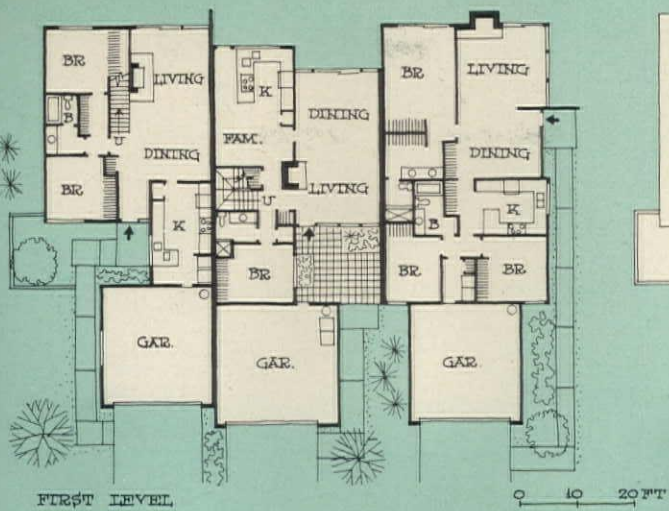
VARIED FACADES, changing roof lines, and staggered setbacks give each house an individual look. Courtyard includes pool and putting green.

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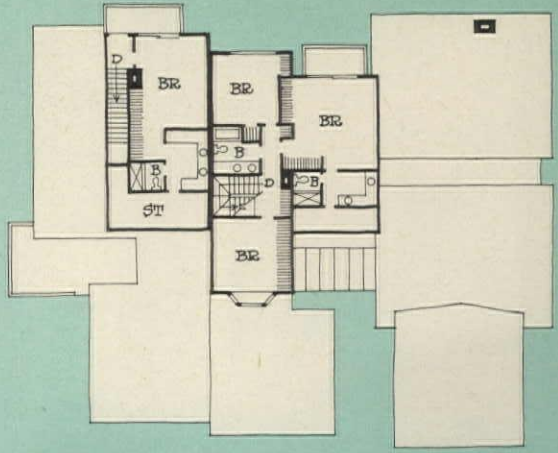




Photos: Julius Shulman



FIRST LEVEL



SECOND LEVEL



DIVERSE ROOF LINES, varied facades, and staggered walls of individual townhouses break up large mass of building and appeal to buyers.

3 A low-density project for the leisure-oriented

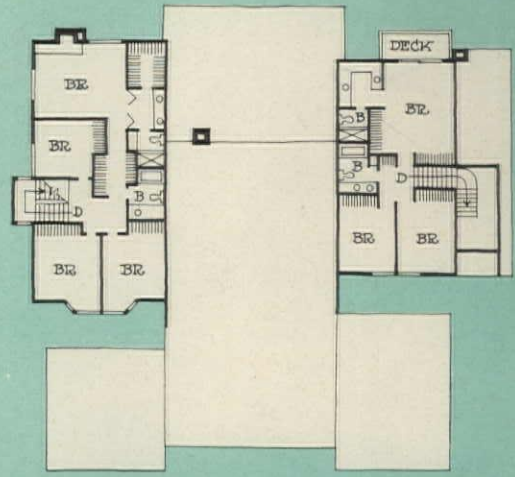
At roughly seven units per acre, the density of these townhouses in Westlake Village, Calif., is hardly more than that of many California detached-house projects.

Why so low? Because builder Stanley C. Swartz—aiming at a market that seeks leisure-time activities with its housing—wanted enough land for swimming pools, putting greens, tot lots, winding paths, and other community amenities. Says architect Richard Leitch, who designed the project: "The spaces between the buildings are as significant to success as the buildings themselves."

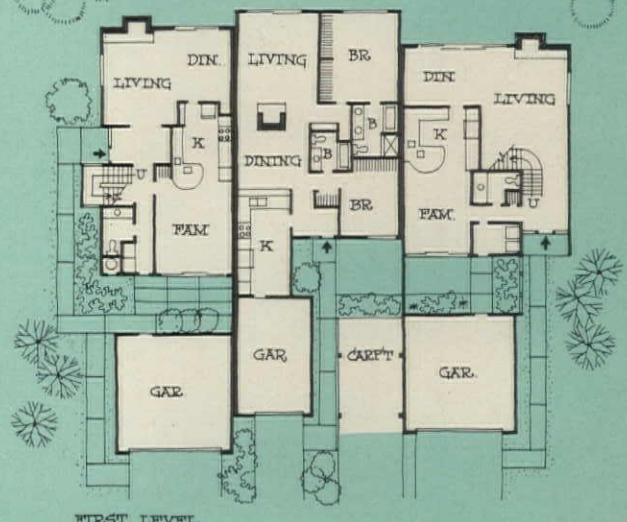
But, Leitch notes, providing so much useable open space demanded relatively large buildings, whose bulk was then minimized by varying the roof lines, staggering the walls, and thus giving each townhouse its own identity.

Six models, ranging from 1,254 to 2,142 sq.ft., are priced from \$31,000 to \$39,000. But choice sites—those on the shore of Westlake's man-made lake, for instance—bring premiums of up to \$13,000. Of the 285 units, 255 have been sold in two years.

DINING AND LIVING ROOMS of unit shown in center plan at right are separated by fireplace.



SECOND LEVEL



FIRST LEVEL

continued



TYPICAL STREETScape at Newmark Commons shows how clustering of houses around courtyards leaves plenty of open space and staggering of setbacks eliminates visual monotony.

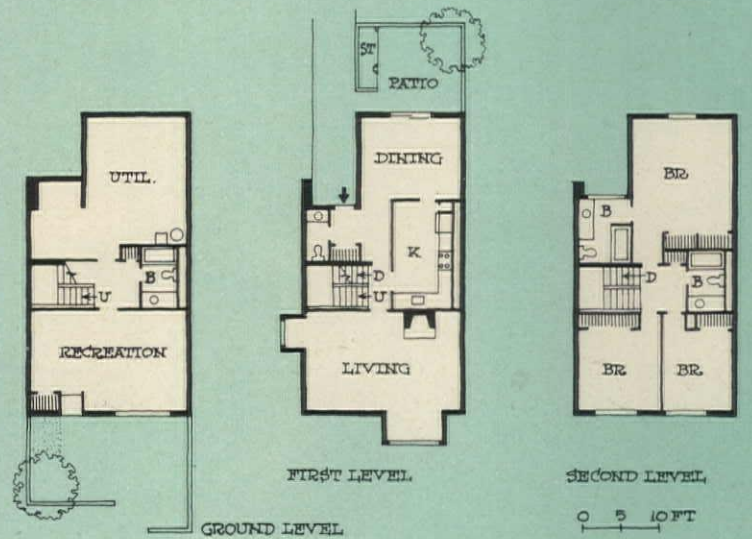
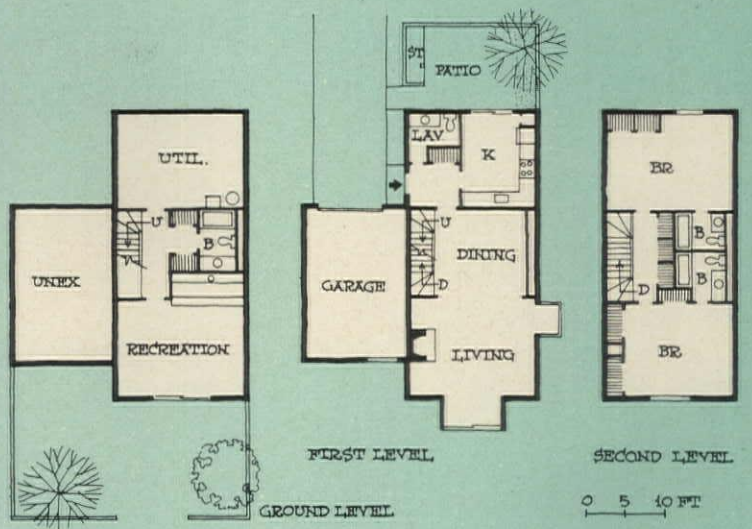


ENCLOSED REAR BALCONIES (above and right) are extensions of mid-level living rooms. Rear terraces are reached through sliding glass doors from lower-level recreation rooms.





FRONT ENTRY is at middle level of three-bedroom unit (plan, upper right). Fence encloses dining-room patio. High, narrow window in end wall brings daylight into stairwell.



4 Large townhouses for a broad suburban market

Some of these houses are bought by single people in their 30s, others by older couples nearing retirement. But many buyers are upwardly mobile young families with children—in other words, seemingly prime prospects for detached suburban homes. What sells these typical suburbanites?

Partly the size of the houses—five plans (two are shown above) range from 2,150 to 2,600 sq. ft. Partly a convenient location—close to stores, schools, and churches. And partly a sense of community—the houses, set in clusters on cul de sac streets, are in builder Ed Bennett's Newmark Commons, first PUD in the Washington, D.C., suburb of Rockville, Md.

Designed by Keyes, Lethbridge & Condon of Washington, Newmark Commons will have 182 townhouses—some bordering a man-made lake—and 198 detached houses. Townhouse prices are from \$34,400 to \$42,500.

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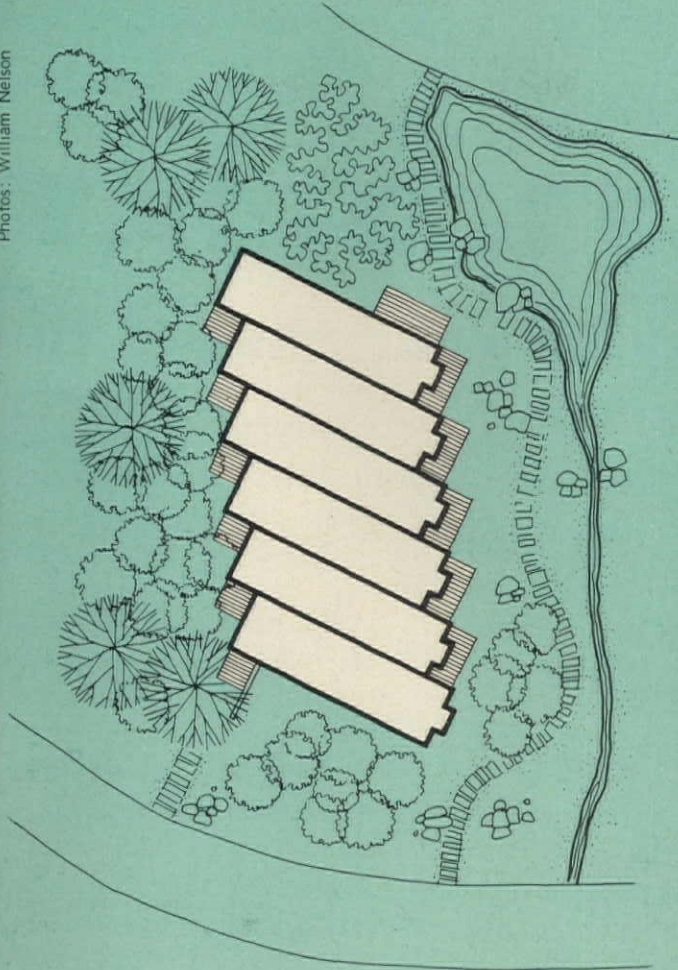
REAR BALCONIES open off first-floor living rooms and third-floor master suites.

FRONT BALCONIES, off second- and third-floor bedrooms, shelter doors to large entry halls, which include closets and storage areas for ski clothing and equipment.

LIVING ROOM, seen here from snack bar, has conversation pit in front of fireplace. Most of the room is two stories high, but the near end is beneath a balcony, which serves as a study or extra sleeping area.



Photos: William Neilson



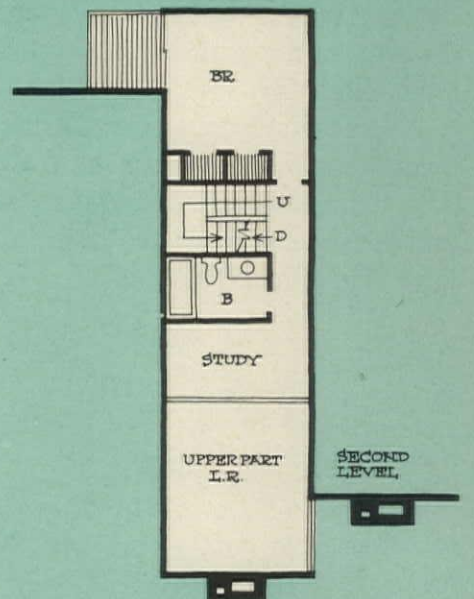
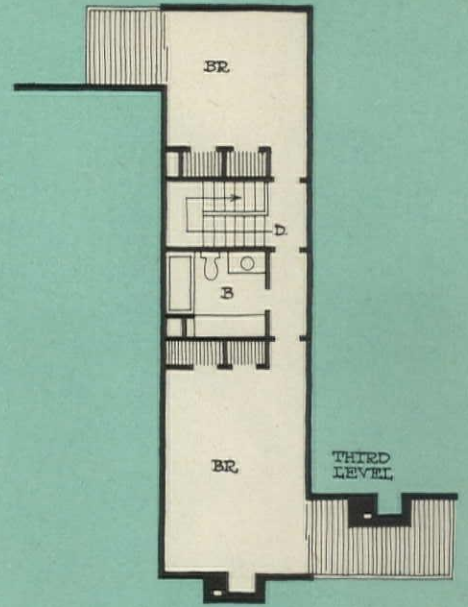
5 Luxury units for the top of the ski-resort market

This striking group of six houses (*see cover*) is a pilot project by a company that was formed to capitalize on the growing demand for vacation and week end homes in the Rocky Mountain snow country.

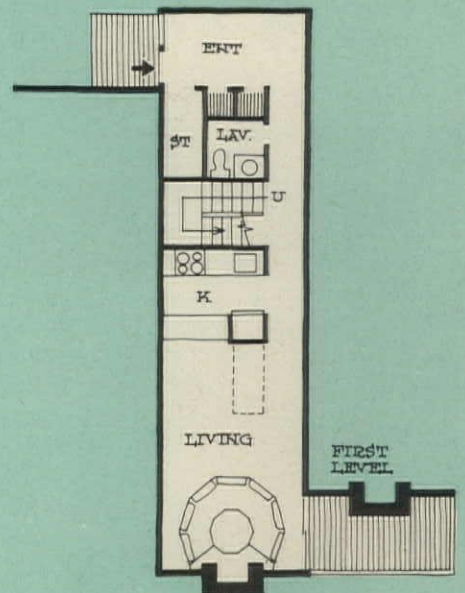
Four of the units, in Aspen, Colo., have been sold for \$63,500 each; the other two rent for \$110 a day during the ski season and \$500 a month at other times.

The houses, which step down a hillside, are arranged in a sawtooth pattern (*site plan, above*) for privacy and to take advantage of the view. Each has 1,560 sq. ft. of indoor living area on three levels, plus another 216 sq.ft. on four balconies.

Donald R. Roark & Associates of Denver designed the project, and Morrison Construction Co., also of Denver, built it for Damiel Corp. of Englewood, Colo. Damiel President Walter Lampl says he now plans to go ahead with other ski-area townhouses. But, he notes, they'll be smaller and lower priced to reach a broader market.



0 5 10 FT





SYNDICATION

may be your answer to tight money

David Stone, an expert who has helped form more than 20 syndicates, tells homebuilders how to raise the capital to buy and develop land

Builders' need for front-end money has increased at least 50% in the past four years—partly because of inflation and rising land costs, and partly because of the greater range of amenities that better land planning demands.

At the same time, many of the normal sources of investment money either have disappeared or have been drastically reduced. Banks, insurance companies and S&Ls are all restricted in the amount of funds they have available for lending.

First, Dave, just what is a syndicate?

A syndicate is an association of individuals to carry out a specific financial project. It is a form of partnership, but one that dissolves at the completion of the enterprise.

What are its advantages for the builder?

By providing funds for the

purchase and development of land, it enables the builder to conserve his working capital and assures him of a guaranteed supply of building lots.

How do syndicates differ from joint ventures?

A joint venture is a specific agreement that an individual (or corporation) has invested X dollars in the acquisition and development of land and/or building in exchange for a stated share of the profits or other specified benefits.

But could this investor demand a lion's share of the profits without having any management responsibilities?

Yes. Many lenders today demand a share of the income, and the day of the lender making loans for a fixed return and no protection against inflation is behind us.

And a syndicate?

But some smart builders have tapped a new source of funds: the individual investor. The method used is syndication, a partnership arrangement that provides for one general partner and a number of limited partners. Marketing Consultant David Stone * has set up 20 such syndicates, including six for Pentom Inc., a Minneapolis builder and land developer (p. 93).

Here, in question-and-answer format, is Stone's advice on how to make syndication work for you.

* President of Stone Institute of Marketing Management, based in Scotts Valley, Calif.



"The general partner controls"

It involves the sale of a number of limited partnerships in the ownership of a specific piece of property. These limited partners get a return on their investment, but the general partner retains complete control of operations.

We had many syndication scandals in the early '60s. Do you mean that kind of deal?

No. Some promoters did use syndication without concern for either leverage, the investor's protection, or the commitments they had made to lenders.

What do you mean by leverage?

This is the ratio between the invested cash and the total obligation. In the syndicates that precipitated the scandals, the projects had too much debt compared with their cash equity, and could not make the debt payments, let alone pay a return to the investor.

How are your syndications different?

First of all, we're not talking about income property but about land and its improvements, intended for future sale to a legitimate builder with a sound reason for acquisition, based on market research and the cost of the land.

Can you form the syndicate before the land is optioned?

No. The syndicate must apply to a specific piece of ground, because the syndicate is married to the property, its benefits, and the long-term commitments involved. You should option the



"It conserves your working capital"

property for a long enough period to put together the people to provide the capital and assume the mortgage.

But what if more capital is needed later?

Any expenses that the general partner has not programmed must be borne by him. The subscription agreement limits the limited partners' obligation. For instance, they cannot be sued or pursued for additional re-financing.

What are the usual terms of a subscription agreement?

It calls for the investment of a certain amount by the limited partners, either in one lump sum or in specified payments to meet a schedule of needs for capital,



"Cannot be sued or pursued"

for paying off mortgages, and such. It also defines the role of limited partners, spelling out that they are precluded from the management of the property. The general partner, in turn, agrees that he will report at least once a year to his limited investors.

What kind of yields are in-



"Limited partners are precluded from management"



"The limited partner expects at least a 20% return"

vestors looking for in such syndications?

Today the limited partner expects at least a 20% annual return on capital, whether it comes in the form of depreciation or tax loss, or in profit. It is not uncommon to be able to show a 40%, 50%, or even 100% return because of a combination of depreciation and capital gains.

How long are limited partners tied to the venture?

Until it is completed and sold. However limited partners are not carried over into future projects unless they resubscribe in the new ventures.

If the property is developed as a single-family subdivision, how do you determine what part of the sales price is land and, therefore, a return to the syndicate?

Very simple. There is an agreement between the syndicate and the building company for the purchase of lots at an agreed price. This is paid to the syndicate either by the builder when he begins construction, or out of the funds released at the closing. This price must be carefully negotiated since the builder is both buyer and seller if he is also the general partner.

Sometimes a real-estate broker plays the role of general partner, and the builder negotiates the purchase of lots as a complete outsider.



"Negotiate prices carefully"

For the builder, wouldn't the best position be as the general partner as well as the take-out buyer?

Yes, but only if he has the management capacity to run the syndicate as well as his building operation.

Are there any special advantages in syndication for the small builder?

Yes. His biggest problem is to find good land he can tie up so that he can compete with the volume builder. His partners in a syndicate are willing to hold land until he needs it because they are looking for growth. They get the appreciation, and he gets the land inventory, which is the critical part of his business.



"You get the land inventory"

Would you then advise a builder to seek out an experienced investor as the general partner and perhaps take a position himself as a limited partner?

The builder can play any role he is qualified for, and should get experts to play those he cannot.

What are the mechanics of putting together a syndication?

First, hire a good attorney who knows real estate syndication. He can make or break you. If your present attorney doesn't understand this business, he should seek out a corresponding attorney who does.

Are there many attorneys with these qualifications?

Yes, surprisingly. Of course, there are many more in major metropolitan areas than in smaller cities and towns.

continued

What next?

Decide on your role in the partnership. Do you want the general partner's responsibilities and share of the profits? Do you want a third party to play that role? Do you want to share in the limited partnership or just to serve as the take-out buyer for the property later on.

What other professional help is needed?

You also need a CPA who knows how to project the obligations of the partnership. He must anticipate future taxes and assessments, engineering costs, and development expense. Because you don't just syndicate the cost of the land, you syndicate all the funds required to develop it.

Then what?

Find a parcel of land and appraise it for its potential, not short-term, but five or ten years from now. Unless there is a convincing growth potential, investors will not be interested. Then you can begin to market the shares.

What kind of people invest in syndicates?

They are as diverse as investors in stocks or bonds. Often they are professional people in high income-tax brackets looking for ways to make their money work for them, or seeking tax-sheltered income. These people are sophisticated and know the value of real property ownership.

How do you seek out investors?

That depends on your investment vehicle. If you want a small limited partnership, you are controlled by state law. These laws usually say that 1) you cannot solicit more than 25 persons, 2) they must all be previously known to you, 3) you cannot advertise the offering, and 4) you can't have more than 15 subscribers.

If your syndicate is larger than this, you must get clearance from your state securities commission. This requires a detailed presentation to the commission, and you must issue



"These people are sophisticated"

a formal prospectus (which you can advertise). Oh yes, in both cases, you cannot go outside your own state for your investors.

What kind of syndication do you use most?

For the Pentom Co. syndications we used public offerings, with an average of at least 100 investors in each project. Getting approval of the state SEC was not difficult once we had proved that we were capable of putting a syndicate together and that we were operating within state law. The first one took about three to five months to become operable. After that, they came a little faster.

But is the public offering the most popular form of syndication?

No. The small builder or broker usually sets up a small

limited partnership with no more than 15 partners, all previously known to the general partner. Each partner puts up a substantial sum—say from \$50,000 to \$100,000. This form is preferred because it involves fewer people and gives the general partner greater control.

Typically, a would-be syndicator would start with one like this. If it worked well, he would put together another, and then another. At this point, he might want capital for a really large development. He has the experience, so he would turn to the public offering, because you will find many more people with \$10,000 (a very common unit of investment) than with \$50,000. And of course, to get enough of them, you can't be limited to your circle of friends.

Have many builders, especially smaller ones, used syndicates?

No—but only because most large builders have access to borrowed capital and the smaller ones simply don't understand syndication. By contrast, real estate brokers have frequently formed syndicates to achieve control of property and, in turn, to generate commissions.

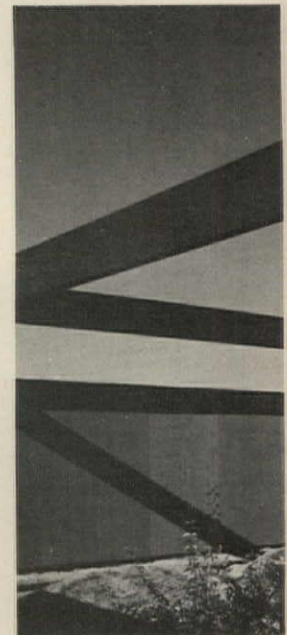
Would you then advise the smaller builder who needs front money for land and improvements to seek out a realty broker with syndication experience?

Yes. Not only because this is a good way to raise the money he needs, but also because he'll learn how to put a partnership together in case he wants to play a larger role in the future. In fact, this is a relatively safe way to experience the advantages and the pitfalls of syndication.

Any other ways to get educated?

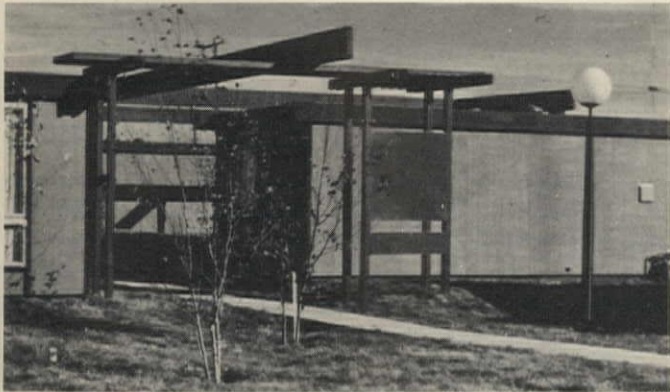
I recommend two books on the subject: "The Real Estate Syndicator's Manual & Guide," by M. Hussander, published by Prentice-Hall, and "Real Estate Syndication," put out by the National Institute of Real Estate Brokers.

How Pentom used

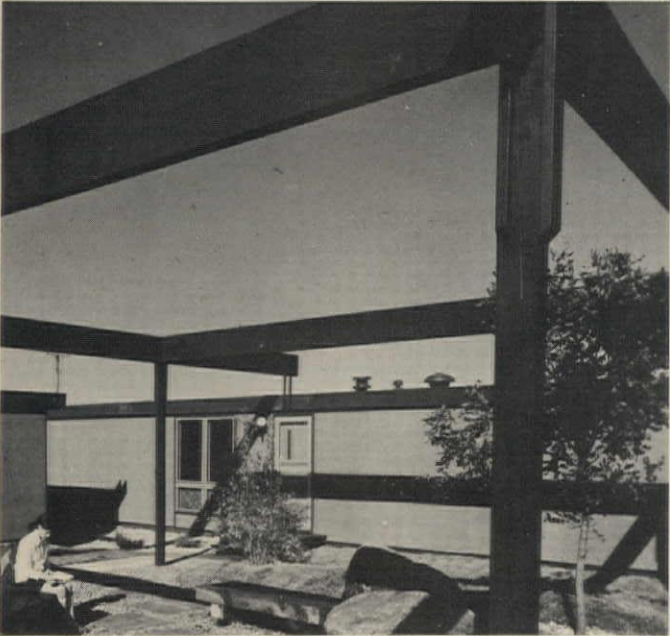


"You're controlled by state law"

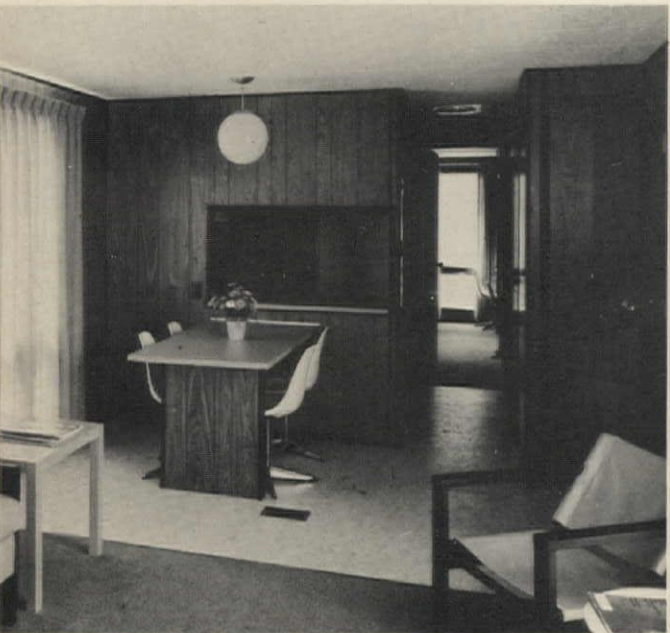
two different syndicates to build 250 units of student housing



PLYWOOD EXTERIORS give warm residential look to mobile homes. Running gear hidden in wells retains status as chattels.



TRELLISED COURT is formed by four units sited in a hollow square. Two house male students, two are for coeds.



LIVING-DINING AREA is at center of house, with bedrooms at either end (plan, right). Window looks out onto quadrangle.

One syndicate, totaling \$1,400,000 (put up by 160 investors) bought and developed the 36-acre Marshall, Minn. site; the second, for \$940,000 (100 investors) paid for the first 100 of the 250 mobile home/dormitories.

The 1,000 Western Minnesota State College students pay \$183 per quarter, or \$549 for the year (plus \$150 for the short summer session). Profit objective of the syndicate: a 6%-10% return, after taxes.

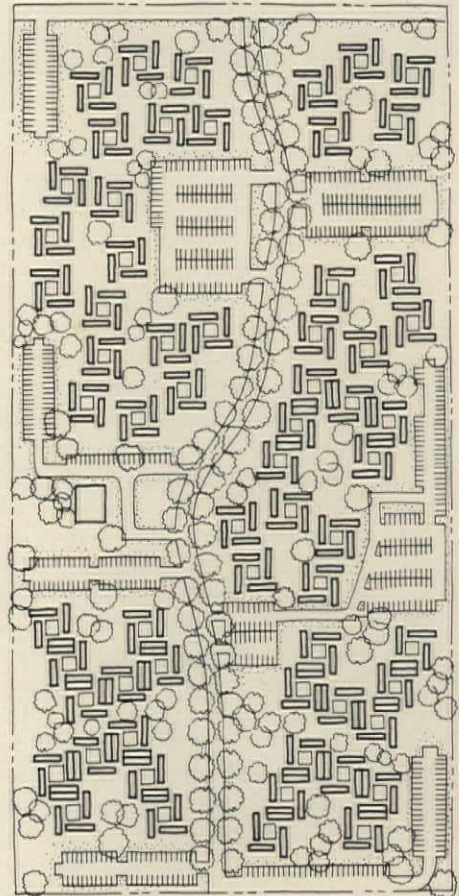
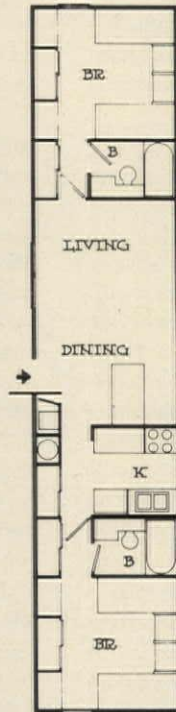
Local code and labor restrictions dictated the development as a mobile-home park and chattel ownership of the units. In turn, this meant consumer financing of the units (\$7,200 mortgages at 10.3% for 15 years).

Everybody wins. Students prefer them over dormitories (100% rentals and a long waiting list);

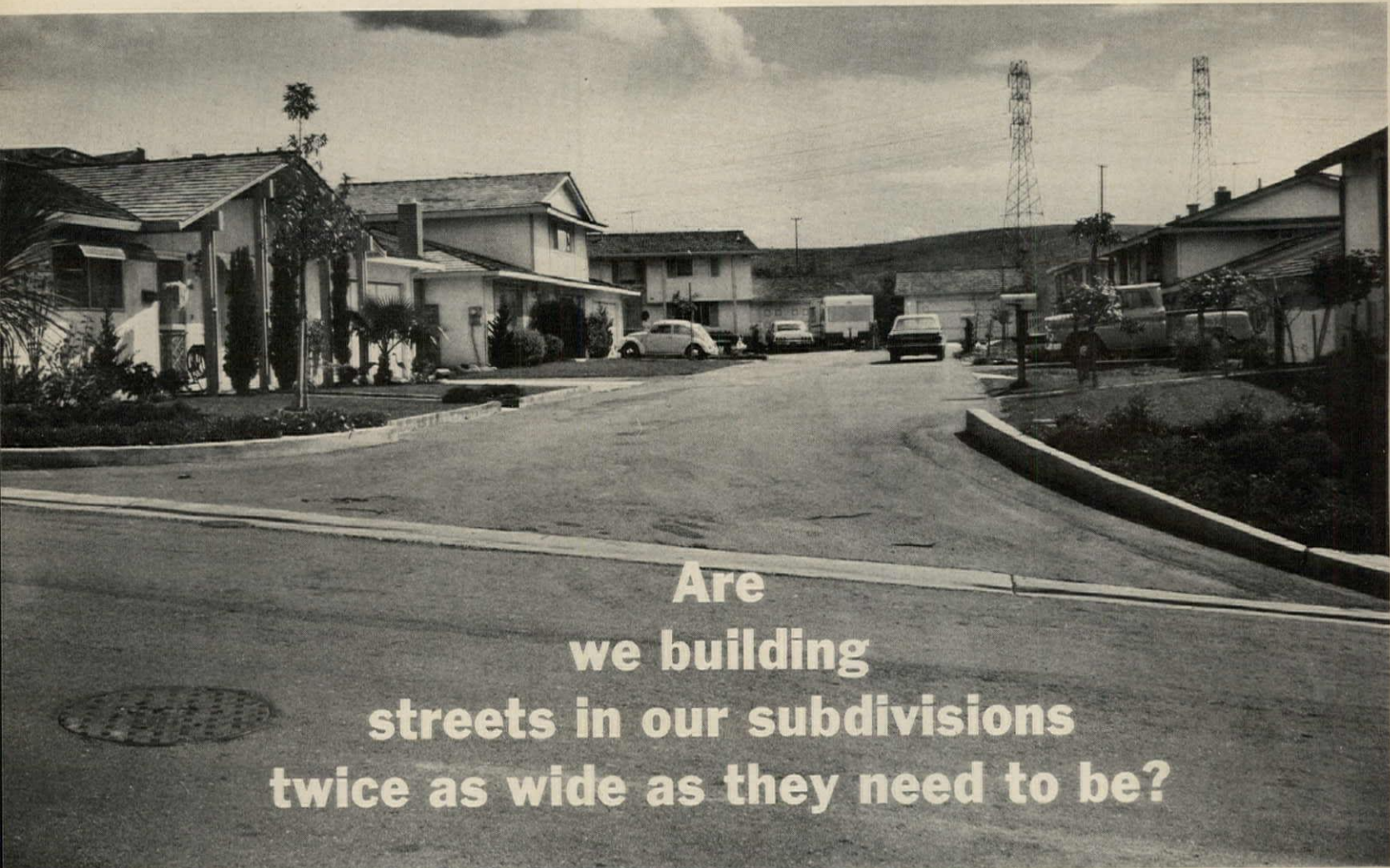
the university likes them because they get student housing with no outlay of capital or subsidy; and Pemtom sold the development to the syndicate at a profit and will eventually make a profit on the units.

The highly favorable economics have brought inquiries from several dozen other schools that are looking for economic student housing. These complete dormitory facilities, including landscaping and a community building, were produced for under \$4,000 per student. At the same time, conventional dormitories built by the state averaged \$6,300 per bed, not including land and/or dining facilities.

Says Lawrence Laukka, Pemtom vice-president: "These units don't answer the needs of urban colleges, but seem perfect for small colleges and junior colleges in less dense areas."



SITE PLAN puts four units in a quadrangle, 25 quadrangles making up a village, with each village housing 400 students.



Are we building streets in our subdivisions twice as wide as they need to be?

Yes, says California Architect Robert W. Hayes. He contends that most residential streets could be less than half of their present width without materially impeding traffic, and that rights-of-way could also be cut at least in half. The land thus saved might raise the value of a typical 100-acre subdivision \$1 million.

Hayes' ideas, based on several years' research into land use and traffic flow, were presented in January at the NAHB convention in Houston. Until recently, they were only ideas; now they are becoming a reality at a project in California (*facing page*).

The typical residential street, Hayes points out, is 40-ft. wide—two eight-ft. parking lanes and two 12-ft. driving lanes—and has a 60-ft. right-of-way. These streets take up 25 per cent of the land area in an average subdivision, yet they are only required to handle a minimum amount of traffic and accommodate on-street parking. Furthermore, says Hayes, these 40-ft.-wide ribbons of concrete are aesthetically unattractive. The only way to make them attractive would be to "plant giant redwoods along the edges," he says.

What can be done?

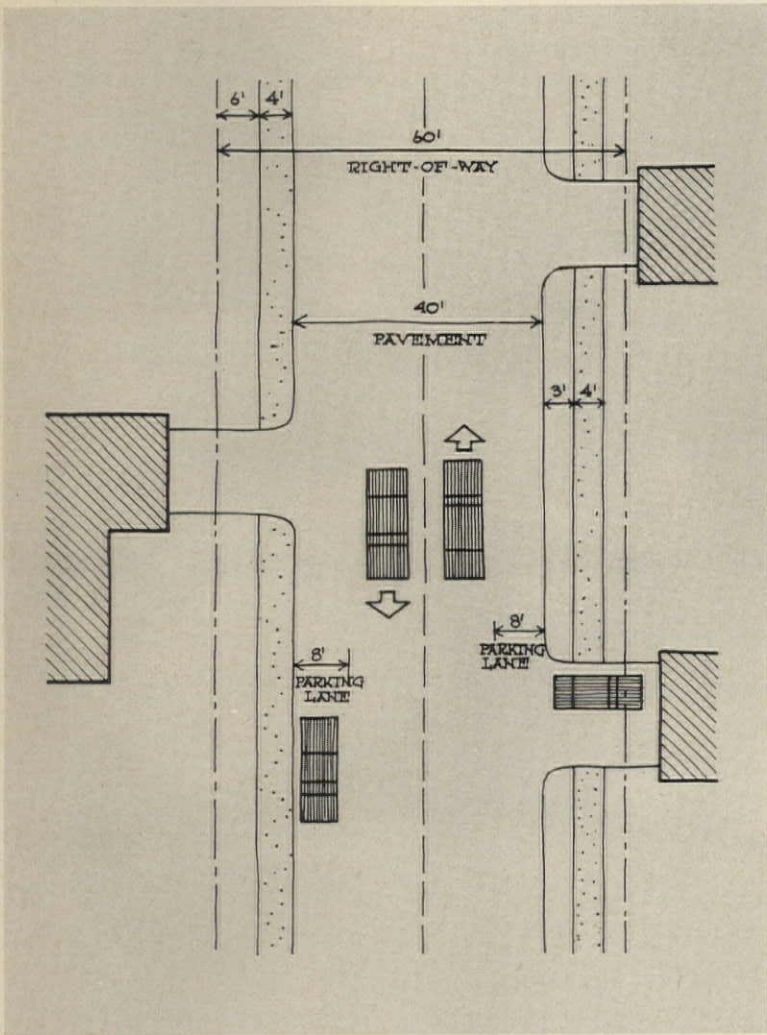
Hayes says the answer is very simple—build streets that are only 18 ft. wide. This would accommodate two nine-ft. driving lanes or a 10-ft. driving lane and an eight-ft. parking lane. Additional parking would be in

head-in bays, located at the edge of the street. Thus, the driving is reduced to one lane when cars are parked on the street, but to two lanes otherwise. But even with one lane, there isn't much of a problem, Hayes says, because a car need only wait about five seconds for a car coming toward him to get around a parked vehicle (*drawing upper right, facing page*).

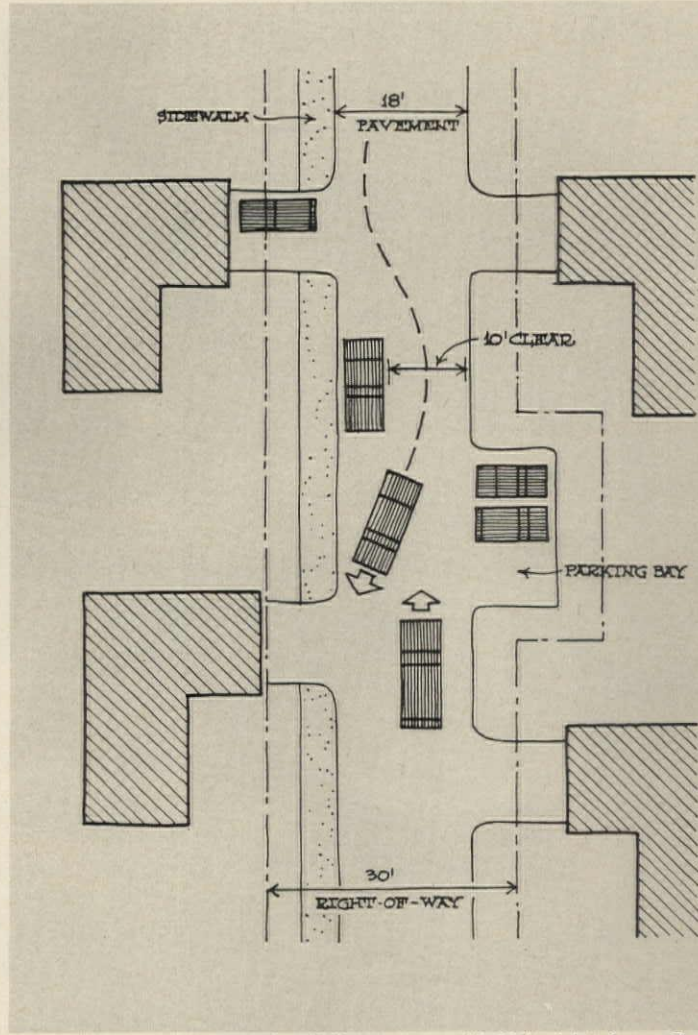
In the narrower street, the right-of-way is also cut in half—to an average of 30 ft. However, Hayes says it could be cut even more—to as little 22 ft.—if the line was drawn at the street edge on one side and at the sidewalk on the other.

The potential savings in a 100-acre site with this new concept are staggering. By reducing the road area 50 per cent, the builder has more than 10 additional acres for homes. Fifty homes, figured at a very conservative \$20,000 each, would bring in an extra \$1 million. And there would be other savings as well, Hayes points out, including, typically per house: \$300 for land, \$180 for curbs, \$360 for pavement, and \$240 for sidewalks—for a total of \$1,080 per house potential savings.

Lastly, instead of 75 acres of houses, there are now 85 acres—a 12 percent increase in the tax base. This fact should make city and town planning boards look twice before they decide to reject the narrow-street proposal out of hand.

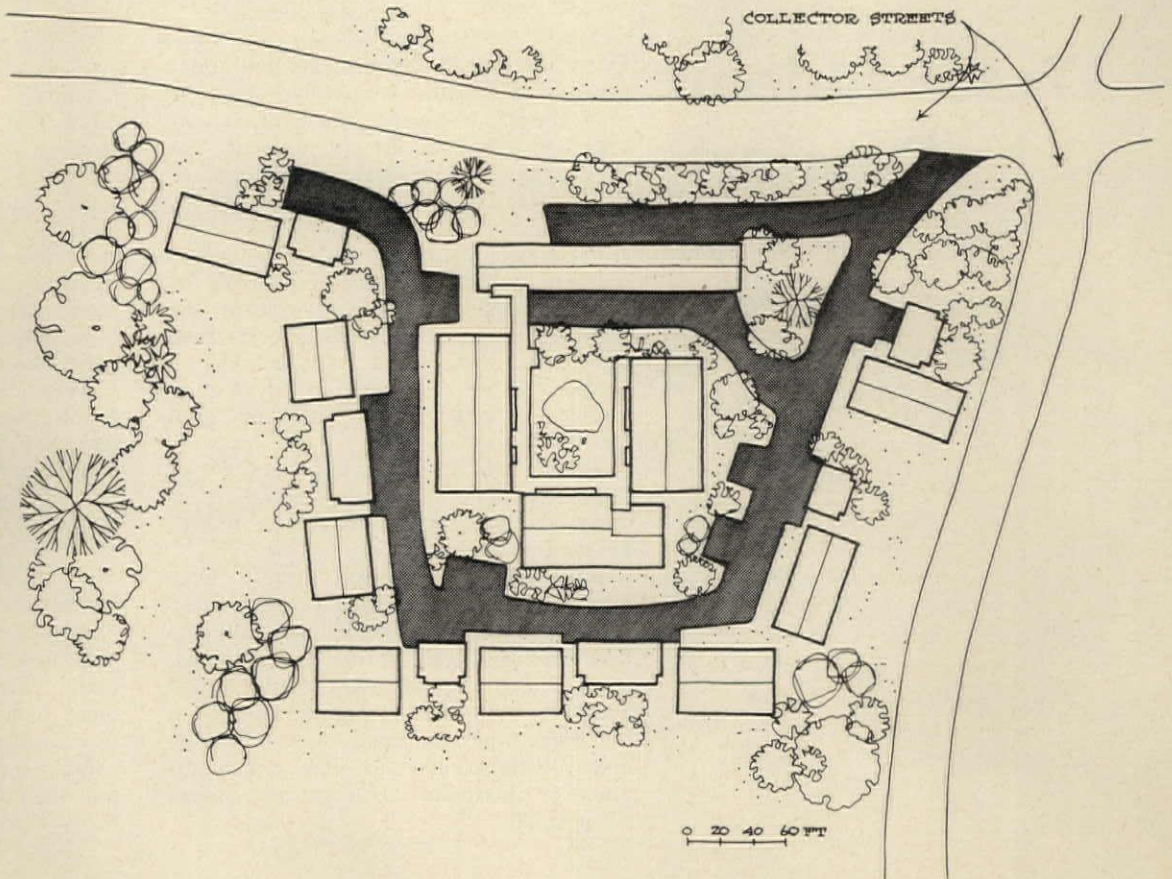


CONVENTIONAL STREET DESIGN has 40-ft. pavement with 60-ft. right-of-way. Hayes says the two driving and two parking lanes aren't needed.



NARROW STREET DESIGN has 18-ft. pavement with 30-ft. right-of-way. Car at right only has to wait five seconds for other to pass.

IDEA BECOMES REALITY at Rossmoor in Walnut Creek, Calif. Hayes has included narrow street configuration in project. Road in cluster starts at upper right and dead-ends at upper left. Parking is in carports and off-street bays.





Total Indoor Comfort

Today's systems can provide a springlike indoor environment —all year round

Every home or apartment being built today *could* offer a feature that would appeal to every buyer or tenant: complete control over one aspect of his environment. The very air in which he lives could be tailored to his exact liking twelve months of the year.

Equipment already on the market can do much more than just heat or cool the indoor air. It can maintain a temperature that never varies more than a degree or so from the desired level. It can also humidify—or dehumidify—the air, scrub it clean of all outside—or inside—dirt or odors, and even pleasantly scent it.

All of these functions are desirable, of course, but some of them are becoming increasingly necessary, especially in today's polluted urban areas.

A standard furnace will keep a home warm day after cold wintry day, and a room or central air conditioner will cool the house effectively during a siege of hot weather. But what happens during the variable temperatures of spring and fall? Does the homeowner or tenant have to throw open all the windows in order to cool the house or apartment? Or to get any change of air at all?

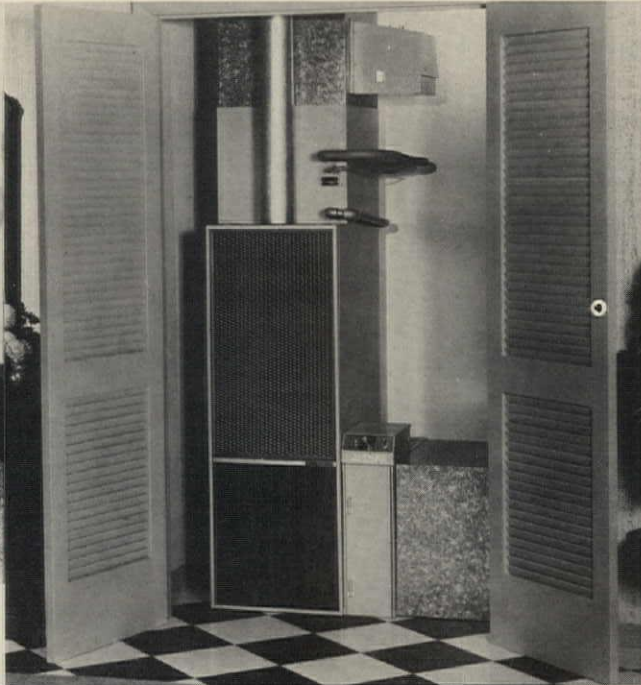
If so, then the homeowner's—and the landlord's—yearly costs are rising in a number of ways. First there are the maintenance costs for frequent repainting of interior walls and trim. Then there are bills for labor or supplies involved in the cleaning of carpets, drapes, upholstery, windows, etc., plus repair and replacement costs for furniture that comes unglued, for picture frames that fall apart, and for handbags, belts, and shoes that dry up and crack—because of too-dry indoor air.

Most discouraging of all are medical problems—and expenses—caused by unnecessary exposure to polluted outdoor air. There are respiratory ailments and allergies that not only require frequent treatment, which is costly, but are downright uncomfortable for the sufferer. And none of these expenses or discomforts should burden today's buyer or tenant.

Shown on the next three pages are products that heat, cool, humidify, dry, exhaust, clean, or filter the air—or all of these. Your buyers and tenants will recognize and appreciate their individual and combined advantages. For further information about any of them, circle the indicated number on the Reader Service card.



COOL with compact, gold-finished aluminum condenser designed for quiet operation. Addison Products, Addison, Mich. *Circle 201*



TOTALLY CONDITION with an electric furnace, an electronic air cleaner, and a humidifier. Chrysler, Dayton, Ohio. *Circle 202*



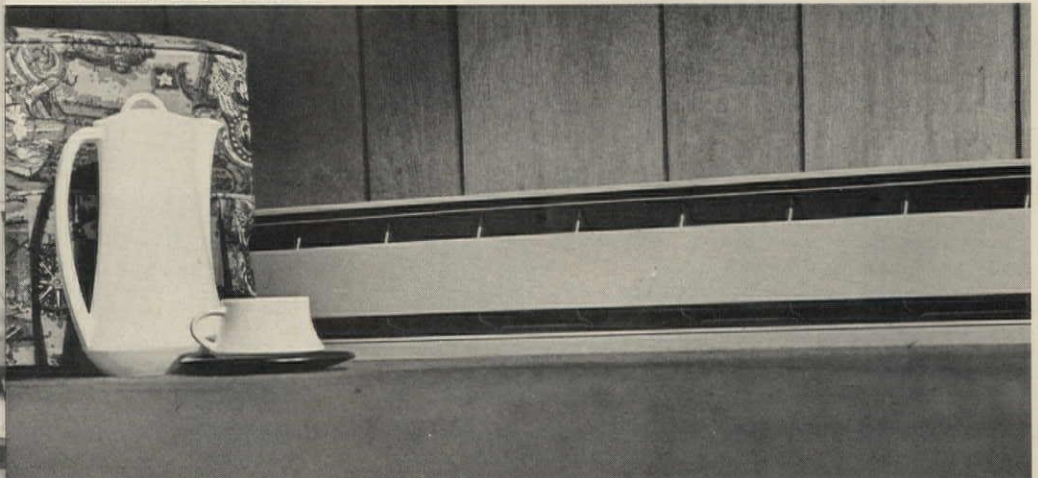
CLEAN with ductless hood. Three filters are non-stick aluminum, spun glass, and charcoal. Miami-Carey, Cincinnati, Ohio. *Circle 203*



DEODORIZE with neutralizing liquid dispersed through heating ducts. Automatic control. Honeywell, Minneapolis, Minn. *Circle 204*

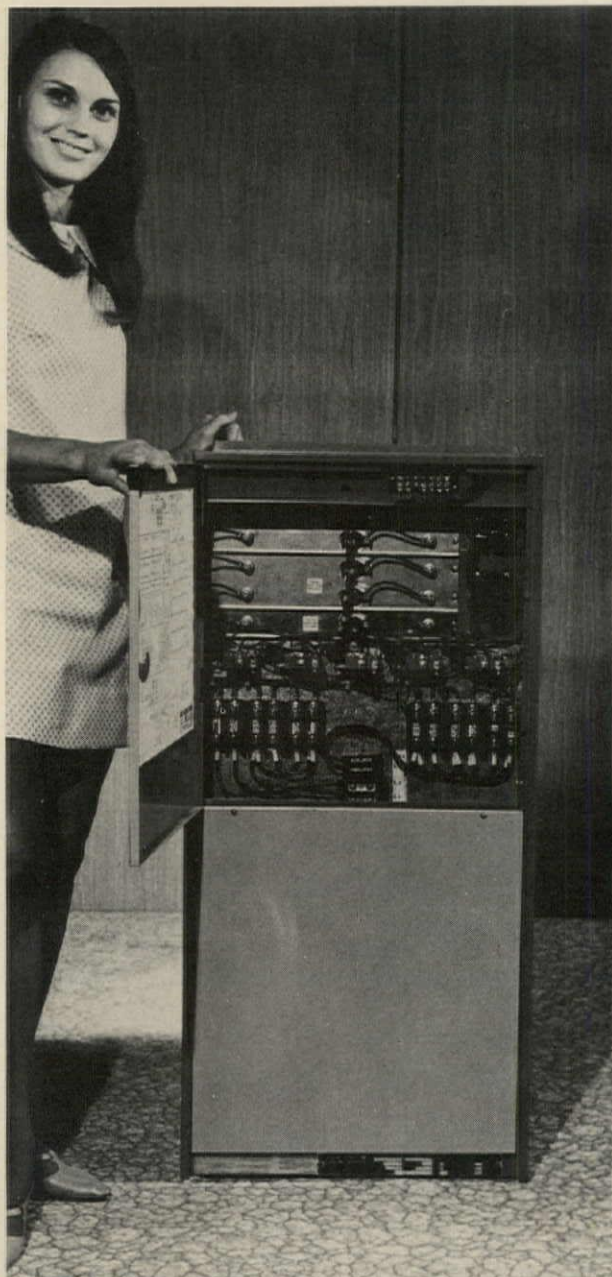


VENTILATE with flush-mounted aluminum wall fan. Snap-out center panel can be decorated. NuTone, Cincinnati, Ohio. *Circle 205*



HEAT with convactor baseboard. A top deflector directs heat from wall. Continuous wireway. Berko, Michigan City, Ind. *Circle 206*

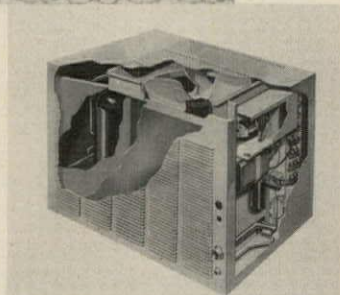
More products that add to total indoor comfort *continued*



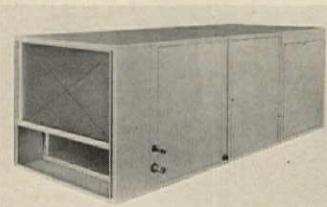
ELECTRIC FURNACE, as the girl above demonstrates, is a compact unit. Largest model in the line is only 43" high. By itself the furnace provides quiet electric heat. Teamed with other of the manufacturer's products, it will cool, humidify, and clean indoor air. A multi-speed fan controls the varying air volumes for heating or cooling, and sequence starting prevents power drains. Trane, La Crosse, Wis. *Circle 207*



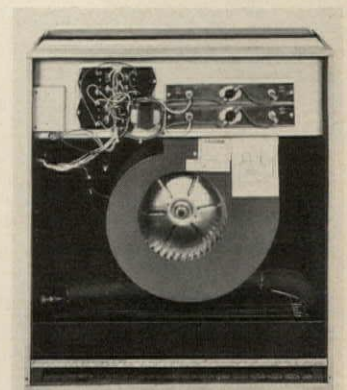
ELECTRONIC THERMOSTAT is wireless, completely portable. It sends signals to a responder installed on or near the furnace or air conditioner. Because it can regulate temperature from any spot in the house, it can be used to correct an uneven system or to simulate a multi-zone system. Kimco Laboratories, Brooklyn, N.Y. *Circle 209*



QUIET CONDENSER, for use on small lots, outside townhouses, or wherever sound might be a problem, is said to reduce noise by as much as 25%. The fan has isolated blades, the frame is strengthened so it won't vibrate, and acoustical materials are used throughout. The upflow unit delivers up to 38,000 Btus of cooling. Fedders, Edison, N.J. *Circle 208*



MODULAR UNITS are 24" high, 26" wide, pre-wired and ready to plug into each other in any sequence to suit a specific heating/cooling need. Modules shown here in split-system heat pump arrangement: filter, heat pump, air handler, and supplemental heating unit. Units are lightweight for easy field assembly. American-Standard, Elyria, Ohio. *Circle 210*

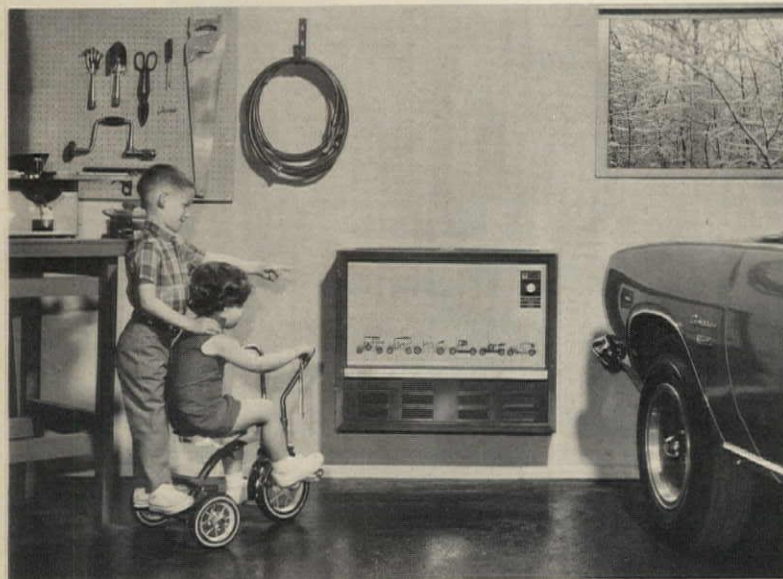


APARTMENT FURNACE is a compact unit that fits easily into walls, ceilings or closets. There is one model for vertical installation, two for horizontal use like the one above. Accompanying compressor-condensers can be installed on the roof, through a wall, or on an outdoor concrete pad. Edwin L. Wiegand Div., Emerson, Pittsburgh, Pa. *Circle 211*

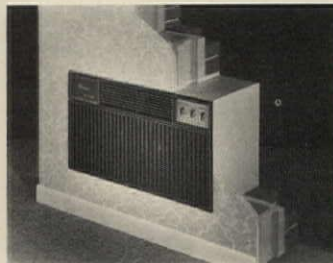


DUCTLESS HOOD, for difficult-to-exhaust areas like apartment kitchens, has two aluminum mesh filters: one to trap grease, the other to remove odors. When filters become dirty, they can be removed, rinsed in hot water with detergent, dried, then

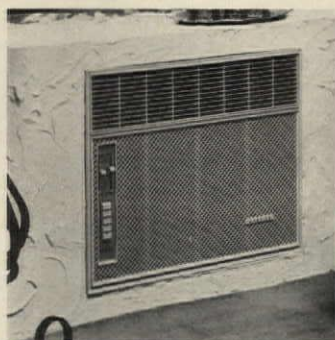
sprayed with a filter coat that replaces their effectiveness. The two-speed hood has an enclosed light, louvers that direct air up and away from both cabinets and the cook's face. Emerson, St. Louis, Mo. *Circle 212*



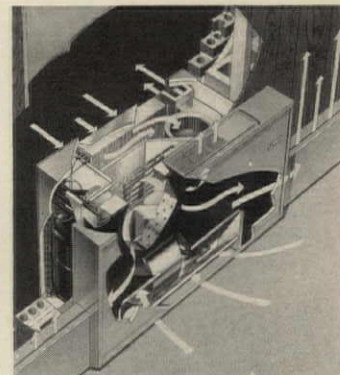
GAS HEATER converts a cold garage to a rainy day playroom, a winter workshop, or an all-weather utility room. It also keeps cars warm at night and eliminates slow—and annoying—winter morning startups. Sealed combustion chamber takes in only outside air, vents consumed air directly outside. Heater has 30,000 Btu output, can be regulated from 40° to 85°. Safety features include automatic ignition, a cool front that can't damage nearby objects. Temco, Nashville, Tenn. *Circle 215*



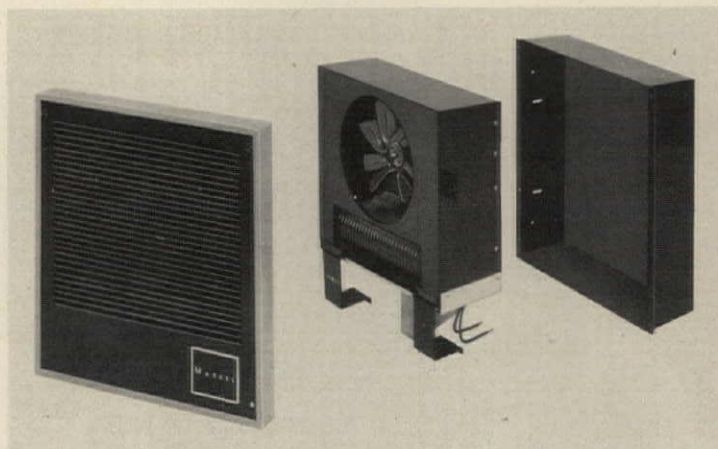
THROUGH-THE-WALL UNIT fits flush to the inside as well as the outside of standard 14" concrete block walls. Models are 5½" to 7½" shallow to permit easy installation. For use in motel or hotel rooms, small apartments, or nursing homes, the units deliver 9,000, 11,500, and 13,000 Btus of cooling, have additional heaters. Whirlpool, Benton Harbor, Mich. *Circle 216*



HIGH-CAPACITY COOLER can handle a whole apartment, several rooms in a house, or a small shop or office. It delivers up to 34,000 Btus of cooling. Features: pushbutton controls for three cooling speeds and the fan, levers to adjust amount of ventilation, and a wide range of temperature settings. Unit operates on 208- or 230-v. circuits. Carrier, Syracuse, N.Y. *Circle 213*

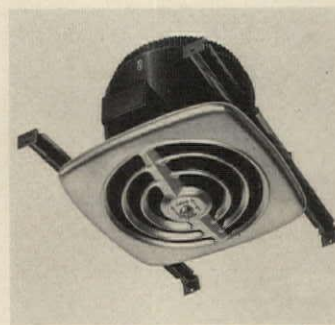


APARTMENT UNIT heats, cools and ventilates a single-zone area. Heating capacity ranges from 8,500 to 24,000 Btus, depending on choice of hot-water, electric, or steam heat. Air conditioning system has cooling capacities of 9,000 to 15,000 Btu/h. Optional air duct sections connect to either side and deliver air along the wall or into adjoining rooms. Operating costs are reduced by pumping up condensation and distributing it across the coil so it evaporates and cools the fins and the condenser air. Lennox Industries, Marshalltown, Iowa. *Circle 214*

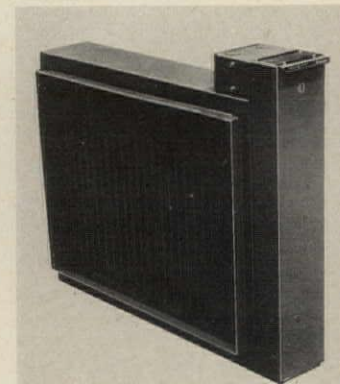


IN-THE-WALL UNIT draws air in at the top, heats it, and flows it out at the bottom. Beige and brown or chrome-finished units can be recessed or surface mounted. Motor is permanently

lubricated and enclosed and guaranteed for five years. The 1,000, 1,500, or 2,000-w. models run on 120, 240, 208, or 277-v. circuits. Markel, Buffalo, N.Y. *Circle 217*



VERTICAL DISCHARGE FAN handles 160 cu. ft. of air per min., has a built-in damper. Adjustable hanger bars slide back and forth for easy installation, but give enough support to reduce vibration noise. Three-point motor brackets are vibration-free rubber mounted. Anodized aluminum grille is 11¾" sq., fan fits an 8" duct. Broan, Hartford, Wis. *Circle 218*



ELECTRONIC AIR CLEANER picks up smoke, grease, pollen, and dust particles, handles up to 1,200 cfm, runs on 120 v. The power cell can be removed, washed in water, and reused immediately. A deluxe model has an access door to the power cell with an operating light. General Electric, Louisville, Ky. *Circle 219*

the focus is on Verve

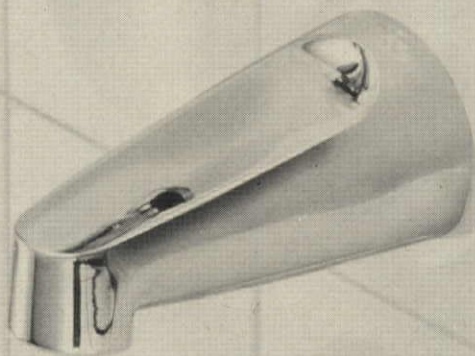
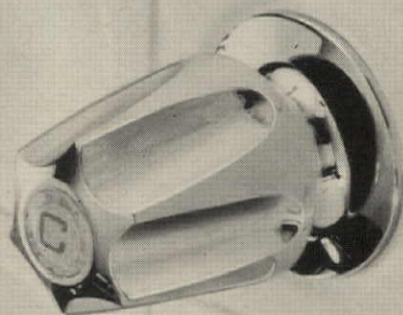
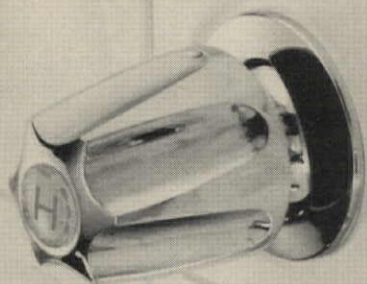


PRICE PFISTER

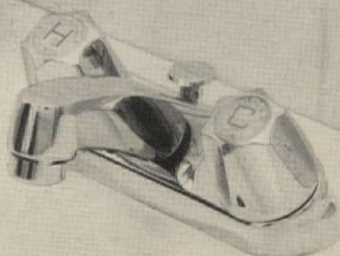
Manufacturers of Plumbing Brass 13500 Paxton Street, Pacoima, California 91331

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a dramatic new line of plumbing brass...
executed in polished chrome, priced for the volume building market




So you know all about houses. How much do you know about women?



6 out of 10 would rather have a gas range.

It's worth knowing — but many builders don't. Women prefer gas cooking. We have a detailed, impartial report that proves it. Based on a national survey made by Oxtoby-Smith, the well-known independent research firm. So when you're equipping the kitchen, remember — all other things being equal, more women choose the home with a gas range.

AMERICAN GAS ASSOCIATION, INC. 

At Ruskin Place, 7 Maytags average 300 loads a week with not one repair in 15 months.



"If we had it to do over, we'd have only Maytags," writes Mrs. Bonnie Eicholz.



Ruskin Place is a new garden apartment complex of 104 units in Kansas City, Missouri. Luxury facilities include a clubhouse, heated indoor-outdoor pool, sauna bath, party room, and two brands of washing machines. Seven of these are Maytags.

Writes the Manager, Mrs. Bonnie Eicholz: "There is no comparison with Maytags and the other machines on repair costs. Not one cent has been spent for parts, even though the Maytags have had heavier use.

We haven't had a single repair since the Maytags were installed 15 months ago. The other brands of washers all have cost as much for repairs as the money they take in. The Maytags are ticket-operated, which means no problem with making change, pilferage, and vandalism. If we had it to do over, we'd have only Maytags."

The tenants also seem to prefer the Maytags. According to Mrs. Eicholz, "4 out of 5 families use the Maytags. In some cases, people walk a block to get to them.

They like the big tubs. And Maytag gets the sand out of children's clothes, doesn't leave it in like the other machines."

We don't say that all Maytags will equal the record that Mrs. Eicholz has enjoyed. But dependability is what we try to build into every Maytag Commercial Washer and Dryer.

If you are interested in finding out more about Maytag dependability, contact the local Maytag route operator or just fill in and mail the coupon.

THE MAYTAG COMPANY
Advertising Dept. HH-4
Newton, Iowa 50208.



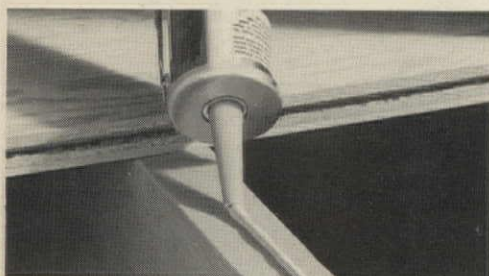
GENTLEMEN: Please rush me full information on the dependable Maytag-Equipped Laundry package.

Name _____
Address _____
City _____ State _____
Zip Code _____ Phone _____



Shhh.

The no-squeak APA Glued Floor System means just what it says. No squeaks. No nail pops. No callbacks. [Keep it quiet.]



No squeaks because the glue rather than nails carries the stress.

No nail pops — same reason.

No callbacks because there are no squeaks.

Properly constructed, the APA Glued Floor System is as simple as that. It consists of glue-nailing a single layer of tongue and groove plywood to wood joists.

Floor and joists are fused into a T-beam unit. The entire floor is stiffer — and joist size can often be reduced.

"It's faster, better and less expensive," says Jim Cutler, United Homes Corporation, Seattle. "We use 2x6's on 24-inch centers instead

of 2x8's (for 10-foot clear spans), and 80 percent fewer nails. We can nail-glue floors all year around. And callbacks are almost a thing of the past."

"We save about \$79 per house." Joe Benz, Craneridge Inc., Glenwood, N.Y.

So single-layer construction cuts costs because it's both subfloor and underlayment. You can get longer spans with the same size joist. And big savings in labor and materials.

There's lots more we have to tell you about the no-squeak floor. With how-to photos. Diagrams. Case histories. Span tables. DFPA plywood grade-use guides. Glue recommendations and equipment supplier lists. Send the coupon.

The no-squeak floor is only one example of the dozens of time-saving building systems developed by American Plywood Association. You can depend on it. Just as you can depend on the DFPA grade-

trademark on plywood. That means it meets the rigid standards of the oldest quality-testing program in the forest products industry. American Plywood Association.

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Tacoma, Washington 98401**

Can you really keep my floors from squeaking? Prove it. Please send me all the facts.

Name _____

Title _____

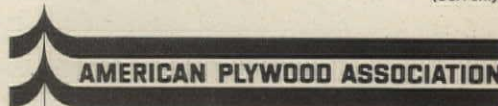
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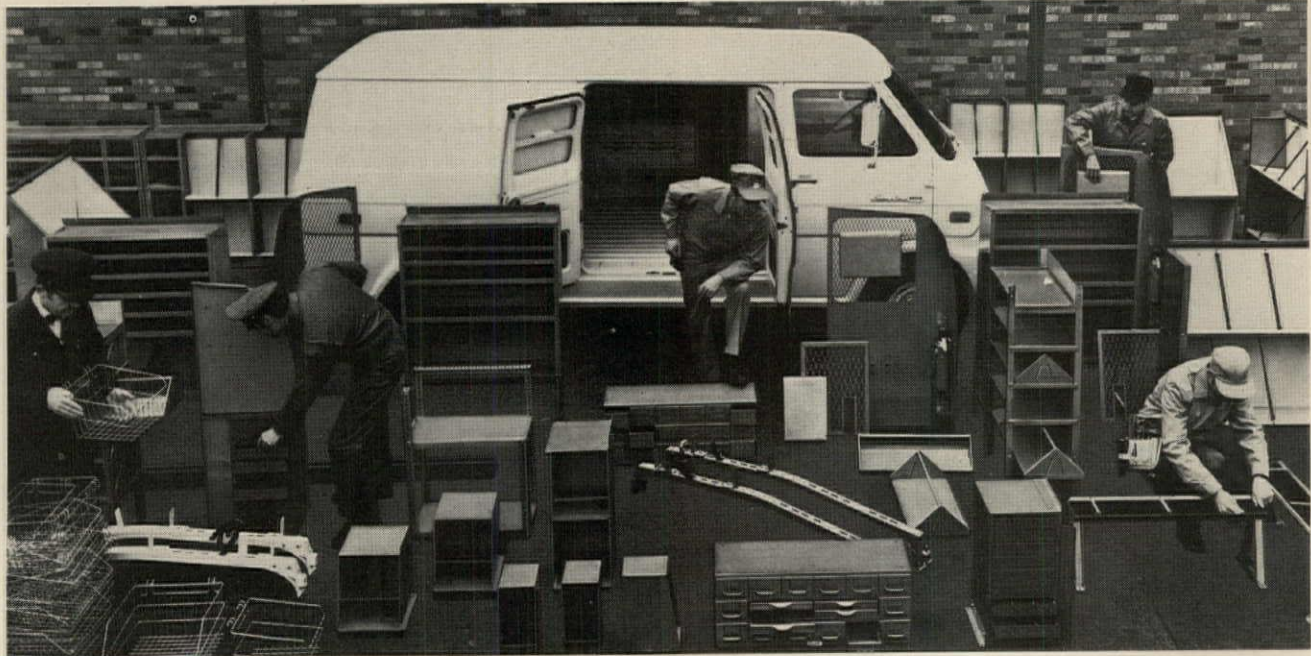
(USA only)



Plywood quality-tested by the Division for Product Approval.



H-040



Perfect fit: Econoline Van custom-designed to your job.

CUSTOM-DESIGN YOUR VAN

Your job may call for a one-of-its-kind van. You can get it in an Econoline, and all from one place—from your Ford Dealer.

Sound impossible? Not for the man with better ideas. Your Ford Dealer can custom-design the Econoline's interior into *your* kind of efficient working space, and it comes to you *ready for work*.

WIDE CHOICE OF MODULAR UNITS

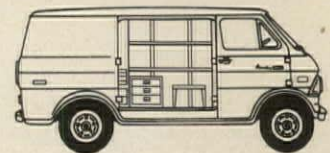
Econoline modular units (like those shown above) are the answer. Components include: racks, adjustable shelf units, drawer units, cabinets, bins (both padded and plain), padded trays, tote trays, hanging baskets, book compartments, storage boxes, partitions, padded siderails, padded floor, equipment holders, ladder racks, and many more.

These are not just parts and pieces, but a system of Econoline-engineered units designed to fit and work together. Constructed of heavy gauge steel with gray enamel finish, they bolt to floor and/or body pillars to become permanent yet movable parts of the van. Traveling showcase or workshop—you name it and it's yours with the Ford Econoline.

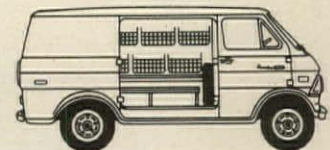
BETTER IDEAS EASE YOUR WORK

However you design your van, you have all of Econoline's basic better ideas going for you. Convenient outside front service center for quick-checking engine and related parts. Driver "walk-through" for easy access to the load compartment. More clear floorspace by 23% than any other van. Wide 5½-ft. stance for stability, yet a sharp 40-ft. turning diameter for maneuverability. And, of course, exclusive Twin-I-Beam independent front suspension for great durability, easy handling, low maintenance, long tire life.

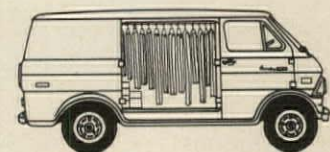
Because it is the one-of-its-kind van, you see more and more Econolines on all kinds of jobs. See how much more an Econoline Van can do for you—see your Ford Dealer.



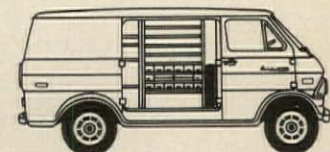
Radio, TV, Appliance Repair



General Utility



Laundry and Dry Cleaning



Vending Repair

FORD ECONOLINE VANS 

29³/₄ in. SMALL

(very fitting)

15 cu. ft. BIG

(very filling)



Model EVT15J

Whirlpool packs a lot into a little.



This new 15 cu. ft. No-Frost refrigerator-freezer has a large 147 lb. top freezer. A handy, extra freezer shelf. And loads of frozen food storage space in the door.

It also has a lot of places to put food in the refrigerator section. Four full-width shelves. Twin crispers. Butter and utility compartments. And two deep door shelves, besides.

Very filling.

But the surprising thing is, this big Whirlpool refrigerator is less than thirty inches wide.

Making it, a very fitting refrigerator. For kitchens where space is a premium.

Since most people would expect to find a much

smaller refrigerator in a compact kitchen, they just might be impressed with this one.

Aren't you, already?

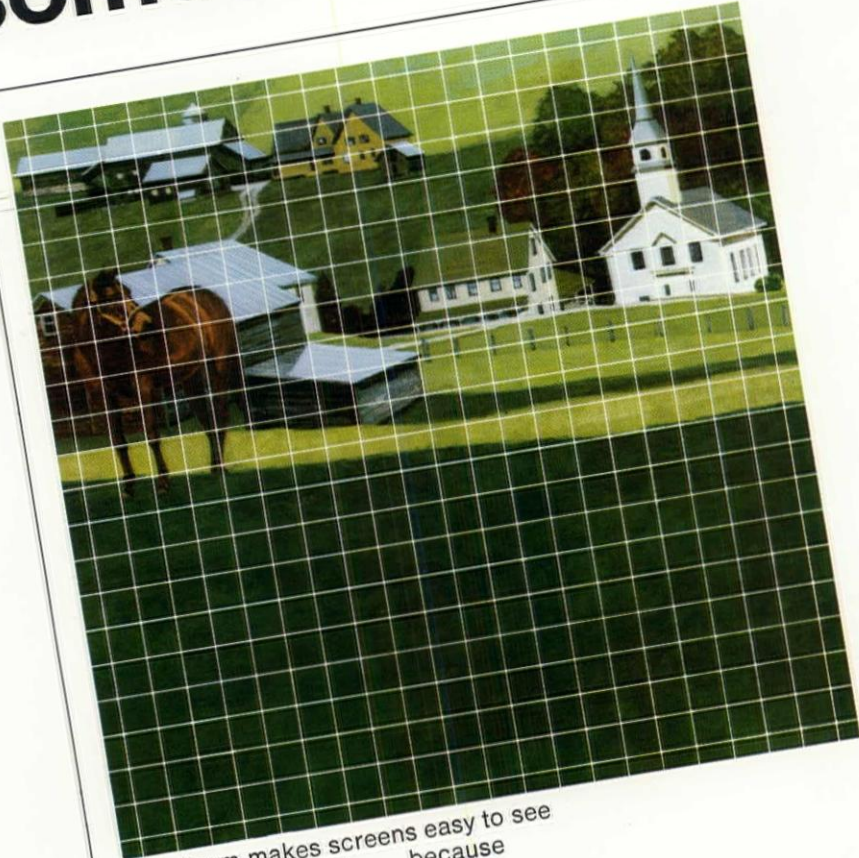
It's a lot of refrigerator for your money . . . and a little refrigerator for your space.

Call your Whirlpool Distributor now. He can also show you a 13.1 cu. ft. model that's just as space-saving on the outside. And check his complete line of Whirlpool refrigerators, from 10 to 21.4 cu. ft.

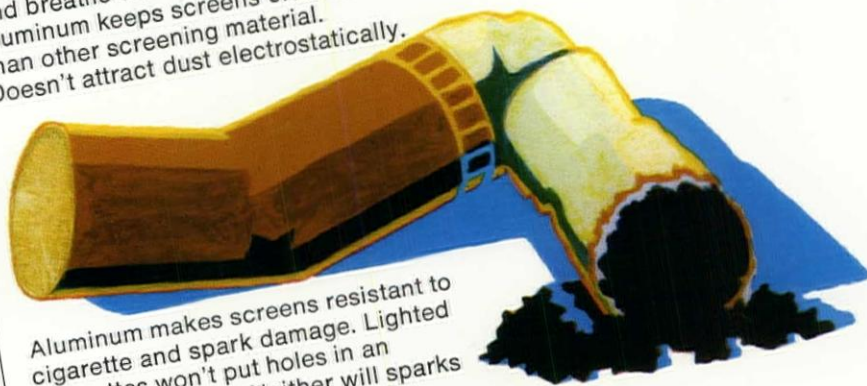


Whirlpool
CORPORATION

Today, aluminum screens are something else.



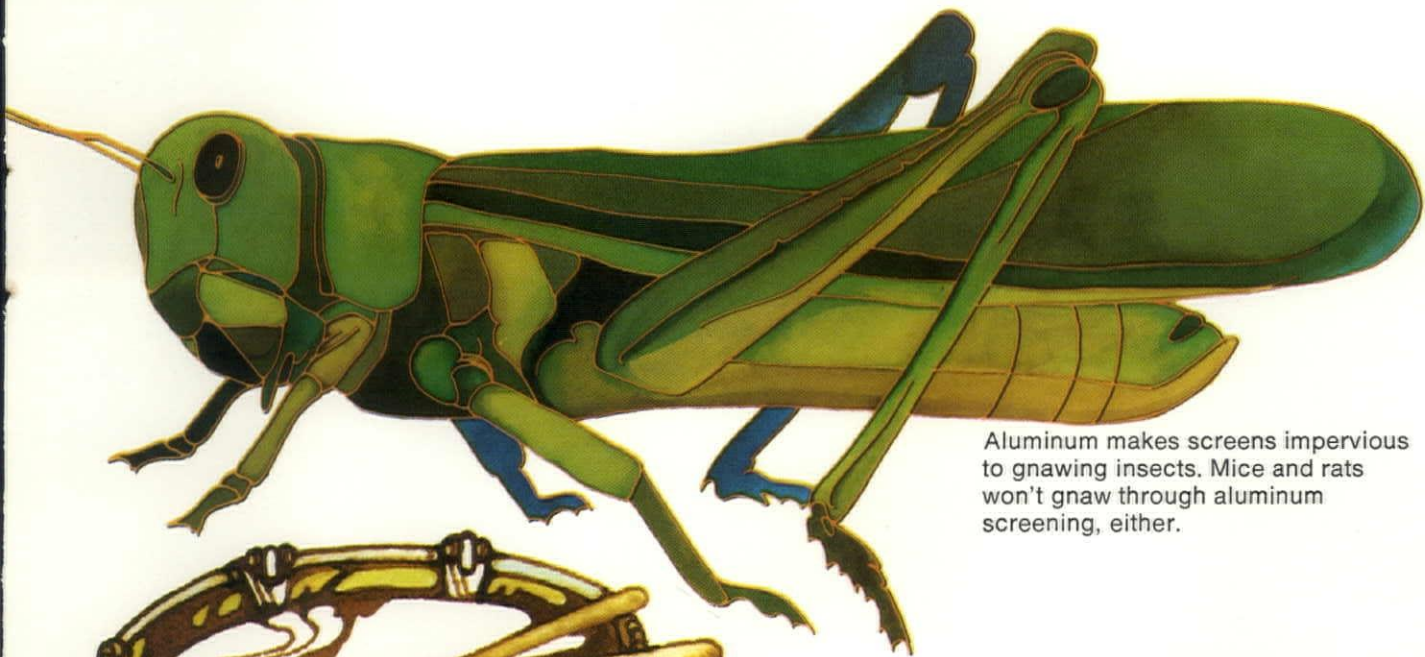
Aluminum makes screens easy to see and breathe through . . . because aluminum keeps screens cleaner than other screening material. Doesn't attract dust electrostatically.



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 stainproof . . . because aluminum never streaks 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 tight . . . because aluminum is easy to engineer. Once tight in the frame, aluminum screens won't bag out or loosen. It adds strength to screen structure and there is no center deflection.



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

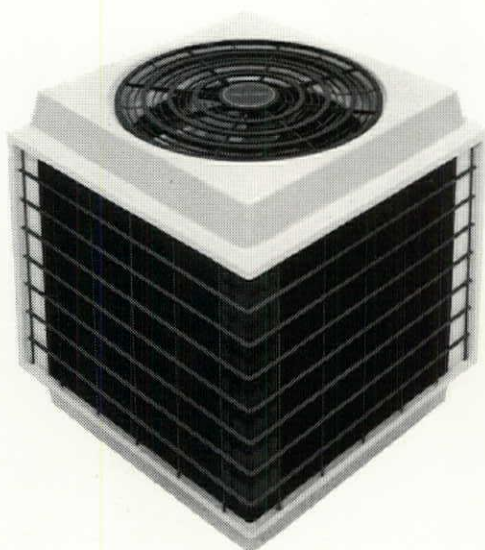


Change for the better with
Alcoa® Aluminum

 **ALCOA**

day & night

The Cool Cube.



It chills 11 classic builder beefs.

1. Waste installation space.
2. Eye-displeasing design.
3. Inadequate heat removal.
4. Flimsy grille guards.
5. Child-tempting external parts.
6. Bulky construction.
7. Garden-destroying exhaust heat.
8. Ear-provoking panel rattle.
9. Nerve-wracking motor noise.
10. Corrosion and paint peel-off.
11. Customer feedback.

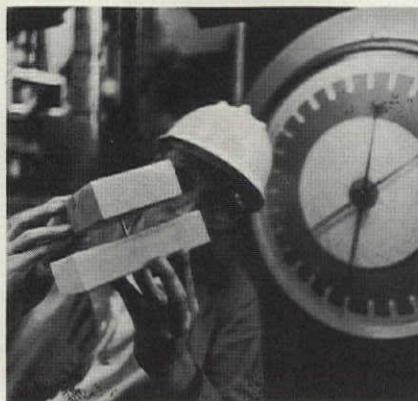
Why not join the Cool Cube Revolution? All you can lose are your aggravations. Write: Operation Cool Cube, Day & Night Manufacturing Co., 855 Anaheim-Puente Road, La Puente, California 91747.

day & night
MANUFACTURING COMPANY

La Puente, California · Collierville, Tennessee

new proof of the extra-grip Scotch Nails

56% more holding power 30 days after installation



Lehigh University recently completed extensive tests of nail holding power. Comparing our Scotch Nails with ordinary round-shank nails—in the 16d common variety—they demonstrated the Scotch Nail's superior withdrawal resistance, both immediately after driving and 30 days later.

Nail tested	Immediate withdrawal, force (lb)	Withdrawal after 30 days, force (lb)	Loss of strength (%)
Scotch, 16d	423	352	16.8
round-shank 16d	295	225	23.7

One hundred samples of each nail were tested under controlled laboratory conditions. Kiln-dried lumber was used to keep moisture content variation to a minimum. And the 30-day test was made so as to simulate actual installation conditions where wood dries and nails lose holding power.

Scotch Nails grip better and longer. Besides the obvious advantages of stronger joints and connections, Scotch Nails have a lower tendency to work loose. This means fewer of those expensive call-backs.

What it means to your customers. House buyers will appreciate your work for years to come. When floors don't creak and mouldings stay tight, they'll tell their friends about that "solid" builder they know.

Scotch Nails cost less installed. Not only do Scotch Nails hold better—and longer—they also cost less installed. Although they have a higher cost per pound, you get more nails in each pound. And, because of their square shank, Scotch Nails have less tendency to split wood than round shank nails. To learn more, just write to us. *Bethlehem Steel Corporation, Bethlehem, PA 18016*

BETHLEHEM STEEL



House & Home
Professional Builder

15-1876-701

If you're not using your body, you're not using your head.

The more we use our heads, the less we use our bodies. And that can lead to things like fat. And fat can lead to heart disease, diabetes, strokes, high blood pressure. And that can lead to death. Maybe you're taking life too easy. Maybe you should make things a little harder on yourself.

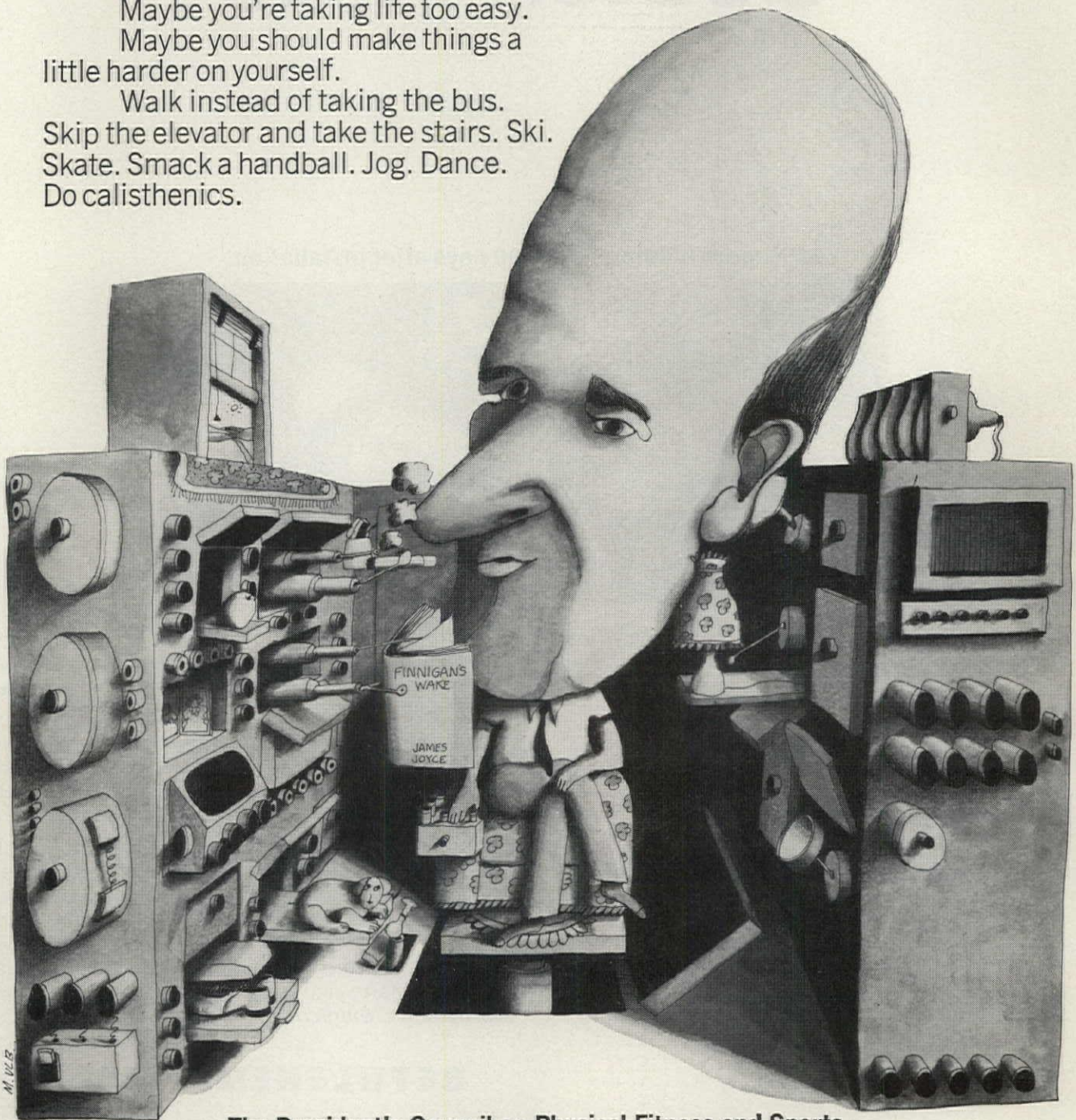
Walk instead of taking the bus. Skip the elevator and take the stairs. Ski. Skate. Smack a handball. Jog. Dance. Do calisthenics.

Use your head.

Use your body.

We can help. For information, pick up a pencil and write to us.

The walk to the post office is a start in the right direction.



The President's Council on Physical Fitness and Sports
Washington, D.C. 20201

Are you confused
about radiant heat
ceiling systems?



Don't be!

There's finally a radiant heat and ceiling system that makes sense.

It's a new system from Georgia-Pacific that acts as both a heating and ceiling system.

This system goes up as easily as regular gypsum wallboard. So it's economical and fast to install—faster than other types of heating systems.

G-P's new Radiant Heat and Ceiling System consists of a conductive layer called "Temsheet,"* which is the heating element. This revolutionary new type of electrically conductive paper is factory laminated between two sheets of gypsum wallboard. Factory finished panels are then nailed to the ceiling framing members and connected by the attached pigtail wires to the junction box, thermostat, and power source.



Since there are no wires embedded in the panel, it can be cut to any desired length. Half-conductive panels which can be cut to different lengths and widths are available for odd shaped rooms.

Once the panel is up, the joints are taped and finished. And the surface is painted. Just like regular wallboard.

That's it.

The job is done.

What could be simpler?

This system is approved by Underwriter's Laboratories (U.L.).

Here's how it helps sell homes.

Your customers are looking for innovations in home construction. G-P's new Radiant Heat and Ceiling System is the most modern and dependable heating system available.

For example, there are no hot or cold spots. Instead, this new system gives even, uniform warmth from floor to ceiling. And, since there's a thermostat in each room your customers get individual room heat control.

Plus, there are no furnaces, ducts, pipes, vents or chimneys to worry about.

No moving parts makes this system virtually maintenance free.

It's clean, too. This system has no blowers or air currents to circulate dirt.

So see your G-P representative soon about G-P's new radiant heat system.

It could make the difference that makes the sale.



*A Registered U.S. Trademark of the Armstrong Cork Co.

For additional information on G-P's new Radiant Heat and Ceiling System, send in this coupon to:
Georgia-Pacific Corporation/Gypsum Division,
P. O. Box 311, Portland, Oregon 97207.

Name _____

Address _____

City _____

State _____ Zip _____



The Marketing Obstacle Course

According to the Market Survey, buying decisions on our products are made principally by Corporate Engineers.



... you'll notice that at the primary specification level, the Corporate Designer is influenced by the Confusion Coordinator.

Yes, of course. On the other hand ...



... our Customer Profile indicates Percolating Department authority, particularly where supplier image is a factor ...

Indubitably true. However ...



... the computer tabulation suggests veto influence by Marinating Superintendents, Draftsmen and Apprentices, 2nd Class ...

And that's not all ...



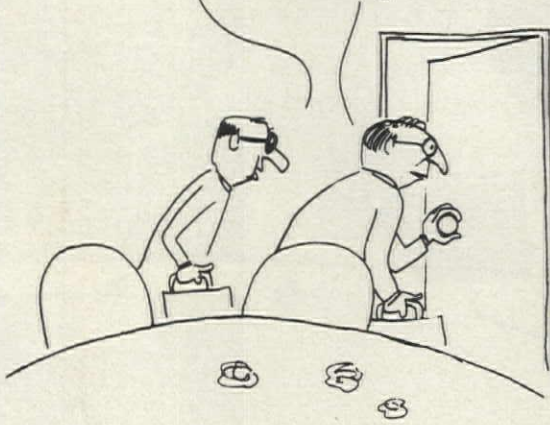
... the statistical breakdown of depth interviews verifies the buying influence of Lab Analysts and Executive Secretaries.

That tells the story, all right.



Wonder who really buys our stuff?

It would certainly be interesting to know.



It seems like everyone's getting into the buying act. You must reach every possible buying influence—known and unknown. Any one of them just might make or break your sale. Fortunately, you can reach them—and at a reasonable cost. The answer lies in consistent advertising in McGraw-

Hill business publications. Ask yourself whether you're advertising often enough—in the kind of magazine that talks business to the people you're trying to sell.

McGRAW-HILL
market-directed®
PUBLICATIONS

NEW PRODUCTS

For more information, circle indicated number on Reader Service card p. 117

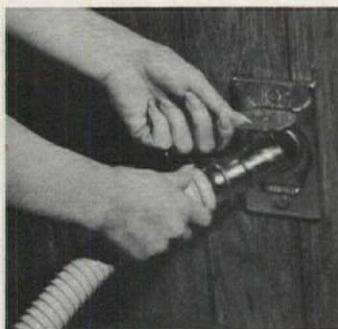
Central vacuums catch the last specks of dust

Whatever dirt isn't filtered or scrubbed out of the air by one of the systems mentioned in the story on page 96 of this issue, can be removed by any of the built-in vacuum systems on the market today.

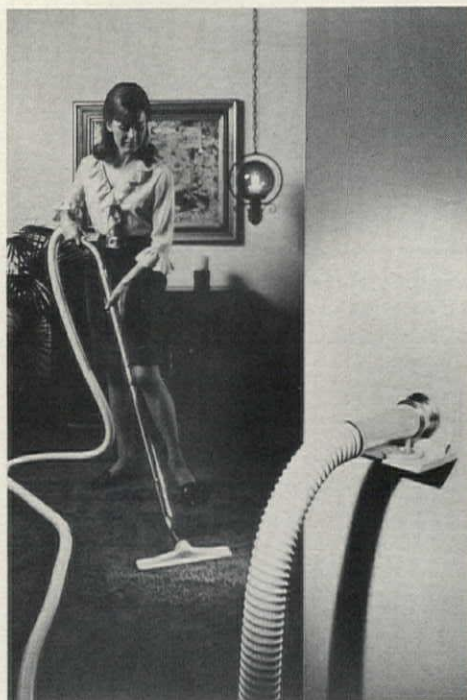
They all operate on remotely located motors that pull the dirt away to a storage tank in the garage, attic, or basement. The tank is emptied every couple of months.

Not only does the remote location prevent dirt from being recirculated in the home or apartment, it eliminates the noise made by portable vacuums, does away with electric cords, and makes the whole job easier. The only items necessary to carry from room to room are the length of light-weight plastic hose, the wand, and whatever rug, floor, or upholstery attachments are needed. The hose plugs into handy wall inlets about the size of switchplates. They start and stop the system.

In a new house or apartment, the plastic hose is run through the walls before they are finished. In remodeling it takes more time but isn't too difficult. For the apartment manager or new home salesman such a system is an invaluable sales tool as an item included in the rent or price. For the home owner it is an additional—and important—re-sale factor.



3



1



4



2



5



6

1. Wall outlet has unobtrusive plastic face panel that flips down for use in system by NuTone, Cincinnati, Ohio. *Circle 246 on Reader Service card.* 2. The usual complete package includes a power unit, hose, wands, outlets, and dirt collection tank and bags. A plus feature here is carry bag for cleaning attachments in unit by Central Vac International, Los Angeles. *Circle 247.* 3. Flip-up outlet and 4. Stair-cleaning attachment are part of package by H-P Products, Louisville, Ohio. *Circle 248.* 5. A 28' hose to do the largest rooms or long stairways and 6. A big six-gal. storage tank are features of model by General Electric, Louisville, Ky. *Circle 249.*

New products continued on p. 124

If you built a house for yourself, this is the one air conditioner you'd want in it.

It's our best. A gas air conditioner you can class as a home improvement. The Bryant 453.

Least of all, it looks good. Horizontal, low, streamlined. With the fan tucked away inside, out of sight and out of ear-shot.

That, naturally, tells you something about how loud it is, which isn't loud at all. Far from it. The 453 purrs. Because its cooling power comes from a silent gas flame.

Most of all, though, the 453 is efficient. So extremely efficient it uses 27% less gas than any other gas air conditioner we ever built. Which obviously means a very hefty savings every month for whoever has one. Nice, since gas

fuel is usually cheaper to begin with. Better yet, the 453 stays extremely

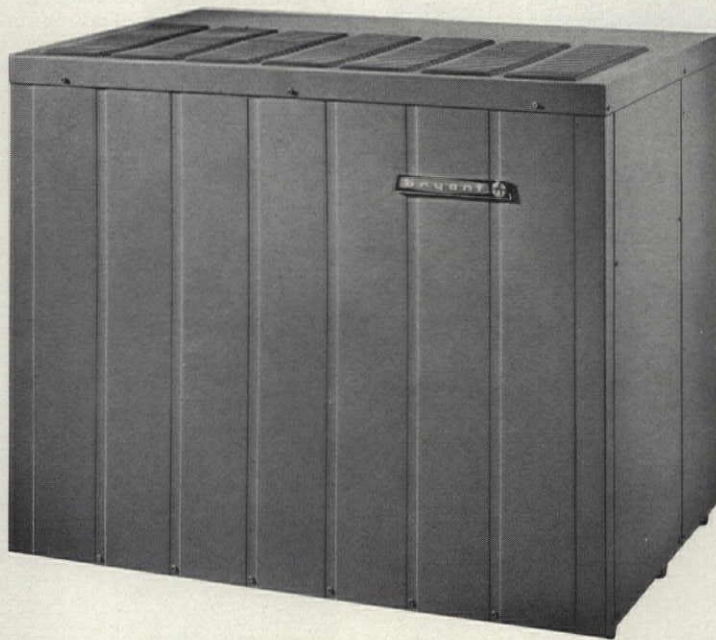
efficient. Constantly. For a long, long time to come. Simply because it's built stronger, with only a few major moving parts. And the few there aren't even critical.

There's more, of course. A list of advantages as long as your arm. Advantages that make the

difference between a good house and a better house. Your kind of house.

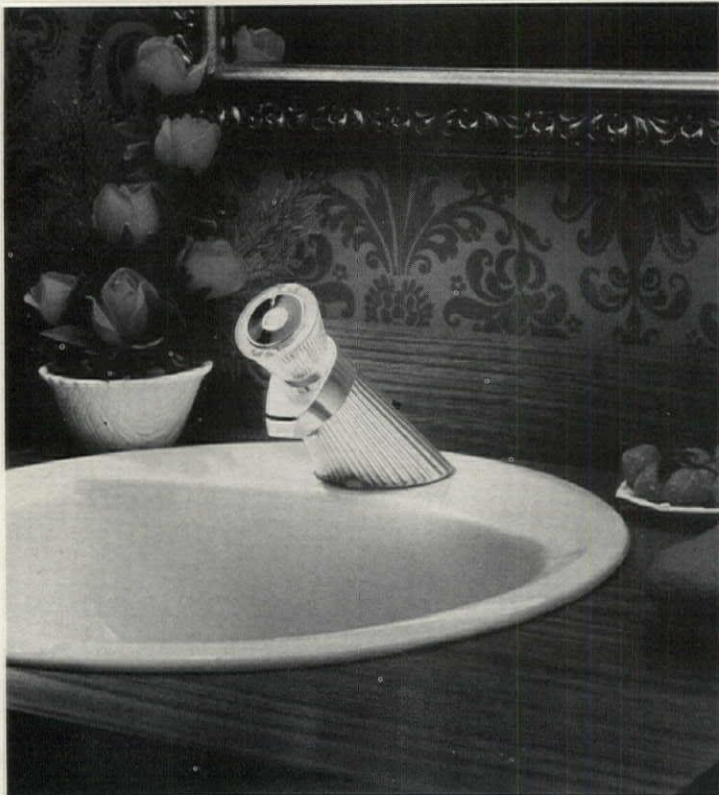
And it stands to reason that what's better for you is also better for the houses you build, which is also better for you. The Bryant 453.

Bryant Air Conditioning Co., 7310 W. Morris St., Indianapolis, Indiana 46231.



The Great Indoors[®]
People **bryant[®]**

Baths



Streamlined fitting combines spout, control knob, and drain lift. Smooth-surfaced crystal-like plastic has interior gold or silver design that can't wear off. Plated ABS spout and stainless base are replaceable. Moen, Elyria, Ohio. *Circle 250 on Reader Service card*



Whirlpool bath is 5' long and self-contained. Automatic timer switch activates 1/3-hp motor that runs on 115-v to drive built-in jets. Porcelain-enamel-finished steel tub comes in five colors and white. Harbor Island Spa, Long Branch, N.J. *Circle 254 on Reader Service card*



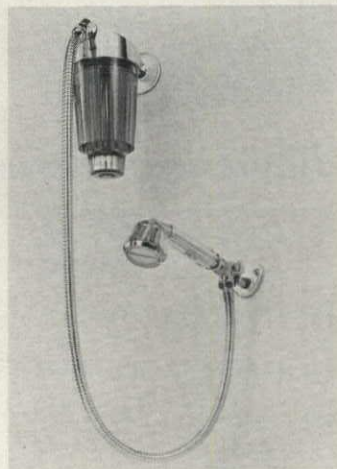
No-hands sink for surgeons could be put to other uses. Automatic control, activated by stepping up to sink, turns on trajectory spout that sends water in splashless arc. Unit stops when user steps away. American-Standard, New York City.

Circle 251 on Reader Service card



Oval mirror conceals a reversible cabinet of steel with beige baked enamel finish. Frame of deeply sculptured wood has a pewter finish. Decorator lights and accessories are also available in pewter finish. Miami-Carey, Cincinnati, Ohio.

Circle 252 on Reader Service card



Shower mixer dispenses liquid soap, shampoo, or bath oil. Mixture is controlled by dial at the bottom. One-pint container is shatterproof plastic. Available separately or with flexible hose and personal shower. Alsons, Somerset, Mich.

Circle 253 on Reader Service card



Stainless steel accessories for public washrooms include mirrors, shelves, holders, and combinations. Mirrors are 18" to 72" wide, 20" to 24" high. Shelves are 5" deep, 16" to 72" wide. Bradley Washfountain, Menomonee Falls, Wis. *Circle 255 on Reader Service card*

Take me along



This Homelite XLS1¹/₂-1A gasoline-engine-driven pump will perform almost any pumping job you have — and it's easy to carry from job to job because it weighs only 22 pounds. It's driven by the same dependable XL engine you'll find on famous Homelite Chain Saws. It has a 25-foot lift, a head up to 140 feet and a capacity of 4200 gallons of water per hour. Throttle control allows matching of pump speeds to job needs, and speeds can be varied from 2500 to 6500 RPM. Requires very little maintenance and the cost is low. Better have a look and a demonstration. See it at your nearest Homelite Construction Equipment Dealer or Homelite Factory Branch.

HOMELITE[®]

9404 S. RIVERDALE AVE., PORT CHESTER, N.Y.

A **Textron**
DIVISION

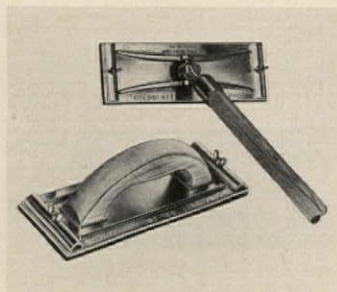
Tools and equipment



Radial arm saw weighs 58 lbs.; light enough for on-the-job work, tough enough to cut a 2x6 as shown. It will also bevel, rip, or miter. A 2-hp motor pushes 8" blade through 2 7/8"-deep cuts. Black & Decker, Towson, Md. *Circle 267 on Reader Service card*



Landscaping tractor features floating axles that follow ground contours, a differential that applies continuous torque to both rear wheels. Attachments include grader shown, plus mowers, trenchers, etc. Allis-Chalmers, Milwaukee, Wis. *Circle 268 on Reader Service card*



Drywall sanders feature easy-to-use improvements. One has 48"-long handle and swiveling device that permits workmen to sand any part of room from the floor. The other has an easy-grip wooden float handle. Goldblatt, Kansas City, Kans. *Circle 269 on Reader Service card*



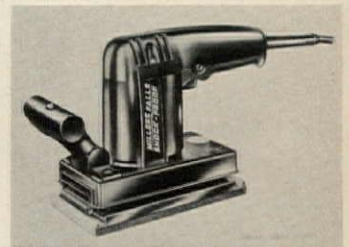
Paint brush, with foam base that conforms to irregular surfaces, has thousands of tiny nylon fibers that flow paint on faster than an ordinary brush. For use with oil- or latex-based paints. Comes with a 4"x4" or a 4"x7" pad. E Z Paint, Milwaukee, Wis. *Circle 270 on Reader Service card*



Overnight cover saves time lost on cleaning up. Painter can leave roller or brush in partially filled five-gal. pail until the next day. Bonnet tightly seals the pail, prevents drying even over a week end. Central States Diversified, St. Louis, Mo. *Circle 271 on Reader Service card*



Pistol drill has a trigger-speed control and a special reversing lever that requires only a flick of the finger to change directions. An interlocking device keeps motor from reversing while running, prevents arcing. Milwaukee Electric Tool, Milwaukee, Wis. *Circle 272 on Reader Service card*



Orbital sander has double insulation, comes with more convenient two-prong plug plus 10' cord. The extremely high speed of 10,500 orbits per min. and the 5/32" orbit help eliminate swirl marks on finish work. Millers Falls, Greenfield, Mass. *Circle 273 on Reader Service card*



Mobile concrete plant for small jobs produces one cu. yd. in 2 1/2 to 4 min. Operator sets controls so that machine is ready to deliver specified mix on arrival at job site. National Concrete Machinery, Lancaster, Pa. *Circle 274 on Reader Service card*

Accent your homes with Harris BondWood®



HADDON HALL, AS SHOWN, IS THE NEWEST OF MANY BEAUTIFUL BONDWOOD® PATTERNS. APPROX. 80° SQ. FT. INSTALLED; OTHER PATTERNS FROM 50° UP.

Try this foyer floor for sales appeal - and save!

Here's a different way to make your homes more valuable without adding any cost. Pick just one area—kitchen, foyer, hall, den or playroom—and install Harris BondWood® parquet. The resulting splendor will catch the fancy of even the "hardest-to-close" customers! Choose from rich domestic hardwoods or from rare imported woods such as Guiana Teak, Panga-Panga or Brown Rhodesian Teak, all $\frac{5}{16}$ " thick and ingrained with lasting elegance. For the best laid floors in the U.S.A. specify Harris BondWood®. There's a pattern for every budget—installed and custom finished for approximately 60¢ to \$2.50 sq. ft. in most areas.

Harris Manufacturing Co.
Dept. HH-40, Johnson City, Tennessee 37601

Please send information on BondWood® Floors.

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 Other Custom Designed Wood Floors

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Company _____

Street _____

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**People who buy
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insulating glass
get a nice warm
feeling inside.**

Windows with Thermopane are a big plus to homeowners. And prospective homeowners.

No more chilly feeling near single glazed windows.

No more putting up, taking down, or washing storm windows.

What's more, Thermopane has the GlasSeal® edge. It's glass fused to glass

all around the edges so dirt and moisture can't get in.

Sure, there are other kinds of insulating glass. But they're not Thermopane and they don't have the GlasSeal edge.

Thermopane insulating glass is made only by Libbey-Owens-Ford Company, 811 Madison Avenue, Toledo, Ohio 43624.

LIBBEY-OWENS-FORD CO., TOLEDO, OHIO



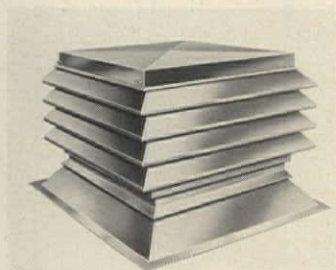
Structural Materials



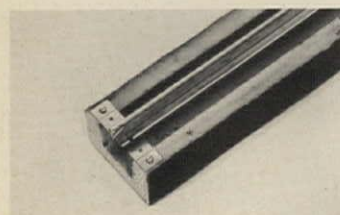
Precast balconies bolt onto extended beams through holes in floor. One-ton units are 7'8" x 4'6". Wood cap on 42"-high railing and wrought-iron side were added by builder. Available in Northwest only. Christy, Fremont, Calif. *Circle 256 on Reader Service card*



Aluminum grating comes with flocked-nylon carpeted treads that provide firm footing, wet or dry. Carpet colors are rust, green, blue, white, black. Other treads available: vinyl, abrasive, bronze, or all aluminum. Construction Specialties, Muncy, Pa. *Circle 257 on Reader Service card*



Roof ventilator is self-flashing, comes assembled on an integral extruded aluminum roof curb that contains 2" of insulation. Included: fabric dampers, bird screens, wiring conduits, cast-aluminum power assembly. Loren Cook, Berea, Ohio. *Circle 258 on Reader Service card*



Beam clips, for use with suspended ceilings, attach to unfinished side of polyurethane ceiling beam. Tabs at 2' intervals bend over main tee of ceiling grid to attach beam before tiles are slipped in place. Urethane Fabricators, Camden, N.J. *Circle 259 on Reader Service card*

New products continued on p. 131



*beat
the
competition
with low cost*

LITE-BEAMS®



YOUR GUARANTEE
OF QUALITY.
LOOK FOR IT!

Beat the overhead and you beat your competition over the head! LITE-BEAMS are installed in cheap little minutes, not big expensive hours!

Apply by adhesive to any surface. Cut with a knife . . . nail, saw or drill . . .

LITE-BEAMS® are the easiest salesmen you ever handled.

And your prospects simply can't resist

LITE-BEAMS' three glamorous

finishes: Old English Dark

Walnut . . . Colonial

Medium Mahogany

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even from

inches away!



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on your competition and

KEEP IT with LITE-BEAMS. Costs go down . . . sales and profits go up.

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LITE-BEAMS, Division of Urethane Fabricators, Inc.

Haddon Avenue & Line Street, Camden, N.J. 08103

The "everything-but" sinks



Sinks for everything but the kitchen to help you build. Elegant laundry sinks in 4 colors. Handy floor sinks for washing pets. 101 clean-ups.

Brighten up the laundry with strong, stain resistant Molded-Stone® sinks. Double and single tub models, floor or wall mounted. Prospects will like the low-slung, all-purpose floor sink, too. Made better than terrazzo by terrazzo experts, Molded-Stone® sinks mean more dollars for you, extra satisfaction for customers. For more information write Dept. HH-4, Formica Corporation, Cincinnati, Ohio 45232.



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House & Home

FEBRUARY 1970
THE MARKETING AND MANAGEMENT PUBLICATION OF HOUSING AND LIGHT CONSTRUCTION

AN OPEN LETTER

TO THE PRESIDENT
THE CONGRESS
THE SECRETARY
OF HUD

GENTLEMEN:

In the face of the worst housing crisis this country has seen since the 1940s, the Department of Housing and Urban Development has put forth a remedy—Operation Breakthrough—that may well do more harm than good. The **real** problems have

continued on page 51

reprints now available!

Heavy demand for the February issue of HOUSE & HOME has made it necessary to reprint the 20-page editorial analysis of the real problems confronting Operation Breakthrough.

Limited quantities are now available on a first-come, first-served basis at a cost of 50¢ per copy.

For copies of AN OPEN LETTER, send check or money order payable to HOUSE & HOME, indicating number of copies desired on coupon below.

USE THIS ORDER FORM

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Enclosed find check for \$_____ for _____ copies of 20-page reprint of AN OPEN LETTER.

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Address _____

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Doors and Windows

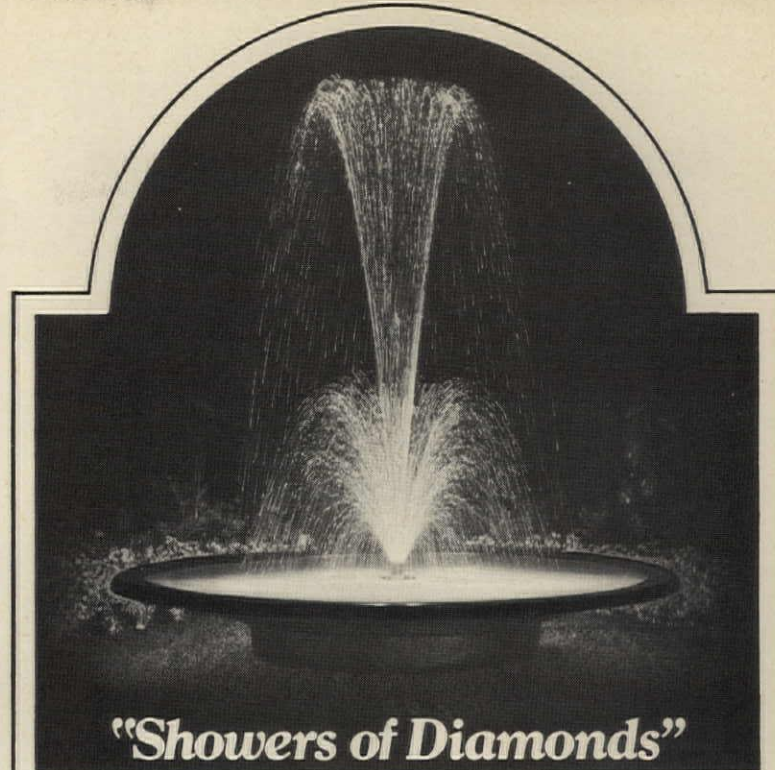


Snap-off grilles speed cleaning by five minutes per window as shown by girl at left. The other girl is cleaning multipaned window that looks just like single-pane model when vinyl grilles are in place. Caradco Div., Scovill, Dubuque, Ia. Circle 260 on Reader Service card



Double-hung window has tilt-in sash that can be removed, and then replaced easily, engaging the balance system automatically. Storm sash and fiberglass screens can also be removed from inside. RIMCO, Rock Island, Ill. Circle 261 on Reader Service card

New products continued on p. 132



"Showers of Diamonds"

Fountains by RAIN JET

IT'S SHEER DELIGHT as thousands of diamond-like water droplets rise, twist, change color, then fall with a soothing musical patter. Patented. Both complete fountain and bowl assemblies (no plumbing needed), and "aquavators" for existing pools. Send for free full-color literature and prices.

RAIN JET CORP., 301 S. Flower St. Burbank, California 91503
Dept. HH

Circle 120 on Reader Service card

"Weathering" for sale . . .



Home at New Seabury, Cape Cod, Mass.; Architect: Royal Barry Wills & Associates, Boston, Mass.; Developer: Emil Hanslin Associates, Melrose, Mass.; Cabot's Stains on siding.

Cabot's BLEACHING OIL

Demand is great for the unique "driftwood" look, an effect usually found only in seacoast areas after years of exposure to salt air. Cabot's Bleaching Oil, when applied to untreated wood surfaces, imparts a delicate gray tone which weathers in but a few months to a beautiful, natural driftwood gray, will not crack, peel, or blister. Everybody talks about the weather; Cabot's has done something about it.

Cabot's Stains, the original Stains and Standard for the nation since 1877.



Samuel Cabot Inc.

430 S. Terminal Trust Bldg., Boston, Massachusetts 02210
Please send information on Cabot's Bleaching Oil.

Circle 121 on Reader Service card

Tired of
tattered
plans?



Keep them neat... the PLAN HOLD WAY!

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Circle 122 on Reader Service card



tub - master Folding-Bypass Tub-Shower Enclosures

Easy to stock. Carton 61" x 10 1/2" x 7 1/2" contains completely assembled unit, hardware, sealing compound, guarantee and instructions.

Easy to handle. Unbreakable; weight only 30 lbs.

Easy to sell! Can be used as rigid bypass, or folded completely out of the way. Ten decorator colors.

Easy to install. With simple hand tools in about 30 minutes. Plumbs itself to uneven walls, unlevel tubs.

tub - master[®]
CORPORATION

413 Virginia Drive Dept. HH-S
Orlando, Florida 32803

Please send information on TUB-MASTER folding shower doors.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Circle 123 on Reader Service card

NEW PRODUCTS

start on p. 122

Interiors



Stagestruck wallpaper features photos of movie super stars in white, black, and silver on vinyl-coated, pre-pasted, and strippable paper. "Silver Screen" is one of several "with-it" papers for young buyers. United de Soto, Chicago. Circle 262 on Reader Service card



Translucent panels, shown here in a divider, can be used as luminous walls or in folding or cabinet doors. Of shatter-resistant plastic, they come in several colors and patterns, 4' or 6' long and 16", 24", or 48" wide. K-S-H, St. Louis, Mo. Circle 263 on Reader Service card

New products continued on p. 134

Mini-size, Maxi-warmth



Quietest between-the-studs heater produces up to 8533 BTUs of comfortable heat

The Hunter Hide-Away is first. First to stay quiet at full power. First to give you a choice of three wattages (1500, 2000, 2500) in the same



unit size. First with a motor matched to wattage to give the right air movement automatically. First with a cool grille at high heat (30° cooler on the average than competitive heaters). No wonder it's a favorite coast to coast. Budget priced, easy to install, economical to operate. Unit or wall thermostat. Beige grille. Special bathroom model, 1250 watts, has chrome grille. Send coupon for further information.

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Hunter makes a complete line of portable and ventilating fans and electric heating equipment, including central electric heating and air conditioning.

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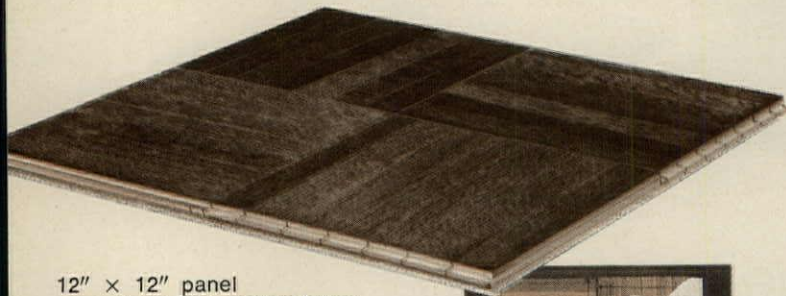


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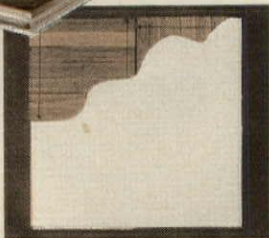


Cushioned Hardwood Parquet Flooring For Economical Sound Control

HARTCO WOOD FOAM-TILE™ is 7/16" × 12" × 12" parquet which includes a layer of 1/8" closed cell foam laminated on the back. It is solid Appalachian hardwood with an impervious moisture-cured urethane factory finish. This new parquet flooring has better IIC sound insulation value than lightweight carpet with pad after the carpet has been used awhile and the nap has become depressed. When used with area rugs in traffic areas, the IIC of HARTCO WOOD FOAM-TILE™ approaches control achieved with heavy carpet (44 oz.) with heavy pad (40 oz.) . . . at much lower cost! Read about it in Tibbals' technical brochure: "Sound Control Data for Various Flooring Systems Used in Multi-Family Construction." Use the handy coupon below for your free copy (and for samples).



12" × 12" panel goes down fast, saving labor. Note milled tongues and grooves to interlock panel in place. Note also foam laminated to back.



Cutaway shows how foam is laminated to back of each parquet panel.

HARTCO WOOD FOAM-TILE is easily installed using an asphalt cutback mastic that is easy to obtain and relatively low in cost.



**TIBBALS
FLOORING COMPANY**
ONEIDA, TENNESSEE 37841

Tibbals Flooring Company—Dept. HO
Oneida, Tennessee 37841

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NEW PRODUCTS

start on p. 122

Prefabs



A-frame comes in solid cedar. Two-level model is 21'4" x 29' long, has 928 sq. ft. including upper-level loft and balcony. It offers one bedroom and bath plus an open living-dining-kitchen area for \$4,380. Lindal Cedar Homes, Tacoma, Wash. *Circle 264 on Reader Service card*



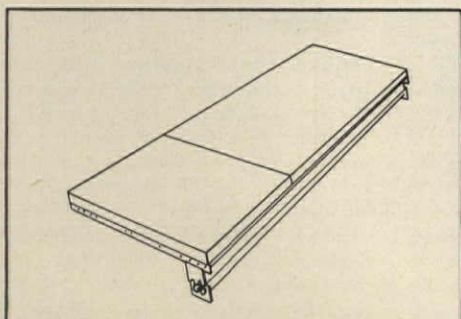
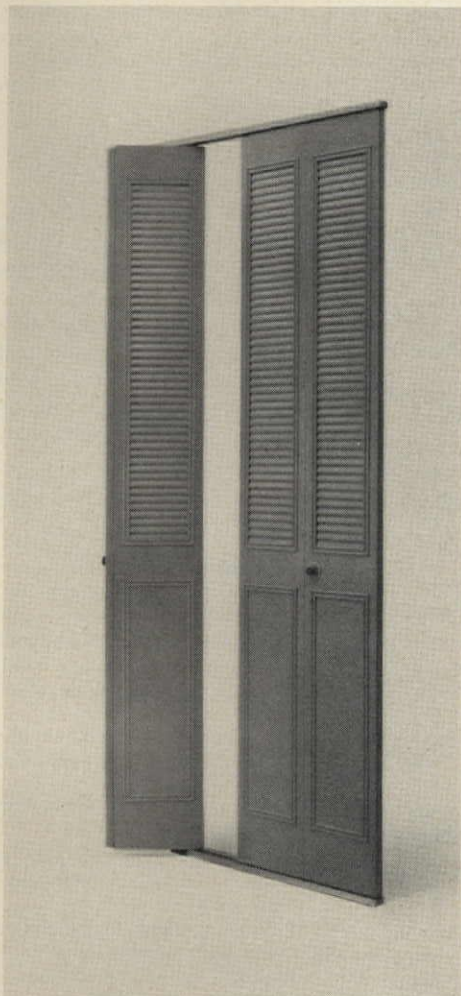
Panelized cabin uses plywood panels by Weyerhaeuser that are 4' wide, aluminum faced, and backed with reflective insulating foil. Exterior finish guaranteed 15 years. Priced from \$2,395 for 20' x 20' model. Advanced Construction, Phoenix, Ariz. *Circle 265 on Reader Service card*



Four gables cover entrance deck, left, living-dining wing, center, kitchen, right, and two rear bedrooms. Above are two more bedrooms, a second bath, and a sleeping loft. Total area: 2,142 sq. ft. American Forest Products, San Francisco. *Circle 266 on Reader Service card*

New literature starts on p. 136

meet the door that meets every need.



Here's the do-everything door that fits in everywhere. Whether you're building a home or a high rise, conventional or manufactured units, or remodeling for urban renewal. And it fits in more economically, more effectively than any other closet system you can buy.

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Only Float-Away gives you doors to fit any height, any width. Even oddball sizes are no problem. Float-Away delivers the door you need—where you need it, when you need it. You're assured of easy installation and top quality. Plus a choice of five different styles.

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Attention Building Material Distributors: Float-Away is now adding distributors in certain protected areas. It's a good time for you to think about adding the complete line of Float-Away closet systems. Good profit. Proven dependability. Just drop us a line. We'll be glad to send you further information.

Yes! Send me complete information on Float-Away Doors and Float-A-Just shelves.

Check one:

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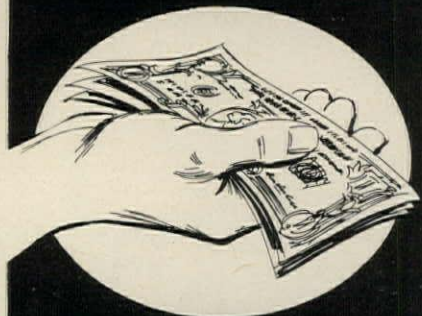
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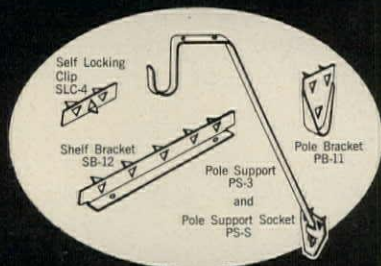
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NEW LITERATURE

For copies of free literature, circle the indicated number on the Reader Service card p. 117

HEATING EQUIPMENT. A four-color booklet contains drawings that explain to the homeowner just why too much or too little heat in the home is uncomfortable; how hydronic hot water, warm air, and resistance heating systems work; what zoned heating is; and which types of systems are designed to be quiet and clean. Other aspects of heating systems covered are humidity, amount of space needed for equipment, the average life of a system, types of fuels, relative costs of operation, etc. A good giveaway to help buyers or tenants appreciate a good system. Weil-McLain, Michigan City, Ind. *Circle 300 on Reader Service card*

ARCHITECTURAL PANELS. Handsome cultured stone panels are shown in a close-up photograph used as the cover of a leaflet that describes a new building panel that looks like quarried stone but weighs only one third as much and is structurally strong. Physical properties are discussed, and suggestions are given for exterior, interior, and accent wall uses. Johns-Manville, New York City. *Circle 301 on Reader Service card*

CONTEMPORARY LIGHTING. Wall and ceiling fixtures of plastic, metal, and glass are handsomely illustrated in black-and-white photographs for a silver anniversary catalog. Included are the newest fixtures, plus some from the manufacturer's early lines—which still look up-to-date today. There are chandeliers of linked glass rings or discs, crystal double cones, hanging fluted columns or smoked crystal square tubes, and translucent nylon filaments webbed around free-form plexiglass shapes. Most spectacular chandelier is a flexible Swiss unit of polished aluminum tubes that can be interconnected to form molecular-like structures. Ceiling fixtures include white spiral frames with bare bulbs, upside-down "trees" of white globes, and chrome bars with hanging chrome globes. Pendants available are similar to chandeliers and ceiling fixtures and also include small smoked crystal hanging globes, a large single white glass globe, and mirrored aluminum cubes. Koch & Lowy, New York City. *Circle 302 on Reader Service card*

REFINED WATER. Water conditioning for apartment projects could cut maintenance costs according to a leaflet that describes a patented five-cycle process. The removal of scale-forming minerals would eliminate clogged shower heads and water heater burnouts. Softened water would keep bathtubs and sinks looking new longer because there would be no hard-to-remove — and therefore scrubbed-to-death — rings and spots. Other advantages of water refining in general, and this system in particular, are listed. Water Refining, Middletown, Ohio. *Circle 303 on Reader Service card*

ALUMINUM SIDING. "An Invitation to Better Living" describes the advantages of using aluminum siding. The 20-page four-color booklet answers frequently asked questions and is available to architects, builders, and realtors for distribution to prospects and buyers. Aluminum Siding Assn., Chicago. *Circle 304 on Reader Service card*

PLAN HOLDERS. More than 200 forms and sizes of vertical and roll files for organizing plans, prints, maps, and charts are shown in a color-coded catalog. Three sections 1) provide guidelines to building filing systems tailored to individual needs and spaces, 2) present a range of vertical files for wall-mounting or mobile or cabinet use, and 3) offer a variety of square tube files. Plan Hold, Torrance, Calif. *Circle 305 on Reader Service card*

LIGHTING FASHIONS. Included in a 120-page catalog are all types of fixtures from chandeliers to garden lights. Four-color photographs and drawings illustrate the book throughout. The wide range of styles presented includes: scrolled chandeliers bedecked with sparkling Viennese lead crystals, hammered and wrought iron fixtures with Spanish

or Mediterranean motifs, large hanging see-through smoked acrylic globes, polished brass colonial hall lights, marbelized panels of makeup lights, antique brass and amber glass candle lanterns, solid copper post lights, plus nine varieties of decorative bulbs, fluorescent and recessed fixtures, budget products, landscape and security lighting. Progress Lighting, Philadelphia. *Circle 306 on Reader Service card*

HIDEAWAY AIR CONDITIONERS. A 24-page catalog covers a line of slim air conditioners for hotels, motels, apartments, hospitals, etc. Black-and-white cutaway drawings show how the systems operate and are installed, and 17 charts give capacity data on cooling and hot water coils, water pressure drop, electric heat, and sound power ratings. McQuay, Minneapolis. *Circle 307 on Reader Service card*

SWIMMING POOLS. A guidebook for the architect, engineer, and contractor covers all phases of public and semi-public pool development and operation, starting from the earliest planning. The book, "Swimming Pools—A Guide to their Planning, Design, and Operation," was published as a project of the Council for National Cooperation in Aquatics. Included are chapters on community pools, school pools, types of pool structures, bathhouse and auxiliary services, pools for competitive swimming, and innovations in pool design for now and the future. Also included are worksheets, check lists, suggested ordinances and regulations, and a feasibility study that obtained a pool for an Illinois town. Send \$10 to Hoffman Publications, Inc., Dept. HH, Sunrise Professional Building, Ft. Lauderdale, Fla. 33304.

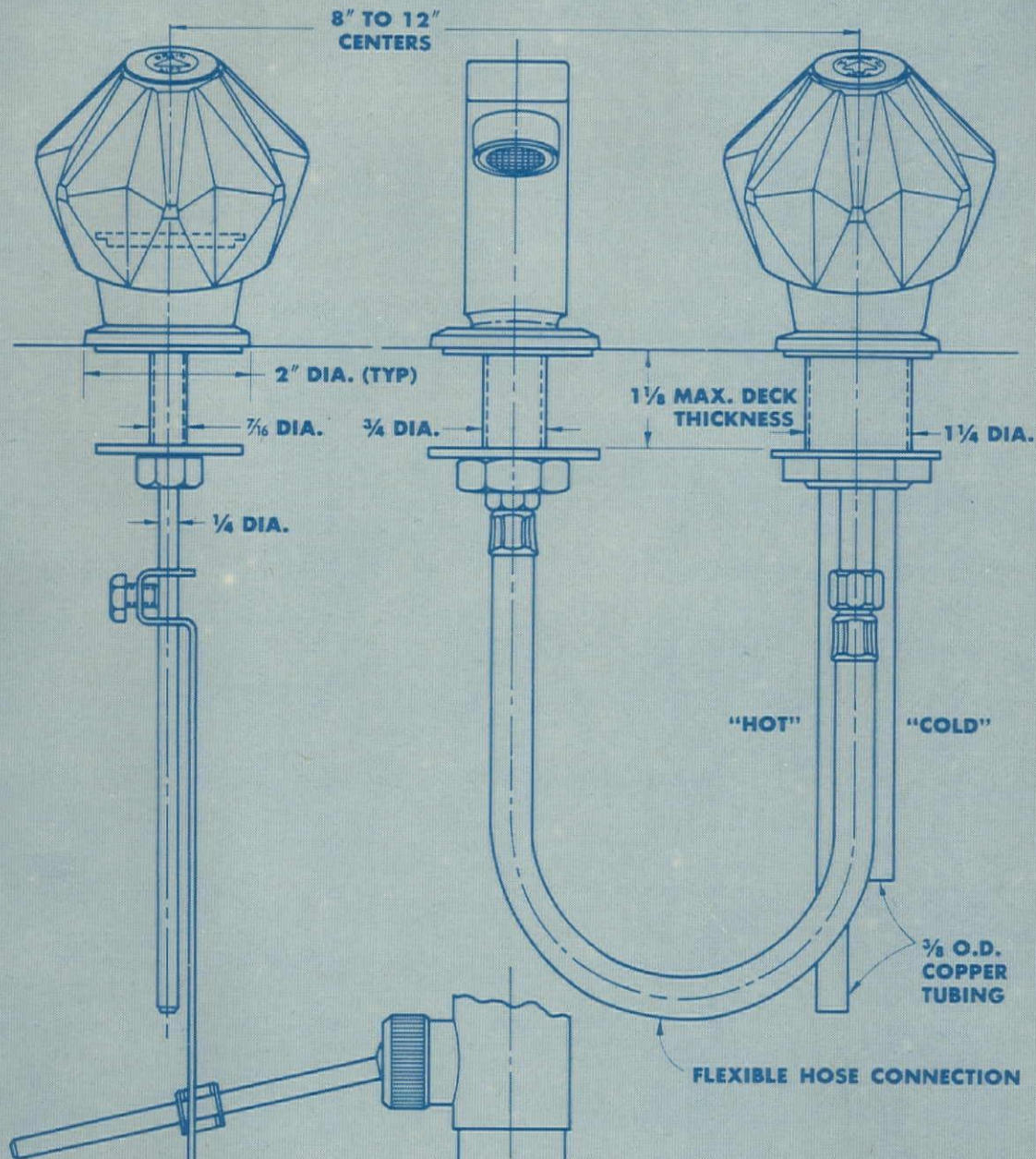
Annual H&H indexes

Copies of House & Home's editorial indexes for 1965, 1966, 1967, 1968 and 1969 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.

GARAGE DOORS. A catalog of wood, aluminum, and fiberglass garage doors contains four-color drawings of the types available for different styles of houses. Included are details on how they should be installed, how they work, and how they can be locked or used with automatic opening devices. Ideas for decorating the doors are illustrated, various carved decorations are offered, and two pages are devoted to plans of driveways and turnarounds. Frantz Mfg., Sterling, Ill. *Circle 309 on Reader Service card*

PLYWOOD FLOOR SYSTEM. Up-to-date design and installation data for 2.4.1 plywood are provided in a 10-page fully illustrated brochure. Uses of the 1 1/8" subfloor/underlayment panels are discussed, and drawings show recommended nailing methods for various floor constructions. Installation photos included. American Plywood Assn., Tacoma, Wash. *Circle 310 on Reader Service card*

SHOREFRONT BUILDING. In this day of booming resort communities, there is also an increasing awareness of the need for conservation of land and seashore. So a timely brochure discusses various methods of building on shorefront property that will protect both the structure and the land from erosion, flooding, undercutting, wave, and storm damage. Full-color drawings and photographs show bulkheads, seawalls, foundation pilings, groins, piers, and marinas — all using treated wood. Koppers, Pittsburgh. *Circle 311 on Reader Service card*



The new Delta Fjord two-handed single handle valve is so easy to install, you could almost do it single handed.

What more could a profit-minded businessman ask for?

We've designed the Delta Fjord with a flexible attachment for easy installation. And you can spread our widespread anywhere from 6 to 16 inches. Making the Delta Fjord versatile enough to fit virtually *any* lavatory.

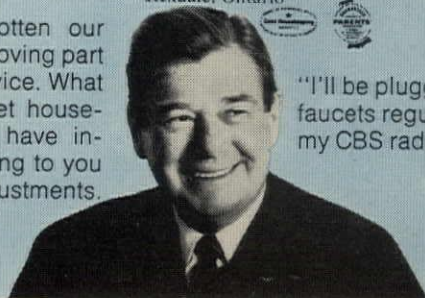
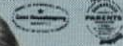
But don't ignore our new valve's looks. We've designed the Delta Fjord with today's fashion-con-

scious housewife in mind. In decorator finishes of chrome, brushed chrome, bright gold or satin gold. In models for the tub, shower and lavatory.

And we haven't forgotten our original concept of one moving part for maintenance-free service. What could be better? A faucet housewives will be crying to have installed . . . and not sobbing to you about return calls for adjustments.

DELTA 

Div. of Masco Corp., Greensburg, Ind.
In Canada:
Delta Faucet of Canada, Ltd.,
Rexdale, Ontario



"I'll be plugging Delta faucets regularly on my CBS radio show."

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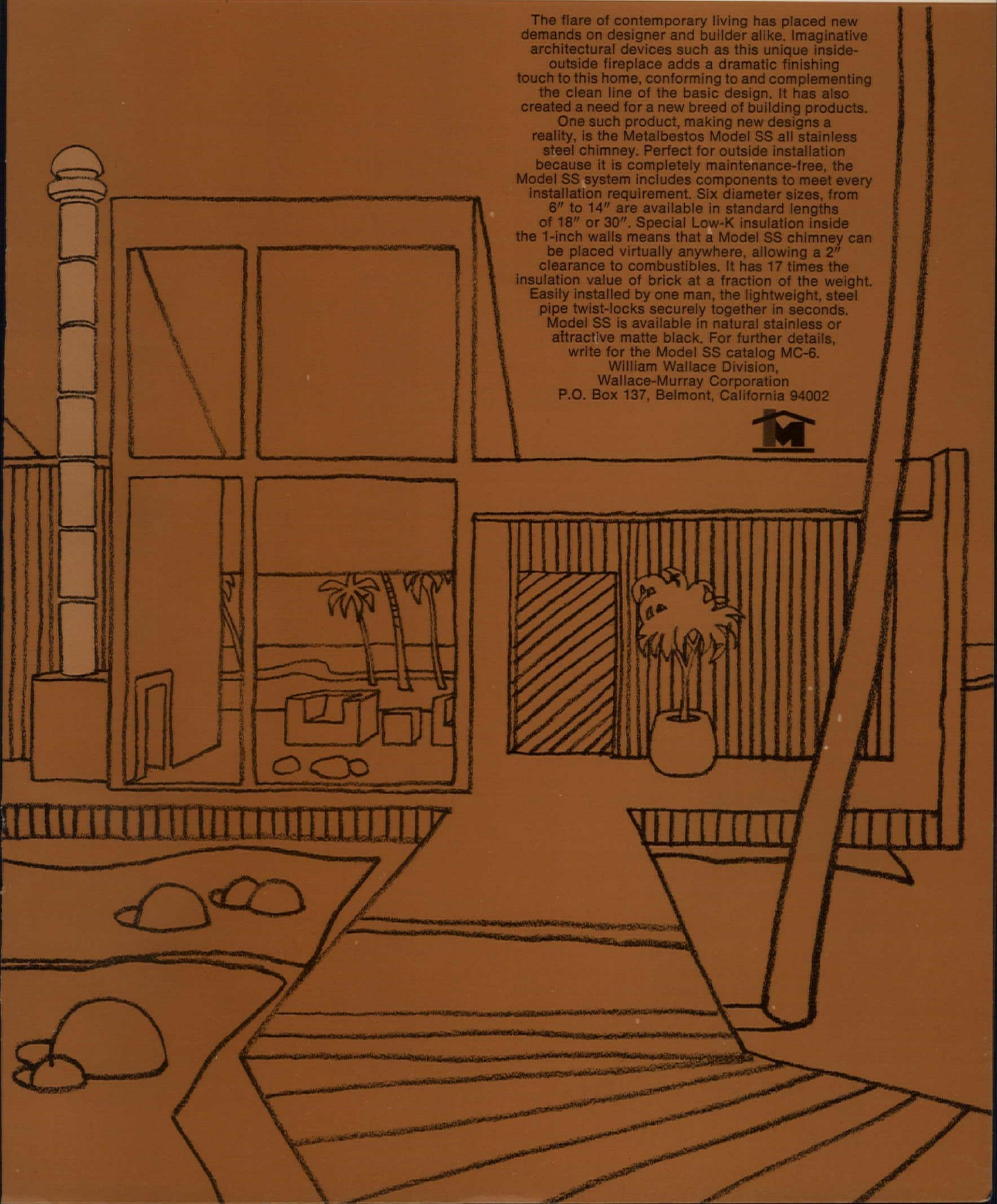
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chimney innovation

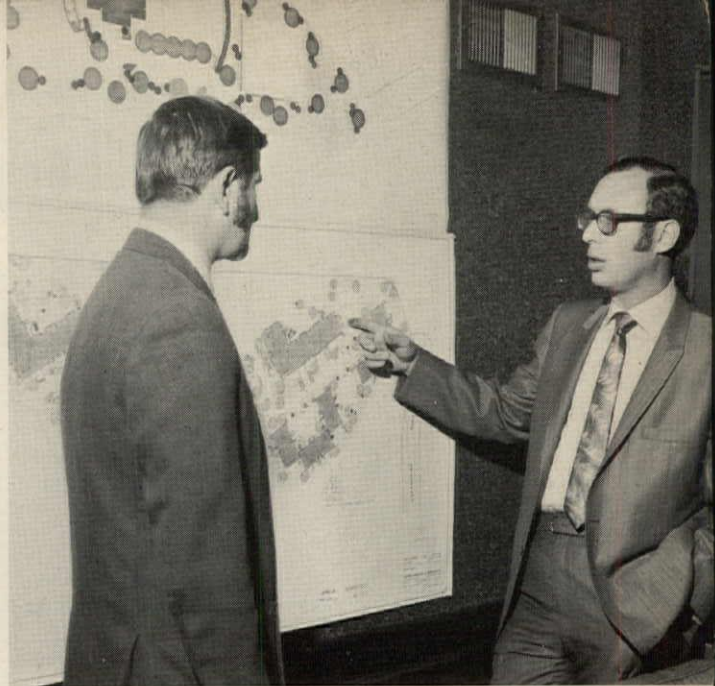
The flare of contemporary living has placed new demands on designer and builder alike. Imaginative architectural devices such as this unique inside-outside fireplace adds a dramatic finishing touch to this home, conforming to and complementing the clean line of the basic design. It has also created a need for a new breed of building products.

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William Wallace Division,
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It's for this reason we've developed the most extensive advertising program in the flooring business. Right now, your prime prospects are seeing Armstrong floors in national magazines. The result of all this is a growing awareness—and a growing demand—for quality floors in quality homes.

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Mr. Jerry Meister, President of
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