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House & Home

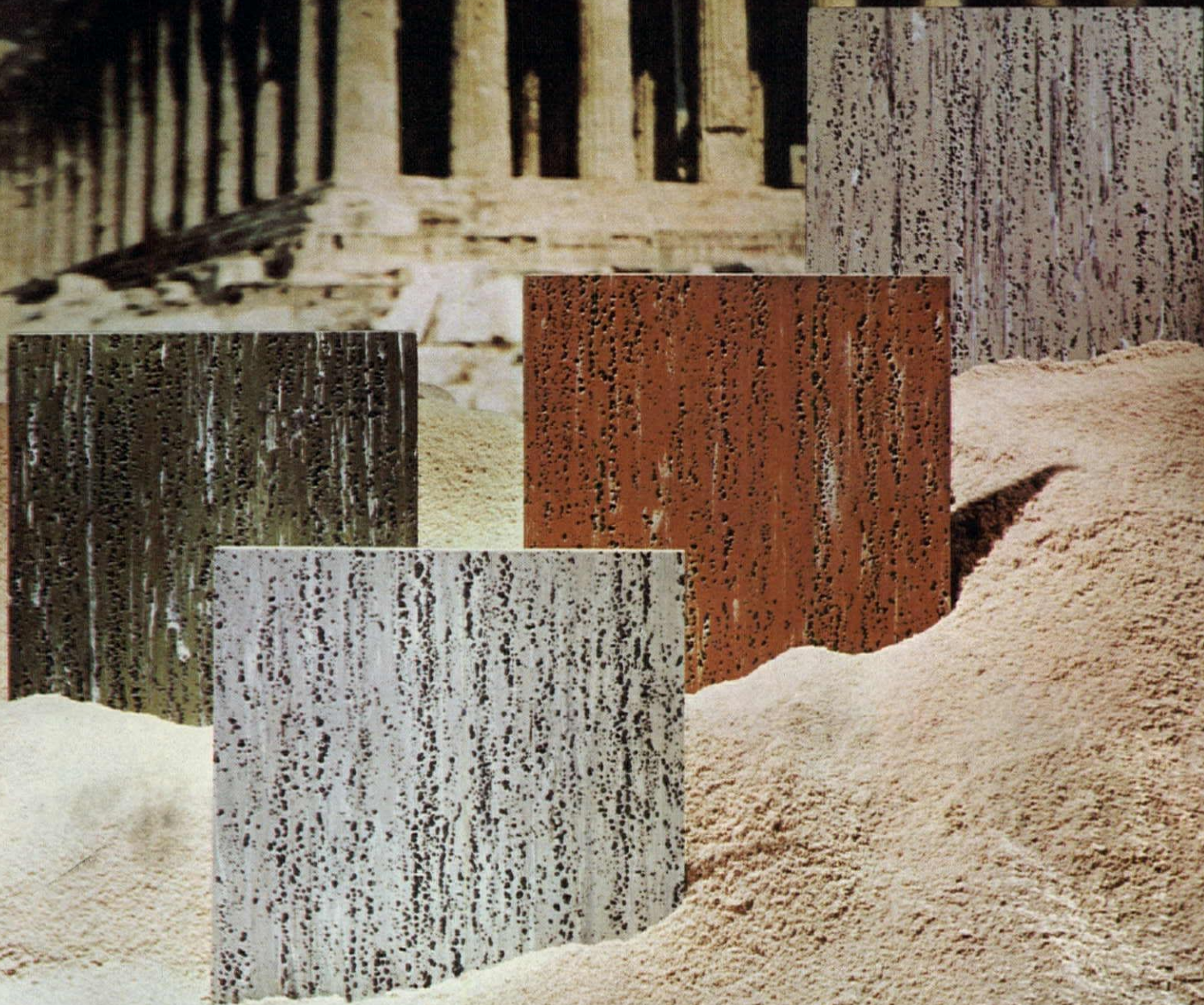


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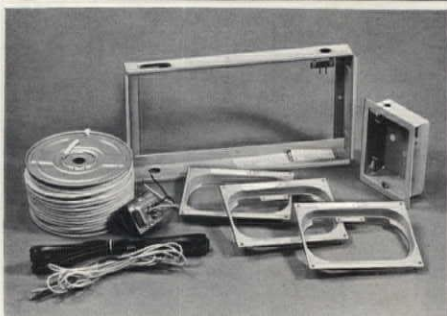
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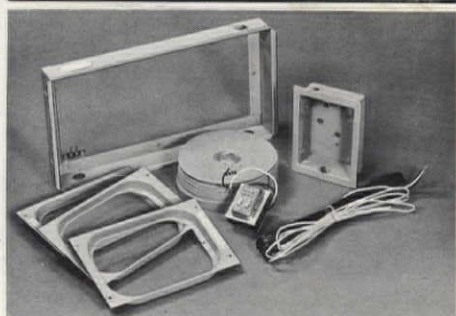
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Cover Sales office at Heritage Woods, Avon, Conn. *Developer:* Paparazzo Heritage Corp.
Architect: Callister & Payne. *Photo:* Ben Schnell.
For story, see page 62.

Detroit's suburbanites jeer Romney, and he eases HUD's stand on integration

Housing Secretary George Romney has beat a hasty retreat from a hard stand on one of government's touchiest issues—desegregation—but not before protesters jeered him and banged upon his car in his home state of Michigan.

Romney had rushed to the white suburban community of Warren, just outside of Detroit, to quiet dissent over HUD's reportedly picking Warren as a target city for the department's desegregation move in the nation's suburbs.

The *Detroit News* had reported that a HUD memorandum had said that Detroit's suburbs represented "an unparalleled opportunity for the application of a fair-housing strategy." Moreover, the *News* said, Warren had been picked to spearhead the drive.

Political issue. Warren, whose 180,000 population is composed of predominantly white and middle-class families, went into an uproar—along with neighboring suburbs.

The result was the quick visit by Romney to quiet the furor, for the issue was dynamite for his wife Lenore. She was campaigning for the Republican nomination for the U.S. Senate and she desperately needed suburban support. She won the primary over conservative state senator Robert Huber by a razor-thin margin, and she faces an uphill fight against the incumbent Democrat Phil Hart in November. She must crack the Democrats' traditional hold over the blue-collar suburbs to win.

'No forced integration.' When Romney arrived in Warren to address 40 local officials, including some suburban mayors, he vowed that he and his department were opposed to "forced integration."

Instead, he said, communities needed only to show "affirmative action" toward desegregation in order to qualify for federal urban renewal funds.

Warren had previously applied for a \$3 million grant from HUD. City councilmen who spoke at the meeting made it clear they still wanted the money but did not want Negroes from Detroit.

An easier stand. Romney clearly backed away from his department's earlier and firmer



Line of police protects Secretary Romney's car from pickets in Warren, Mich.

stand on renewal funds. Instead of a list of 12 steps Warren should take to qualify for HUD funding, the list was first cut to five, and then to two—adoption of an open-housing ordinance and the setting up of a human relations commission.

With just those two items, Mayor Ted Bates pressed his drive to secure the urban renewal funds for Warren—and Romney agreed to approve the application.

Moreover, the appointment of the commission would not hold up the grant, a HUD spokesman said later.

The angry pickets. The quick turnabout by the Administration's top housing adviser did not come in time to stop an angry crowd from menacing Romney after the meeting. As he was leaving the session, hun-

dreds of citizens with picket signs made it clear they didn't want the government's money if it meant an increase in the black population.

Warren and most surrounding suburbs of Detroit have staved off desegregation moves. Open-housing laws are not enforced with any enthusiasm, and zoning codes have been used to reject low-income projects. In 1969 Warren refused to permit construction of a 100-unit low-income project for fear that Negroes might live there.

Romney's pledge. Romney, for his part, is required under the 1968 Fair Housing Act to approve funds to local communities "in a manner affirmatively to promote fair housing."

To Romney, this means only affirmative action, not forced integration. And in his talk to

the local officials at Warren he repeatedly made the point that "there is no policy of forced integration of the suburbs. For any community to receive our HUD grants they must take affirmative action to prevent discrimination in the choice of a house or a community in which to live." —A.M.

N.Y. State group sues to bar homes for aged

More than 300 residents in the town of Ramapo, N. Y. have filed suit in Federal Court in New York City to block a low-income housing project for the elderly.

Robert Fletcher, the principal plaintiff, said in a courthouse news conference that Secretary Romney of the Housing and Urban Affairs Department was the "the most dangerous man on the American political scene today, a frustrated radical seeking to amass vast dictatorial powers." Romney's department is a defendant in the suit.

The suit is directed principally against the Ramapo Housing Authority, the second defendant, for entering into agreement with federal authorities to build 200 units of housing. The town is in Rockland County, across the Hudson from and just north of New York City.

FHA's revamp begins with fireworks

The first public results are appearing in response to Secretary Romney's effort (*News*, Jan.) to organize a department out of the bureaucratic accretion that goes by the name of HUD.

In Dallas—and other cities—the job of FHA district director is being abolished and a HUD area director will take over by the end of September.

The move is part of a plan to integrate FHA into the overall HUD system. In Dallas it produced fireworks that resulted in an early retirement for Ed Dee, FHA district director since 1962.

When the change was first announced, Dee said he was retiring for reasons of health. Later he confirmed reports that he

had been offered the new post, but on condition that he agree to leave by Nov. 1.

Underneath the public statements on the HUD reorganization was a complaint by Dallas Republicans that Dee, a Democrat, had played favorites when approving projects.

Dee denied the allegations, but declined the new job. He was not the only candidate. Manuel Sanchez, a Republican, was also mentioned for the HUD post in Dallas.

Sanchez ran for state treasurer in 1968, and this may have given him an edge over Dee for the new post.

—LORRAINE SMITH
McGraw-Hill News, Dallas

Schenectady builder says HUD threatens locality

Clifford J. Kearney, a builder, charges that HUD officials have threatened city officials in Schenectady with a loss of housing funds if local zoning is not changed to allow a multi-family project.

Kearney, in a telegram to HUD, contends local conditions make the changes impractical.

But local HUD officials will not listen, he says, and he asks:

"Do federal employees have the right to intimidate local officials with the threat of withdrawing federal funds, without knowing all the local and state issues involved?"

"Being a Negro," Kearney explains, "I cannot be classed as a racist who does not want black people in the area."

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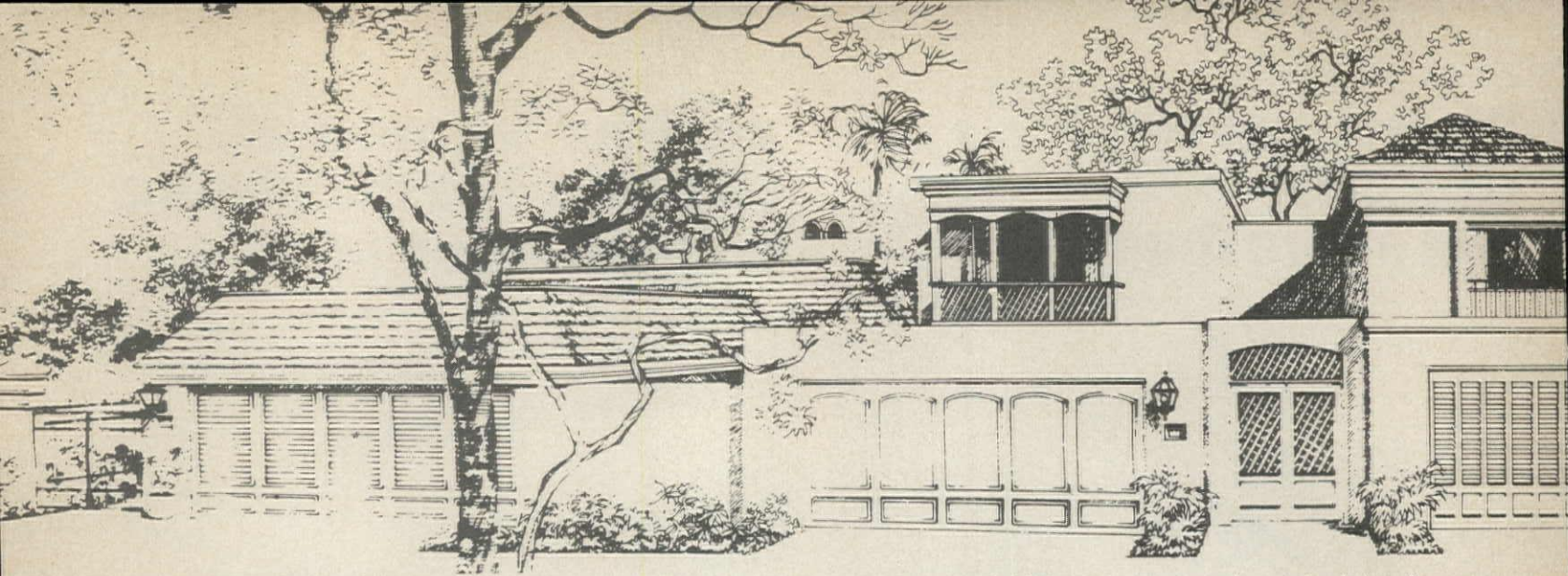
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B. Only glass can make that expensive surrounding property an integral part of the home—bringing the environment indoors where it adds extra value to the structure. Here, an impressive townhouse entryway features a U-shaped courtyard with glass extend-

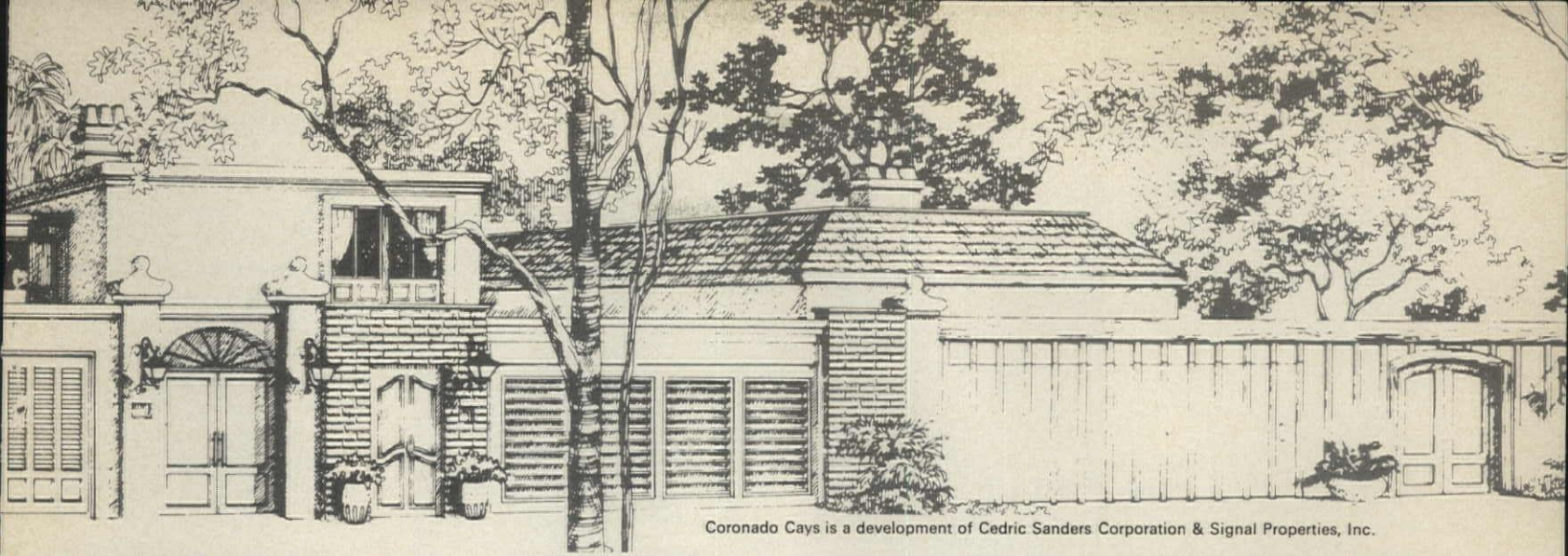


A



B





Coronado Cays is a development of Cedric Sanders Corporation & Signal Properties, Inc.

ing two stories high. In high-traffic areas like this, use *Herculite® K* tempered safety glass for maximum safety.

C. The spacious bath will be a pleasant surprise to just about any of your prospects. Wall-to-wall mirrors make everything seem even bigger. And if they're *High-Fidelity®* mirrors made of PPG glass, the beauty of it all will be beautifully reflected.

D. This impressive entryway, with its dramatic clerestory windows, makes a spectacular high-ceilinged foyer even more spectacular. And if it's a sunny elevation, consider windows with PPG tinted glass—to create some unusual

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F. The garden-type kitchen has a pass-through serving bar to the patio. The imaginative use of glass here makes the great outdoors and the kitchen one big happy unit.

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President Nixon signs emergency act to speed the flow of mortgage money

After six months of often heated debate, controversy, and name-calling, the Emergency Home Finance Act of 1970 has been signed into law.

One of the happiest aspects of the legislation was that the emergency bill was enacted as the emergency in housing appeared to be on the wane.

President Nixon pointed out, in signing the legislation: "We have been very much encouraged in the last couple of months as far as housing starts are concerned." He did not add, of course, that starts are not yet at the level where the Administration would like to see them.

The legislation offers short- and long-range plans to stimulate residential lending and building. Although critics dispute this claim, the bill's backers say it could bring \$10 billion a year in new money into housing.

Mortgage subsidies. For the short run, Congress approved the Administration's plan to subsidize advances (borrowings) by savings and loan associations from the Home Loan Bank System. A \$250 million authorization was granted, but in mid-July Congress appropriated only \$85 million. The system will probably seek a supplemental appropriation later this year.

The \$250 million is to be used to lower the cost of borrowings by associations. Basically, the subsidy will make up the difference between what it costs the regional Home Loan Banks to borrow on the market, and the 7½% banks charge on advances to member S&Ls. It is estimated that the \$250 million will thus support \$4 billion worth of S&L lending.

Similarly, for the short run, Congress increased by \$1.5 billion the Government National Mortgage Association's special-assistance authority. This money will become available immediately, to be used by GNMA to buy more HUD-assisted mortgages. Congress expects the bulk of these funds will be used under the tandem plan to support the loans made under Section 235 and 236 programs.

Proxmire compromise. Congress sought to do something for middle-income home buyers, and it was here that much of

OFFICIAL WHITE HOUSE PHOTO



Housing leaders watching the President sign Emergency Act are (front row, from left) Sen. Sparkman, Rep. Widnall, Sen. Bennett, Sec. Romney, Sen. Mansfield, President Kingman of GNMA and Chairman Martin of the FHLBB.

the controversy ensued.

In the Senate, William Proxmire (D., Wis.) tried—as he has in past years—to draw the Federal Reserve Board into the mortgage market via Federal purchases of FNMA and Home Loan Bank Board securities.

The original Proxmire proposal failed and compromise was arranged, but not before the House had killed a proposal by Chairman Wright Patman of the House Banking and Currency Committee. The Patman plan would have forced pension funds and foundations to divert a specific dollar amount of their assets to home mortgages.

The compromise, worked out in the Senate and agreed to by the House, provides for channeling of low-cost mortgage credit into middle-income mortgages.

Mid-income subsidy. Financing institutions would lend—at 7%—to homebuyers who qualify, and the loans would be sold

to either FNMA or to a new Federal Home Loan Mortgage Corp. Then HUD would subsidize the purchasers for the difference between the 7% loan and the market rate.

Funding for the program was set at \$105 million—but of course Congress will still have to appropriate the money. Of the \$105 million, 25% will be made available for purchases of existing housing.

Lending institutions operating under the Proxmire amendment are expected to be mere conduits. They would, of course, retain the servicing on the loans, and other income would come their way via fees.

New secondary markets. To aid the mortgage market in the long run, Congress finally set up a secondary market for conventional home loans.

Both Fanny May and the new Federal Home Loan Mortgage Corp., an arm of the bank board, are empowered to operate such

facilities.

The Bank Board's operation may be ready first, for its constituents—savings and loans—are the major conventional lenders. Fanny May, now running close to its borrowing capacity, will be forced to keep its primary emphasis in the FHA and VA mortgage markets.

Death of free rate. One important provision that was wiped out of the legislation in the conference committee would have set up a dual rate system for FHA and VA loans.

The dual system provided for making government-backed loans either at a free rate, but with no discounts, or at an administered rate with discounts. Stiff opposition from the Mortgage Bankers Assn. to the no-discount clause killed the proposal, and Congress granted only an extension of the housing secretary's present authority to set the rate on FHA loans.

Help for S&Ls. Savings and loan associations, in addition to getting \$250-million subsidy, won several new powers. Among these:

- Statewide lending authority, subject to the regulation of the bank board.
- Authority for S&Ls to serve as trustees for Keogh funds.
- A new, higher limit of \$45,000 for single family home loans made by associations.

Savings and loan holding companies got a three-year extension—up to five years—to divest themselves of unrelated activities under the 1968 S&L Holding Company Act.

Aid for banks. Commercial banks won liberal new powers to make mortgage and construction loans. Congress raised banks' loan-to-value ratio on mortgages from 80% to 90% and extended the top maturity of bank housing loans from 25 to 30 years.

For construction loan financing, the law boosted the maximum maturity of loans by banks for construction from 36 to 60 months—an extension designed to help banks finance commercial or industrial construction that may need that much time to complete and to obtain permanent financing.

ANDREW R. MANDALA
Washington

Two HUD officials resign under fire

The Housing and Urban Affairs Department's personnel problems have begun to surface.

Sherman Unger, the controversial general counsel, and Lawrence M. Cox, an assistant secretary, have resigned under fire.

Unger had been the central figure in a losing fight for control of the Federal National Mortgage Assn. President Nixon has now nominated him for a one-year term on the Federal Communications Commission, but sources close to HUD

and Fanny May insist that Unger was asked to resign from HUD. The shift to FCC, they say, was made to ease him out.

Cox's problems relate to his expense accounts while executive director of the Norfolk Redevelopment and Housing Authority. He had reportedly charged travel and entertainment expenses to the authority, and he resigned his \$38,000 HUD post in July after it was disclosed that HUD auditors were looking into the Norfolk agency's records. A.M.

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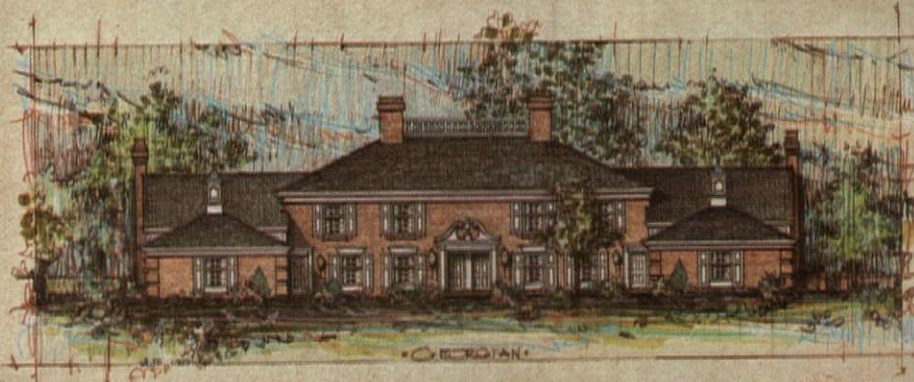
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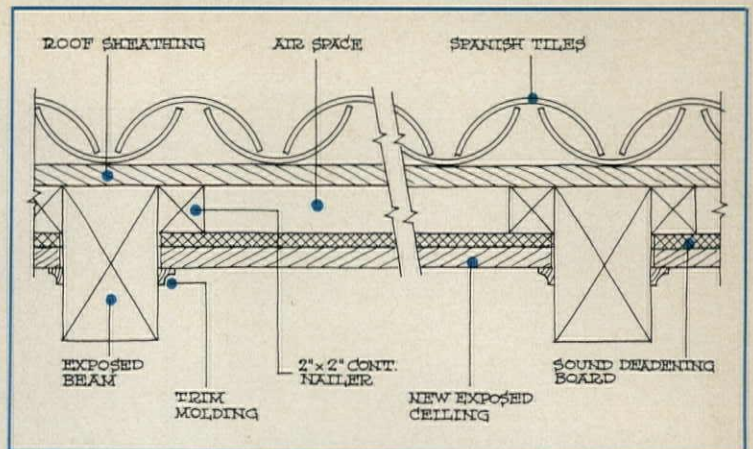
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Beamed ceilings retained their original appearance (left), even though a second ceiling (drawing above) was installed in houses soundproofed in Stages 2 and 3.

Keeping the jet's roar outside the door—it's a difficult and costly process

Can householders find happiness near a jetport?

To a degree and at a cost.

The nation's first large-scale scientific study of ways to keep exterior noises out of a house shows that acoustical modifications of existing houses are technically possible and give "significant" relief from airport noise.

The costs, however, are significant too (See table, right), and the principal lesson of the experiment is that noise-control features should be designed into a new house rather than added to an existing house via specialized remodeling.

Reports Mrs. Elizabeth Cuadra, who was project manager for the study: "In noise control, prevention is much more effective than a band aid."

The study shows that problems abound.

A \$200,000 effort. The Los Angeles Department of Airports commissioned the \$200,000 project and has just released the results.*

Wyle Laboratories of El Segundo did the study and wrote the report. It is sufficiently detailed for use by architects seeking to incorporate specific noise-control features into house plans, according to Wyle.

Costs. The report reveals that:

- Minimal efforts to exclude sound from a house failed to satisfy occupants. The average cost of this type of soundproofing, termed Stage 1, was \$3,210 a house.

- Maximum expense can

Average Cost for Soundproofing Houses in Stage 2

House Elements	Labor	Material	Total
Windows	\$ 875.	\$1,238.	\$2,113.
Doors	234.	286.	520.
Beamed Ceiling	407.	335.	742.
Ventilation	884.	1,000.	1,884.
Misc.	254.	107.	361.
Total	\$2,654.	\$2,966.	\$5,620.

make a house habitable, but if outdoor noise is loud enough to require such effort, people cannot stand to live in the area. Average cost was \$12,550 a house for this part of the project, labeled Stage 3.

- A middle route, Stage 2, costing an average of \$5,620 a house, reduces external sound in satisfactory manner.

The Wyle report estimates that cost reductions of 10-20% are possible if a large-scale program is undertaken, but warns of pitfalls.

Builder's challenge. Finding contractors willing and able to tackle such a demanding job is a major problem.

A high level of craftsmanship is required, and Wyle had difficulties with even those contractors that it had screened before letting bids.

"Contractors had to be supervised closely," says Mrs. Cuadra. And contractor supervision of subs was inadequate for the specialized work. Some work had to be done two and three times before it was satisfactory.

It will pay to have a builders' training course if soundproofing is to be done on a large scale, says Mrs. Cuadra, an acoustical engineer whose specialty is the architectural and legal problems of noise.

Test on houses. Before Wyle

started on the 20 houses that comprised the experiment, it used three empty houses in a test of materials and techniques. The houses, owned by the airport, were on land bought as a clear zone near runways.

The typical procedure was to insulate a room so no jet noise could be heard, then remove insulation from one area at a time and measure the noise that came through wall, window, door, ceiling or other area.

In this way the whole house, from roof-ceiling interspace to foundation vent, was measured for sound leaks. The importance of double-glazing instead of single-pane windows constituted a major finding.

Later, double-glazing was used exclusively in modifying the inhabited houses. The double-windows were commercially available, as were almost all materials used on the project.

And on people. After two months of tests on empty houses, work began on inhabited residences. They were mostly in the \$20,000 to \$30,000 bracket and from 5 to 25 years old.

The owners had agreed to cooperate in return for the free soundproofing they were to receive, but many were disappointed later by an unexpected degree of inconvenience. This,

it appears, is an inherent problem in soundproofing: greater household disruption than in most remodeling work.

Minimal control. Soundproofing in Stage 1, the minimal degree, furnishes a forced-air ventilation system and so allows the householder to live with doors and windows closed.

It also repairs all cracks or openings in the house, and it replaces hollow-core outer doors with others that have solid cores and peripheral seals.

Windows, except those on the lee side of the house, are sealed shut. The lee side windows can still be opened but they get improved acoustic seals. Occupants said that Stage 1 simply did not reduce noise sufficiently.

The middle course. A greater, but not extreme, degree of quiet was sought in Stage 2. Tech-

CONTINUED

A note on sound

Sound was first measured outside the houses. It ranged from 65 decibels to more than 95, with half the houses in the 85-94 range.

Soundproofing reduced noise, exterior-to-interior, by 25 decibels in Stage 1, by 35 in Stage 2 and by 50 in Stage 3.

A decibel is the smallest amount of sound the human ear can perceive. Loudness almost doubles for every 3-decibel increase in volume of sound.

But decibels don't matter as much as comfort. A quiet house is a subjective quantity, like a spacious room, so Wyle Laboratories did not rely on sound meters alone. It interviewed householders to determine whether soundproofing was satisfactory.

*Department of Airports, One World Way, Los Angeles International Airport, Los Angeles 90009.



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CIRCLE 65 ON READER SERVICE CARD

H&H SEPTEMBER 1970 11

...Keeping the jet's roar outside the door — It isn't easy (continued)

niques used in this phase offer more promise than those used on the houses treated in Stages 1 and 3.

Forced-air ventilation was the first step, as in Stage 1.

After that, exterior doors and windows were replaced. Acoustical doors and double-glazed windows were used throughout the houses. Tests had shown that ordinary windows and doors do little to block noise.

Overhead insulation was achieved by adding a second ceiling under the original.

Closing the holes. Mail slots in the front door, chimneys, and the ventilation ducts of kitchen and bathroom are clear channels for noise. In Stage 2 they were modified, or, in the case of mail slots, replaced by outside mailboxes.

Straight-pipe ventilators were replaced with curved sound-insulated ducts, and chimneys were equipped with dampers that would close snugly.

Stage 2 soundproofing results appear economically feasible and cost figures are given in the box on page 10.

Maximum control. In Stage 3, the spending of \$12,550 per house produced great soundproofing; so good, in fact, that the resident could live in a house that was quiet although it was in an area of intolerably high outdoor noise.

Stage 3 work included all of the Stage 2 modifications, plus insulation of walls and floors.

It was in Stage 3 that the inefficiency of wall insulation was discovered. In two houses, cemented layers of wood fiber sound-deadening board and gypsum board were added to the interior of walls. Further sound reduction was marginal.

Floor modifications included sound traps inside the foundation vents and fiberglass batts between floor joists.

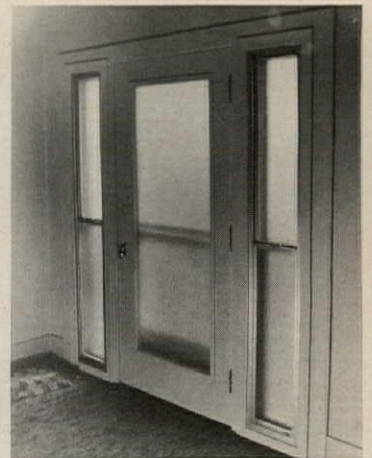
During Stage 3, two techniques were used for overhead insulation.

Chemical foam, urea formaldehyde, was sprayed above ceiling joists. Or, fiberglass batts were placed between ceiling joists and covered with wood fiber sound-deadening board.

The difficulties. Problems de-



Jet roar was measured outside residences before soundproofing began.



Double-glazed doors and windows were installed during Stages 2 and 3.

veloped in abundance.

- The foam created an odor for a time after installation.
- The fiberboard was difficult to install to required tolerances.
- "You can't leave any holes," Mrs. Cuadra warned. "If daylight comes through, there is a sound leak."

Financial barrier. In Los Angeles there has been talk of a large-scale program to soundproof houses near the airport—sponsored by the city and paid for by a head tax on passengers.

And federal aid has been mentioned.

The Wyle report makes clear that large-scale financing will be a major hurdle for anyone who wants to shield a house from jet noise.

It also makes clear that many technical problems face the contractor seeking to perform this type of work—above all the need for highly skilled craftsmen.

—BARBARA LAMB
McGraw-Hill News,
Los Angeles

'A sordid scandal,' says Patman — or, how FHA appraisals enrich slum speculators

As chairman of the House Banking Committee, Wright Patman (D, Tex.) fired off a letter to Secretary Romney threatening to hold up money bills for FHA's Sec. 235 home-ownership program pending an explanation of the over-generous appraisals Patman's investigators have discovered.

Romney came right back with a promise to tighten appraisal standards, and this appeared to satisfy Rep. Patman temporarily.

Long range problem. Nevertheless, data presented by Banking Committee investigators dramatizes a problem that has been around for months — FHA appraisal standards.

Patman said his investigators had found evidence of "a national scandal of the most sordid type" in the 235 program.

"There is strong evidence suggesting that much of the Federal funds expended in this program are ultimately going to the speculators, the real estate salesmen, and the mortgage company that finances the

speculator," Patman charged.

His report cited instances in which houses sold under the interest-subsidy program brought twice what they had cost a few months earlier.

One such transaction in Washington involved a house that was bought for \$9,000, held four months, and resold for \$17,500. Some 120 transactions were investigated.

Victims: the poor. Lax — or even worse — appraisal standards were the key to the higher price charged the second buyer, the low-income family the program is designed to help.

The FHA's appraisal standards have long been under criticism. The agency has followed a pattern of making appraisals 20%-40% higher than any conventional appraiser would, wrote Griffith T. Johns, of Broadview S&L in Cleveland in the March issue of *Savings and Loan News*.

The 1968 Housing Act directed the FHA to insure mortgages in declining neighborhoods even if the properties involved did not meet the nor-

mal FHA risk requirements.

The profit scheme. But the idea backfired. The Home Loan Bank Board has admitted that speculators reaped excessive profits by the following technique:

Slum investors buy property at or below market value, spending small amounts on improvements. The investors then get FHA appraisals that help sell the property at greatly inflated prices.

The HLBB has instituted cease-and-desist proceedings against one federal S&L, which it declines to name. The board charged that the association had utilized defective appraisals to make "a large portion of its loans to 1) speculators to finance the purchases of property and 2) borrowers to permit them to purchase properties from the speculators."

Inflated values. The board cited market value determinations as the basis for the problem. In all appraisal reports reviewed in the case, the board said, the appraisers had used

market-value definitions that ignored financing terms in estimating the property's true value.

"In other words, the appraisers had calculated a price at which a speculator could sell a house to a purchaser with 100% financing and no money down.

"The failure to take into consideration the financing terms was directly contrary to state requirements."

The board also said that appraisal reports had "no definition of market value except a statement to the effect that the property was located in an area that was undergoing ethnic transition, which resulted in a dual price range; that is, one price paid by the speculator and another paid by the prospective home buyer.

"Many of the properties, however, were not in areas where ethnic transition had already taken place and, significantly, the market values shown on the appraisal reports for ghetto areas were inflated just as much as those for transitional areas."



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LEVITON

Peak interest rates of 1969-70 have forced some 30 states to act on usury laws

And for the most part the states moved away from reliance on unrealistic mortgage ceilings.

The extreme market forces of the past year were persuasive enough to produce legislation raising mortgage rate ceilings in more than half of the 50 states.

Success stories. No state abandoned ceilings entirely, but there was an assault on the idea that local statutes can keep the cost of money below what borrowers bid in other areas.

Michigan and Virginia voted a temporary free market in mortgage lending, Michigan until Jan. 1, 1972, and Virginia until July 1, 1972.

Both states removed FHA-VA

loans from usury jurisdiction permanently.

Some failures. There were some mishaps along the way.

Rep. Wright Patman (D., Tex.) helped kill a District relief bill with the contention that only gamblers, speculators, and corporations could pay the high rates that he was helping to outlaw.

And in Maryland the legislature tried to outguess the capital market when it decided that a momentary rise in bond prices was the herald of easier money and refused to raise the 8% ceiling on conventional mortgages.

In 60 days yields had attained

new peaks, the wisdom of the lawmakers had been tarnished, and Maryland was stuck with a ceiling that severely hampers activity in conventional loans. Lending on FHA and VA homes was freed from the state's limits.

Rate schedule. The table on this page was prepared as a general guide to local conditions.

The table is based on information from lenders in the various states. It has been checked against the interest-ceiling compilations of the Commerce Clearing House and the Beneficial Finance Corp., both of Chicago; the Mortgage Bankers Association of America, with headquarters in Washington;

and the Lon Worth Crow Co., the big Miami mortgage banking house.

Many lawmakers, as one respondent in this survey noted, are depression-reared and remember banks and bankers as the villains of the foreclosures of the 1930s.

And other lawmakers would also seem to have yet to learn what Andrew F. Brimmer, a member of the board of governors of the Federal Reserve System, said in 1968:

"The early abolition of statutory rate ceilings is a critical ingredient in developing a viable mortgage market."

—TREVETT MATTHEWS

STATE	Basic Rate	FHA-VA Exempt	New Law on	Pertinent conditions and/or legislative situation	Legislature Meets
Ala.	8	Y	13 Sept 1969	For individuals, 8% on loans to \$100,000, 15% on loans above that. For corporations, 8% on loans to \$10,000, 15% on \$10,000 to \$100,000, no ceiling above \$100,000. Feb '70 effort for 10% simple passed House and failed Senate. Ceiling is 4% above Federal Reserve rediscount rate, hence currently 10%. Law permits out-of-state lenders to exceed ceiling, is ambiguous, extends to end of 1970 with further extension possible. FHA-VA status is legally uncertain.	4 May 1971
Alsk.	10	—	May 1969	Applies to individuals and partnerships, 18% is ceiling for loans to corporations. Corporations can plead usury. Legal opinion bars all fees if income goes to lender. 10% is constitutional ceiling.	11 Jan 1971
Az.	10	Y	July 1969	Loans closed by a bank or savings and loan association are exempt. Ceiling is imposed by constitution, and does not exempt loans to corporations.	4 Jan 1971
Ark.	10	N	1874	Banks, trust companies and savings and loans are exempt, thus effectively excluding FHA-VA loans.	6 Jan 1971
Cal.	10	N	6 Nov 1934	Real estate mortgages above \$5,000 exempt. Ceiling of 18% on loans to commercial, industrial and manufacturing corporations. Corporate usury case is pending.	6 Jan 1971
Col.	12	—	1913	Corporations not covered by ceiling.	12 Jan 1971
Ct.	12	—	2 July 1969	Ceiling is 15% for corporations. Effective 5 Aug 1970 interest charges may be computed over contract period, not life of loan.	5 Aug 1971
Del.	9	—	4 Feb 1970	Ceiling is 15% for corporations. Effort to liberalize law failed in May 1970.	6 Apr 1971
D.C.	8	N	1964	No ceiling for corporations and on loans above \$100,000.	11 Jan 1971
Fl.	10	N	1955	Bill removing ceiling on loans of \$750,000 and higher to corporations signed by governor on 2 July.	20 Jan 1971
Ga.	9	Y	Feb 1969	Ceiling is 12% for non-agricultural corporations.	11 Jan 1971
Hi.	12	—	2 July 1970	No ceiling for corporations and "business loans," which needs clarification. Effort expected in 1971 legislature.	7 Jan 1971
Ida.	10	N	March 1969	Ceiling does not cover partnerships or corporations. If a loan is closed by a trust company or an insurance company other than a life company, there is no ceiling.	11 Jan 1971
Ill.	8	Y	1 July 1969	No ceiling on loans to corporations.	11 Jan 1971
Ind.	8	N	Aug 1969	Corporations cannot plead usury.	12 Jan 1971
Iowa	9	Y	April 1969	Contract ceiling of 7% was raised 24 March to 8% until 1 July 1972 for loans on single-family houses. Bill to abolish ceiling passed both houses, but was vetoed by governor. No ceiling on corporation loans.	4 Jan 1972
Kns.	10	—	pre 1955	Does not apply to corporations.	10 May 1971
Ky.	7	Y	24 Mar 1970	All business loans and loans of more than \$2,000 to individuals are exempt. UCCC died in committee, new effort expected in 1971.	6 Jan 1971
La.	10	Y	30 June 1969	Corporation loans and "business" loans above \$5,000 are exempt, even if to an individual. Action of Dec 1969 freed FHA-VA loans from ceiling. UCCC effort failed in legislature.	20 Jan 1971
Mne.	16	—	Oct 1967	Legislature in 1969 removed ceiling on corporate loans above \$100,000, and in 1970 extended this to include individuals in real estate business.	11 Jan 1971
Md.	8	Y	18 Dec 1969	Ceiling is for loan on primary residence, was raised from 6 1/2% in 1969. Ceiling is 12% for income property and second residence.	6 Jan 1971
Mass.	None	—	—	Ceiling removed until 1 July 1972, with extension possible. FHA and VA loans are permanently removed from Virginia usury jurisdiction.	12 Jan 1972
Mich.	None	—	May 1970	Legislature in 1969 removed ceiling on corporate loans above \$100,000, and in 1970 extended this to include individuals in real estate business.	11 Jan 1971
Minn.	8	Y	Mar 1969	Corporate loans exempt.	13 Jan 1971
Miss.	8	Y	7 Oct 1969	Loans to corporations exempt. UCCC failed passage in 1970.	19 Jan 1971
				Ceiling for corporate loans is 15%.	5 Jan 1971

The exemption of FHA-VA loans from state statutes is indicated by Y for yes and N for no, a dash is used if the ceiling rate is far enough above the FHA rate to make the question moot, or if the information was not available. UCCC is Uniform Consumer Credit Code.

STATE	Basic Rate	FHA-VA Exempt	New Law on	Pertinent conditions and/or legislative situation	Legislature Meets
Mo.	8	N	1891	Corporation loans exempt. Atty. Gen. has ruled FHA-VA 8 1/2% loans illegal, but these are being closed out of state by lenders with offices out of Mo. Bill for 10% ceiling failed passage.	1 Jan 1971
Mt.	10	—	pre 1955	There is no law for defense of loans made to corporations. UCCC introduced in legislature but failed passage.	4 Jan 1971
Nbr.	9	—	1941	FHA exempt, VA not exempt, corporation loans presumed exempt, but test case is pending.	5 Jan 1971
Nv.	12	—	1913	Corporation loans are not exempt.	18 Jan 1971
N.H.	None	—	—	Usury law removed in 1921. Second mortgage on 1-4 family house has 18% ceiling if less than \$5,000.	6 Jan 1971
N.J.	8	Y	16 Apr 1970	Ceiling was raised by state commissioner, who thus reached the end of his power. Corporation loans exempt.	12 Jan 1971
N.M.	10	—	pre 1955	Corporation loans exempt. UCCC failed in 1969 legislature.	19 Jan 1971
N.Y.	7 1/2	Y	1 July 1968	Temporary action, until 30 June 1971. Ceiling is 25% on loans to corporations, with certain limits.	6 Jan 1971
N.C.	8	Y	1 Aug 1969	Graduated by size and purpose, reaching 12% on \$100,000 loans, and unlimited on \$300,000 and up loans, individuals and corporations being treated alike. Legal confusion on rate for first mortgage between \$50,000 and \$100,000.	13 Jan 1971
N.D.	8 1/2	Y	July 1969	Corporate loans and business loans above \$25,000 to individuals exempt. Savings and loans have 12% ceiling.	5 Jan 1971
Oh.	8	N	—	Corporate loans exempt. Bill to set ceiling at FHA rate failed passage.	4 Jan 1971
Ok.	10-18	—	1 June 1969	Oklahoma's UCCC allows 18% to supervised lenders and 10% to others lending to consumers. Corporations cannot plead usury. The 10% is a constitutional ceiling.	5 Jan 1971
Or.	10	N	pre 1955	Ceiling is 12% on loans to corporations.	11 Jan 1971
Pa.	9	Y	24 July 1970	Corporate loans exempt. Loans above \$50,000 exempt. July 1970 law raising ceiling to 9% calls for all interest charged to be included. Other fees of closing excluded.	5 Jan 1971
P.R.	10	Y	25 June 1969	Corporations cannot plead usury.	11 Jan 1971
R.I.	21	—	Sept 1966	Ceiling includes corporate loans, was reduced from 30% in 1966.	5 Jan 1971
S.C.	8	Y	Feb 1969	Corporation with \$40,000 worth of stock issued cannot plead usury. For individuals, 10% on \$50,000 to \$100,000 loan, 12% on \$100,000 to \$500,000, no limit on larger loan.	13 Jan 1971
S.D.	10	Y	24 Feb 1970	Corporate loans exempt.	19 Jan 1971
Tn.	10	Y	Apr 1969	No exemptions for corporate loans or for large loans. Ceiling is imposed by state constitution.	23 Feb 1971
Tx.	10	N	pre 1955	Corporate loans above \$5,000 have 18% ceiling, except charitable and religious corporations, which have 10% ceiling.	12 Jan 1971
Ut.	18	—	1 July 1969	Utah's UCCC in force. Loans below 10% rate require only disclosure of rate to borrower, loans above 10% require full compliance with UCCC.	11 Jan 1971
Vt.	7 1/2	Y	17 Apr 1969	Ceiling is for loan on primary residence, was raised from 6 1/2% in 1969. Ceiling is 12% for income property and second residence.	6 Jan 1971
Va.	None	—	26 Feb 1970	Ceiling removed until 1 July 1972, with extension possible. FHA and VA loans are permanently removed from Virginia usury jurisdiction.	12 Jan 1972
Wa.	12	N	20 Feb 1970	Legislature in 1969 removed ceiling on corporate loans above \$100,000, and in 1970 extended this to include individuals in real estate business.	11 Jan 1971
W.Va.	8	Y	Jan 1969	Corporate loans exempt.	13 Jan 1971
Wi.	12	—	—	Corporate loans exempt. UCCC may be introduced in 1971.	19 Jan 1971
Wy.	10	N	pre 1955	Ceiling covers corporate loans.	12 Jan 1971

This table is of necessity an oversimplification of a maze of laws. Modifying—and even conflicting—statutes make highly competent legal advice imperative. Although great care and reliable sources were used, complete accuracy cannot be guaranteed.

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Government's new secondary mortgage market could spur conventional lending...

That's what the Administration hopes, anyway.

The new Emergency Home Finance Act permits the Federal National Mortgage Assn. and the Home Loan Bank Board to set up secondary markets for conventional mortgages. Neither agency plans to rush headlong into this uncharted area, but some lenders see the new facility as an eventual breakthrough in the problem of smoothing the flow of mortgage funds.

The conventional loan, an unwieldy investment instrument varying widely from state to state, has long been the target of mortgage experts bent on standardizing lending and appraisal practices. Fanny May has shown the way to a successful market in FHA-VA loans with its auction of commitments, now two years old. In this market, the mortgages have already been standardized by the federal guaranties on the loans. Officials of both FNMA and the Bank Board now hope that some method of standardization can likewise be achieved with conventional loans.

Early start at HLBB. Preston Martin, chairman of the Bank Board, said the board would set up a market soon for savings and loans, savings banks and, indeed, commercial banks.

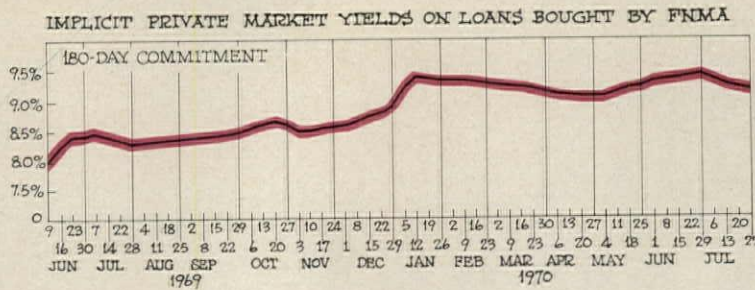
Fanny May, now pressing against its borrowing limits, will be more cautious. President Oakley Hunter said of the enabling legislation: "It may not be feasible [for FNMA] to provide the same relative degree of help for conventional loans as for FHA and VA loans."

Hunter also said that Fanny May, while "pleased to have the opportunity to effect improvements in the conventional market... will continue to give full recognition to the public interest nature of FNMA."

A Fanny May market in conventionals is expected to begin sometime this year, however.

Market rules. Fanny May and the Bank Board won identical powers to deal in the conventional market. The Board will operate its market through a new agency, the Federal Home Loan Mortgage Corp.

Fanny May and the FHLMC can hold, deal in, or sell mort-



gages or part interests in loans up to a value ratio of 75% in most cases but can deal in higher ratios in three instances.

The agencies can trade 90% shares in loans if the seller retains a 10% participation. And they can trade whole loans if he agrees to repurchase or replace the loan upon default, or if the excess above 75% of value is privately insured or guaranteed.

This last provision is a potential bonanza for private mortgage insurance firms, which offer to insure the top portion of the loan.

Easing of rule. One of the most troublesome features of the secondary market proposal was finally stricken from the bill at the insistence of mortgage bankers. That would have required sellers to buy back a problem loan within a specified

period. The bill now leaves the buy-back provisions to the purchaser.

There is a major difference between FNMA's present operation in the FHA secondary market and that contemplated for the FHLMC. Fanny May does not require delivery of the loan; FHLMC will.

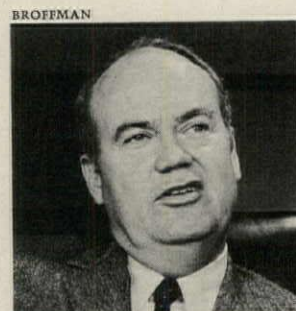
Another big difference—which has now been adjusted—comes in servicing fees. The FHLMC will pay 3/8%; FNMA had been paying 1/2%. In a recent change, however, FNMA lowered its fee to 3/8%. —A.M.

Loan increase reported by Calif. mortgage group

California's mortgage bankers boosted their loan originations by \$2.6 billion in 1969, despite the competition of other investment media.

Richard J. Giddings, newly-elected president of the California Mortgage Bankers Assn., reports this as the highlight of the association's third annual economic survey.

Members were servicing a record \$16.5 billion of loans for institutional investors at the end of 1969.



HUNTER
In no hurry



MARTIN
Eager to start

HOMEBUILDERS' MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending Aug. 8.

FNMA Auction Prices Aug. 10 8 1/2 %	City	FHA Sec. 203b— Min.-Down* 30-year immed.* Discount paid by builder		Trend	Conventional Loan Interest Rates			Construction Loan Rates
		Private mkt. 8 1/2 %			Comm. banks, Ins. Cos. 7 1/2 %	Savings banks, S&Ls 8 1/2 %	Savings banks, S&Ls Over 8 1/2 %	
90-day commitment Average 96.44 Accepted bid range 95.50-96.55	Atlanta	4		Down 1/4	a	8 1/2-8 3/4+3 1/2-4 1/2	a	9 1/2+1 1/2
	Boston	1		Steady	8 1/4+1-2	b	a	8 3/4+1
180-day commitment Average 96.70 Accepted bid range 95.75-96.93	Chicago	3 1/2-4 1/2		Down 1/2	b	7 1/4+1 1/2	a	b
	Cleveland	4 1/2-6		Down 4	a	8-8 1/2+1-3b	a	9+2
	Dallas	3-4		Down 1 1/2	8 1/2	8 1/2+1	8 1/4-9+1-2	9-10+1-2
	Denver	3 1/2-4		Down 1/2	9+1	9+1	9 1/2+1 1/2	9+1 1/2
	Detroit	4		Down 1/2	b	8 1/2-8 1/4	a	9 1/2-10+1-2
	Honolulu	5-6		Steady	9-9 1/2	9-9 1/2+2-3	b	10+2-3
	Houston	4		Down 3/4	a	8 1/4-9 1/2+2	9 1/2+3	9-9 1/2+1-1 1/2
	Los Angeles	3 1/2		Down 1 1/2	b	8 1/2-9	9+3	9 1/2-10+1 1/2-3
	Miami	5		Down 1 1/2	8 1/4+3 1/2	8 1/4+3 1/2	8 1/4+4 1/2	9+1-1 1/2
	Minn.-St. Paul	3-6		Steady	8b	a	a	b
12-18 month commitment Average 96.89 Accepted bid range 96.50-97.29	Newark	3-4		Steady	b8	b8+1	b	9 1/4-10 1/4+1-2
	New York	4		Steady	7 1/2b	7 1/2b	a	9 1/2-10+1 1/2-2
	Okla. City	3-4		Down 3/4	a	8 1/2+1	8 1/4+1 1/2-3	9 1/2+1-2
	Philadelphia	2-3		Down 1	8 1/2	8 1/2	a	9 1/2+2-3
	San Francisco	3 1/2-4		Down 1	8 1/4+1	8 1/4-8 1/2+1-1 1/2	8 1/2-8 1/4+1-1 1/2	8 1/2-9 1/2+1-2
	St. Louis	5-6		Down 1	8+1	8+1-2	8+2-3	9 1/2-10 1/2+1-2
	Seattle	4-5		Steady	b	8-9	a	9 1/2-9 1/4+1 1/2-2
Wash., D.C.	4		Down 1 1/2	b8	b8	b8	9-9 1/2+2	

* 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 8 1/2% mortgage plus extra fees, w—for comparable VA loans also.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, chairman, Boston 5 1/2 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.

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lumber and plywood.

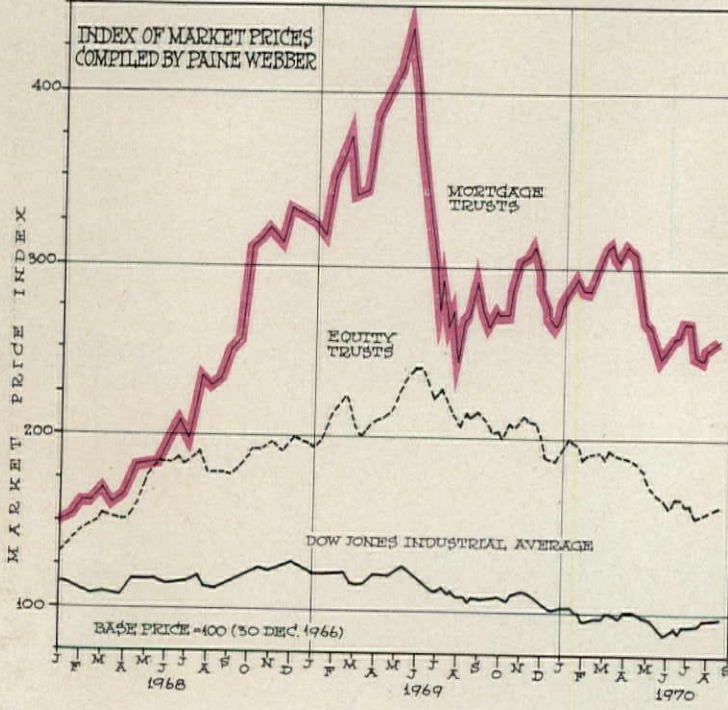


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Leaders of real estate trusts to meet in New York

Real estate trusts, the investment group that includes trusts that own real estate, trusts that hold mortgages, and hybrid trusts that do both, will be in the spotlight Oct. 15-16, when the National Assn. of Real Es-

tate Investment Funds holds its 10th annual conference at the Roosevelt Hotel in New York City. James O'Leary, executive vice president of the U.S. Trust Co., New York City, speaks on "The Economic Outlook."

The Tappan Co., the kitchen appliance maker, plans to buy 80% of Bob Schmitt Homes Inc. of Strongsville, Ohio.

Payment will be in Tappan common, the amount to be determined by audit and appraisal.

Bob Schmitt, who owns the building company, is famous for innovation (*Factory in the Field*, H&H, Jan. '64) and for fighting those who resist innovation (*Study of Homebuilder's Living Hell*, News, Dec. '68 and *Bomb Rips Bob Schmitt House*, News, Jan. '69).

Neither earnings nor volume of the builder are made public.

Tappan earned \$905,000 or 37 cents a share on sales of \$65.9 million in the first half. Its headquarters is in Mansfield, Ohio. The Schmitt acquisition will be the first for Tappan in the building field.

Fleetwood purchase. Fleetwood Enterprises of Riverside, Calif., has acquired Deluxe Homes, which manufactures modular housing in Berwick, Pa., and Quincy, Mich.

Deluxe was acquired for 360,000 shares of Fleetwood valued at about \$7.5 million.

Fleetwood, which makes mobile homes and recreational vehicles, had sales of \$117.9 million in the year ending April 26. Deluxe reported revenue of about \$4.6 million in the year ending Feb. 28.

Inland's expansion. Jewel Builders of Columbus, Ohio, will be the fifth operating subsidiary of Inland Steel Urban Development Corp., the housing company formed in February by Inland Steel Co. of Chicago.

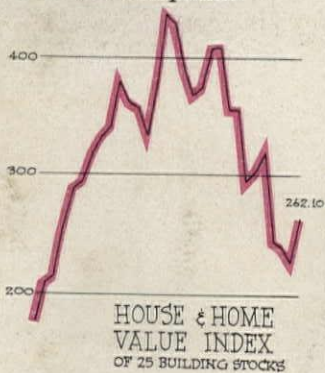
Jewel, a specialist in apartments and government-financed housing, was acquired for an undisclosed amount of Inland common. Julius J. Cohen continues as president.

Inland's acquisition of Jewel brings together two companies that first talked merger eight years ago.

Don Scholz, president of Scholz homes of Toledo, approached Cohen, and their talks led to the brink of a merger (News, May '69). But before the deal could be closed, Scholz was acquired by Inland. Both companies are now subsidiaries of Inland Steel Urban Development.

Housing stocks recover

HOUSE & HOME's index of 25 housing issues turned upward after a three-month decline, rising to 262.10 from 227.12 in the month ended Aug. 5. Stocks on the index are indicated by bullets (•) in the tables at right. Here's the composite.



SHARE PRICES OF JANUARY 1965 = 100

How top 5 did in each group:

	Aug. '69	July '70	Aug. '70
Builders	467	325	351
Land develop.	534	269	329
Mortgage cos.	492	387	449
Mobile homes	748	385	487
S&Ls	187	120	133

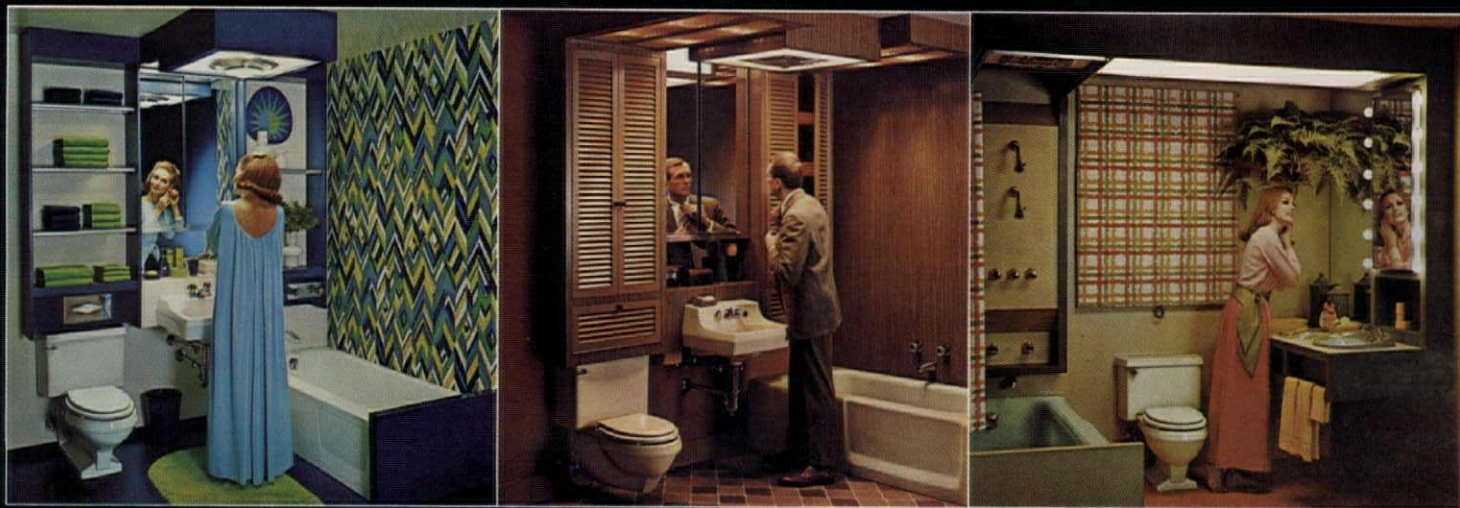
HOUSING'S STOCK PRICES

COMPANY	Aug. 5 Bid/Close	Chng. Prev. Month	COMPANY	Aug. 5 Bid/Close	Chng. Prev. Month	COMPANY	Aug. 5 Bid/Close	Chng. Prev. Month
BUILDING			United Fin. Cal.	6 3/4	+ 1/2	Citizens Financial	11	+ 3/2
Bramalea Cons (Can.)	2.60	- .10	Wesco Fin.	13 3/4		City Invest.	13	+ 2
Capital Divers (Can.)	1.40	+ .30				Cousins Props.	27	- 2
Centex Corp.	23 3/4	+ 3 3/4	MORTGAGE BANKING			Forest City Entr.	13	+ 1 3/4
Christiana Oil	7 3/4	+ 1 1/2	-Advance	29		Great Southwest Corp.	3 1/2	+ 1/4
Cons. Bldg. (Can.)	1.10		Charter Co.	7	+ 3/4	Investors Funding	9 1/2	- 3/4
Dev. Corp. Amer.	7 1/2	+ 1 1/2	-Colwell	15 1/4	+ 1/2	Midwestern Fin.	12 3/4	+ 1 3/4
Dev. Int. Corp.	6	- 1/2	-Cont. Mtg. Investors	17 1/2	+ 4 1/2	Rouse Co.	25 1/2	+ 4 3/4
Edwards Indus.	6 1/2	- 1	Cont. Mtg. Insurance	14 1/2		Tishman Realty	19 1/2	+ 3 3/4
First Hartford Rlty.	4 1/2	- 1/2	Excel Investment	7 1/2	- 4 1/2			
First Nat. Rlty.	4 1/2	- 1/2	FNMA	38 3/4	+ 5 1/2	MOBILE HOMES & MODULES		
Frouge	13 1/4	- 1/2	First Mtg. Ins. Co.	7 1/4	+ 3/4	Con. Chem. Co.	6	
-General Bldrs.	4 3/4	+ 1/4	First Mtg. Investors	22 1/2	+ 2 1/4	-Champion Homes	19 1/2	+ 5 1/2
-Kaufman & Bd.	35 1/2	+ 3 3/4	-Lomas & Net Fin.	7	- 1 1/2	Commodore Corp.	6 1/4	+ 1 3/4
Key Co.	5	- 2 3/4	-MGIC Invest. Corp.	46 1/2	+ 10 1/2	-DMH (Detroit)	14 1/4	+ 3 3/4
(Kavanagh-Smith)			Mortg. Associates	14 1/2	+ 3 1/2	-Fleetwood	22 1/2	+ 5 1/2
Leisure Technology			Mortg. Trust of Amer.	17 1/2	+ 3/4	-Gerdon	11 1/2	+ 2 1/4
Corp.	13 1/2	- 1/4	North Amer. Mtg. Inv.	19 1/2	+ 2 1/4	Mobile Home		
H. Miller & Sons	5 1/2		Palomar Finan.	4 1/2	- 3/4	Industries	11 1/2	+ 3 3/4
McGrath Corp.	6	+ 1	UIP Corp.	3 1/4	- 3/4	Monarch Ind.	14 1/2	+ 1/2
National Environment	1 1/4	+ 1 1/2	(United Imp. & Inv.)			Redman Indus.	17 1/2	+ 3 3/4
(Sproul Homes)			Universal Invest. Trust	2 1/2	+ 1/4	Rex-Noreco	16 1/2	- 1/4
Nationwide Homes	5 1/2	+ 1 1/2	(South. Mtg. Inv.)			-Skyline	22 1/2	+ 4 1/4
-Presidential Realty	9 1/4	+ 1 1/2	LAND DEVELOPMENT			Town & Country Mobile	8 1/2	+ 2
Presley Development	13 3/4		All-State Properties	3/4	+ 1/4	Zimmer Homes	11 1/2	+ 3 3/4
Pulte Homes	6 1/4	+ 1 1/4	American Land	3/4		Hodgson Houses	3	+ 1
Ryan Homes	39 1/2	+ 4 1/4	-AMREP	16 7/8	+ 5 1/2	Modular Housing		
Standard Pacific Corp.	5	+ 1 1/4	Arvida	7 1/2	+ 1 1/4	Systems Inc.	9 1/2	- 1/2
U.S. Home & Dev.	22 1/2	+ 3 3/4	Atlantic Imp.	15	- 4	Nat. Homes A.S.	12 3/4	+ 4 1/2
-Jim Walter	27 1/2	+ 2	Canaverl Int'l	5 1/2	+ 1/2	Stirling Homex	15 1/2	+ 3
-Del E. Webb	7 1/2	+ 1/4	Crawford Corp.	3 1/4	- 3/4	Swift Industries	4	+ 1 1/2
Washington Homes	5 1/4	+ 1/4	-Deltona Corp.	18 1/2	+ 4 1/4			
Western Orbis	4	+ 3/8	Disc Inc.	4 1/4	+ 1 1/2			
S&Ls			Don the Beachcomber					
American Fin.	13 1/2	+ 1 1/2	Ent. (Garden Land)	6 1/2	- 3/4			
Calif. Fin.	7 1/4	+ 1	FPA Corp.	5 1/2	- 1/4			
Empire Fin.	9 1/4	+ 3/4	(Fla. Palm-Aire)					
Far West Fin.	11 1/2	+ 1 1/2	-Gen. Devel.	19 1/4	+ 3			
-Fin. Fed.	11	+ 1	-Holly Corp.	1 1/2	- 1/4			
-First Char. Fin.	37 1/2	+ 3 3/4	Horizon Corp.	17	+ 3			
First Lincon Fin.	4 1/2	+ 1/4	Laguna Niguel	4 1/4	+ 1			
First S&L Shares	12 1/2	+ 3/8	Major Realty	5 1/2	- 1/2			
First Surety	3 1/4	- 1/4	-McCulloch Oil	24 1/2	+ 4 1/2			
First West Fin.	2 1/2	+ 1/4	Scientific Resources	2 1/2	- 1/8			
Gibraltar Fin.	14 1/4	+ 2 1/2	(Sunasco)					
-Great West Fin.	18 1/4	+ 1	So. Rlty. & Util.	4 1/2	+ 3/4			
Hawthorne Fin.	7	- 1 1/4	DIVERSIFIED COMPANIES					
-Imperial Corp.	10 1/2	+ 3/4	Boise Cascade	48 1/2	+ 3/4			
-LFC Financial (Lytton)	5 1/4	+ 1						
Trans-Cst. Inv.	5	+ 1/4						
Trans World Fin.	7 1/2	+ 3/8						
Union Fin.	7 1/2	+ 1/2						

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 1-for-5 reverse 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 & Sage, 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.

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City Investing regrouping housing units

The New York investment conglomerate plans to group its housing and land development activities in a single company.

The company is Guerdon Corp., of Southfield, Mich., the 52%-owned subsidiary that makes modular units and mobile homes.

Guerdon will acquire City's 49% interest in General Development Corp. of Miami, the option that City holds on another 2% interest in the land developer, and all the real estate assets of City's wholly-owned Southern California Financial Corp. of Los Angeles, an S&L holding company.

The officers. F.L. Cappaert, Guerdon's president, will be president and chief operations officer of the revamped company. George T. Scharffenberger, City's president, will be chairman and chief executive.

The expanded Guerdon company will have 28 housing plants in 17 states and will build conventional single-family, mobile and modular housing. It will also develop land and mobile home parks.

Assets will total \$175 million and net worth will approximate \$150 million.

The reorganization will permit Guerdon to take advantage of the largest single market of the 1970s, housing, according

to Scharffenberger's prediction.

Stock swap. The plan calls for Guerdon to issue City 1.728 shares of its common for each of City's 4.6 million shares of General Development.

Guerdon would also issue stock for the real estate assets of Southern California Financial. Common would be issued to City in a ratio based on City's book value, the value of the assets and the market value of Guerdon common.

Total value of both transactions would be more than \$120 million.

Sterling Forest, City's 20,000-acre residential tract near Tuxedo, N.Y., is carried on City's books as an investment and is not included in the regrouping.

General Development's senior vice president, Boyd T. Prior, has resigned in the wake of the promotion of 39-year-old Frederick E. Roach to the presidency of the company (News, Aug.). Prior had been sales and marketing vice president before becoming senior vice president last May.

General Development recently doubled its short-term credit lines with banks, to a total of \$20 million. The move was to provide funds for expanded operation, Charles H. Kellstadt, chairman, said.

Great Southwest omits dividend, may unload land

Great Southwest Corp. has just done \$1.8 million worth of belt tightening, and its move may include a drastic reduction in its real estate holdings.

Great Southwest sustained a \$3.5 million loss in the first half of 1970, compared with a \$20.7 million profit in the 1969 period.

From its headquarters in Harrington, Tex., the company announced it is passing the dividends on two series of preferred stock, saving \$1.8 million.

And in Newport Beach, Calif., home of Great Southwest's subsidiary, the Macco Corp., the parent revealed that "substantially all" of Macco's California real estate may go on the block. Macco owns 35,000 acres.

The problems of Great Southwest echo those of Penn Central Transportation Co., which through its subsidiary, the

Pennsylvania Co., owns 92% of the land development company.

Great Southwest "has been suffering a severe liquidity problem" with respect to Macco's operations, according to Angus G. Wynne Jr., president of Great Southwest.

Sale of land would reduce the Macco debt load and provide funds for operations with more modest cash requirements, such as Six Flags Inc., Great Southwest's other subsidiary. Six Flags operates amusement parks.

Macco has made a drastic cut in personnel. From about 800 in June, the staff has been reduced to slightly more than 500.

Whether there will be more layoffs depends on ability to fund programs, a spokesman said.

—LORRAINE SMITH
McGraw-Hill News, Dallas

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BATTERY PARK CITY

THE BATTERY PARK CITY AUTHORITY, a public benefit corporation of the State of New York, invites applications from qualified individuals and organizations to sublease and undertake construction and development of the Office-Commercial Area within the Battery Park City Project in the Borough of Manhattan, City of New York.

On November 24, 1969 the City of New York executed and delivered to the Authority a lease of the project area consisting of approximately 91 acres extending from the bulkhead line westerly to the United States Pierhead line from Battery Park to Reade Street, for a term of 99 years commencing June 18, 1970.

Battery Park City is to be developed in accordance with a Master Development Plan and a series of Development Area Plans providing for an Office-Commercial Area and a Residential Area. The Office-Commercial Area, located at the southern-most part of the Project Area, consists of approximately 10 acres on which sublessees will be required to construct five million square feet of net rentable office space, plus retail and parking facilities.

The Authority will construct bulkheading and fill and will provide service facilities.

At this time, invitations for applications to sublease and develop are limited to the Office-Commercial Area.

All applications must be accompanied by a financial statement, certified by an independent public accountant, showing a complete statement of assets and liabilities and a statement of income, expenditures, profit and loss for the most recent fiscal year. For publicly owned corporations, the latest published certified statement and report to stockholders will be acceptable. Also a detailed statement of the background and history of the applicant, so as to demonstrate its ability to accomplish the satisfactory construction and completion of the Office-Commercial buildings complex, must be submitted.

Applications will be accepted from principals only. The Authority will not pay or obligate itself to pay finders' fees, brokerage commissions or other such charges.

As soon as practicable after receipt and review of the replies to this public invitation by the Authority, arrangements will be made for interviews with those applicants who, in the judgment of the Battery Park City Authority appear best qualified, by virtue of their experience, capability and financial qualifications to satisfactorily construct and complete construction of the proposed development.

Prior to final selection the tentatively successful applicant will be required to deposit the sum of \$100,000.

Copies of the Master Lease and Master Plan may be obtained by payment of \$20.00 per copy. Checks should be made payable to Battery Park City Authority.

Seven copies of applications must be submitted and must be received no later than the 30th day of September 1970 unless extended at the discretion of the Authority.

PLEASE DO NOT TELEPHONE
MAIL APPLICATIONS TO:

CHARLES J. URSTADT, CHAIRMAN
BATTERY PARK CITY AUTHORITY
393 SEVENTH AVENUE
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Spanish model is one of three in Raldon Rally series; price \$19,500-\$23,000.

Opening subdivisions at one-a-month clip — that's the Raldon Corp. down in Dallas

The builder was selling in six subdivisions at mid-summer. By the end of September there will be 10. And the rapidity of openings is matched by the company's growth rate.

Don R. Dixon and Raleigh Blakely organized Raldon Corp. one year ago with only six people, including themselves. Today there are 50 working to produce what is expected to be a \$14 million gross for the fiscal year that ends next March 31.

Management team. Raldon did not start from scratch; both founders had been active in Dallas housing.

Dixon, an architect, began as a custom builder in 1963, and Blakely, a 1950 business administration major at Southern Methodist, had spent eight years with Centex Corp. and worked as a land developer.

The Raldon company started with five subdivisions, and the growth rate since then points to a highly successful mixture of in-house plans and farmed-out execution.

For instance, Dixon, although an architect, works only on the conception and preliminary planning of houses. An outside drafting firm is given the job of getting the details down to the working plan stage.

Raldon builds largely with subs—and even its computer system uses outside machines. Dixon says the company makes sophisticated use of these hired computers for analysis of production efficiency.

Outside financing. In financing, too, Raldon's ability to join

forces with an outside organization has paid off.

Much of Raldon's rapid growth can be attributed to its association with Builders Resources Corp. of Los Angeles. This venture capital specialist has provided the bulk of the capital for the 10 projects in which it is a joint venturer.

It was in anticipation of obtaining such outside financing that Dixon and Blakely put Raldon together from smaller building companies. They foresaw that small builders would have increasing difficulty finding money.

House lines. Raldon produces three series of houses:

- Rally, which offers 21 elevations and seven floor plans, with prices from \$19,500 to \$23,000.

- Insight, with 18 elevations and six floor plans, at \$24,000 to \$28,000.

- Holiday, which are mostly custom built, and cost from \$29,800 to \$35,000.

A factory ahead. Apartment projects and house building in a factory can be seen in Raldon's future.

Raldon has built apartments for others, but has yet to build a project for itself. Although it owns some apartment sites—bought for investment—its first apartment development is not likely to start until after the company begins using factory building techniques.

"We will continue to build the same type of house, but in a factory, instead of on the site," Dixon says. —L.S.

for a choice of ways to stop delays!

These 3 whiteprinter models give you a choice of speeds to fit your needs . . . a choice of ways to save time and money on whiteprints. All models make copies from translucent originals at a material cost of 1 1/2¢ per sq. ft. They're easily movable—in your office or on the job. No warm-up needed—they're always on go. Printers/developers synchronized. No plumbing or special wiring required. Just insert your original and diazo paper and you get a sharp clear copy in seconds. Only Blu-Ray gives you a choice and full year warranty.

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The U/R fiberglass bath gives all your properties a terrific plus. It's the fastest selling feature in modern homes today. So let Universal-Rundle help you tell the world that you're the builder in your area who's way out front. Send in the coupon now!

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Yes, I want to know all the details of your Dealer/Builder Program for 1970. Please have your representative call. No obligation.

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And Tappan's broad cabinet line now covers the full range from economy to custom. So you can give every customer convenience by the kitchenful. Tappan, 250 Wayne Street, Mansfield, Ohio 44902.

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"Total Electric homes? I wouldn't build anything else."



Quality construction—featuring flameless electric heat—helps sell homes for Builder David C. Smith. And he's sold as many as 30 homes in two weeks.

Last year David C. Smith, Gaithersburg, Maryland, built more than 100 homes—custom built and project units. Every home was a Total Electric Gold Medallion Home.

"We made up our minds to build top quality and minimum maintenance into our homes," says Mr. Smith. "Flameless electric heat meets these requirements best."

"Our quality story makes sense to buyers. And it pays off in word of mouth advertising for us. We've sold as many as 30 homes in two weeks without special promotion."

"My experience building Total Electric homes goes back over the past six years and I haven't had one customer complain about electric heat operating costs."

Electric heat can help you build a better quality, faster selling home, too. Start now, by getting all the facts from your electric utility company. They'll be glad to work closely with you.

P.S. Is Mr. Smith's own home Total Electric? You bet!



...where everything's electric,
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Edison Electric Institute, 750 Third Ave., New York, N. Y. 10017



The house the kids rebuilt — builders create a labor pool with students

Until recently, the Los Angeles house above was an eyesore. Now it has been rehabbed and sold for \$18,000. The rehabbers: 20 inner-city high school boys who tackled the job as part of a program to prepare them for apprenticeships in building trades unions.

Sponsored by a Los Angeles affiliate of NAHB—the Building Industry Assn.—the Youth Housing Opportunity Program is supported by subcontractors, materials suppliers, union locals, and a savings and loan association. So far, its sponsors report, it has produced these results:

- Six of the trainees have already started, or are about to start, union apprenticeships.

- Three more Los Angeles houses have been lined up for rehab projects by some 60 high school trainees.

- Housing-industry groups in other cities are following the Los Angeles lead. Similar programs will soon start in Oakland, Calif.; Memphis, Tenn.; and Chicago.

The Los Angeles program is sponsored by the Young Home Builders Council, educational arm of the Building Industry Assn. It was conceived by two

council members, John Konwiser and Robert Renz, as a way to attract young men to the labor-short housing industry by offering practical experience.

Konwiser and Renz cleared their idea with school officials and the AFL-CIO Building Trades Council, then ran into a problem: how to find a house to rehab. Several s&ls turned down requests for foreclosed dwellings before Gibraltar Savings & Loan came to the rescue with a house that needed extensive repairs before it could be re-sold.

Local suppliers and subcontractors donated materials. The subs also contributed guidance, sending men to the project to explain their specialties and help supervise the trainees.

Working Saturdays, the students finished the job in four months. They were paid \$1.75 an hour. Their supervisor, also paid, was Harold Campbell, manual arts instructor at Jefferson High School. Gibraltar s&l reimbursed the Youth Council for the \$6,000 payroll after selling the house.

"The students really matured on the job," says Konwiser, "and can now see opportunities for themselves that they couldn't see before."



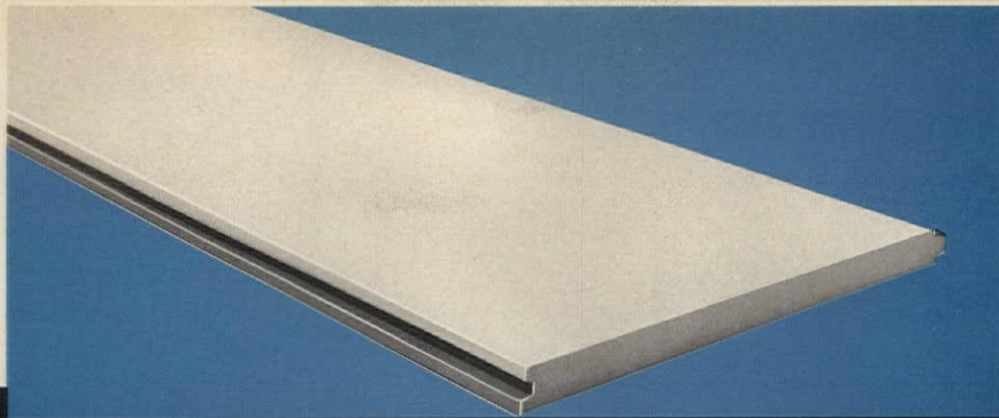
Student carpenters construct partition; they gutted and rebuilt interior.



Instructor Harold Campbell explains floor plan to one of his students.



Building Inspector S. G. DeBonis talks to students after approving work.



homasote roof decking is a beautiful finished ceiling, weatherproof insulation, a tough structural base for roofing and made in 2' wide panels with T&G edges to cut building costs.



See your building materials dealer, or use the reader service form for more inspiration.

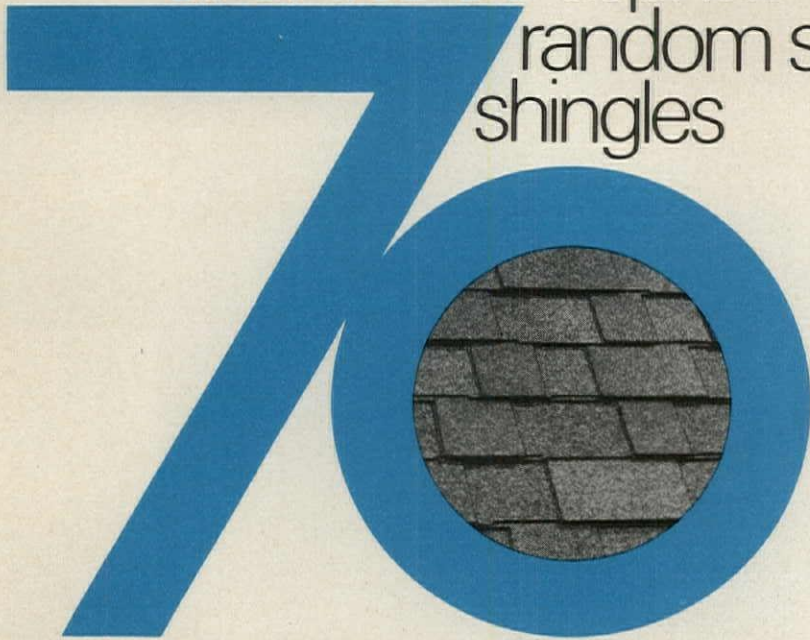
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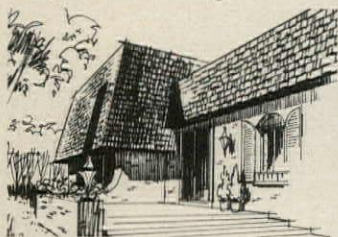
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Bird's exciting new *architect*® 70 shingle lets you offer homeowners the best of both worlds! The rich custom character of natural random wood shakes . . . plus the superior protection and durability of top quality asphalt. All in one bold, distinctive shingle that will delight your most discriminating customers.

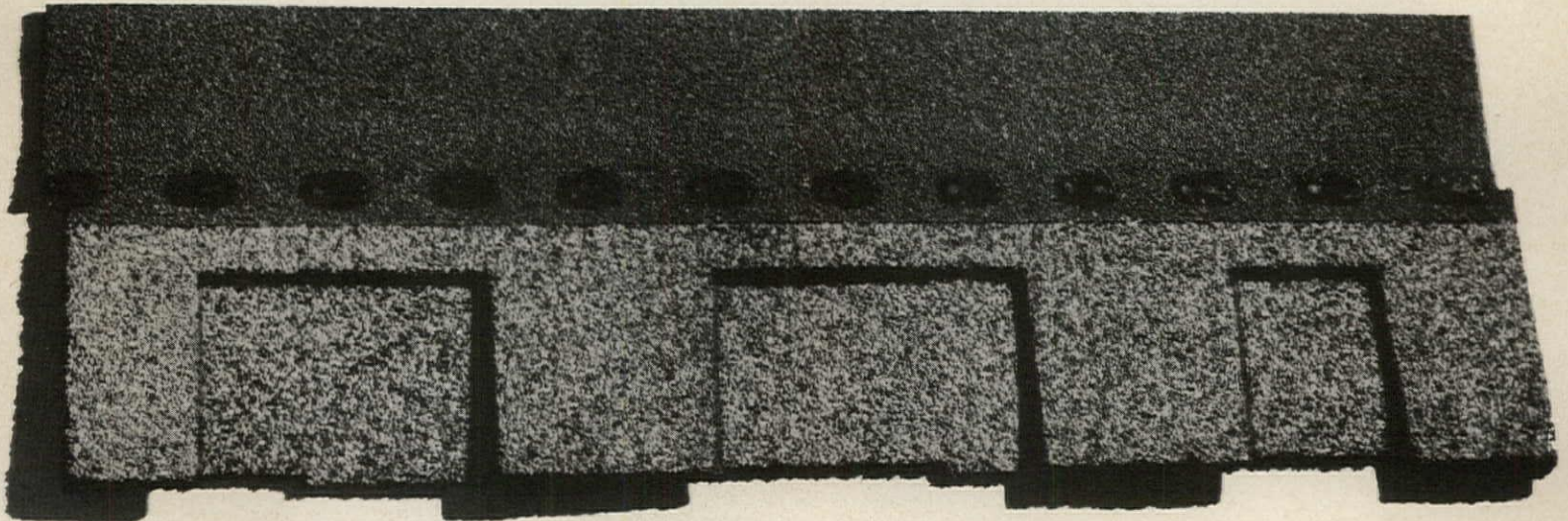
It's a heavier shingle, random-edged, for a richly sculptured shadow line . . . a handsome, deep texture. Comes in custom colors. Compliments traditional or modern styles, all types of building materials. Looks striking on broad expanses, small angular areas, mansard roofs, anywhere.



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Personalize your homes with dramatic Bruce Fireside Plank

Today many home buyers are bored with the institutional look of wall-to-wall carpet monotony, so give them something to get excited about. Give them the rich, dark coloring and alternate-width oak planks of permanent-type Bruce Fireside Plank Floors.

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Aluminum door frame has fewer parts than wood frame, is factory-painted. Both the trusses and the prepunched studs are set on 24" centers.

To get the facts on aluminum framing, Ryan Homes puts up a prototype house

Does aluminum framing have any advantage, other than reduced weight, over conventional wood framing?

With that question in mind, Ryan Homes, a big Pittsburgh-based builder that has already tried steel framing, is testing Alcoa's new Alumiframe system. Using the Alumiframe package—which includes not only walls, partitions, and trusses but also windows, millwork, and trim—Ryan has erected one house and is about to start another. The first house (below, right) is identical in plan and design to one of Ryan's conventionally framed production models.

The aluminum package costs about \$100 more than conventional materials for the 1,040-sq.-ft. house. But Dick Younkman, who heads Ryan's product development and research department, says the extra cost is offset by these advantages:

Fewer parts. The Alumiframe system has about half as many parts and fasteners as a conventional system.

Easier handling. Alumiframe is about 80% lighter than a conventional system. So crews can handle normally heavy components—wall sections and roof trusses—and a 40-ft. extruded aluminum floor beam with surprising ease.

Easier fastening. Instead of nails, Alumiframe uses self-tapping screws. The only problem here, however, is in getting crews used to working with screw guns.

Simplified framing. Alumiframe eliminates the need for double framing around doors and windows, and built-up corner posts.

Less finishing. Since pre-painted millwork and trim are part of the Alumiframe package, finishing time is cut considerably.



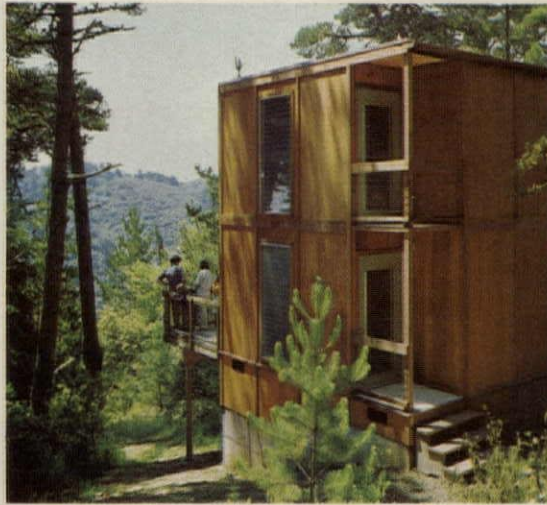
Wall section, easily handled by small crew, is 26' long.



Trusses are tightened with wrench and temporarily braced.



Test house is Ryan's standard Rymark split-entry model.



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PALCO Redwood Plywood . . . you see it wherever quality, appearance and economy are important. IN and ON all types of construction: apartment buildings, office buildings, motels, recreation centers, pre-engineered buildings, homes, restaurants, stores. There are good reasons for this:

Beautiful natural russet color and interesting grain patterns on clear, knot-free faces, handsomely saw-textured. Factory-applied water repellent treatment. An ability to hold any type of finish longer, with minimum maintenance. Can be used as combination siding-sheathing.

The convenience of 4' x 8', 9' and 10' plywood sheets in 3/8" and 5/8" thicknesses. Made in a plain pattern (with no

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Send for color brochure that gives complete product specifications, application instructions, and detailed finishing recommendations.

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Weathersealing installation flange

Welded insulating glass

Rigid vinyl sheath over core of wood

Polyurea factory finish

Read about this window before you start your next job.

It could save you a pile of money and a whole lot of grief.

This window is the Andersen Perma-Shield® Narroline™—a contemporary version of the traditional double-hung.

The core is made of warm natural wood.

But all exterior surfaces, except the sash, are encased in a sheath of rigid vinyl. (Just like a coat of armor.) And the sash is protected by a special polyurea factory finish that won't chip, crack, peel or require painting for at least 10 years.

Just imagine . . . the money it can save you!

Think of exterior on-site painting costs, for example. With ordinary double-hung windows, you have to pay up to \$10 per window to have them painted.

With Perma-Shield Narroline, you don't have to pay a cent to have them painted. Less clean-up cost, too.

But, Perma-Shield saves you more than money. It saves you a lot of trouble, too.

You won't have people complaining that these windows are cold and drafty. Their unique combination of wood, vinyl, and welded insulating glass make Perma-Shield wonderfully snug and weathertight. (No storm windows needed.)

And, they're easy to operate, too. No sticking or binding. No changing shape with the weather. No rattling, leaking, or balking.

Very simply, they don't bug people. So people won't bug you.

Actually, we could go on forever telling you about Perma-Shield windows—how they come in 4 styles and hundreds of sizes.

But we're running out of space.

So, why not get the rest of the story from your nearest Andersen dealer. (He's in the Yellow Pages.) Or send for our free booklet.

And read on.

HH-90

- Tell me more. Please send free Perma-Shield literature.
 I'd like a Perma-Shield demonstration in my office.
Have a distributor call me for an appointment.

Name _____

Title _____

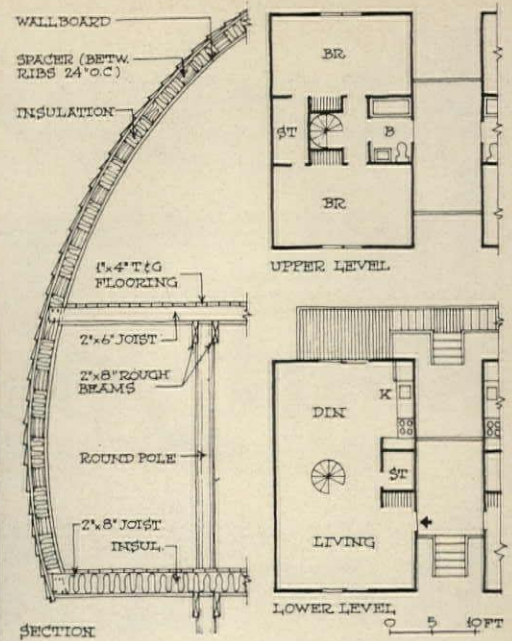
Firm _____

Address _____

City _____ State _____ Zip _____

Mail to: Andersen Corporation, Bayport, Minnesota 55003

Andersen Windows 
Window beauty is Andersen. Andersen Corp., Bayport, Minnesota 55003



Duplex was built by Charles Doster, Winterville, Ga. Clapboards are nailed to shop-built arches 24" o.c. Alternate exterior has asphalt shingles nailed to plywood. Wallboard covers interior.

Low-cost housing: these odd-looking units can be built for \$7 a sq. ft.

So reports a small-town builder after trying his hand at several of them. He is Thomas B. Waring of Hope Mills, N.C. (1960 pop. 1,109), whose company—Pioneer Homes—built the tubular house shown below.

That house and the duplex above are two of 11 models designed by the U.S. Forest Service to show how innovative uses of wood can make for better rural housing at lower cost.

Costs were held down by Spartan design and detailing. Wall construction was simpli-

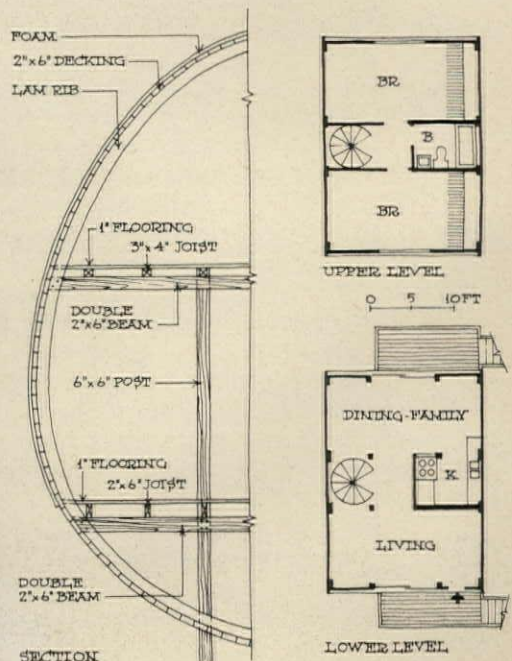
fied (see drawings); partitions are single sheets of particle-board set into slots; floors are single-layer t&g boards left exposed on the undersides as ceilings; the interior finish is minimal—no closet doors or moldings; and there's little site preparation because the houses are set on poles.

Do buyers balk at this no-frills approach? "No," says builder Waring. "They don't expect frills in a house that doesn't look like a house."

CIRCLE 275 ON READER SERVICE CARD



Spiral staircase is easily constructed out of wood. Steel rod in center of wood pole sections acts as support. Exposed t&g planks and double laminated ribs make up interior walls.



Tubular house was built by Pioneer Homes, Hope Mills, N.C. Built-up roofing and batt insulation were eliminated when foamed-in-place urethane was sprayed over 2x6 t&g planks and then painted.



New Whirlpool dishwashers
speak softly

but they help you ask for the order

Not every closing decision is reached in the kitchen. But the moment of truth begins right there. If she likes the appliance she sees in *this* room, you know your showing is off to a selling start.

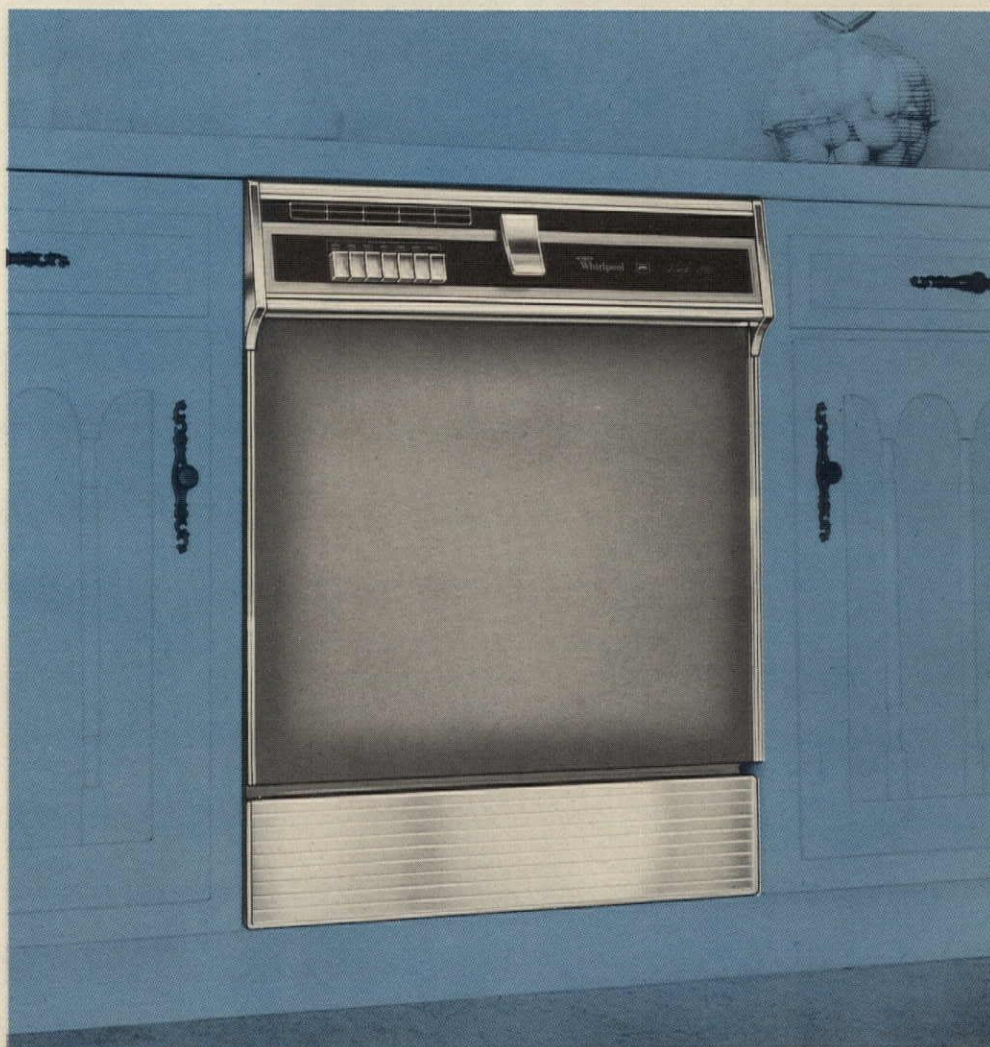
That's where we come in. She'll like our new undercounter dishwashers...the quiet ones. A new Sonic Shield helps muffle the motor and shhh the sound. Other likable features include a removable silverware basket she can load at the table. And an exclusive, removable cutlery basket in the door that keeps long knives and forks safely out of "ouch" range. And for new loading ease, a 5-position adjustable upper rack. To make room for tall glasses and extra-large plates.

And you'll like the exclusive pre-installation baseplate that saves time at the job site. Just hook up water, drain and electrical lines beforehand. Later, one man can slide it into place, attach 2 hoses and plug it in.

For more kitchen charisma, install one of our continuous clean gas or electric ovens that will clean itself as it cooks. Or choose a self-clean electric model.



Model RVE26



Model SWU-100

Then for total cleanability, there's Jac-Vac*...our central vacuum cleaning system. It gives her a clean sweep of dust and dirt...all around the house. Kitchen. Nursery. Patio. The wet or dry system will even wash floors and windows.



And while Whirlpool dishwashers speak softly, we'd like to shout about our builder services. Like nationwide Tech-Care service, our simplified warranty letter, "cool-line" information service... and builder counseling programs including Accountrol* and Minirisk*. That's just part of the Whirlpool story. Your Whirlpool Distributor would like to tell you more. Why not give him a call today?

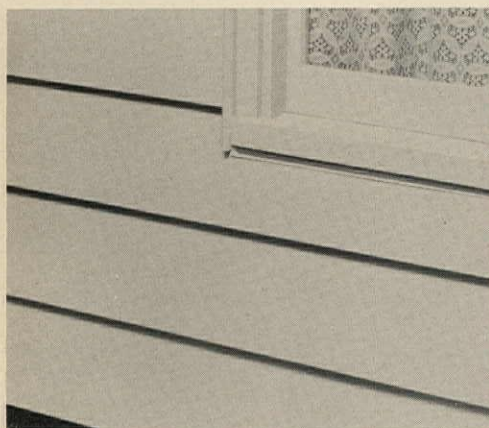
*Tmk.


Whirlpool
CORPORATION

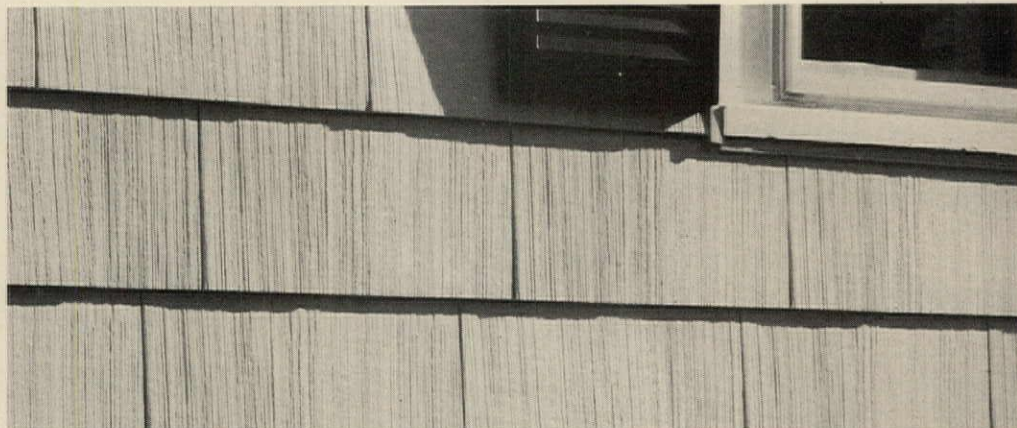
Geon vinyl protects a house from top to bottom and inside and out.

The kind of houses that your customers want. Houses that almost maintain themselves.

Geon vinyl. The tough material. It has what it takes to make:



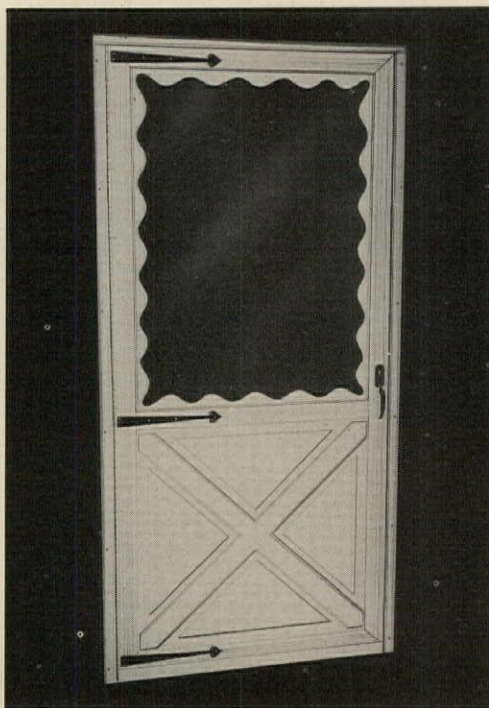
Siding that resists denting . . .



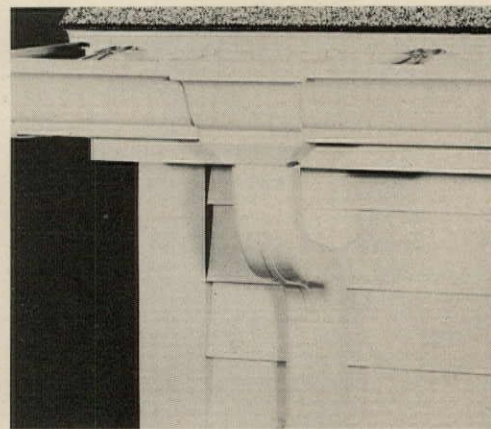
. . . and can look beautifully shake . . .



. . . or charmingly stone.

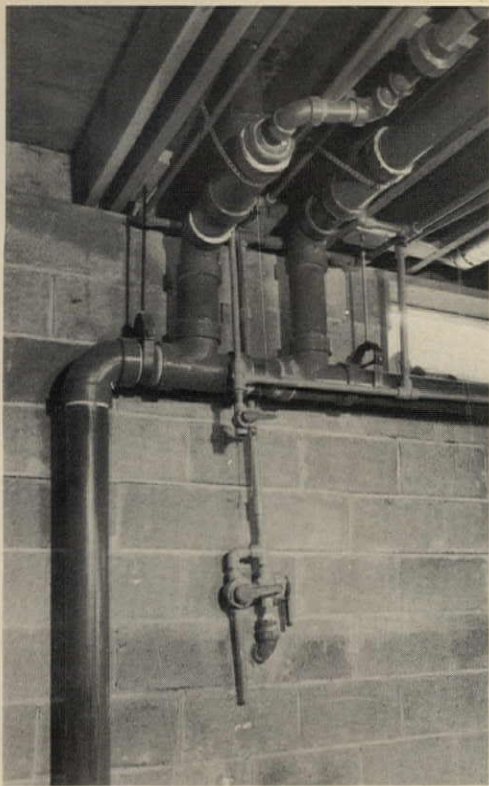


Storm doors and windows that reduce sweating and sticking.

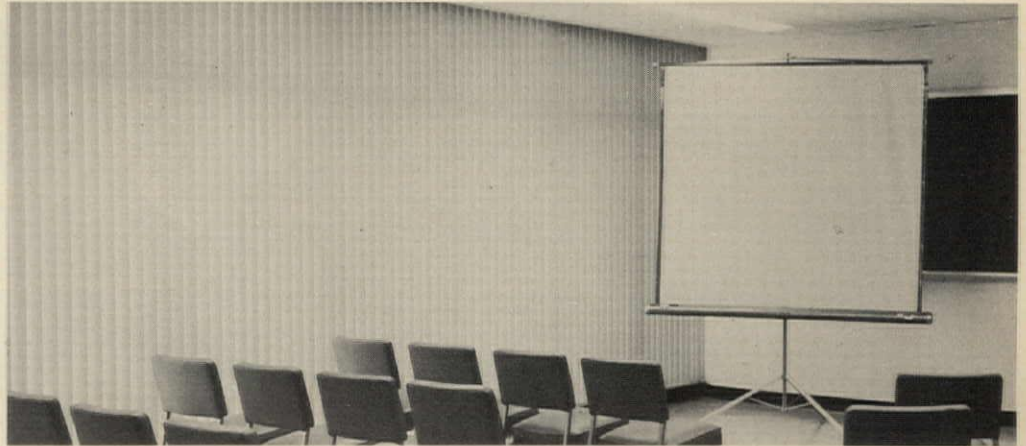


Gutters and downspouts that won't corrode or blister.

And that makes the difference in selling houses.



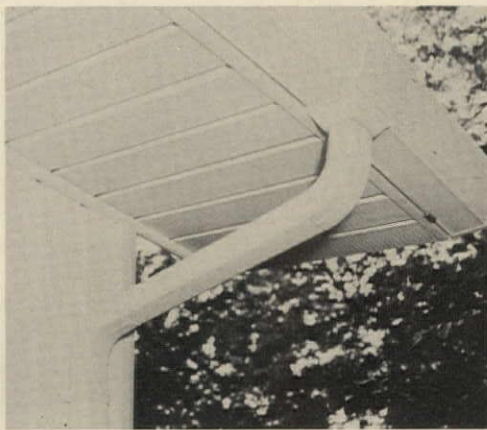
DWV and water supply pipe that resists build-up of hard water deposits and reduces heat loss.



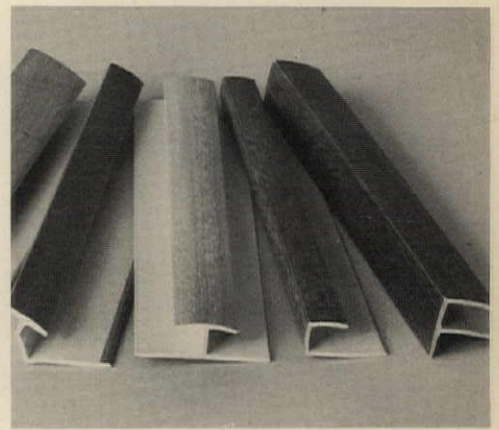
Louvers for vertical blinds that resist twist, warp or bow. That close perfectly from top to bottom.



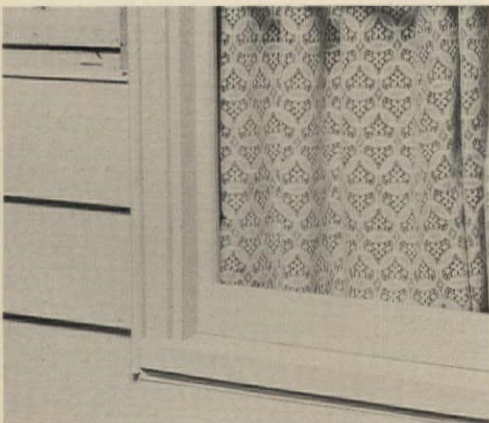
Shutters that don't rot or peel.



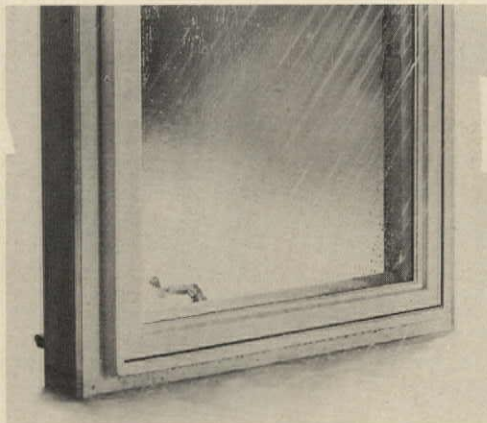
Soffit panels that resist warping. Panels that are strong but light and easy to handle and cut.



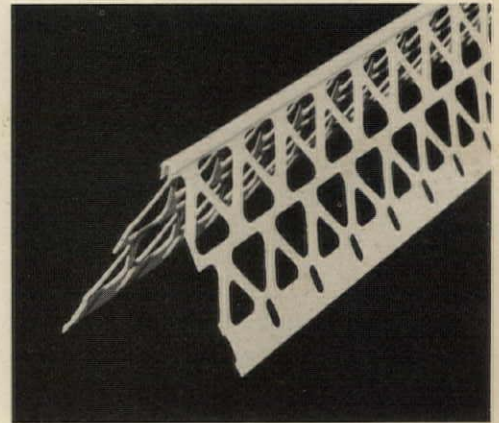
Interior trim that requires no painting.



Vinyl components for windows that reduce sticking, sweating.



Vinyl clad windows that are warm and need no painting.



Solid vinyl corner bead that's tough, won't rust.

These and other products such as awnings, roof edge, baseboard raceways are of solid color that won't rub or wear off. Color the sun can't make peel and moisture can't blister.

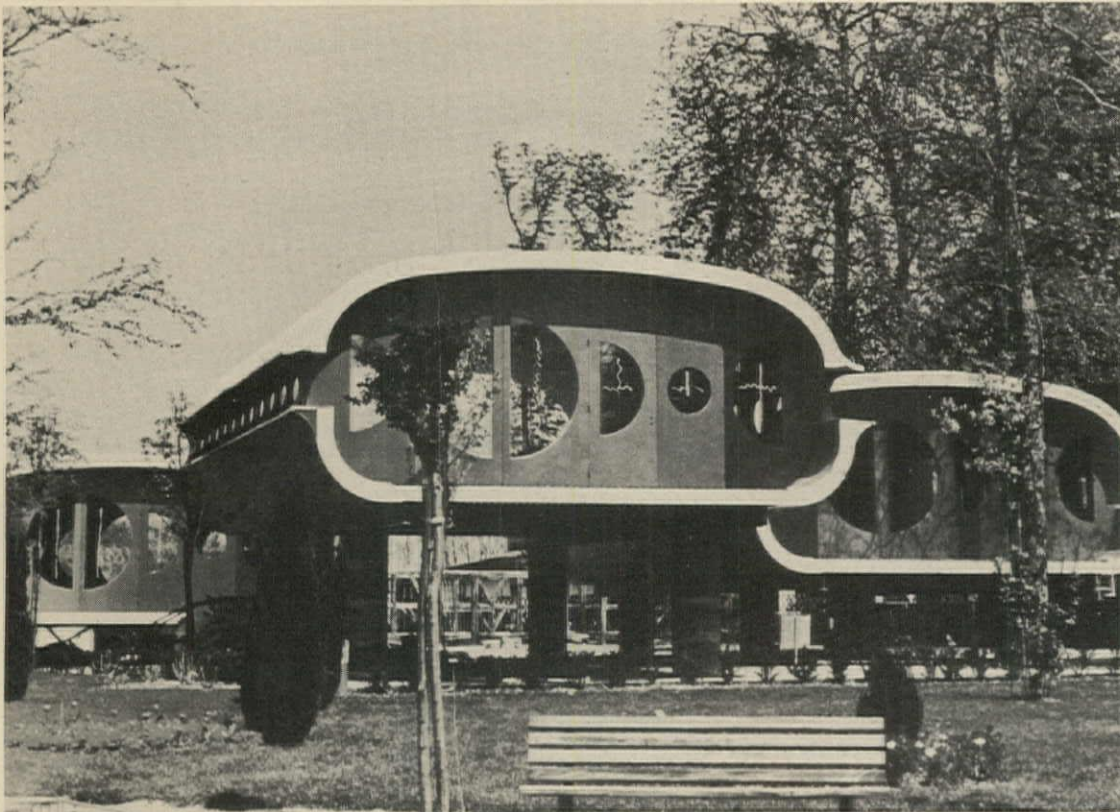
We're talking about sense. The kind of sense your customers have when they're looking to buy a house with practically no maintenance. And that takes

B.F. Goodrich Geon vinyl.

Geon vinyl. For detailed information, write to us at B.F. Goodrich Chemical Company, Dept. H-19, 3135 Euclid Avenue, Cleveland, Ohio 44115.

B.F. Goodrich Chemical Company
a division of The B.F. Goodrich Company





French forerunners of U.S.-built fiberglass housing were made of wood. Here three units form an office building.

For vacation areas-fiberglass sectional housing

The housing, similar to the French office units above, will be marketed to second-home buyers by Coquille Villages Inc. of Denver.

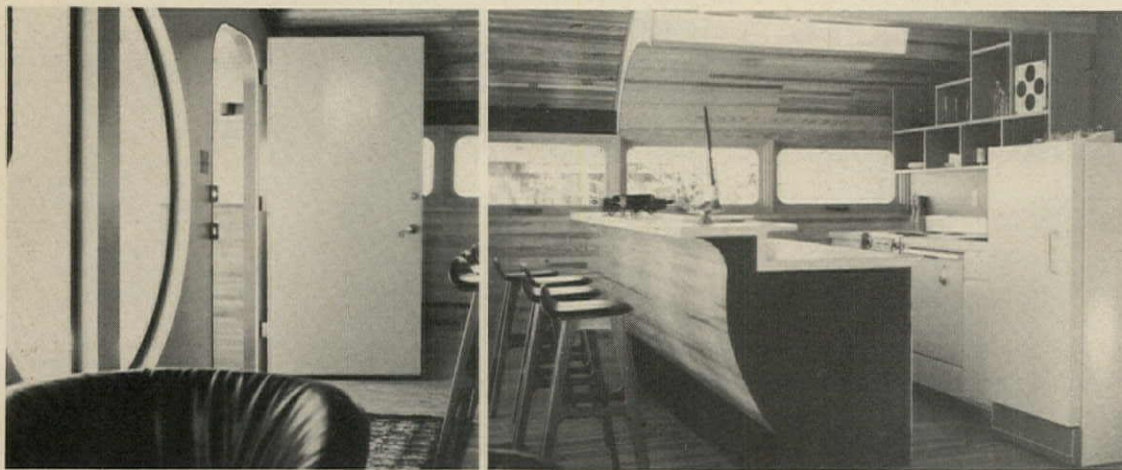
Built in two halves, each house has an inner and outer fiberglass shell with a foamed urethane core. The half-house sections will be trucked from

a Denver factory to Rocky Mountain resort areas, where they will be unloaded by crane and erected in two days by four men.

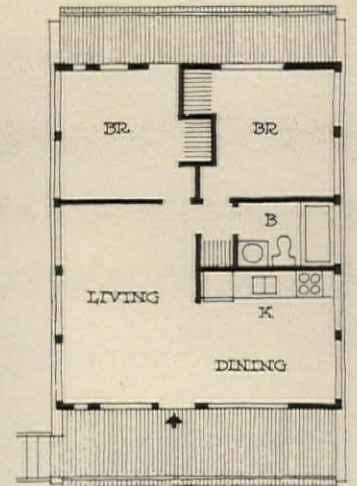
Jock Shaw, president of Coquille Villages, says the fiberglass, sectional units are particularly suited to the vacation market for three reasons: 1)

they are virtually maintenance-free; 2) they require a minimum of on-site labor; 3) they are adaptable to difficult sites because they are set on poles and therefore need no foundations.

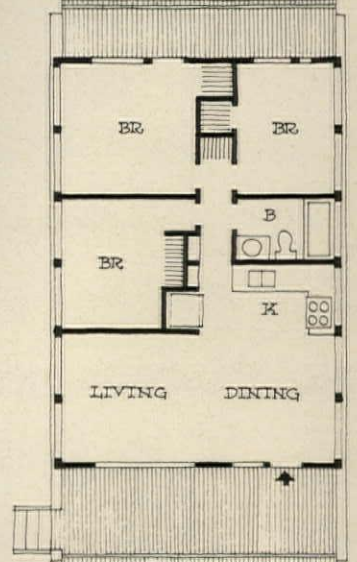
"What's more," Shaw notes, "I think people are tired of seeing nothing but A-frames. They want something different."



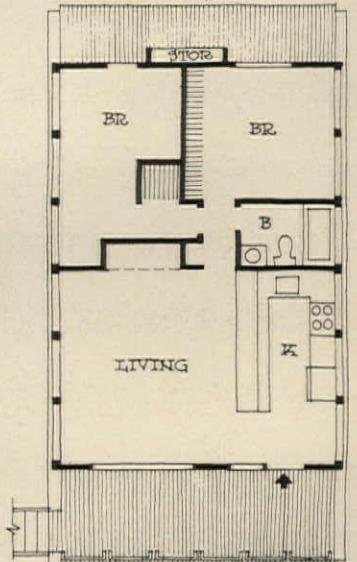
Boat-like interior has contoured ceiling and counter, circular windows, and alcove (lower right) with pull-out bed. U.S. prototype of deluxe model, shown here, had fir and mahogany interior finish, but interiors of production models will be wood-grained fiberglass. Exteriors, also fiberglass, are available in a choice of colors.



2 BEDROOM COQUILLE



3 BEDROOM COQUILLE



DELUXE COQUILLE

0 5 10 FT

Three models range in price from \$14,575 for a plumbed and wired two-bedroom shell to \$22,645 for the deluxe unit (photos, left), which includes appliances, built-ins, and more elaborate interior. Two-bedroom model has 720 sq. ft. inside and 240 sq. ft. of deck; deluxe and three-bedroom models have 860 sq. ft. inside and 300 sq. ft. of deck.

Bugged about building costs?

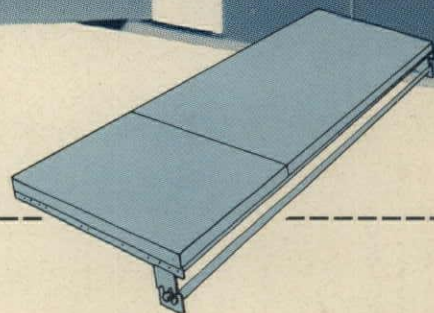
With Float-Away you
can save a buck.

You know what's happening to building materials costs. They're skyrocketing! Not so with Float-Away. Now you can actually save up to 30% when you buy Float-Away metal bi-fold closet doors. Yet they're still the finest closet systems at any price. Float-Away gives you a choice of five decorator styles—ease of installation—sizes to fit any opening—and prompt availability. Always. It's a good time, too, to introduce yourself to Float-a-Just shelves, Float-Away's complete line of metal shelving. Tops in durability. Yet they haven't gone up a penny!

So, whether you're building a home or a high rise, a manufactured home or an urban renewal project, why not save yourself a buck? With Float-Away. For further information, fill out the coupon below and return today to:

FLOAT-AWAY[®]
COMPLETE CLOSET SYSTEMS

Department HH-32, 1123 Zonolite Road, N. E., Atlanta, Ga. 30306
Phone (404) 875-7986



You bet I'd like to save a buck! Send me complete details on Float-Away metal bi-fold closet doors and Float-a-Just shelves right away.

Name _____

Company _____

Address _____

City _____ State _____ Zip _____



PHOTOS: BARBEAU ENGH

This leisure-oriented apartment project draws on an upper-income market

Even though some tenants are students at nearby Stanford University, the average household income at Sharon Green in Menlo Park, Calif., is more than \$20,000.

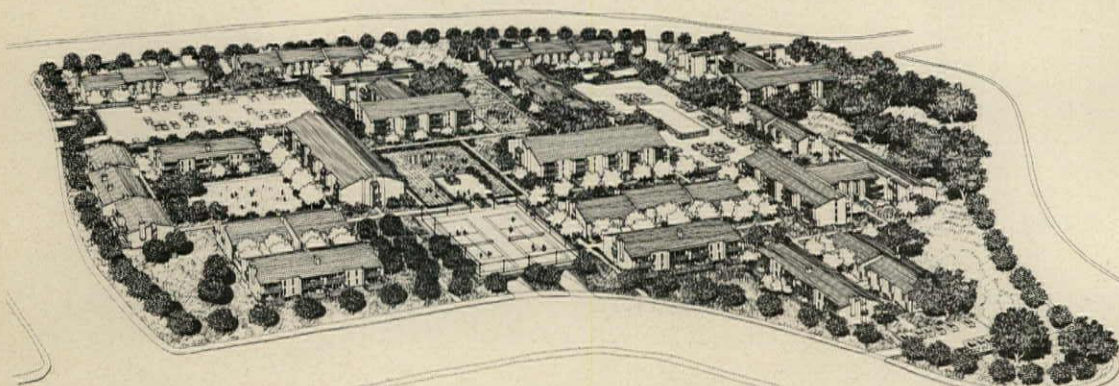
What's the project's appeal?

Partly its location in an area of upper-price, single-family houses. In fact, many tenants are former homeowners.

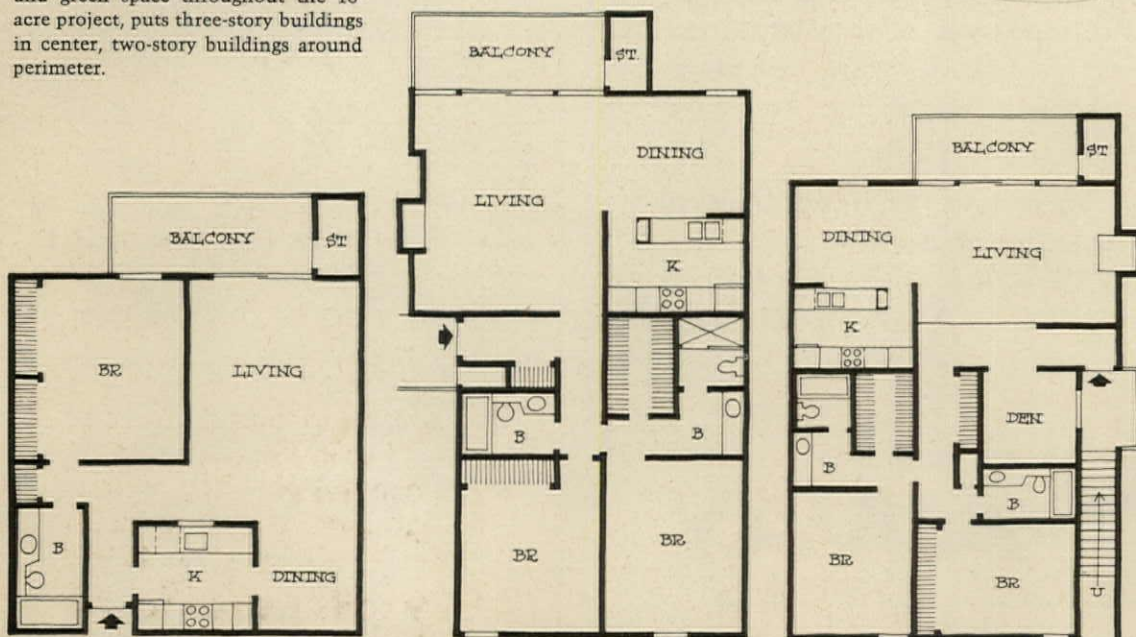
Partly its natural environment — largely the result of saving large trees.

And partly its wide variety of recreation facilities, which include two swimming pools, putting greens, tennis courts (atop an underground garage), picnic areas, and a clubhouse.

Sharon Green has 296 units on 16 acres. Built and owned by Lincoln Property Co., it was designed by Frank L. Hope & Assoc.



Site plan scatters recreation facilities and green space throughout the 16-acre project, puts three-story buildings in center, two-story buildings around perimeter.



Variety of floor plans (three of six are shown here) meets a market that ranges from young singles and retired couples to families with teenagers. Rentals: from \$230 for one-bedroom units to \$415 for three bedrooms.



Old oaks, saved by planners and developer, are feature of project.

“When someone asks for the best dishwasher, I give him a KitchenAid.”



“KitchenAid is synonymous with quality,” says Miami Beach builder Richard Basker. “Both to me and the people who buy my condominium apartments.”

“Quietness of operation, tenant satisfaction and lack of call-backs far outweigh the initial difference in cost between KitchenAid and other dishwashers,” Basker adds.

Basker, who has been building in Miami Beach for almost 20 years, constructed his Ashley Apartments on Collins Ave., a prime area in Miami Beach.

So whatever your building specialty, you can impress your prospects by installing KitchenAid dishwashers. It's the one many people recognize as being the best.



For all the details, see your distributor today. Or write KitchenAid Dishwashers, Department ODS-9, The Hobart Manufacturing Company, Troy, Ohio 45373.

KitchenAid
Dishwashers and Disposers

KitchenAid dishwashers—20 years of good old-fashioned quality.



"Insurance companies are getting some great apartment deals — at the housing industry's expense"

The loan officer from the major insurance company sat opposite the apartment developer and outlined his financing proposal.

He had just spent all morning and most of the afternoon touring the developer's existing projects. And they were impressive: top locations; sharp managers; outstanding design; strong markets; virtual 100% occupancy backed up by waiting lists of prospective tenants; plus the developer's reputation among lenders for consistent success.

Without hesitation, the loan officer laid out his terms for the developer's next project: 1) an 80% mortgage, 2) 10% interest, 3) 50% ownership of the project to be handed over to the insurance company, and 4) 100% of the project's cash flow to be paid to the insurance company for the first five years of operation. The developer, in other words, would get nothing out of the project for five years except depreciation benefits.

Sorry about that. But before the developer could even snort in response to the proposal, the loan man added apologetically: "As you know, gentlemen, we have just so much money to lend, and the main office insists on these terms as the minimum. I know that sophisticated apartment developers like yourselves probably cannot accept these terms." And he was right.

Nevertheless, those were the only terms he had to offer, and while they were out of the question for this particular developer, they are not for others.

Insurance companies are finding customers for this kind of financing, and the effects on the apartment industry are not attractive. Instead of promoting housing, "lender-take-all" deals like these discourage it. Not only do they discourage developers from building, but they discourage developers' efforts to upgrade quality.

The reason these deals are being sold is that insurance companies are in the driver's seat. They are now the apartment developer's primary source of long-term financing, and financing is scarce. So many of them are dictating increasingly tough terms, which are designed literally to turn insurance-company lenders into apartment landlords. In addition to bonus interest payments and/or a cut of rental income (traditionally known as the kicker), lenders now want part ownership of the property—commonly about 50%.

Being in the driver's seat is making

insurance companies unreasonable. They demand half of an apartment developer's project without getting involved in either front work or property management. The developer conceives, organizes, builds, rents up, and manages the deal, only to have the lender take 50% ownership and perhaps 100% of the rental income during the project's best years.

Foolish formulas. Being in the driver's seat is also making the insurance companies shortsighted. Their criteria for apartment investment are based solely on yield. There used to be some relationship between investment risk and interest rates, but no more. Today many lenders size up deals strictly from the standpoint of yield, and unfortunately they do it with standard formulas applied to amateurs and pros alike. They project operating expenses typically at 42% of gross income and vacancy rates at 5% to 7%; then they peg the loan at 75% to 80% of projected value based on net income.

One reason this is short-sighted is that yield formulas ignore quality. Lenders who choose apartment investments strictly on the basis of numbers will gladly pass up a high-quality project for a mediocre one if the latter will permit them another point or so of interest.

Another reason the insurance companies' yield formulas are short-sighted is that too often they ignore performance records. They overlook not only a developer's planning expertise but also his ability to manage apartments. And with the lender himself retaining such a large piece of property, this is a serious oversight.

False assumption. A developer who can produce apartments can't necessarily operate them. Yet the lender's investment rides on the assumption that he can. A loan decision determined only by numbers is based on the axiom that the value of real estate has to go up, when in fact bad management can make it go down to the level of negative cash flow. If insurance companies stick to these assumptions, more and more of them will be forced into the property management business to save their investments.

Developers with good property management records are actually discredited by the insurance lenders' approach to apartment financing. If loans are based on a set 42% of gross income for operating expenses, expert management, which holds expenses

consistently at 32% to 34%, is never taken into account. Also, loans based on 93% to 95% occupancy formulas fail to acknowledge long-term track records of 97% and better.

Lenders' formulas ignore differences in quality not only between developers but also between apartment projects.

Extra money spent on landscaping, recreational facilities, interior design, or layout tends to be detrimental to financing because the loan amount is fixed by the lender's income/expenses/vacancy formula. The formula doesn't allow for the extra quality and amenities that a good developer builds into a project. Extra quality is not a measurable value on the insurance company's standard scale. So, unfortunately, the best way to meet the lenders' requirements is to minimize quality.

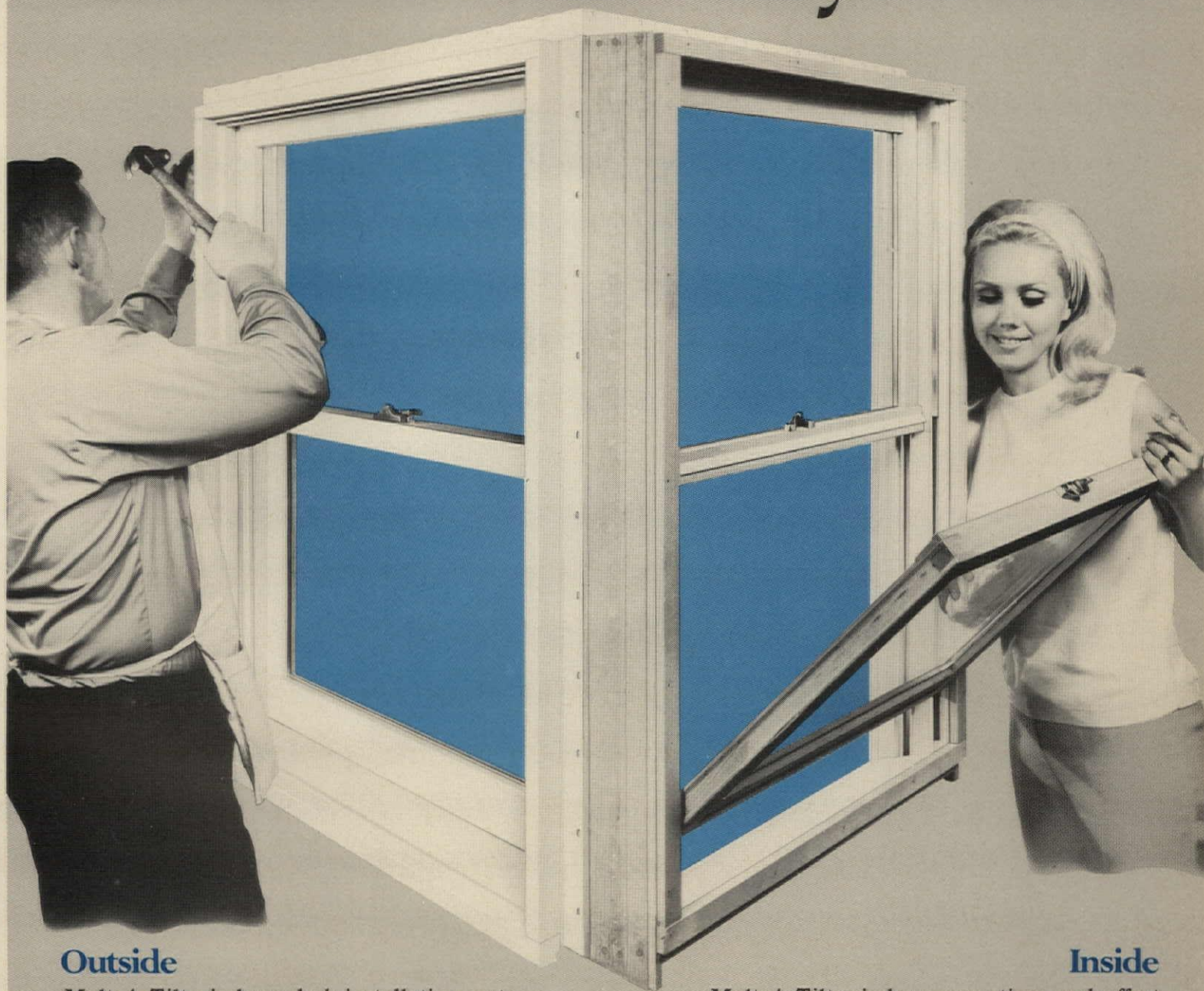
Unreal formulas prevent most insurance companies from coming up with apartment financing that makes sense. Insurance lenders have found innovative ways to take more dollars from the developer's pocket but not make financing feasible.

Negative tactics. Handing out apartment mortgages according to which deal will produce the best yield on paper is worse than unrealistic—it is a negative approach to housing production. No serious developer can consider the unprofitable deals that some insurance companies are offering today. This kind of financing appeals to developers who, because they are weak performers or new to the business, have no choice but to sell out their projects because they haven't a track record or a money partner to fall back on for bargaining power.

By supporting weak developers without performance records and by making it difficult for experienced developers to build, the insurance lenders are doing neither themselves nor the housing market a favor. All too often they are encouraging mediocre projects and forcing even the best of developers to boost rents and speed inflation.

As insurance companies muscle their way into multifamily housing, they acquire not just a bigger piece of the action but much of the responsibility for property management. So far, however, the sole interest of many lenders has been how much of his project the developer will give away—or how little he can be persuaded to work for. If that continues, the quality of apartment living has to suffer.

Malt-a-tilt, the window that's on your side



Outside

Malt-A-Tilt windows slash installation costs because they require no painting. Exterior frame parts are vinyl clad and weather strip is rigid P.V.C. Vinyl. Sash is factory finished by a special process that insures paint won't wrinkle or crack. Windows are virtually maintenance free.

Inside

Malt-A-Tilt windows save time and effort during cleaning and routine maintenance with the exclusive Malta Tilt-in/Take-out feature. Both sash tilt inward and are removable with a minimum of effort. Outside screens can be installed from roomside and need not be removed during cleaning.

Outside and Inside *Malt-A-Tilt* wood windows are the most versatile on the market today with time and cost saving features that will appeal to both you and your customers. Circle reader service number below for complete details.

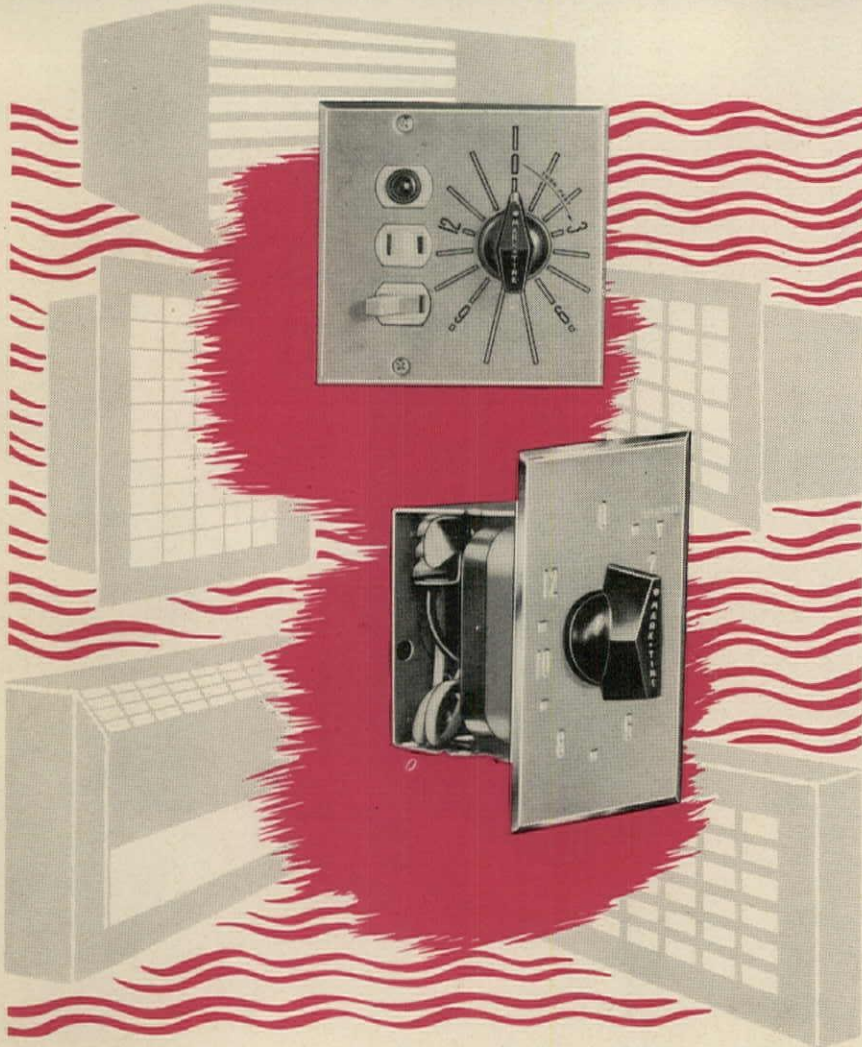
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LETTERS

Modular housing

H&H: Your appraisal of what you term the "phantom" modular housing industry [June] is downright detrimental and confusing.

In this very tough economic year when all sales of building products and housing are off, this new industry needs encouragement, improved communication, and understanding so that it will get the support of the government, manufacturers, lenders, and, yes, the public.

I attend many meetings and seminars, probably more than your editors, and visit many plants across the country. What I hear and see is enthusiastic businessmen trying to launch a new industry.

They need our help in new components and systems, new materials, and moral support. They need your help, too, for improved communications and understanding. Tell it like it is, certainly, but don't be an old Brooklyn baseball fan, cheering when he hits a home run and booing when he strikes out.

EDWARD A. MORE, director
Building Industry Relations
Formica Corp.
Los Angeles

No boos intended. Fact is, the article in question called modular housing a "potential growth industry," but noted, quite accurately, that the boom is at least three years away. Wall Street's boundless optimism about mobile homes contributed to a shakeout in that industry. The best way to prevent a similar shakeout in modular housing is to tell it like it is, which is what the article did. If Formica's More thinks H&H is anti-modular housing, he should read "You too can play in the modular game" in our August issue—ED.

H&H: . . . one of the most accurate reports on a much publicized industry.

However, just because some manufacturers, and would-be manufacturers, have slipped and lost their footing on the tip of the iceberg that shows, it does not mean that the iceberg doesn't exist.

It would be interesting to see a follow-up article a year or so from now assessing the outlook as it exists then.

W.D. Rowe
Redman Industries Inc.
Dallas

Follow up, we shall. H&H will keep a sharp eye on modular housing—not only as an industry but also as a method many conventional builders can use—ED.



“Ticket-Operated Maytags stopped coin-box looting, ended vandalism, and increased our gross 25%,” writes *Mr. Thomas Connelly, Executive Director, Brookline Housing Authority.*



Ticket-Op Maytags help take the temptation out of the laundry room. Instead of coins, they use an exclusive electronic ticket!

Brookline Housing is a project in a low-income section of Brookline, Mass., with 290 apartments and 700 tenants.

Mr. Connelly of the Housing Authority, and Don Shaw of the Mac-Gray Co., Cambridge, operator of the laundry concession, report: “We tried with coin-operated machines for five years, and couldn’t keep running. Break-ins and damage were constant.

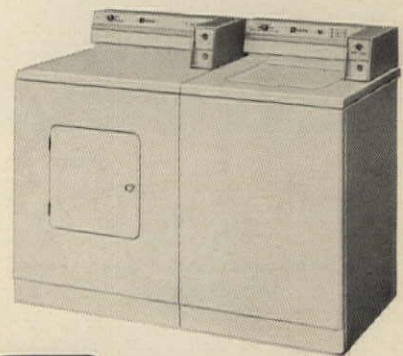
“In 1966, we switched to Ticket-Operated Maytags—11 washers, 11 dryers. Instead of coins, these machines use Maytag’s exclusive Electronic Tickets

which are difficult, if not impossible to counterfeit. No ticket dispensers were put in the laundry rooms. Tickets were available only at the Management Office, at the extreme end of the project. Some tenants have to walk half a mile to buy tickets, but they don’t seem to mind.

“As a result, coin-box looting and vandalism are no longer a problem. Gross income is up 25% over the best year before we put in Ticket-Op Maytags. Machines are in service practically 100% of the time, and both management and tenants are pleased,” conclude Mr. Connelly and Mr. Shaw.

Naturally we don’t say all Maytags will equal the experience at Brookline. But dependability is what we try to build into every Maytag Commercial Washer and Dryer.

Find out what Maytag Ticket-Operated Washers and Dryers, and Maytag dependability, can do for you. Just fill in and mail the coupon.



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GENTLEMEN: Please rush me full information on the dependable Maytag-Equipped Laundry package.

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NEW FOR THE 70's GARDENCOURT* Building apartments, townhouses, "condos," single family? Gardencourt is the answer—fresh, new styling combined with exceptional durability. Covered inside and out with Vinyl, even on door and shelf edges. "Pewter" finish pulls accented by unusual trim inserts in Avocado, Flame or Black.



NEW FOR THE 70's Kingswood* CLASSIC — Brings the ultimate in luxury — handsome oak veneers with mouldings of solid oak. Antique "pewter" finish pulls on doors and drawers.



NEW FOR THE 70's Kingswood* MANOR — Country flavor with sophistication. Oak veneered doors are deeply grooved, edges heavily moulded. Hammered "pewter" type pulls.

Sustained Excellence

Sustained excellence in manufacturing kitchen cabinets is the sum total of hundreds of successful operations, from the engineering that predetermines the construction of every part of every cabinet . . . through fabrication by skilled personnel working with the finest tools and machinery available to the industry. We are proud of assurances we constantly receive from customers that we have passed every test of excellence, and that for quality alone, or *quality-at-a-price*, or *quality-at-a-price-plus-service*, we have no equal in the kitchen cabinet industry.

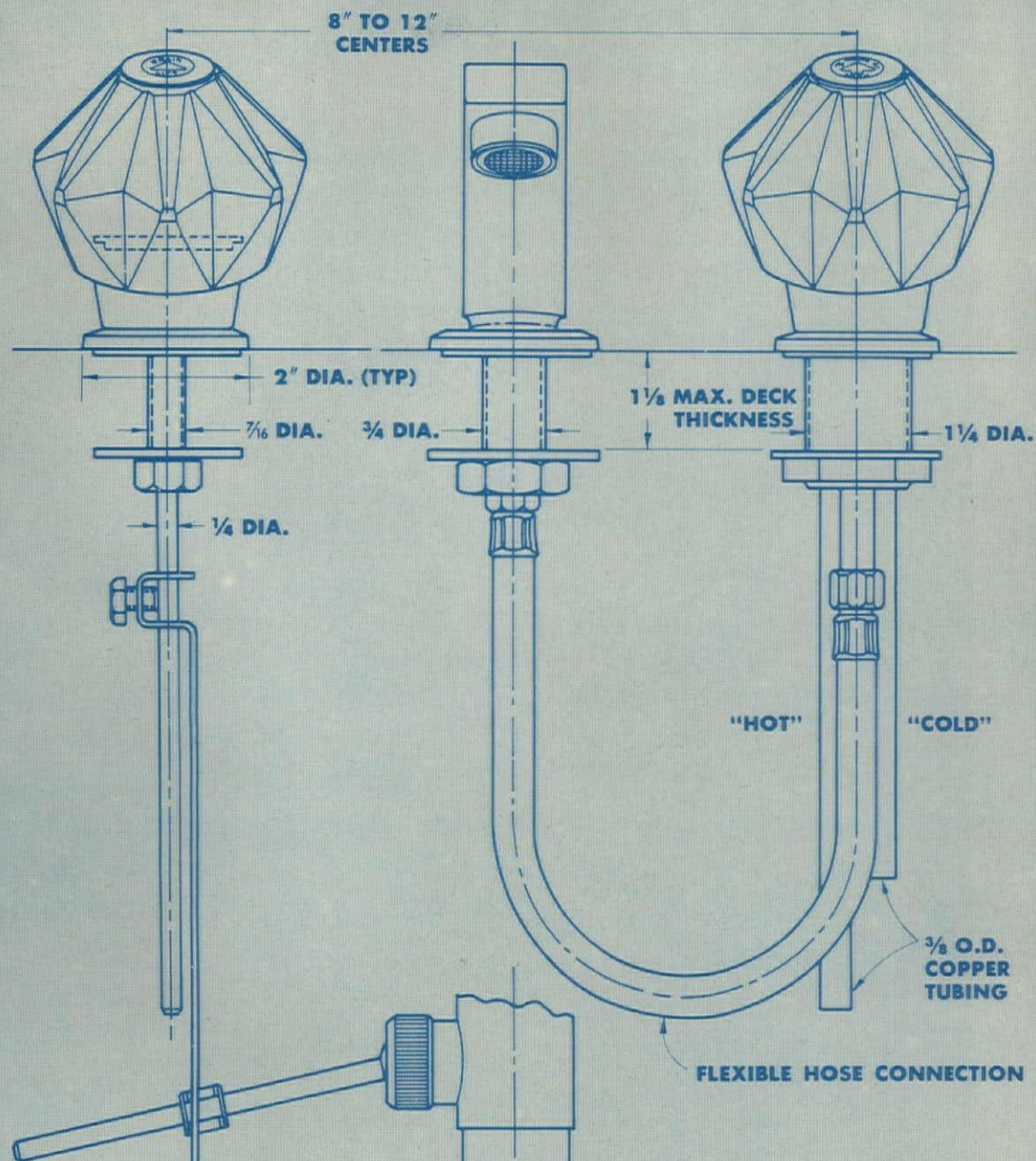


"The most beautiful kitchens of them all"

H. J. SCHEIRICH CO., P. O. BOX 21037, LOUISVILLE, KENTUCKY 40221



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The new Delta Fjord two-handled 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.

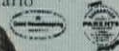
But don't ignore our new valve's looks. We've designed the Delta Fjord with today's fashion-con-

scious housewife in mind. In decorator finishes of chrome, brushed chrome, bright gold or satin gold. In models for the tub, shower and lavatory.

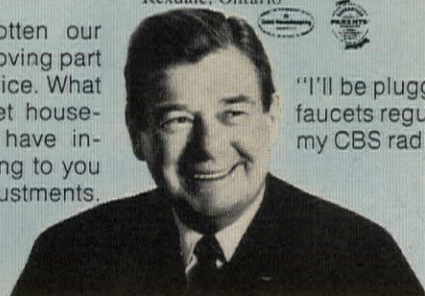
And we haven't forgotten our original concept of one moving part for maintenance-free service. What could be better? A faucet housewives will be crying to have installed . . . and not sobbing to you about return calls for adjustments.

DELTA

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"I'll be plugging Delta faucets regularly on my CBS radio show."



The Great Indoors System. One installation leads to another installation.

Give the homes you build all the comforts of home. With Bryant's totally integrated system of heating, cooling, air cleaning and humidification.

It will make your homes more saleable.

Start with a Bryant Quietline® gas, oil, or electric furnace, and you're on your way to The Great Indoors.

Add on a Bryant gas or electric air conditioning system. Bryant dealers offer both options. In Quietline® models.

Then add a Bryant electronic air cleaner for a cleaner, healthier home.

And a Bryant power humidifier for

a more comfortable, static-free heating season.

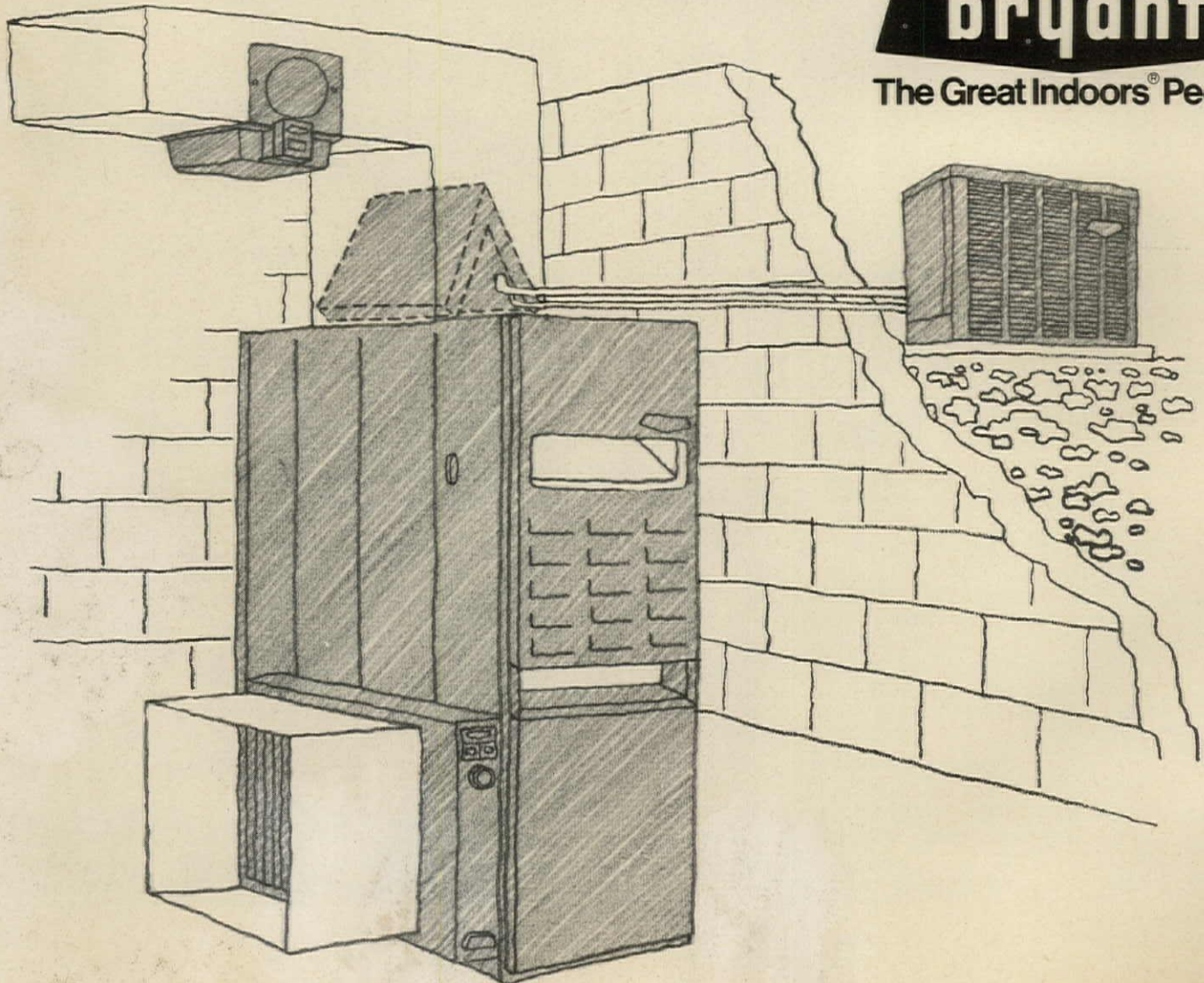
Or to save space inside, install a Bryant outdoor cooling-heating unit.

Bryant gives you a lot to choose from. Naturally every component matches every other component. They were made for each other. All this, and quiet too.

So go on, install the Great Indoors System. You can't beat it. Especially when you join it.

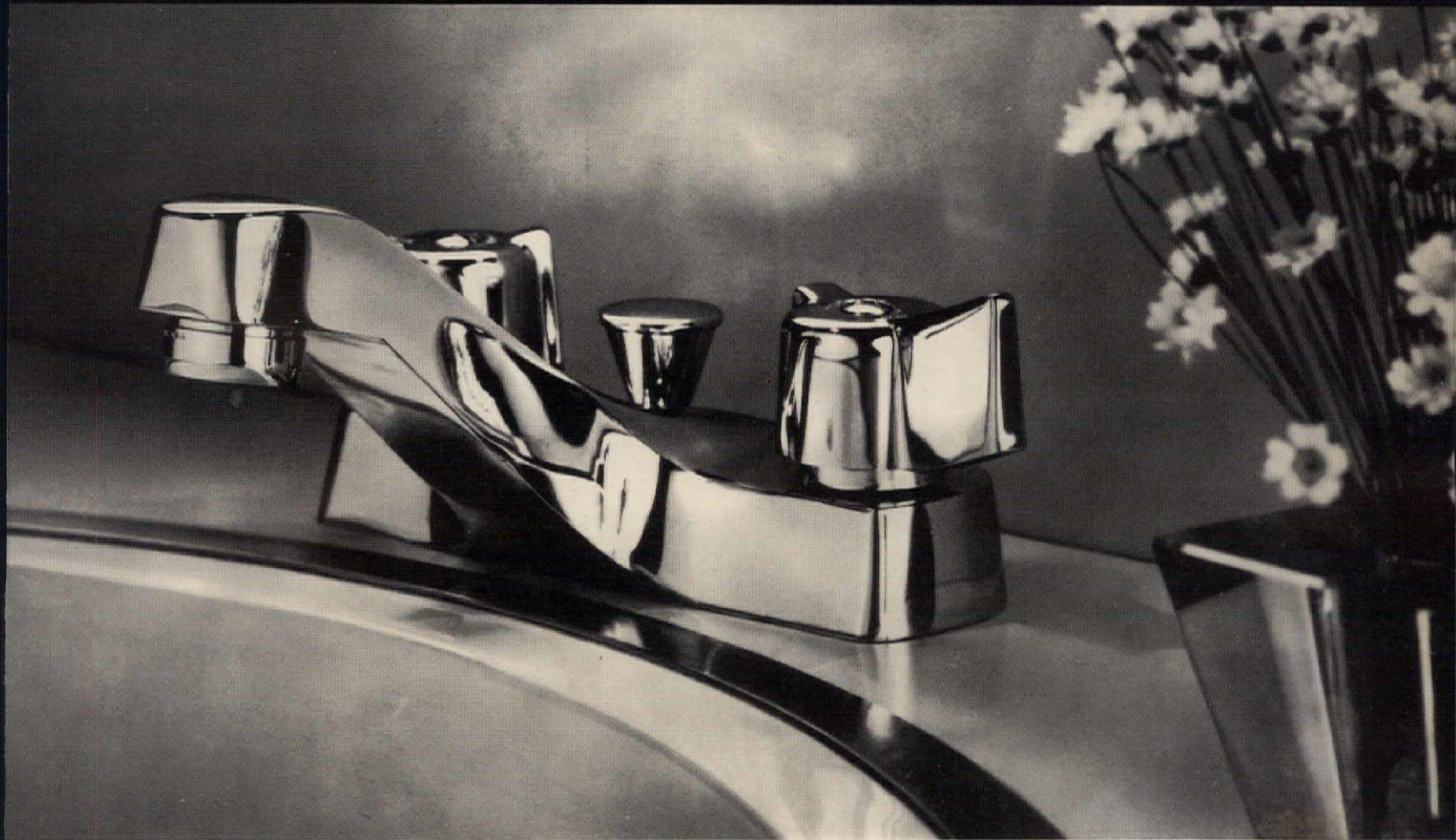
Bryant Air Conditioning Company,
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bryant[®]
The Great Indoors[®] People





NEW GERBER CENTERSET. IT RISES ABOVE THE OTHERS.



Gerber center set faucet No. 43-331 shown on Gerber countertop lavatory bowl No. 12-770.

With its extra long, uplifted spout, this new Gerber 4-inch center set faucet is the perfect companion to modern countertop lavatory bowls.

It meets all code requirements. It's easy to install. Has all Gerber's traditional quality features (one-piece body of high copper content brass, renewable bronze seats, and all threads in the bonnet, permitting

easy removal of all working parts after installation).

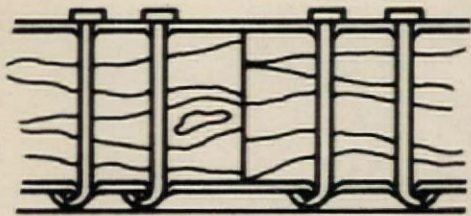
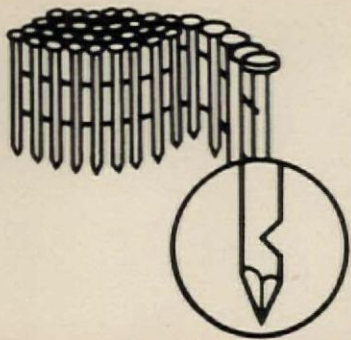
Gerber's new center set is a comfortable faucet to live with. It allows plenty of room for hand washing—and, as you can see, it's a real beauty.

This high-rising center set is just a small part of our complete line of quality fixtures and brass. All designed to help you give extra value without sacrificing your profits. Gerber Plumbing Fixtures Corp., 4656 W. Touhy Ave., Chicago, Ill. 60646.

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The Bostitch Clinch-Nail Truss System answers the need of residential, light commercial, and apartment builders for a strong, dependable system of assembling wooden roof truss components. The system is also ideal for remodeling contractors because changes from one size truss to another can be made quickly and easily.

Simple, space-saving Bostitch system locks wooden truss members between two 20-gauge galvanized steel plates. Each truss nail (comparable to a full-head 8d nail) is power-driven through the truss joint and clinched on the opposite side. Two-ply construction of the Bostitch clinch-pad truss plates insure precisely controlled clinching every time.

Truss assembly is remarkably fast because trusses don't have to be back-nailed. And Bostitch clinch-nailed truss joints shrug off racking abuse often encountered when completed trusses are handled during shipment and at job sites.

The Bostitch Clinch-Nail Truss System is designed for flexibility, durability, and economy. For complete information, talk to the man with the fastening facts—your Bostitch man. Or write Bostitch, 249 Briggs Drive, East Greenwich, R.I. 02818.

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New towns

Everything we know now says they won't work. But there are a lot of things we don't know

Now in the Congressional hopper is a bill proposing, among other things, federal aid to privately-developed new towns.

One of the implicit premises of the bill is that we will need new towns—which are really giant bedroom communities with a little commerce and industry thrown in—to help house the burgeoning population of the U.S. in the next thirty years. This premise is based on recommendations of last year's National Commission on Urban Growth Policy, which suggested 100 new communities of 100,000 persons each and ten new communities of one million each.

But based on a projected total of 300 million people by the year 2000, these new communities would house only 7% of our total population. Therefore, some 93% of the new housing needed in the next generation must go into existing urban areas.

Obviously, even a mammoth new-town program will do little to take the load off our cities and their

surrounding belts of suburbs.

Even more to the point, the biggest housing problem we face is providing adequate housing for lower-income families. Can new towns provide such housing better than existing programs in established urban areas? The simple arithmetic of numbers of people and numbers of jobs suggest that they would help very little in this area.

But an even stronger argument derives from the fact that we now house most low-income families in old housing units. In the last 35 years we have produced less than a million units of government-subsidized new housing low-income families can afford. Yet there are at least ten million U.S. households below the poverty level, and two to three times that number in the low-income range.

Faced with the low priority that Congress and the people place on housing subsidies, how can we expect new towns to make more than a gesture toward housing low-income households?

On the other hand,.....

Just because we haven't found the cure for cancer doesn't mean that we should stop spending money to find it. And just because new towns don't promise ideal solutions to our urban problems doesn't mean that we should give up in our efforts to find better ways to plan and develop them.

But if we get a new town bill next year that nickels-and-dimes it—\$20 million here and \$80 million there—nothing will happen. Let us explain:

Most new towns have been disasters for their original developers, chiefly because they were burdened with a heavy debt structure for the financing of land. (The three notable exceptions, Newhall Ranch, Irvine, and Mission Viejo, all in California, needed no debt financing to acquire land; it was already owned by the developer.)

The only real debt-position exception is Columbia in Maryland. Columbia lies beautifully placed in the Washington-Baltimore axis; its acreage was acquired at a very low average price—approximately \$1500 an acre; and its developers have been able to borrow \$80 million, a debt which will not start diminishing until 1973.

What seems likely to prevent this huge debt from becoming a disaster is what planners today are calling a "critical urban mass." A critical urban mass has both tangible and intangible parameters, but basically it is the sum of the factors which attract both people and industry, to an urban center. Through good fortune and good planning, Columbia seems to have been able to create its own critical urban mass. So things like gas station sites in the middle of undeveloped meadows are already worth

as much as half a million dollars because industry can see the payout of such an investment just two or three years down the road.

Basic to creating a critical urban mass is patient capital. Patient capital is the kind that's willing to take a long ride down before it starts coming back, and eventually returning a profit to the original investors. The trouble is, nobody's willing to take that ride anymore. Patient capital has virtually dried up in this country as it has in the rest of the free world. Lenders, especially of short-term money, expect 10% to 15% yields. Obviously, no original developer can afford to pay that kind of interest for 20 years.

So perhaps the only way to learn something new and creative about our urban plants, something that historical precedent has not yet turned up, is to get, via the new town bill, enough federally-backed patient capital to build an experimental new town. We should be able to learn a great deal about the creation and interaction of such things as transportation, housing, waste disposal, pollution, education, and jobs.

Why not give the private sector in the housing industry the same opportunity the private sector in the defense industry gets? Our analogy is the C5A cargo plane. Let the private housing industry have \$2 billion, plus enough for 25% overruns, and perhaps we really can add to our knowledge of the urban plant and how to make it work better.

But if the new town bill gets chewed up into a slightly bigger version of 1968's Title X, it will simply shove our myriad urban problems back under the rug.

RICHARD W. O'NEILL



Behind the smashing facade of this new project, you'll find...

7 keys to making it in a tough market

It's no news that this has been a tough year everywhere for housing. Yet since it opened in Avon, Conn., late in June, Heritage Woods has chalked up an impressive sales record: 10 families already living in condominiums, 70 deposits, and good prospects for 125 sales by year's end—better than the developer's original projections.

One reason Heritage Woods is moving so well is apparent in the picture at left: Paparazzo Heritage Corp. has used the same basic design (architects: Callister & Payne), the same of clustering, and the same em-

phasis on green areas as in its well-known Heritage Village (H&H, Apr. '67), some 30 miles away and still going strong (350 sales a year).

But attractiveness is only a part of the reason Heritage Woods is booming; it is one facet of a comprehensive marketing concept that starts by pinpointing prospects and goes all the way to selecting pictures for the model-home walls. According to Karl Jalbert, marketing vice president of Paparazzo Heritage Corp., there are seven keys to this concept:

Key #1: A market segment that has power in reserve

Heritage Woods is aimed at what Jalbert calls an expanded empty-nester market; the only restriction is that a family must have no children under 15 at the time of purchase. To date, most buyers have been in the 50-and-up age bracket.

"This is a very durable market," says Jalbert. The buyers are well off, and most of them have sold houses in which they had heavy equity."

The result is a market that's not overly concerned about high mortgage interest; to date, 75% of Heritage Woods' buyers have paid cash (average house price: \$40,000).

"We've certainly lost some sales because of the stock market," says Jalbert. "People don't want to sell stock now and finalize their losses. But most of them are willing to take a mortgage and, in fact, make their own deals. We handle very few."

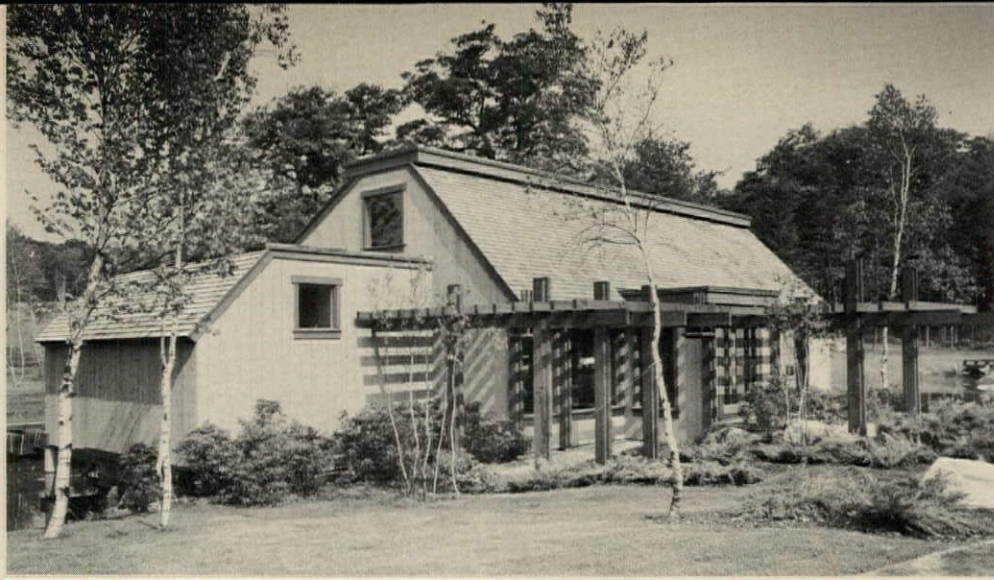


Key #2: A site plan that creates a natural environment

As the drawing above shows, Heritage Woods' 1,200 houses are built in clusters. The areas around these clusters are heavily treed and landscaped, as is evident in the photo at left. And the clusters are in turn set around a golf course (designed by Desmond Muirhead Inc.), which turns almost half of the project's 359 acres into handsome stretches of open fairway. About two-

thirds of all the units will have clear views of the course.

"Half of the course is completed now," says Jalbert, "so people can drive up to a cluster site and look out over it. It's been a tremendously effective sales tool for us. And, of course, the golf itself is a great attraction." Membership in the club is open to all buyers.



Key #3: A sales center that establishes the project's quality

The Heritage Woods sales office is this 3,000-sq.-ft. building through which visitors must pass entering and leaving the model area. "It establishes the quiet mood we're trying to create," says Jalbert, "and it blends in with the architecture of the whole

project. We've kept it small because we want to welcome people but not overwhelm them." Inside is a main lobby area that overlooks a pond (*see cover photo*), three sales offices, two conference rooms, and the project's administrative offices.

Key #4: A model area that really reflects the whole project

"This isn't just window dressing," says Jalbert of the model area shown below. "We spend \$750 a unit for landscaping, so every cluster will look just as natural and

attractive as the model compound. We like to take prospects out to see production units so they know that what they saw in the model area is what they'll actually buy."





PHOTOS: BEN SCHNALL

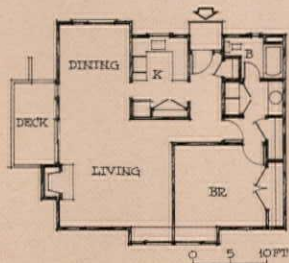
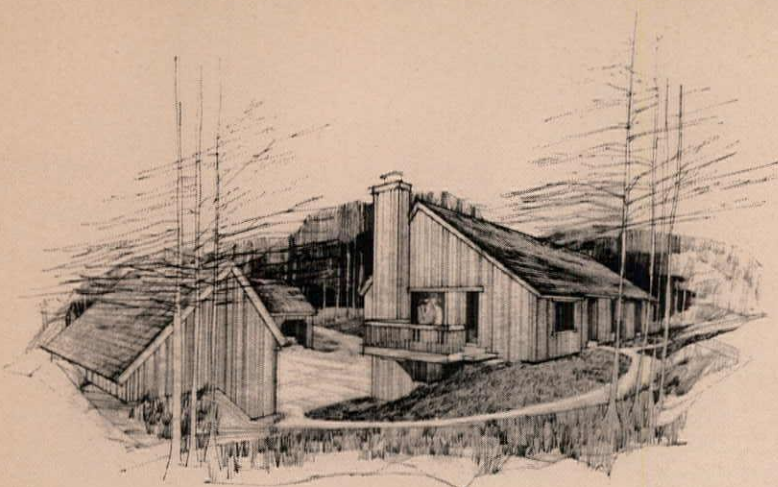


Key #5: Architecture that fits the project's environment

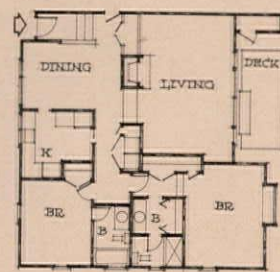
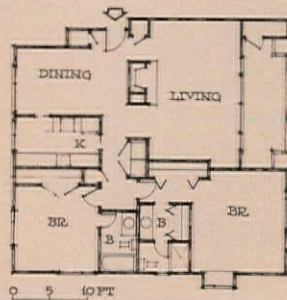
Formally speaking, the design in Heritage Woods is an amalgam of early New England and late Northern California. "But," says Jalbert, "the important thing about it is that it blends in with the natural feeling we've established with our landscaping."

The two buildings shown above are four-plexes which will be repeated in almost

the exact same form throughout the project. But there are enough elements breaking up each elevation so that even slightly different angles of view make the buildings look very different from each other. The siding in all buildings is rough vertical boards, and all roofs are cedar shingles. Trim is simple square-edge boards.



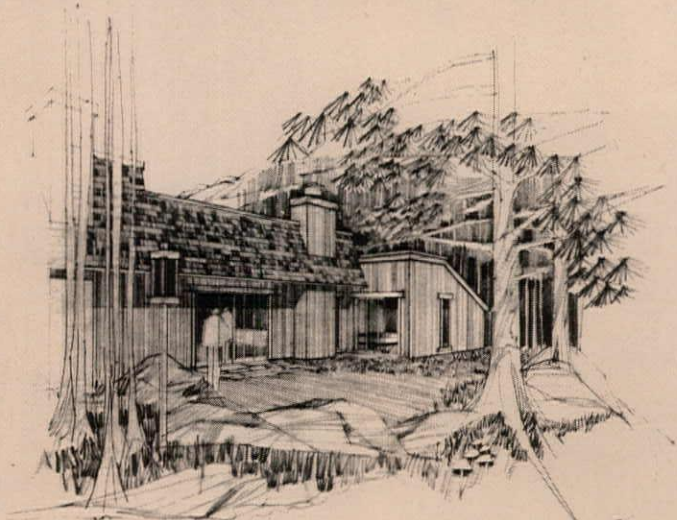
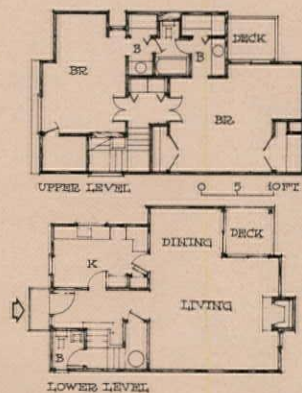
The Carriage House is the lowest-priced unit at \$29,500. It has one bedroom and 930 sq. ft. of living area, and is usually built as a hillside duplex over garages.



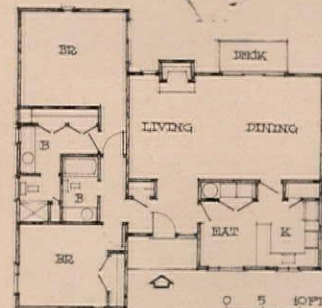
The Wilton (left) and Guilford (right) are always built as first- and second-story pairs in fourplex buildings. The Wilton offers 1,329 sq. ft. for \$41,000; the Guilford offers 1,183 sq. ft. for \$37,500.



The Westbrook is the smaller of the project's two townhouse units. With two bedrooms and 1,464 sq. ft. of area, it is priced at \$46,000.



The Sherman is a one-story, two-bedroom unit with 1,430 sq. ft. of living area. Its price: \$47,500.

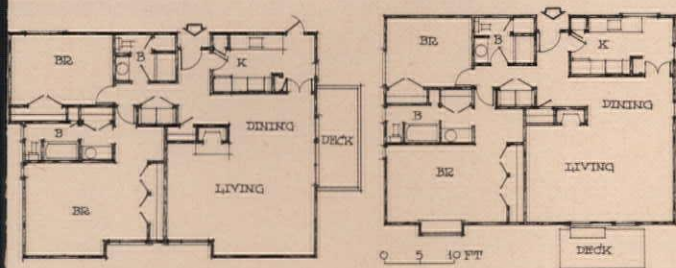


Key #6: A model line that satisfies a wide range of buyers

"The empty-nester makes up the bulk of our market," says Jalbert, "so we've tried to satisfy all possible life styles within the basic empty-nester house—a two-bedroom unit in the \$37,000 to \$44,000 price range. But we also want to appeal to younger adults, and single people too. So our line includes a one-bedroom and a three-bed-

room model, and our basic price range goes from \$29,500 to \$53,000."

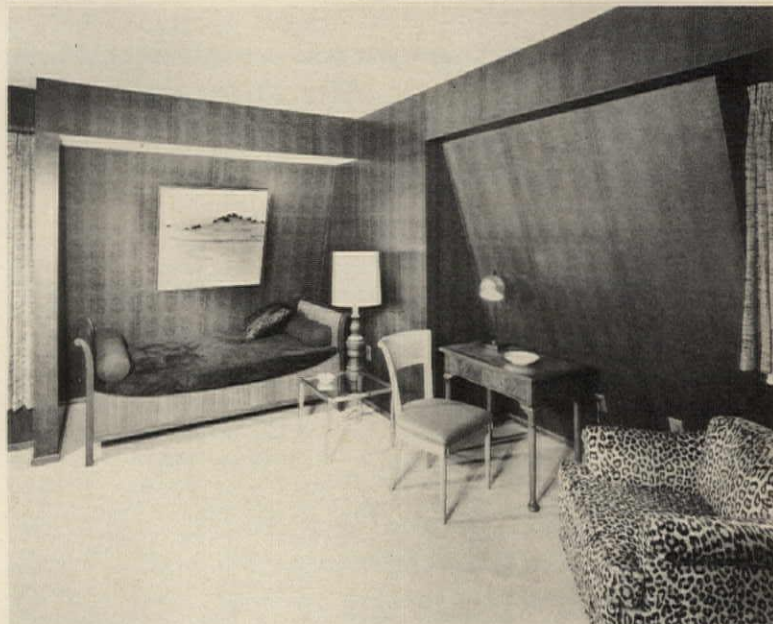
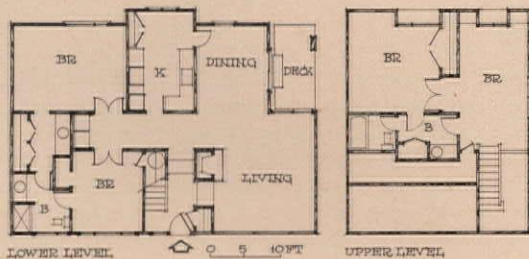
Heritage Woods' eight models are shown above. Four of them, the Wilton, Guilford, Fairfield, and Kent, are always built as part of quadriplex building; the other four are built in varying combinations but with never more than two units to a building.



The Fairfield (left) and Kent (right) are also fourplex pairs. The Fairfield, with 1,341 sq. ft., sells for \$42,000; the Kent, with 1,249 sq. ft., sells for \$39,500. The Fairfield, if it is a second-floor model, is also available with an extra tower room. Added price: \$5,000.



The Litchefield is the top of the Heritage Woods line. It is a townhouse model with three bedrooms, a second-floor area that could become a fourth, and 2,043 sq. ft. Price: \$53,000.



PHOTOS: BEN SCHNALL

Key #7: Model decor that stretches prospects' imaginations

"What we're reaching for is a combination of elegance and the dramatic," says Jalbert. "We think our market is ready for something exciting. And we want to emphasize the openness of our designs." The photos above show examples of the three furnished models in Heritage Woods. The bedrooms are in the Westbrook, the living room in the Guilford.

Built-for-sale apartments: A

Source of this report: four pioneers in a business that bears watching

All four are based in California, which is the place to go if you want to find out about building apartments for sale to investors. It's where dozens of builders are responding to investor demand, where dozens of syndicators are putting together apartment deals, and—logically—where *HOUSE & HOME* sent writer David Thaler to research the story that starts at right. His assignment: find out what's good—and not so good—about this business.

Thaler sought out the leading companies in the field, then interviewed the key man at each:

Al Bergum, a former home-builder, launched, and now heads, the built-for-sale apartment division of Wm. Lyon Development Co. As a subsidiary of publicly held American-Standard, Wm. Lyon seeks after-tax earnings by selling the apartments it builds—if possible, before they're completed.

Less than two years ago the company wasn't even in the apartment business. Now it has a 90-man apartment division, is building projects in northern and southern California and Phoenix, Ariz., and expects to sell 3,500 units to investors in 1970.

Bergum says he won't even consider building a project with fewer than 100 units unless it's "easy to do." Outside California, he looks for markets where his division can produce and sell at least 1,000 units a year.

When Bergum spots a likely target city, he sends in a task force of about a dozen people. But, he notes, "we move in only a few at a time. You don't want to send 12 people into a town at once."

When a potential market is se-

lected, Bergum's division opens a temporary office there and ties up suitable land. If the market proves out, the office becomes permanent.

Sales accelerate toward the end of the year, says Bergum, as investors approach the tax deadline. "That's when you see a scramble—particularly among small investors," he explains.

Al Adams, 38-year-old president of the Caltex Companies, didn't even think of selling apartments to investors when he began building them 11 years ago. His objective was to accumulate as large an apartment portfolio as he could.

Although Adams had been building tract houses and offices in California, his first apartment venture, a 19-unit project, was in Dallas.

"I'd heard Dallas was having an apartment boom," he recalls, "and I thought that was a good place to start."

Since then, he has built 1,400 units in Dallas and northern California. He builds for the lower end of the luxury market and, like most California apartment builders, for adults only.

Lately Adams's production has accelerated despite the tight-money market. It was tight money, in fact, that led him into apartment sales.

"With lower loan-to-value ratios, we needed more capital," he says. "So we went into turnkey building and building for sale."

Actually, apartment sales are just one facet of Adams's business—he's still primarily an investment builder. Each of his twin organizations—one in Dallas and the other in San Jose—is made up of three companies.

One company, an investment builder, develops and holds apartments. One, a general contractor, builds turnkey projects. And one, called Habitat Development, builds apartments for sale to investors.

Eventually, Adams may want to take Habitat public. And by generating ordinary income, Habitat is establishing the kind of earnings history that underwriters require of a company going public.

Right now, Habitat is working with syndicators in San Francisco, Los Angeles, and Detroit.

"Detroit," Adams notes, "has lots of soft money—income that would go to the government if it weren't sheltered."

In structuring limited partnerships, Habitat designates the limited partners' contributions for tax-deductible items—property taxes, interim financing fees, sales taxes, and the like. Adams points out that the amount of tax benefit is an important factor in determining how much equity the investor will get for his contribution.

Habitat also sells completed projects to syndicates or joint-ventures with a syndicate and then sells the project. And it is about to joint-venture with a major corporation in Denver.

Michael Zullo heads Shareholders Real Estate Programs (SREP), apartment-sales subsidiary of a publicly held company.

Among other things, the public company, Shareholders Capital Programs, manages mutual funds and builds apartments. Its building division was formerly a partnership of Marshall Ezralow and Alan Schwartz.

SREP was formed last January. Previously, Shareholders' apart-

ment deals were packaged by Coldwell, Banker & Co., a real estate investment firm. Mike Zullo handled the Shareholders account for Coldwell, Banker. Now he is president of SREP.

Shareholders builds bread-and-butter apartments. Zullo's responsibility is to sell them before they're completed. Usually he asks for a 20% down payment and takes back a second trust deed. The second mortgage runs for eight years and is non-amortizing, but the buyer gets it at only ½% above the prime rate.

Shareholders is building 3,000 units in northern and southern California and Phoenix and is considering expanding into other markets.

Max Resnick, an apartment builder for 20 years, started building for sale to stay in business during the money crunch.

Resnick operates in the San Fernando Valley's luxury market. He pays up to \$185,000 an acre for land, builds to a density of 45 units an acre, and gets about 27¢ a sq. ft. in rent.

His financing has come hard. On occasion, he has been forced to begin construction without a permanent loan, relying on interim financing to take him to completion and hoping he'll then get a permanent. So far, he has.

Now things may be getting easier for Resnick. Recently, he has been approached by several would-be joint-venture partners, who may have the leverage needed to pry loose a permanent loan. So this year he thinks he can more than triple his 1969 volume of 300 units. Even so, he would still be far short of his production capacity.

Threat to you?

There's a new breed of apartment builder—the one who builds apartments for immediate sale to investors—and he may be dangerous.

He already has changed the nature of the apartment business in California, and his impact will soon be felt in other parts of the country.

Geared for large-scale production and able to move easily from one city to another, the merchant builder of apartments can quickly overbuild what once were considered good rental markets. He has already done it in San Jose, Calif., where vacancies for several new projects are running over 30%. And he's about to repeat his performance in southern California's Orange County, where production is outpacing demand by approximately 9,000 units, and in Chicago's northwest suburbs, near O'Hare Field, where 18,000 units are currently under construction.

While apartment packagers have been a part of the housing industry for years, merchant building has only recently become a way of life for a number of large-volume companies. But today built-for-sale apartments are being produced by the thousands. Both public corporations striving to avoid depreciation and increase after-tax earnings, and privately owned companies, confronted by a tight money market, are finding it necessary to build apartments for sale.

Selling apartments is relatively easy. The buyers are wealthy men—high-income physicians and lawyers for example—seeking investments and tax savings. Even the man who wants to invest only a few thousand dollars can find something on the merchant apartment builder's shelf. And if he can't find what he wants there, he can turn to a syndicator—the middle man who collects investors, forms them into a limited partnership, and arranges for them to buy an apartment project through their partnership.

Once the apartment project is purchased, the merchant builder frequently walks away. Responsibility for managing the apartments is left to the investors, who, because of ignorance or greed, may let the project deteriorate.

"In some cases," says Al Adams, president of Caltex Companies, in San Jose, Calif., "actual depreciation is running close to the accelerated depreciation used for accounting purposes."

To make the investment package more attractive, the merchant apartment builder usually takes back a non-amortizing second mortgage, hoping the investor will be able to refinance or sell the project before the note comes due.

"I won't know whether we're making a profit for eight or ten years," says merchant builder Max Resnick of Encino, Calif., "and neither does anyone else. We're taking our profit in these notes."

Some builders are accepting as little as 4% interest on the notes. Even the larger merchant builders are finding it necessary to take back paper on the sale of their apartments.

"To make a deal viable," says Al Bergum, head of American Standard's Wm. Lyon Development Corp.'s apartment division, "we'll take a second trust deed."

Although the merchant builder has to defer his profit to make a sale, there is still a tremendous demand for apartments. Established builders in California aren't able to satisfy the demand, so others are filling the gap—sometimes with an inferior product.

"There's a shortage of good merchandise," says Mike Zullo, president of Shareholders Real Estate Programs of Los Angeles, selling arm of a publicly held merchant apartment builder (Shareholders Capital Programs Inc.).

Comments another builder: "The syndicators have tried to fill the gap by playing the role of the builder, and they're producing some real garbage."

Still, with all its problems, the merchant-built apartment project is here to stay. And since it is a product of tight money and the shift to public ownership of homebuilding companies, it may become the predominant apartment-development method within five years.

If that strong possibility becomes a reality, what should the housing industry know right now about this new ball game? For some answers, turn the page.



WM. LYON'S BERGUM



CALTEX'S ADAMS



SHAREHOLDERS' ZULLO



RESNICK'S RESNICK

Who builds for-sale apartments? Earnings-hungry public companies and money-starved builders

Merchant-built apartments would be a rarity if it weren't for tight money and the swing to public ownership of home-builders.

Builders who have gone public now find themselves confronted by the need to produce after-tax earnings to satisfy stockholders. They cannot afford to retain apartments because the resulting depreciation would reduce after-tax earnings.

If a builder has sold out to a publicly held corporation, chances are his ultimate price will hinge on his company's future earnings. In that case, the builder is even more eager than the parent corporation to produce earnings and avoid depreciation.

Publicly held building companies which had not developed apartments until recently have entered the market with the thrust of an intercontinental ballistic missile. Two years ago, for example, Wm. Lyon Development was not an apartment builder. Now the company has 7,000 units in one stage or another and this year will deliver 3,500 units to buyers.

Companies like Wm. Lyon Development Co. are attracted by what is obviously a very good market and by the comparative ease of generating earnings through building apartments for sale. Building and selling 1,000 houses is a major achievement for a builder. But, as apartment builder Resnick points out, "It takes very little effort for a builder to expand from 200 to 1,000 apartment units. He can do it overnight."

Resnick, in fact, is doing just that: in 1969 he delivered 300 apartment units; this year he may deliver as many as 1,000.

Apartments offer another major advantage to public companies. If, for some reason, a sale cannot be made, the company can retain the project. So risk is reduced.

"It's better than selling houses," says Bergum of Wm. Lyon, "because you can always hold the project and get the cash flow."

If the industry weren't plagued by tight money, the public companies might be the only merchant builders. But tight money has forced the privately owned apartment builder to become a merchant, too.

Take Caltex's Adams. "When I started developing apartments," he says, "my intention was to build as big a portfolio of apartments as I could, live on the cash flow, and make my profit on the capital gains from sales. Then tight money forced me to change my policy."

The change, found necessary by many apartment builders who once developed only for their own account, is a result of shrinking loan-to-value ratios.

Before the days of tight money, it was common practice for a builder to mortgage out—and not uncommon for some builders to do better than that. But today a lender requires front money equal to about 30% of the cost of a project, and most builders can't afford to sink that much into a long-term investment. If they can raise the money, they have to roll it over—by selling the project. If they can't raise the money, they have to take a joint-venture partner or build on a turnkey basis.

It's not uncommon today for a builder to joint-venture with a syndicator and then sell the project to a third party. The syndicator supplies the front-end money and receives a share of the builder's profit and a guaranteed syndication fee when the project is sold.

The merchant apartment builder is capitalizing on a hot market

Apartments are in favor with investors. No one knows why, really, although there are several theories.

"There's a tremendous drive to find tax shelter for high incomes," says Resnick.

"An investment in apartments provides

a hedge against inflation," says Bergum. "That makes apartments competitive with other types of investment."

The bear market on Wall Street is also a factor.

"When the stock market goes down," says Bergum, "and investors pull out their money, that money is likely to go into income-producing property."

Comments Shareholders' Zullo: "A professional man earning a high income needs some place to invest his money. If the stock market isn't performing well, he's going to look elsewhere."

Some builders have not found it necessary to mount an advertising program. Bergum says Wm. Lyon has been able to find buyers through its contacts in the industry—lenders, land brokers, property managers—who have steered buyers to him.

"We haven't had to make a concentrated sales effort," he says. "We ran one little ad in *The Wall Street Journal*, and we got so many phone calls we had to shut it off."

Often it takes no more than a newspaper article announcing plans for a particular project to stimulate sales leads.

Syndicators give the merchant builder access to the small investor

Most builders rely on syndicators to make the sale. The merchant builder is actually the wholesaler; the syndicator is the retailer.

In theory, a syndicator is simply a broker. He brings together the merchant builder and a group of investors, who negotiate a sale. When the sale is made, the syndicator collects his fee.

In practice, however, the syndicator has a more active role. He determines the

builder's selling price, applies a markup equal to the fee he wants, and then sets about selling the project to investors. In finding investors, the syndicator is performing a function similar to the one performed by stock brokers.

The syndicators' procedure is standard. "It's a very sophisticated process," says Resnick, tongue in cheek. "Usually, it's done on a paper napkin over lunch. The syndicator asks, 'How much do you have to have, Max?' and I tell him. Then he adds his markup—and you can bet it's more than the 5% commission they usually talk about—and he has the total cash requirement. Taking that requirement and the projected cash flow, or spendable income, he can determine the return on investment. If the return is too low, the builder can reduce his cash requirement, or he can lower the interest rate on the note he's going to take back. Some men are dreamers. If the return is too low, they just raise the projected rents, giving them a bigger spendable income and a higher return on investment. Of course, the tenant may not pay that higher rent. Then there's a vacancy problem."

Syndication is a marvelous phenomenon. It enables the small investor to put his money into real estate and, by the same token, gives the builder access to the pool of capital previously invested in such things as common stocks and mutual funds.

Syndication experienced a boom in the late 1950s, then fell into disrepute. The cycle may be shorter this time. The peak of the boom hasn't been reached yet, but already there are warnings that syndication is being abused.

"Some syndicates are making bad mistakes in trying to satisfy the demand for merchandise," says Caltex's Adams.

Warns Resnick: "There's going to be a shake-out. Deals are being sold on good salesmanship only. Syndicators can sell almost anything today."

Some apartment builders, disenchanted with syndicators and aware of the current seller's market, are considering setting up their own syndication departments.

Stock brokers may become salesmen for merchant builders

Several builders are putting together large limited partnerships which will own a number of buildings. Investors will buy shares in such partnerships just as they now buy stocks and bonds—through brokerage houses.

For example, a major partnership proposed by a West Coast builder, and now awaiting approval by the Securities & Exchange Commission, would work like this:

The builder would be the general partner, with a \$1-million investment or 10% of the partnership. To raise the other \$9 million, 1,800 shares would be sold to limited partners. The minimum investment by each limited partner would be \$5,000, or one share. So, theoretically, there could be 1,800 limited partners.

The partnership would buy, manage, and sell apartment projects. The builder intends to sell his apartments to the partnership, but the partnership could also buy projects from others.

An investor would receive a 7% return on his equity, but his effective return could be as high as 9.3%.

Each \$5,000 investment would earn \$350 (7%), but half of the \$5,000 investment would be in the form of prepaid interest. To an investor in the 50% tax bracket, that means a tax saving of \$1,250. His actual investment, therefore, is \$3,750, and the \$350 return is equivalent to 9.3%. In addition, there is the usual benefit of depreciation, which would make the actual return even higher.

The partnership is being packaged by an investment banker, and shares would be sold by the banker's salesmen—the same people who sell common stocks.

In fact, some merchant builders foresee the day when real estate investment will be handled by stock brokerage houses, as a matter of course.

"It's a natural," says one builder. "It gives a broker something to sell his clients when the stock market isn't doing well."

Comments another: "If investment bankers want to offer balanced programs to their clients, it makes a lot of sense to include opportunities in real estate investment."

While public offerings of shares in limited partnerships may be on the threshold

of popularity, they are no threat to the existence of syndicators. Not immediately, at least.

And while some builders are concerned about abuses by syndicators, many more are worried about the abuses of permanent lenders (*see also, p. 46*).

Merchant builders haven't solved the permanent loan problem

Insurance companies are still demanding equity kickers and participations, and although a merchant builder doesn't have to live with a permanent lender after he sells a project, the terms of a permanent loan can make the sale difficult.

"Insurance companies," says Caltex's Adams, "want a sale-leaseback of land with 10% land rent; an equity position of up to 50% of the deal; 3% to 6% of the gross income; 20% of the incremental rent (increases in gross rent); and the first cash flow for five years. Needless to say, I'm looking for every conceivable way to avoid insurance companies."

Says Max Resnick: "Insurance companies want more and more. They're diluting present earnings and making it tough to sell to investors. Some of my friends are going along. They have no place else to go. They're counting on the appreciation in the value of the land they've held for several years to give them a profit."

If a builder is fortunate, as American-Standard's Wm. Lyon Development and Shareholders Real Estate Programs are, he gets his permanent financing from a savings and loan association, which does not demand an equity position. →

Wm. Lyon has been able to get permanent loans for 9½% and three to four points, with a loan-to-value ratio of 68% to 72%.

Shareholders has been getting 25-year permanent loans at 9½% to 9¾%, with a 65% to 70% loan-to-value ratio.

Resnick, considered a small-volume builder, gets what he can where he can. Recently, he has been joint-venturing with partners who have access to permanent lenders.

Caltex has been searching for new permanent lenders, and is one of several companies considering syndicating the entire cost of an apartment project—all-cash deals.

"Let the investor get the benefit of that 10% interest rate," says Caltex's Adams.

But Shareholders' Zullo says 100% syndication won't work: "Leverage and tax shelter are two of the most important selling points for real estate as an investment, and you sacrifice both if you make the investor put up all cash."

In an all-cash deal, the nominal rate of return on investment is increased by a percentage point, perhaps slightly more. But because the investor loses the tax deduction gained from paying interest on the permanent loan, the net return after taxes declines.

"Lots of builders can't get money," says Zullo, "so they're talking about all-cash deals. But when you run the numbers through an all-cash deal, you'll see it doesn't make sense. The more you think about it, the more problems you can find."

What's more, reselling an apartment project would be difficult, Zullo points out, if financing couldn't be obtained for the buyer: "The builder says he'll go with an all-cash deal now and get a permanent loan when the money market turns around. Does he expect to see a 6% interest rate? I don't. Does he expect to see 7%? Not in my lifetime. He's forgetting, too, that it's more expensive to raise all cash.

"If I raise \$10 million, I don't want to put it in \$10 million worth of real estate. I want to put it in \$50 million worth of real estate."

Caltex's Adams agrees that the market for permanent loans is not likely to improve soon: "It looks bleaker and bleaker as you go down the road."

But Adams feels that the terms now of-

fered by insurance companies are unacceptable to builders: "They're sucking all the profit out of a venture. It's bad enough that they're raising the constants to 10, 11, 12, 13, but the equity kickers they demand mean that a builder will have to wait five years to begin making some money on a project. And he can't sell it to investors. Who would buy a project with the kind of permanent loan insurance companies are making?"

Even without equity kickers, the permanent loans being made today make an apartment project virtually unsaleable. The low loan-to-value ratios are translated into higher cash requirements for investors. Since the spendable income of any apartment project doesn't change, the larger the cash requirement, the lower return on investment.

To reduce the cash requirement, builders are taking back notes. Assume, for example, that a builder takes a \$850,000 apartment project to a syndicator with a \$600,000 first mortgage. The syndicator may mark up the project \$150,000 to cover his fee and other costs involved in the sale. The project now sells for \$1 million. It has a spendable income of \$20,000.

If the builder is going to recover his equity and cover the syndicator's fee, the buyer will have to make a down payment of \$400,000. But a \$20,000 return on a \$400,000 investment is 5%. An investor could do as well, or better, buying a certificate of deposit at a local bank.

So the builder agrees to take back a non-amortizing note for \$200,000. Now the investor has to put down only \$200,000. The spendable income is still \$20,000, but now it represents a 10% return. (Actually, the spendable income will be reduced by the amount of interest paid to the builder, but the principle is the same: the builder is increasing the investor's return by taking his profit in paper.)

The question, builder Resnick notes, is this: "What happens in eight or 10 years when the builder's note becomes due?"

Resnick doesn't pretend to know the answer. If the builder is lucky, the market for apartments will be solid, the money market will be loose, and the investor will be able to refinance or sell the project, paying off the builder in either case.

If the builder isn't lucky, the apartment market will be soft, the investor will find it impossible to refinance, and, according to Resnick, "He'll call me and say, 'Max, come get your building.'"

Shareholders' Zullo doesn't think an investor with 20% hard equity will walk

away from a project: "It just won't happen."

Resnick isn't so sure. He worries particularly about poorly managed projects: "If an investor sees his property is deteriorating, and he has a vacancy problem, he may panic. He might really milk the project for a couple of years and then give it back to the builder."

The builder would then be confronted with an additional investment to bring the property back to a rentable condition. He would have to assume the first mortgage. And he would then be in approximately the same position he was eight years earlier when he agreed to take back a note: his profit is still on paper.

Merchant building of apartments may be creating a management problem

A merchant builder often walks away from a project once it's sold, leaving the problem of managing the units to the new owner. The new owner, however, doesn't know anything about management, so he pays a property management company a 5% fee to run the project.

That should solve the problem. Although an amateur owns the building, a professional runs it. But apartment management is a marginal business. And if a management company finds that costs are outrunning the 5% fee, there is a temptation to milk the project by deferring or avoiding maintenance.

The ideal arrangement is for the builder to retain management. He knows what he's doing. He wants to use projects he has built and sold as showcases for future buyers, so he has an interest in keeping a project up to par.

L.B. Nelson Corp. of Palo Alto, Calif.,

has the ideal arrangement for an investor. Nelson leases back the projects it sells, not only managing the units but also guaranteeing the buyers a certain return. Most builders aren't willing to go that far, however.

"I'm a coward," admits Resnick. "I've been around too long, I've seen too many cycles in this business to stick my neck out by guaranteeing the investor a return."

Some builders agree to manage the apartments for a fee. "I don't see how you can sell apartments without agreeing to manage them," says Shareholders' Zullo. "I have to tell investors right off the bat that I'm assuming they want nothing to do with management. Most investors wouldn't be interested in apartments if they had to worry about managing them."

From the builder's viewpoint, retaining management has a basic advantage: "The only way to assure the job is done right is to do it ourselves," says Zullo.

Resnick, like many other builders, regards management as a nuisance. "Syndicates who retain management for the profit on 5% are going to be disillusioned," he says.

Wm. Lyon Development does not manage apartments. The company usually recommends a local property manager to its buyers, relying on the volume of its business to keep the performance of the management firm at an acceptable level.

Merchant builders may overbuild some apartment markets

In the rush to meet investors' demand for apartment projects, some merchant builders tend to lose sight of the primary market—tenants.

"If the tenant doesn't move in," says Wm. Lyon's Bergum, "everything else falls apart."

What's more, at least two current factors seem to make overbuilding inevitable:

1) Apartment projects are getting larger. A few years ago a 200-unit project was a major development. Today projects of 400

to 1,000 units are common. Wm. Lyon, for example, is starting a 2,400-unit project in northern California.

Apartment builders have learned that a project doesn't generate enough income to pay for good management unless it has at least 100 units. As a rule of thumb, an apartment owner can spend \$5 to \$7 per unit per month for management, including the cost of providing an apartment manager with a living unit. Obviously, the caliber of manager who will work for \$250 a month in a 50-unit project is different from the caliber of manager who earns \$1,000 a month in a 200-unit project.

2) Merchant apartment builders are mobile. When southern California builders had difficulty finding land in good apartment markets around Los Angeles, they went to the San Francisco Bay area. Now, several Bay area markets are overbuilt.

Last year Chicago seemed to be a ripe apartment market. The merchant builders moved in, and now in the northwest suburbs of Chicago, near O'Hare Field, there are 18,000 units under construction.

This year Phoenix is the hot market. Wm. Lyon is there. Caltex is there. And a number of other merchant builders have either moved in or are considering moving in.

Similarly, there is a flow of traffic into Denver, which probably will be the next market to be invaded by merchant apartment builders from other cities.

It takes relatively little expense and effort for a builder to research the market in a "foreign" city and then set up shop.

Builders like Wm. Lyon are continuously looking for new markets, particularly in large cities. "The risk is much lower in a big city," says Bergum.

When Wm. Lyon goes outside California, it looks for a market in which it will be able to produce 1,000 units a year. Other merchant builders have approximately the same volume criterion, and when several 1,000-unit-a-year builders move into a city, there is an immediate danger of overbuilding.

Zullo thinks California's Orange County is heading for trouble: "We had some land tied up there and thought we would go into the market. Our research indicated a demand for 13,000 units. The next time we looked, there were 22,000 units coming onto the market. We pulled out."

The one saving grace in the methods employed by merchant builders is their refusal to warehouse land. Usually they want land ready to be developed. They'll tie up land if they can, waiting for a rezoning. In

fact, Caltex draws much of its profit from forced appreciation of land through either rezoning or finding a way to use a bypassed problem site. But Caltex will not warehouse land.

The sales profit on apartments compares favorably with the profit on houses

An efficient builder can look for a 4% to 5% after-tax return on sales. Usually, however, the profit is quoted on a per-unit basis. The range is \$500 to \$3,000 per unit, depending on what the builder has deducted before arriving at a profit figure.

"I once asked a builder how much he was making," says Zullo, "and he told me \$500 a unit. I thought that was low until I discovered that what he called a \$500 profit was equivalent to what other builders would call a \$3,000 profit."

Profit is related to sales price, and price is related to yield. Most builders will negotiate the price of a project, although some are trying to establish a one-price policy.

"We prefer not to negotiate," says Bergum, "and it's getting easier for us as our reputation grows for quoting one price."

Even Wm. Lyon Development will change its price, however, if an investor can successfully challenge the income projection.

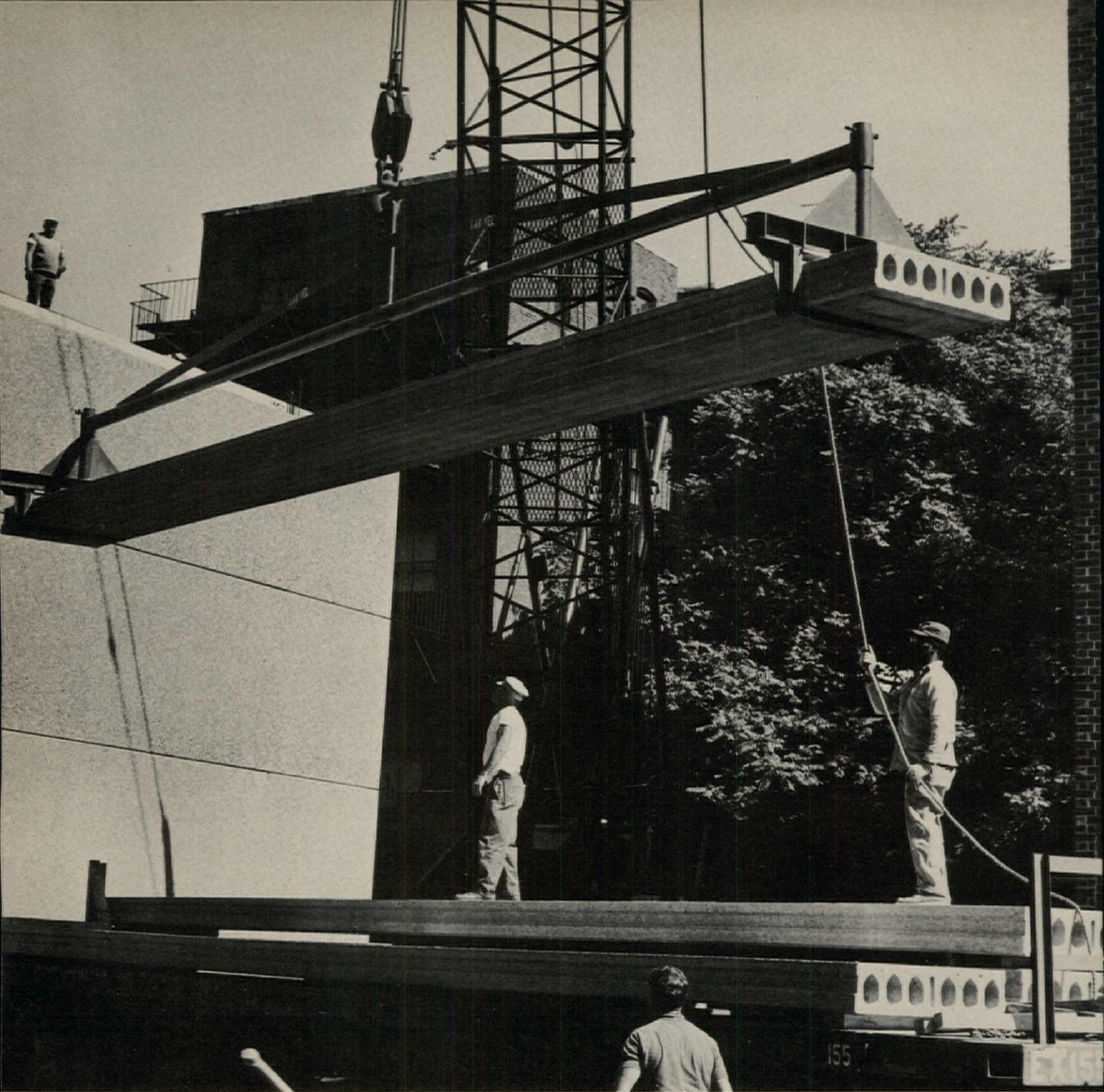
If a builder sells his project before leasing begins, the projected yield is no better than an informed opinion. In the buyer's opinion, the yield may be lower—and in that case, the price should be lower.

Selling a project before it is completed gives the buyer the benefit of original ownership—depreciation on a double declining balance—but it also increases the risk.

Because of the risk factor, reputation is bound to be a significant factor in the sales of merchant apartment builders.

"People know we do our homework carefully," says Bergum. "That's why they come to us when they want to buy apartments."

—DAVID THALER



What's new — and maybe for you — in the new precast concrete systems

More and more, medium and high-rise apartments, and commercial buildings too, are becoming part of the homebuilder's world. This means increased involvement with heavy construction. And the good news is that a growing number of precast concrete systems promise to make heavy construction faster, less expensive, and more versatile.

Just as light construction is beginning to move into the modular factory, heavy construction stands on the verge of a revolution of its own. The form is precast concrete, used in a variety of ways from post-and-beam to slabs and panels to complete boxes. And the promise is the same as that offered by modulars: easing of labor problems, faster production, and in the end, lower costs.

Precast systems are still relatively new to the U.S. The Sepp Firnkas-Carl Koch system (H&H, July '67) has been used in the Boston area for a number of years, and a few other builders and fabricators have done some work with prefabricated concrete components. But for all practical purposes, formwork has always been the American way.

Not so in Europe. Those countries lack the enormous timber resources of America and have had to lean on concrete construction; logically, their concrete technology is ahead of ours. And the fact that most European housing takes place under the government wing rather than the private entrepreneur gives a huge boost to systems building: the government can guarantee a manufacturer that if he tools up to manufacture systems components, he'll get enough business to make it economically viable. Not surprisingly, Europe is dotted with manufacturers of precast systems, and that type of construction is the rule rather than the exception.

Two things seem to have triggered the current awakening of interest in precast systems in this country:

First, there was Habitat, the conglomeration of concrete boxes that stirred so much comment at Expo in Montreal. Habitat turned out to be wildly expensive, chiefly because it was a one-of-a-kind project built under difficult circumstances. But it opened a lot of eyes to the fact that concrete need not produce just the same old apartment buildings, and it glamorized the idea of the prefabricated concrete box.

Second, there is Operation Breakthrough. While this program's ability to get low-income housing built is very much in question, it did attract a number of precast systems—several of them European—as entries, and eventually as winners (H&H, April). The result has been increased interest on the part of builders and developers, and

increased activity by both U.S. and foreign systems manufacturers towards setting up operations.

Why are builders and developers interested in precast systems? Three reasons:

1. *The need for low-cost housing.* This promises an enormous market over the next decade and much of the market is in urban centers, where high-rise buildings are the rule.

2. *The need for higher densities in suburban developments.* More and more big new subdivisions are incorporating both high-rise and commercial buildings into their plans.

3. *Labor problems in heavy construction.* This is a broad generality for a complex situation. But by and large, there is a growing shortage of labor skilled in poured-in-place concrete, and, as in light construction, prefabrication seems the most practical—if not the only—solution to keeping costs within reason.

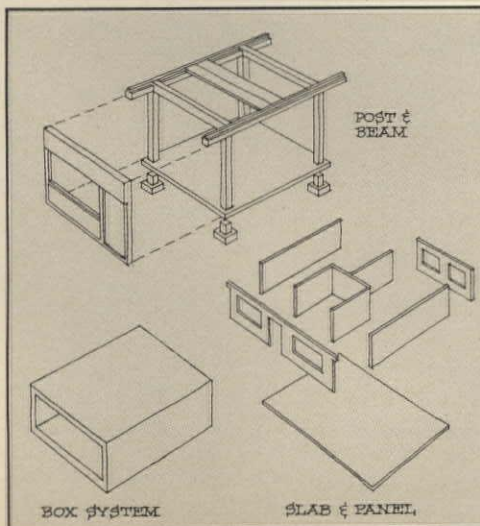
What are these systems, and how do they work? The most widely used (*drawing, left*) include:

Slab and panel. This is the system most commonly used in Europe. Slabs are either precast or cast on the site, and wall panels may be either loadbearing, cross wall, or core-bearing. Special elements such as shear walls, shaft walls, sandwich panels, and stairs can also be cast in systems of this type. The joints between slabs and panels are usually cast in place or grouted. In some systems, slabs are made of standardized off-the-shelf hollow core planks like the one pictured on the facing page.

Post and beam. This framing system allows a considerable amount of flexibility in partitioning. The system consists of precast reinforced columns and beams joined both vertically and horizontally. Infill panels and partitions are then hung from this load-bearing framework. The system is ordinarily limited to low-rise (one to four stories), and, unlike most other systems, it is sometimes used for detached housing.

The box. This is the system used in Habitat: it permits a completely finished unit with up to three bedrooms to be built on the ground and hoisted into place. In most box systems, four sides—roof, floor, and two walls—are poured monolithically, and the other two walls are closed in afterwards.

TO NEXT PAGE



The ultimate aim of all these system types is, of course, to cut building costs. But comparisons are difficult to make. For one thing, the cost of conventionally-built concrete buildings varies widely, depending on the site plus a whole range of local conditions. For another, precast systems are so new in this country that not enough buildings have been made from them to get really meaningful figures.

But some of the companies currently involved with precast systems have made general cost projections, although they are based on a variety of different criteria. For example:

Omniform, a consortium based on the Sepp Firnkas system noted above, says that a 900-sq.-ft. townhouse built from the system will cost about \$13 a sq. ft., in place and completely finished. This is based on a minimum volume of 400 units.

Development Corp. of America, a Boston-based consortium, projects a cost of \$16.56 a sq. ft. for a prototype mid-rise building, and \$14.86 if the volume reaches 1,000 units a year.

Neil Mitchell, a developer of a post-and-beam system that bears his name, and is the basis of Mid-City Developers' consortium, reports that in a prototype house for a 165-unit project in Lancaster, Pa., 680 man hours was all that was required to complete the basic structure.

Module Communities, which uses the Tracoba precast system (p. 77), claims it can save 15% or more over conventional construction.

And *Norman Wakefield*, president of the Rouse-Wates company (p. 78), says he believes his system will cut the structural cost of a building by 8%.

Speed is, of course, a major factor in the cost-cutting possibilities of any precast system. According to Wakefield, the Rouse-Wates system should cut overall construction time by 30%, and the necessary man hours of site work by 50%. And executives of *Module Communities* say their Tracoba system can cut building time by as much

as 50% on the average high-rise project.

There is far less weather-vulnerable outdoor work than with conventional systems. Form setting is virtually eliminated, and the only on-site pouring (which is a special problem in very cold weather) is for closing joints. Consequently there is less chance of expensive delays.

Pricing can also be easier and far more precise with precast components. Parts can be, in effect, picked out of a catalogue, and costs and construction times can thus be predicted with far more accuracy. Result: a reduction in contingency margins, and ultimately in cost.

Just how quickly and how extensively the new precast systems become available depends on a number of factors; how much government assistance is given to low-income housing is perhaps the most important. But there is enough activity right now to justify considerable optimism. Specifically:

Off-the-shelf precast components, which are not part of any particular system, are available from at least 120 precast plants around the country.

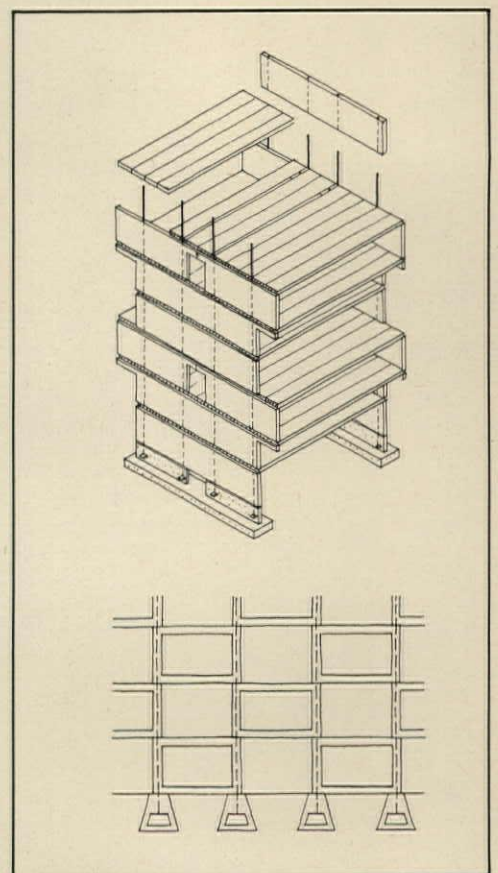
Module Communities, as noted earlier, has just completed a plant in New York City. The company will sell components, but prefers to act as contractor or co-developer.

Rouse-Wates has a Toronto plant that has produced 1,600 units so far, and is preparing to build two other plants in Columbia, Md., and St. Louis.

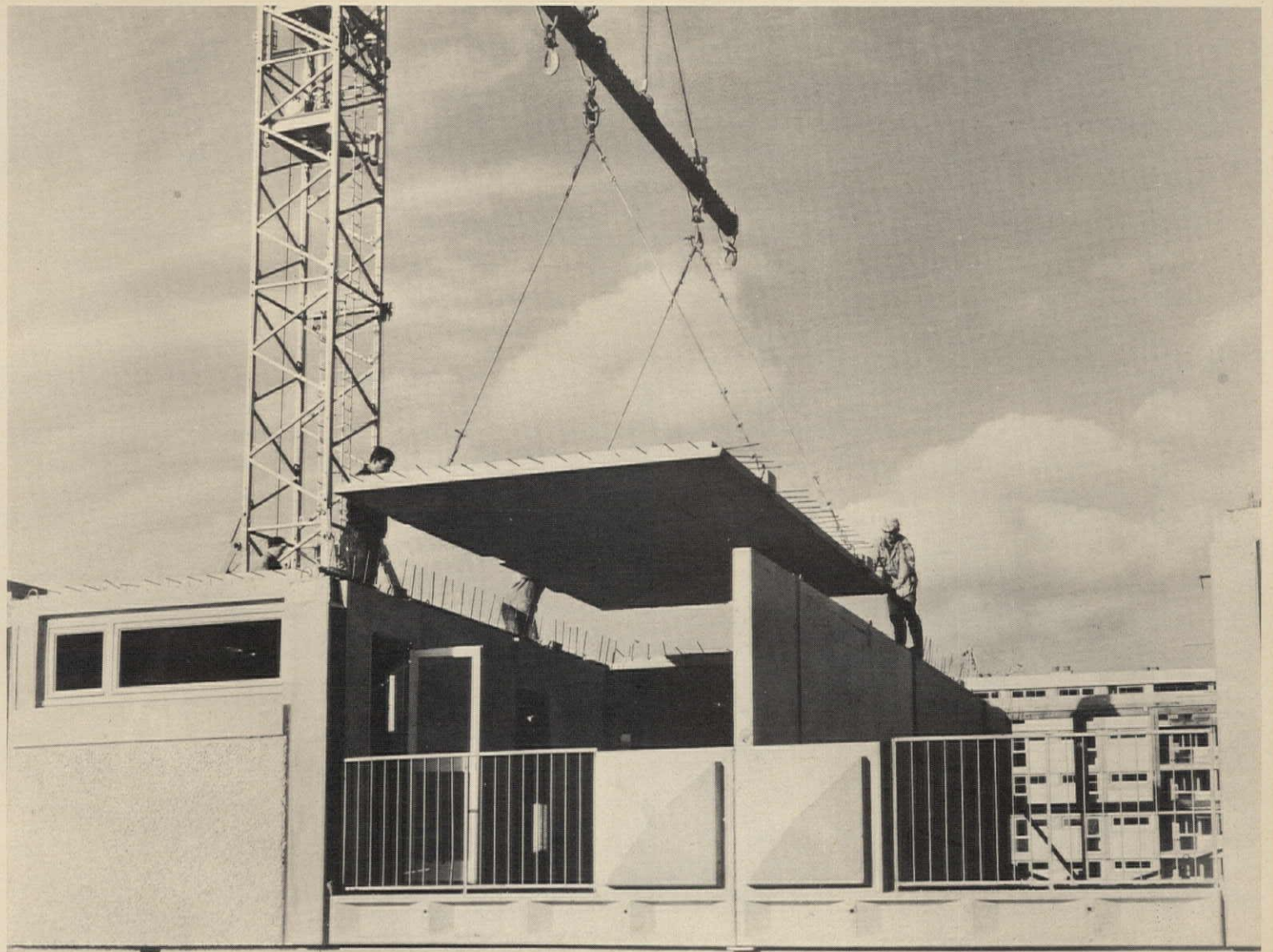
Omniform can now supply components from plants in Hartford and Camden, N.J.

Other precast companies are in various stages of preparation, and virtually all of them are making plans to franchise manufacturers and/or builders to produce their systems. Further, should Operation Break-through move out of its current partially stalled situation, other precast companies who have been awarded contracts may decide to build facilities.

At right and on the following four pages are details of six typical precast systems.



Assembly drawings show how the Sepp Firnkas precast system (top) and Shelley system (bottom and p. 79) are held together with post-tensioning rods. Firnkas system is basis of *Omniform*.

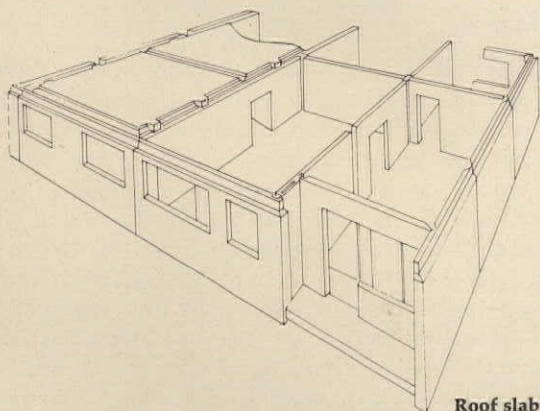


Module Communities Inc.

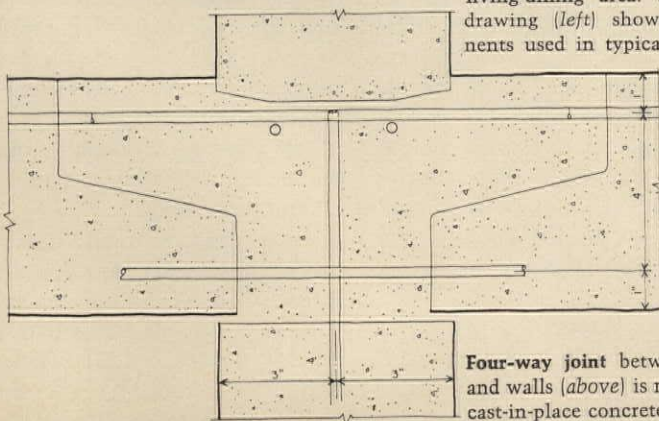
Adapting the French Tracoba No. 1 system to American usage, this Yonkers, N.Y. firm will use factory-cast slabs and panels to build four high-rise projects in the New York metropolitan area. With a factory already completed in the Bronx, MCI is

about to begin work on its first 20-story apartment in Yonkers.

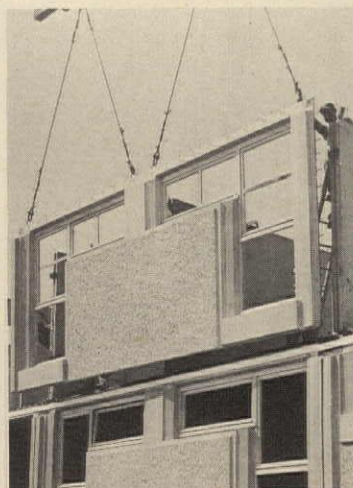
The same basic casting molds will be used for all four projects, although designs and texture will be different (*photos, below*). Components will be trucked to the site and erected by crane.

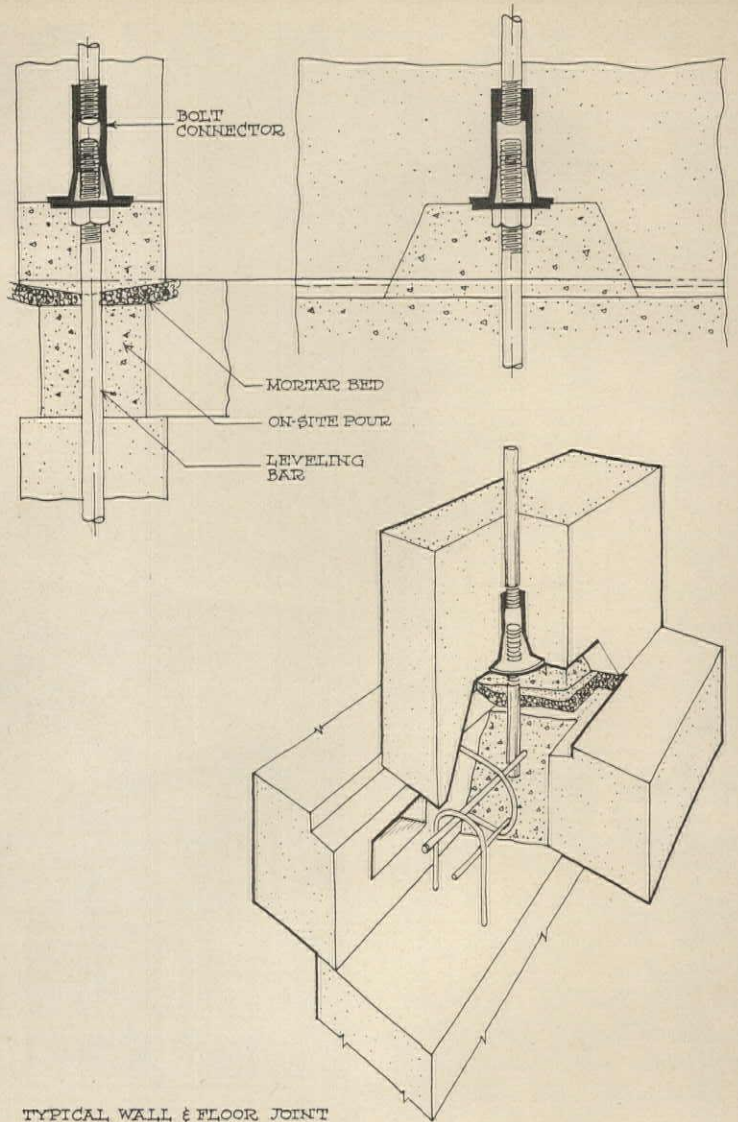


Roof slab (*photo, above*) is lowered in place over apartment's living-dining area. Schematic drawing (*left*) shows components used in typical unit.

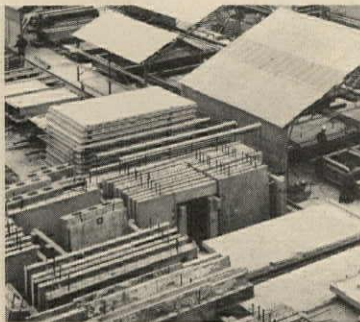


Four-way joint between slabs and walls (*above*) is made with cast-in-place concrete.





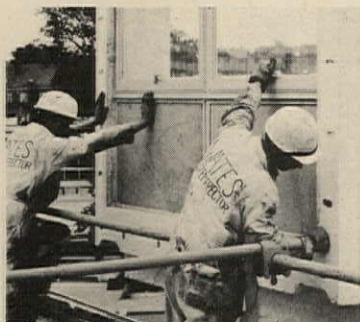
TYPICAL WALL & FLOOR JOINT



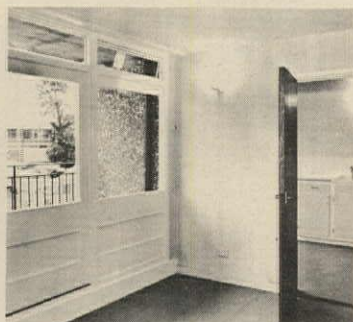
Wall panels and floor slabs are factory-cast in battery molds, heat-cured, and filed to await shipment.



Floor slab with projecting loops is lowered into position over threaded tie-bolts in ground-floor walls.



Window-wall panels, fully glazed, are positioned over slab and lowered onto pre-levelled locating bolts.



Utilities pre-installed in exterior wall panels include all wiring and electric baseboard heating.

Rouse-Wates

The Wates system of building, developed in England, uses precast slabs and panels with a unique joint (*drawing, above*). Wall panels are equipped with leveling bolts and nuts to align and connect vertically, while reinforcing bars inserted in loops projecting from the slabs give the joint lateral strength. The joint is then grouted.

A key feature of the Wates system is the possibility of a wide variety of surface textures on exterior wall panels. These range from brick tiles and exposed aggregate (*photo above*) to ribbed concrete.

In addition to precast components, the system also requires a considerable amount of conventional poured concrete for foundations, garages, and access structures.

Rouse-Wates is a two-member consortium formed in April of this year to undertake large housing and commercial proj-

ects. It consists of the Rouse Co., a major developer and the nation's eleventh largest mortgage banking firm, and Wates, Ltd. of London, holder of patents on a highly successful precast concrete system. Based in Columbia, Md., which is being developed by the Rouse Co., Rouse-Wates already has several large projects either on paper or under way: a planned 225-unit Operation Breakthrough prototype in St. Louis, and Echelon, a suburban development now under way in Voorhees Township, N.J. Echelon will include 3,000 apartments plus a retail mall, four major department stores, and a community center.

According to Scott Ditch, vice president of marketing for the Rouse Co., Wates' ability to control costs and make use of quickly-trained unskilled labor will be important factors in the success of these and other



The Shelley System: A seventeen-member consortium

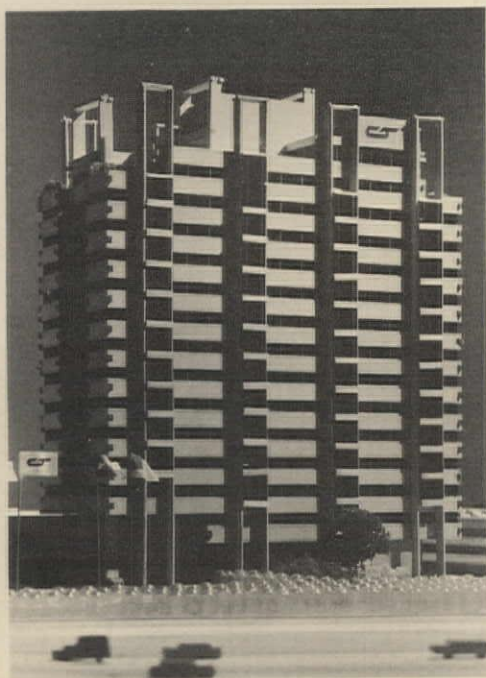
Based in San Juan, Puerto Rico, this company's system stacks entire precast units like building blocks and can be used for apartment buildings up to 22

stories high. Each unit has a completely finished interior.

Each box overlaps the other, and in the overlap is space for post-tensioning and utilities

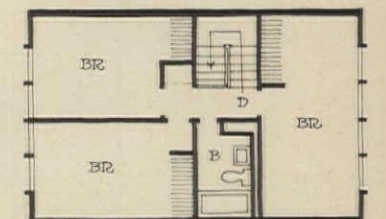
(see drawing, p. 80).

Stairways, corridors, garbage disposal facilities, and elevator shafts are integrated into the system.

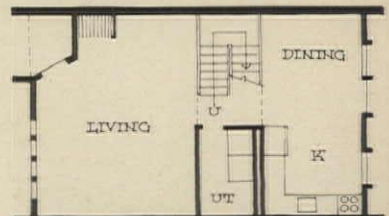


Texas Industries

The Sepp Firnkas system of post-tensioning (see also the drawing on page 76) is used in this office building in Houston. It was designed by Paul Rudolph. The building's precast panels are supplied by Texas Industries.

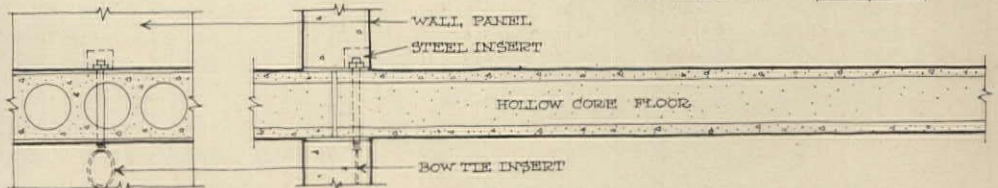


UPPER LEVEL



LOWER LEVEL

0 5 10 FT



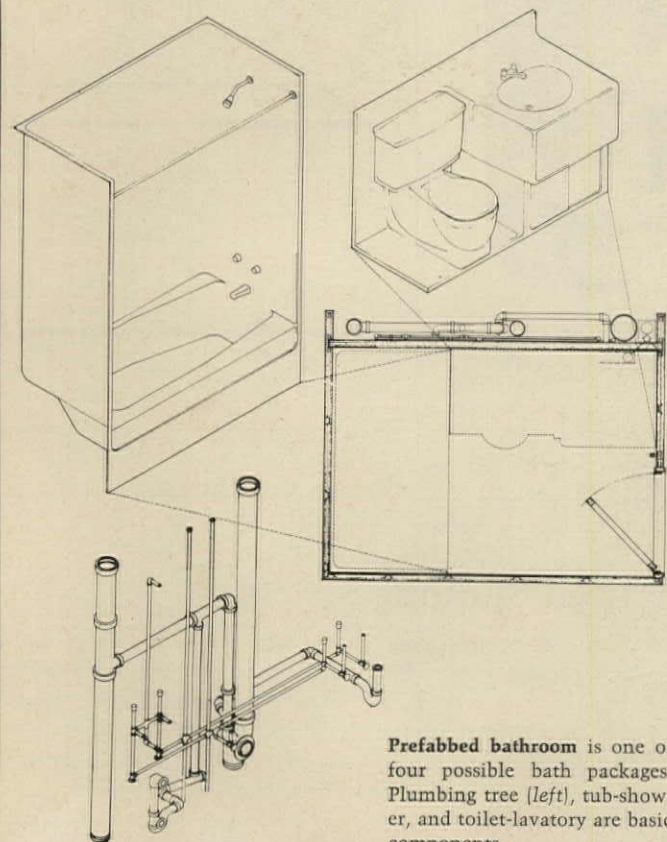
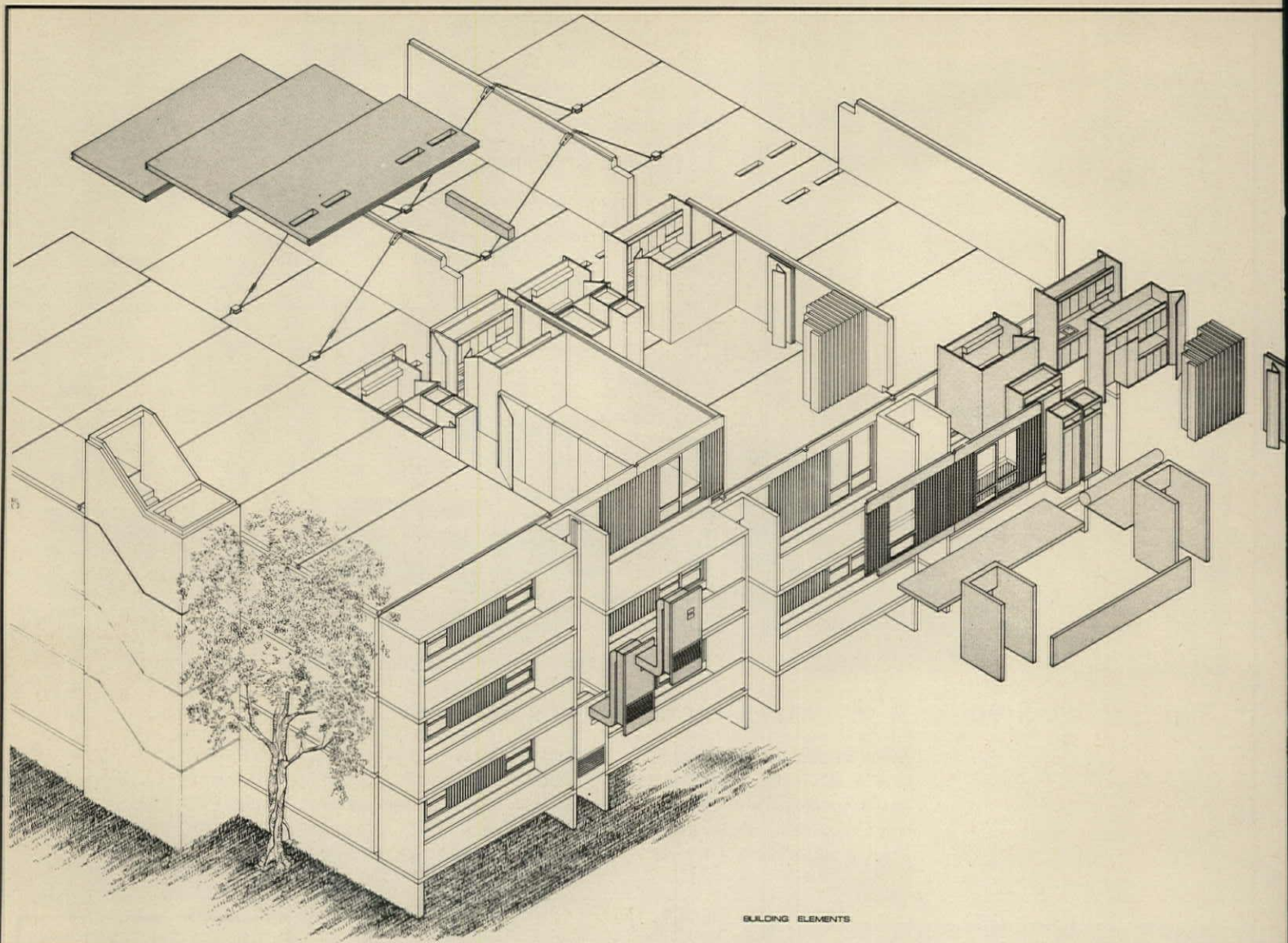
Concrete Industrialized Building System

Concrete load-bearing walls and hollow-core prestressed walls are the basis for this system offered by a consortium headed by the Portland Cement Association.

With 120 producing companies throughout the country,

PCA can supply planks, panels, and other precast components from a large number of plants.

Shown above are plans, perspective view, and a typical joint detail with special turn-key connector for two-story row houses.



Prefabbed bathroom is one of four possible bath packages. Plumbing tree (left), tub-shower, and toilet-lavatory are basic components.

Descon/Concordia

From Canada comes this slab-and-panel system designed to utilize components which are currently available from many casting factories now located in both the U.S. and Canada.

Product availability in local areas is one of the key factors on which the Montreal consortium is basing its operations. The other is extreme flexibility in design and construction decisions. For example, whether bathrooms are to be prefabbed entirely or only partly will depend on local codes and the local availability of plumbing trees and other components.

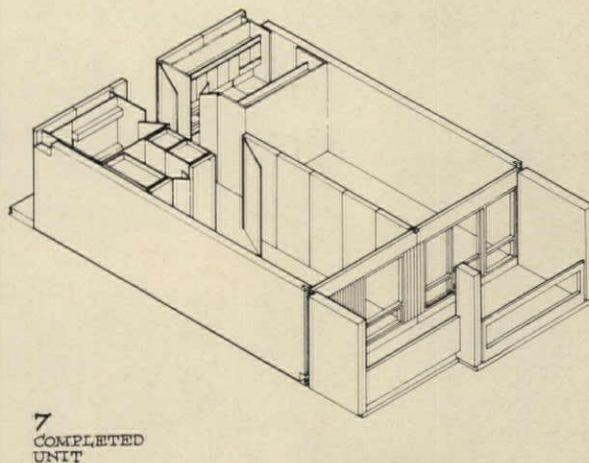
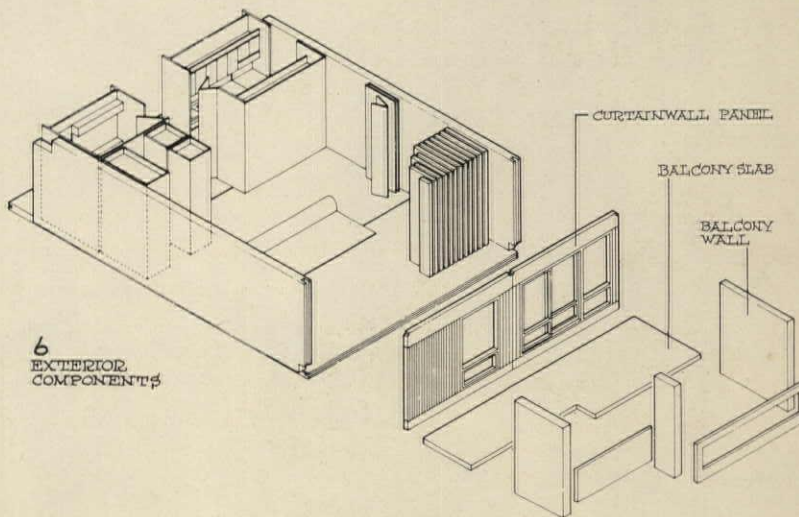
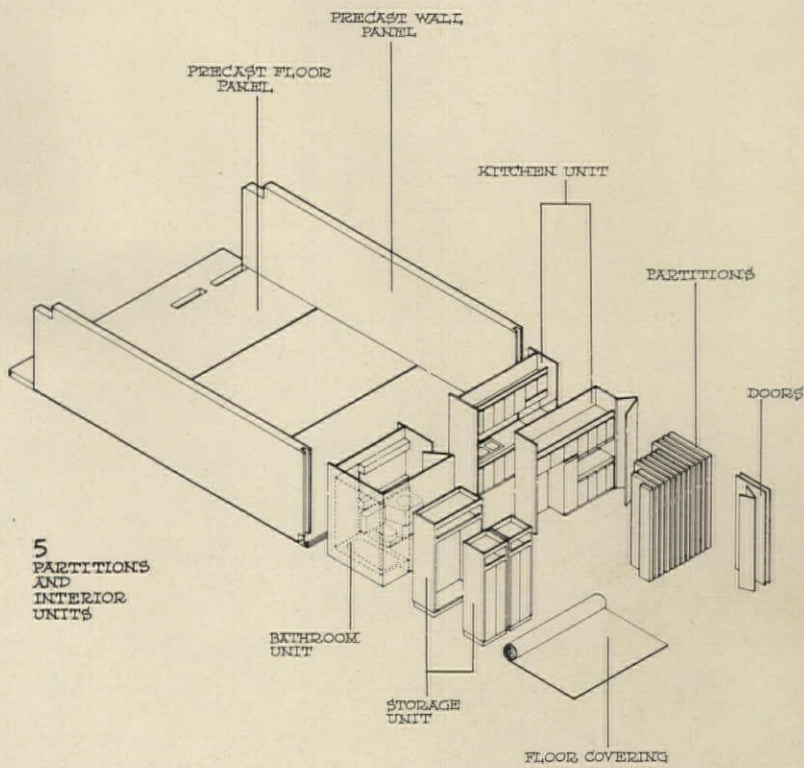
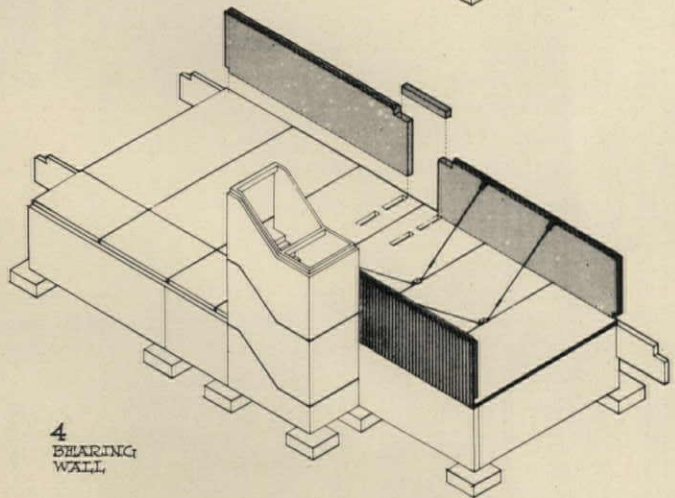
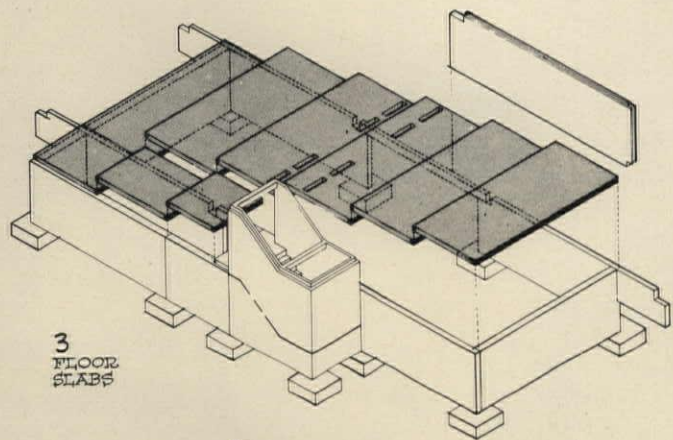
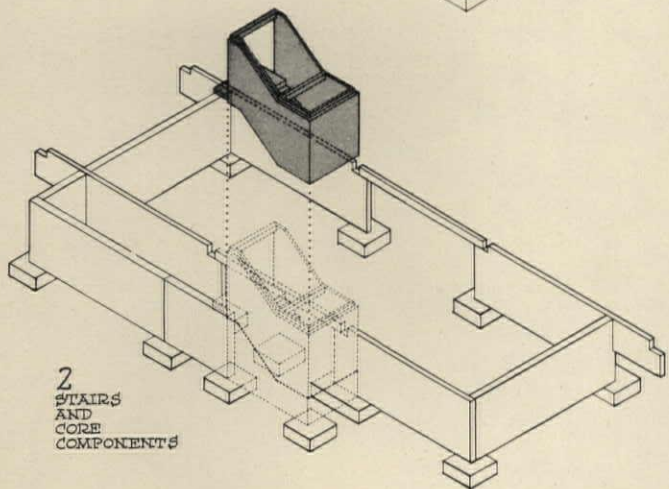
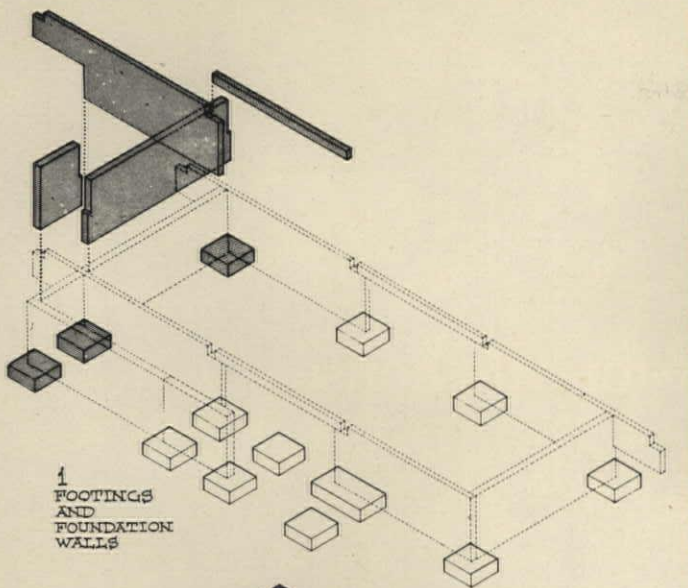
In this emphasis on off-the-shelf components, Descon/Concordia differs from most European-derived systems. And, according to George Buchanan, an American architect acting as consultant to the consortium, no special casting plants will have to be built. Casting can,

if necessary, be done on the site.

All joints are of the dry mechanical type, which means that they can be completed in any kind of weather. Panels and slabs can be prestressed, post-tensioned, or simply reinforced, depending upon the local labor situation.

Interior components and sub-assemblies in the system include kitchen cabinets, storage units, bathrooms, and partitions. Some of these can also be fabricated in local plants if necessary. Partitions incorporate raceways for wiring, convenience outlets, and vinyl base-board. Exterior wall panels include windows, sliding doors, and air-conditioning systems.

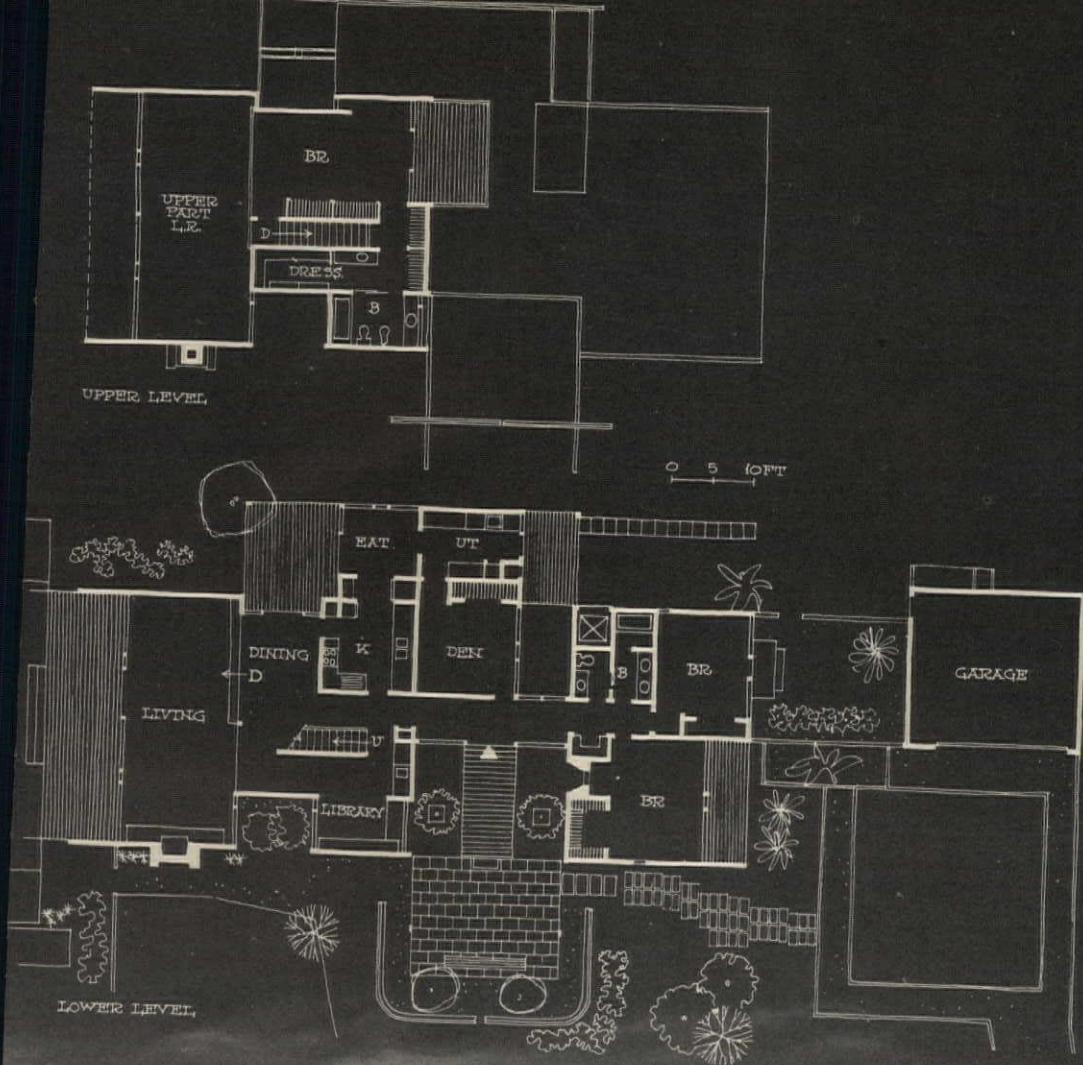
Descon/Concordia has Operation Breakthrough projects planned and in the design stage for both Jersey City (150-175 units) and St. Louis (100-125 units).



Contemporary ideas for the built-for-sale house

Speculative building has come a long way in the past few years. Where the spec builder used to play it safe, putting up a nice neutral house that might appeal to the majority of so-called average buyers, today he is moving more into the realm of strong contemporary houses which appeal to a small but growing group of buyers that wants something different and is willing to pay for it. Here and on the next six pages are five such houses, all of them award-winners in the Homes for Better Living Program, sponsored by The American Institute of Architects in cooperation with HOUSE & HOME and *American Home*.





Varied roofs and setback walls add interest to a superlong elevation

They break up what could have been monotonous—a 118-ft.-long house and garage on a raised pad—and create the illusion of separate structures. They also open the house to light and a view of a reservoir while maintaining absolute privacy from neighbors.

Behind the blank stucco walls are five decks and four courts. The largest deck (far left in plan) runs the full 32-ft. length of the living room (above). Others open off the kitchen, dining room, and bedrooms.

Award of Merit
 ARCHITECT: Dorman/Munselle Assoc.
 BUILDER: Jondol Construction
 LOCATION: Lake Encino, Calif.
 SALES PRICE: \$110,000





Uphill bridges lead to main entrance, at far left, and kitchen and family room, in foreground. High windows light master bedroom on top level.

Wooded hillside (right) was left pretty much unscarred. Houses are partly hidden by oak trees. House described here is the one at far right.



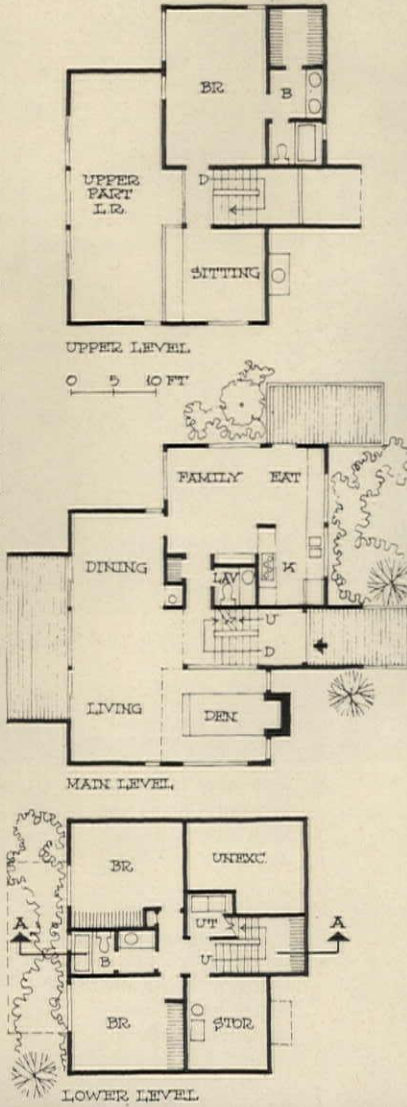
Entry bridges
tie this hillside
house to its
sloping wooded site

The bridges lead from the up-hill street to both upper-level entrances of the three-story house. And they leave the site relatively undisturbed, which was exactly what the builder wanted because he plans to deed 50% of the 300-acre project back to the county for trails and parkland.

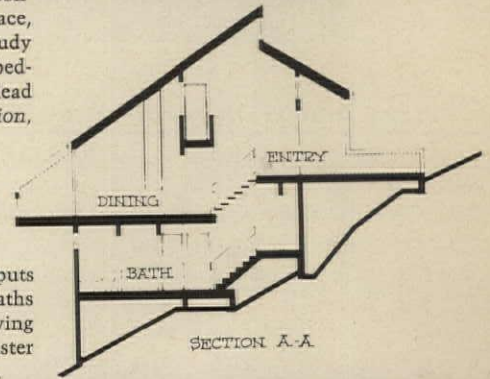
This house and other similar designs (*below*) sit on foundation piers sunk into the steep terrain. Only the roadways were carved out of the hilly land, so most of the trees and ground cover were saved. Even the lot lines were left undrawn until the designs were complete. And to enhance the rusticity of the area, exterior materials were kept simple and natural.

Award of Merit

ARCHITECT: Fisher-Friedman Assoc.
 BUILDER: Allan-Marin
 LOCATION: Mill Valley, Calif.
 SALES PRICE: \$46,500



Inglenook, a low-ceilinged conversation area by the fireplace, is tucked under the open study bedroom level above. Stairs lead up to main entrance (*section, right*).



Three-level plan (*left*) puts children's bedrooms and baths on lowest level, main living areas in the middle, master bedroom and study above.





This small house on a narrow lot offers two attractions of big-house, big-lot living

Its lot is only 30 ft. wide, its indoor area only 1,296 sq. ft., and its price with land only \$24,687. Yet this house has a spacious feeling plus indoor and outdoor privacy from neighbors and the street. For example, a hidden patio (*below*) was created by setting the garage to one side of the lot and the living

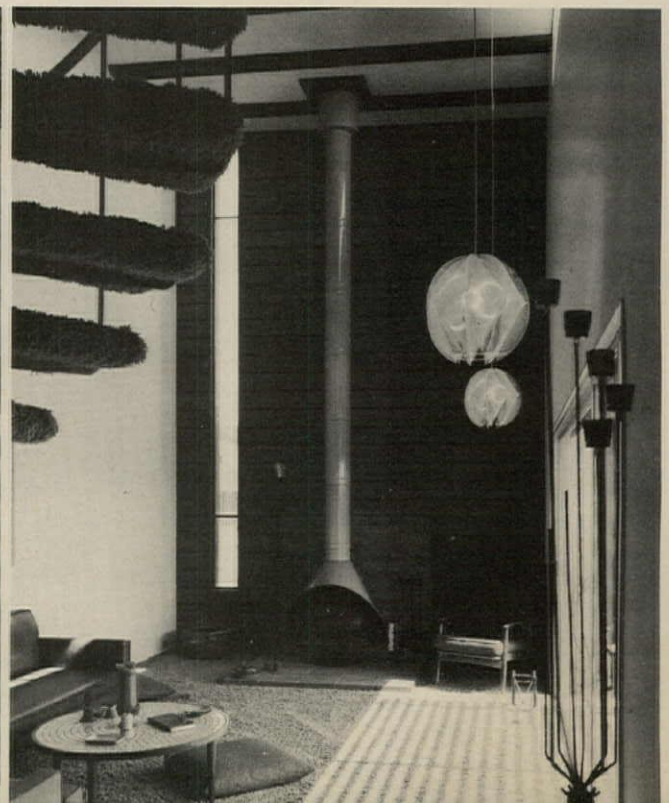
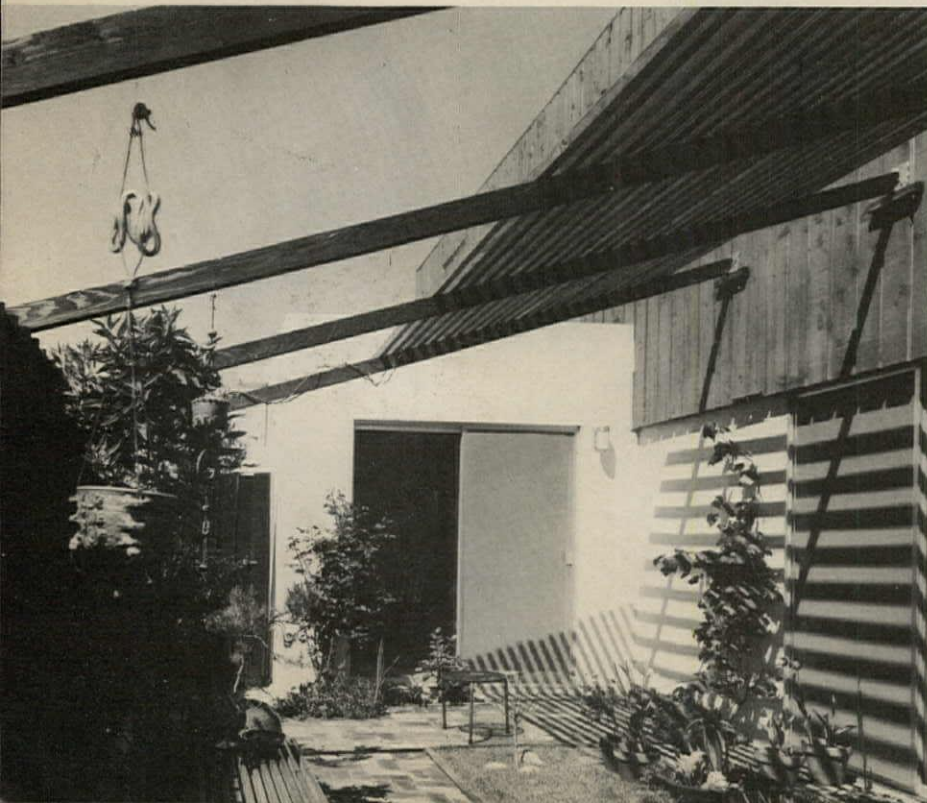
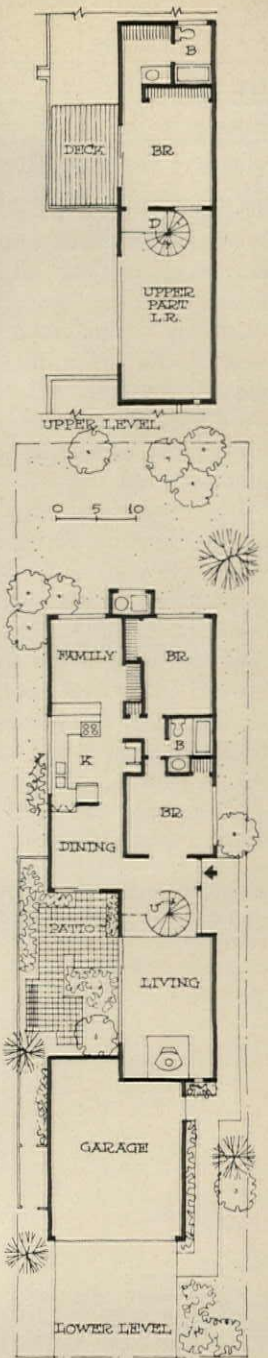
room to the other. And the 17' x12' living room seems larger because it is two stories high and open to both the patio and foyer, and to the bedroom/den beyond.

Honorable Mention
 ARCHITECT: Simpson & Gerber
 BUILDER: McKellar & Weyer
 LOCATION: San Diego, Calif.

Two-story house, with end wall broken only by slender window, is behind garage. Entry walk is between garage and retaining fence.

Jogged plan forms patio by putting garage on one side of lot and 12'-wide living room on other. Plan was designed for six narrow, leftover lots in an old subdivision.

Secluded patio (*below, left*) is reached through sliding doors from dining and living rooms (*see plan*). Wooden sun-screen partly shades both patio and living room (*below*). Open, spiral stairway in living room photo helps create spacious interior feeling.



**Every room in this
glass-walled house
opens to a private
outdoor-living area**

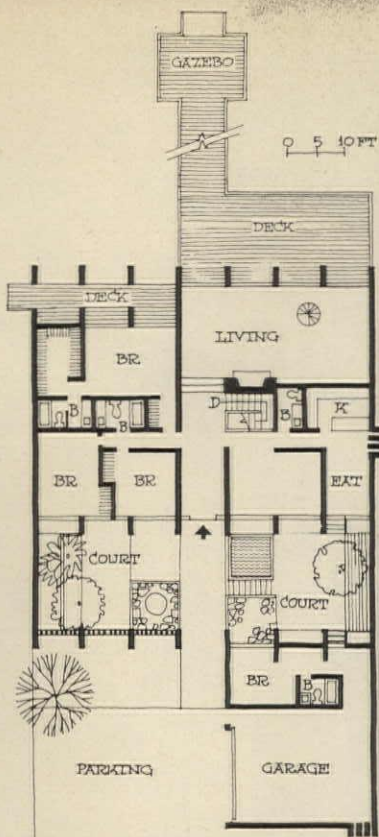
Up front (*bottom photo*), landscaped courts adjoining the dining room, breakfast area, and two bedrooms. In the rear (*top photo*), there's a large deck off the master bedroom, and a terrace off the lower-level area.

Wooden screens and the garage, which includes guest quarters, hide the front courts from the street. And a bridge over a stream connects the living-room deck to another outdoor-living area—a screened gazebo at the rear of the lot.

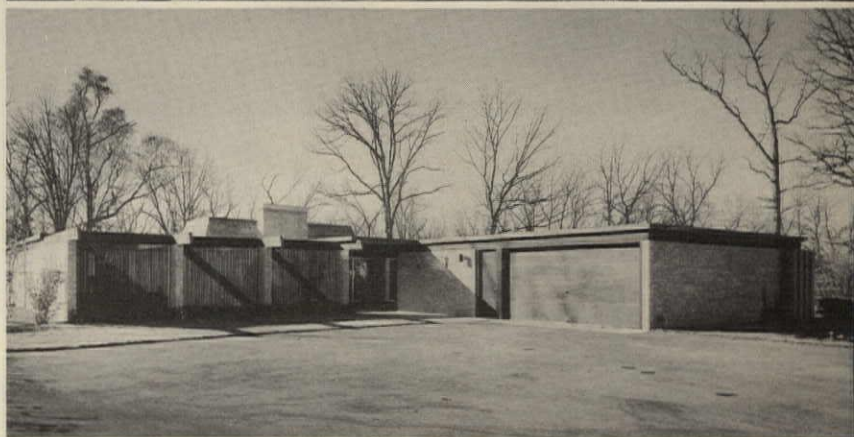
Sliding glass doors across the front and back of the house are set between brick piers. End walls are solid brick.

Honorable Mention

ARCHITECT: *Anderson & Battles*
BUILDER: *John Madro*
LOCATION: *Deerfield, Ill.*
SALES PRICE: *\$85,000*



Main-level plan, open to outdoors in front and back, is closed at sides. Circular stairs lead to balcony in mansard-roofed area over living room.



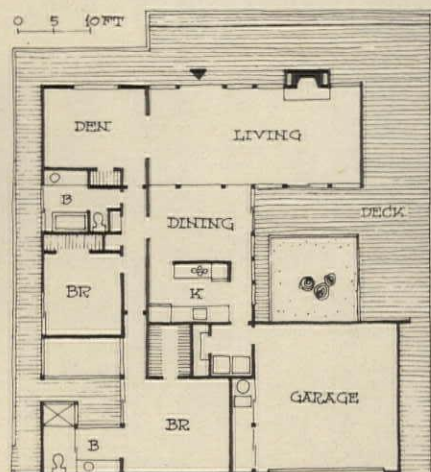
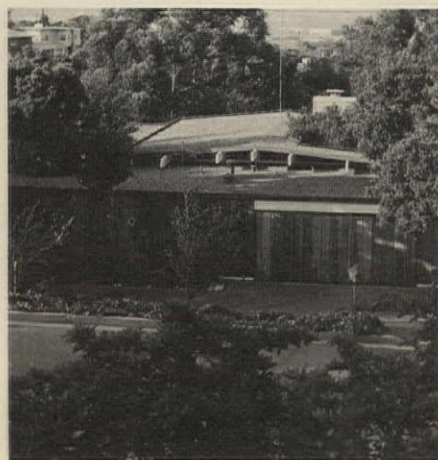
**This house on
a platform brings
treetop living
to a steep site**

The wooded lot drops off more than 50 ft. from the street (foreground in small photo) to the rear. To save the trees and tie into a shallow sanitary sewer at street level, the house was set on a platform, which is up to 45 ft. above the ground.

The platform, anchored to a concrete wall along the front set-back line and supported by braced wood posts on concrete piers, extends beyond the house as a deck on three sides. Much of the wall area is glass so that the trees, some of which grow up through holes in the deck, seem to come right into the house. Behind the garage, the roof is slightly raised to let light in through a clerestory.

Honorable Mention

ARCHITECT: *Churchill-Zlatunich Assoc.*
BUILDER: *Vernon D. Crosby*
LOCATION: *Millbrae, Calif.*
SALES PRICE: *\$50,000*



U-shaped plan isolates master bedroom, puts kitchen and dining room in center of house, and leaves openings in platform for trees.





Housing Systems, Inc. Penfield, N.Y. Consulting Architect, James H. Johnson

The wave of the future for low-cost housing—a single module that can be stacked or combined for unique housing effects. An interesting texture was used on the single unit of poured concrete by spraying the entire exterior surface with cement-base, waterproof THOROSEAL PLASTER MIX. Voids can be patched with THORITE, the non-shrink, non-slump patching mortar. It proves how timely THORO SYSTEM PRODUCTS are for today's building needs.

Unique modular units finished and waterproofed

quickly and economically with THOROSEAL PLASTER MIX

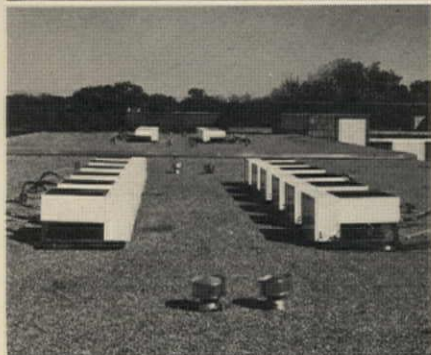
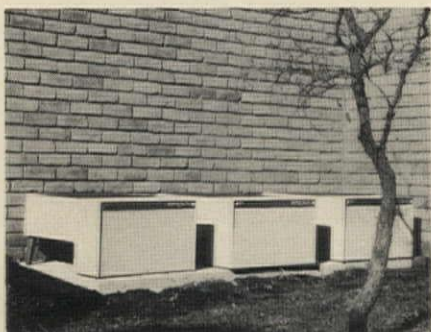
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DEPT. 70-HH-2 • 7800 N.W. 38TH ST., MIAMI, FLORIDA 33166

Tenant control

controls tenants

Keeps them in their place: your building. It's a fact that a long, happy tenancy needs individual apartment-by-apartment climate control. Fresh, clean air. At the right temperature and humidity.

Lennox modular heating/cooling systems are built to fill individual comfort needs, tenant-controlled. And Lennox systems are not troublemakers. For tenants, or owners. They're quality-built, for long, dependable service, low maintenance.



Owner's costs are predictable, too: long-term guarantees cover critical components, long-term service contracts are available. And you have the added protection of single-source responsibility: Lennox.

Lennox gives you the widest choice. Any type, size, fuel. Indoor or out. Roof-mounted. Ground-level. Thru-the-wall. Combination or remote cooling. *And now: the new Lennox HS8 condensing unit – compact, low-silhouette easy-to-hide; with isolated compressor chamber for new quietness.*

Get the whole story on tenant control. Write Lennox Industries Inc., 835 S. 12th Avenue, Marshalltown, Iowa 50158.

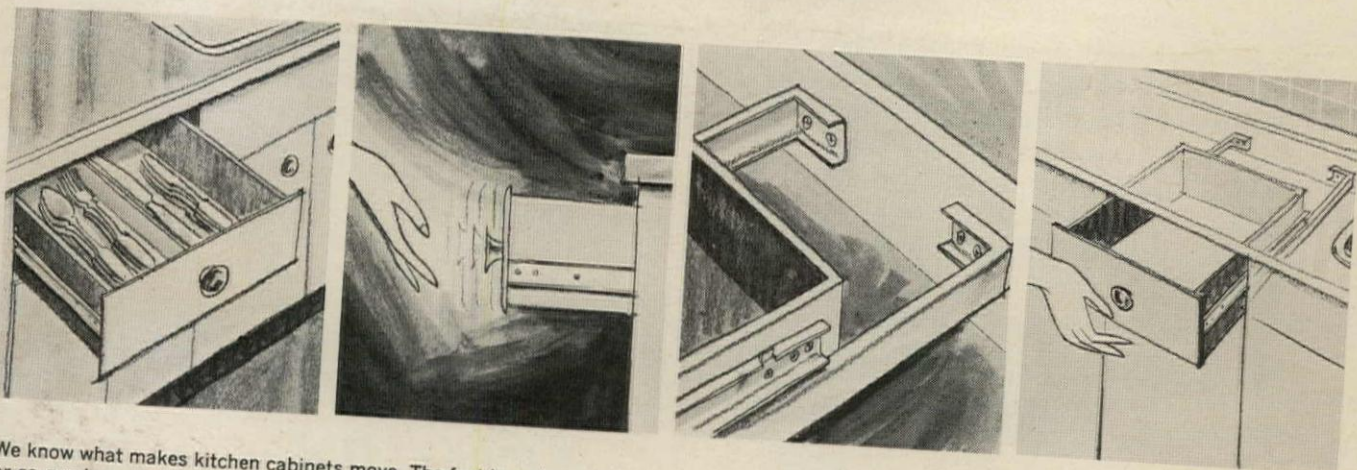
LENNOX
AIR CONDITIONING • HEATING

Top photo: Each tenant controls his own Lennox heating/cooling system at Brooktown Apartments, development of 400 garden-type apartments in Dallas suburb of Addison, Texas. New knee-high Lennox HS8 condensing units can hide easily behind future plantings. Developers: Brooktown Properties. General contractor: C.C. Blaylock Construction Co.

Bottom photo: Low, new-design Lennox cooling units hide on roof, provide individual tenant control for Mi Amigo Apartments, a 149-unit complex under construction in Dallas. Owners: George T. Connell and M.I. Harris, Jr. Building contractor: GTC Company.

Be picky.

Grant's 336 Slide comes in 4 styles.



We know what makes kitchen cabinets move. The fact is, we've a dozen or so good reasons in our catalog of slides—one of which is the 336. Select it in any of its 4 variations and you've bought the ability to make good cabinets better. The 336 is available with 1) all of its standard

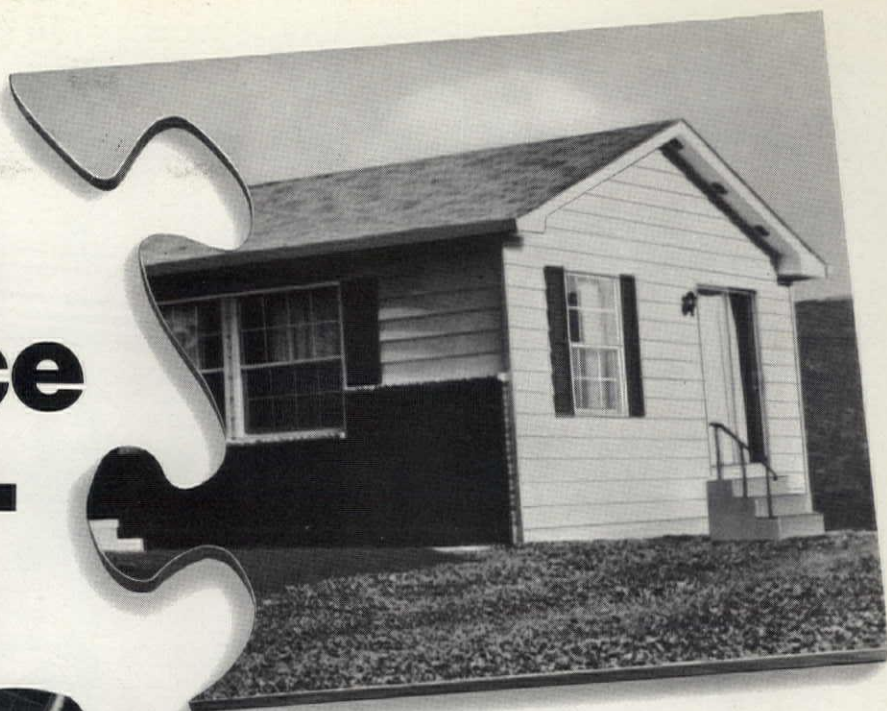
features, such as nylon ball bearing rollers, positive stop action, only $\frac{1}{2}$ " side space and up to 75 lb. load capacity, 2) self-closing feature, 3) rear mount feature, 4) self-closing and rear mount combination. So, be picky. It pays.

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Because of the Scotch Nail's extra holding power, home builders can keep labor costs down. It costs money to take a carpenter off one job to re-nail loosened trim and mouldings on another job.

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Please send your Scotch Nails flyer (D52549) in the quantities noted for the builders listed on the attached sheet. Firm name, location, telephone number, and shipping address are included for each.

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Firm _____ Phone _____
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Imagine an exterior wall cladding with all the beauty and durability of stone. Plus the low cost, easy installation and maintenance freedom of plywood. And you're into Sanspray®. A natural stone aggregate bonded to plywood. The most exciting thing to happen to exteriors in a long, long time.

That's Sanspray's large aggregate pictured above. There's also a small aggregate (equally distinctive). And a

range of colors you have to see to appreciate; like Tangerine, Pearl Gray, Gaelic Green, Monterey Sand... and others.

But the hidden beauty of Sanspray lies in its low cost—far less than most stone and masonry wall claddings. Far lighter, too, and much easier to install. Saw it. Drill it. Glue it. Nail it directly to framing members. Then forget it. Because Sanspray is virtually maintenance-free,

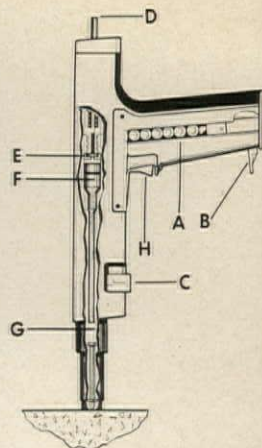
in all climates. Sanspray. The beauty treatment for all residential, light commercial and industrial buildings. Find out more about it at your local U.S. Plywood Branch Office.



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A piston tool that drives ten fasteners in less than a minute

This is the semi-automatic version of a powder-actuated tool introduced last year (H&H, Mar. '69). The original model took a single power pellet and was actuated by a hammer blow. This model takes a track of ten pellets and is actuated by a trigger.

The tool drives either pins or threaded studs up to 3" long and

fastens wood or steel to concrete or steel. It weighs 5½ lbs., can be used in one hand horizontally into furring (photo, left), down into drywall track (center), or up into ceiling track (right).

The operator inserts the fastener, then drops a track of pellets into the channel in the handle (A on drawing), presses a lever (B) to

move a pellet into firing position, places tool on work surface and presses hard until an indicator (D) shows tool is engaged. He then squeezes the trigger (H) which actuates the pellet (E) that drives the piston (F) against the head of the fastener (G). The whole operation takes about six seconds.

Eight levels of power can be se-

lected by turning the dial (C). The tool cannot drop-fire or fire accidentally in the air. The pellets themselves are harmless if dropped, struck, crushed, or ignited. Piston should withstand 7,500 fastenings before replacement is necessary. Ramset, New Haven, Conn.

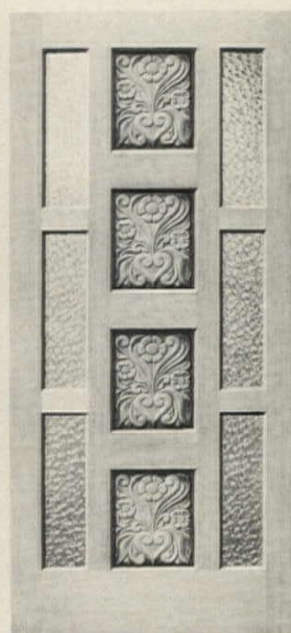
CIRCLE 250 ON READER SERVICE CARD



A deluxe unit offers three feet of cooktop

The 36"-wide electric surface section has four coils, plus a barbecue grill that is interchangeable with a Teflon-coated griddle. Two of the elements are high-speed 2,700-w coils. Rotary controls for

the coils are located on the eye-level hood, while the griddle/grill control is located at the rear. In chrome, white, avocado, copper or gold. Hotpoint, Louisville, Ky. CIRCLE 251 ON READER SERVICE CARD



A carved wood door that sells for less than \$100

The door at left sells for \$75. With wood panels instead of glass, it can be delivered for \$65. It is carved on both sides and carries a five-year guarantee. The manufacturer, a producer of custom carved doors, found that builders would not pay more than \$85 for doors, even for \$85,000 houses. So this one was designed specifically to meet their price demands. The manufacturer's line also includes stock doors from \$150 to \$225, custom doors up to \$600, plus design-your-own doors for shopping centers, motels, or whole project themes. Architectural Specialties, San Francisco.

CIRCLE 252 ON READER SERVICE CARD

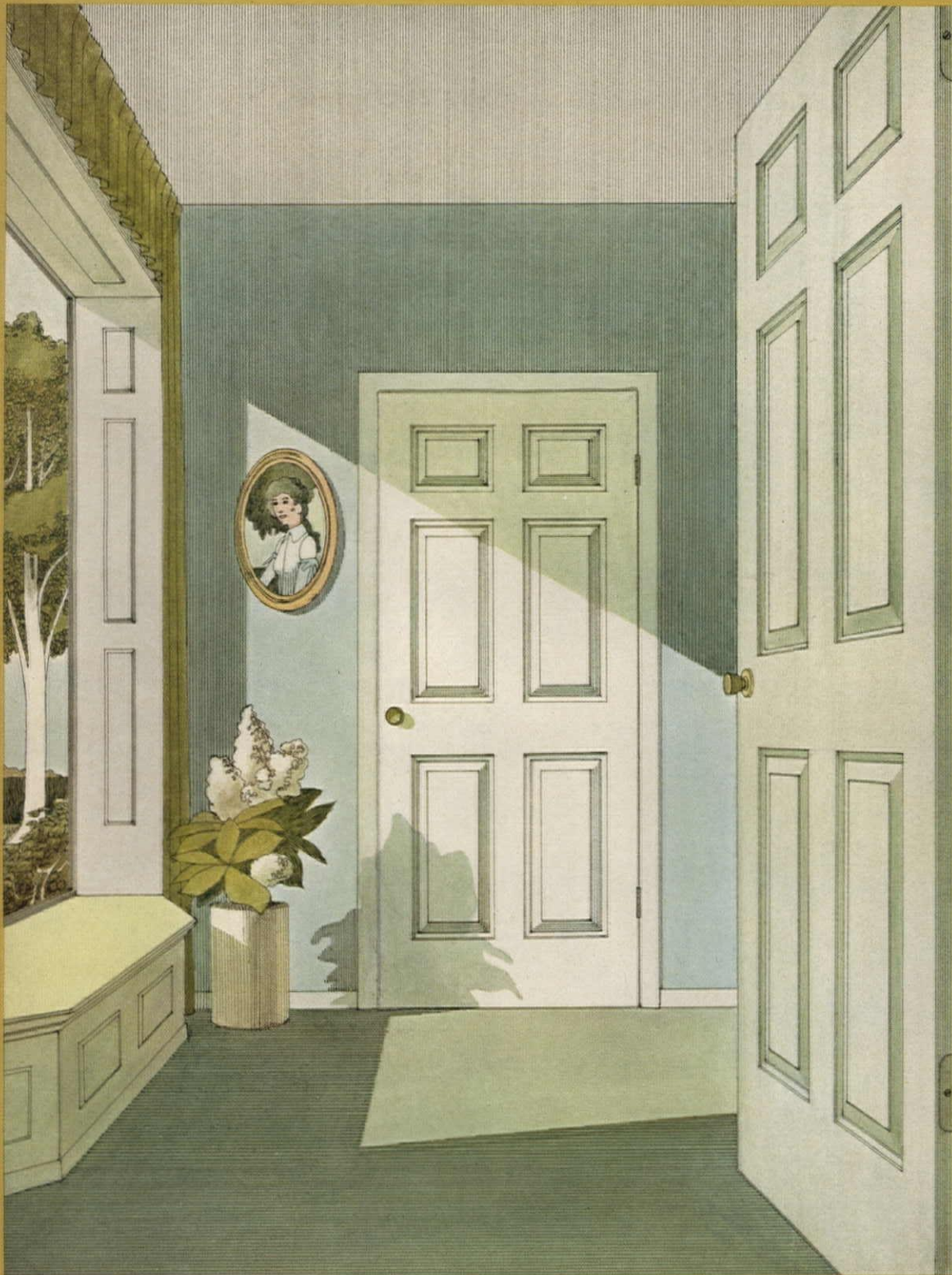


Deluxe cabinets look like fine maple furniture. Wood has baked-on vinyl-based sealer that eliminates moisture-caused warping, provides lasting protection. High-

style gold hardware has large easy-grip handles and pulls, hinges are self-closing, shelves are adjustable. Tappan, Mansfield, Ohio.

CIRCLE 253 ON READER SERVICE CARD

New from Caradco... a revolutionary Colonial Door



**The
Molded
Door
with the
deep-carved
look.**

The style is from a period known for graceful forms. You get authentic six-panel colonial door beauty and elegance. Only now it's molded by a new Caradco process into one-piece faces that can't split, check or shrink—all factory primed. And you get it for less than the cost of conventional panel doors. Feature these doors as a major interior design extra. Show homebuyers the steeply beveled panels that yield deep shadow lines like handcrafted doors of colonial days. Let them feel the wood-textured surface. You'll find tremendous buyer appeal in Caradco molded doors. Write us for full details.

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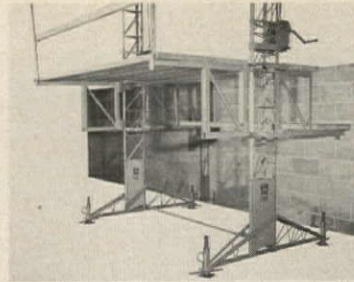
CIRCLE 104 ON READER SERVICE CARD



Mobile washing equipment washes, degreases, waxes, de-ices, or sanitizes contractors' equipment, mobile homes, signs, even buildings. Unit can be mounted on a pickup truck as shown, in an

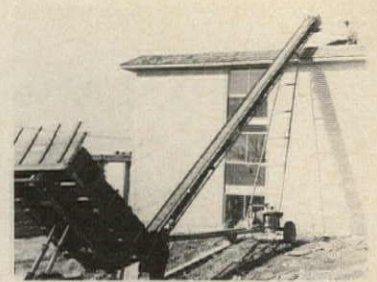
enclosed van for year-round use, or on a trailer. Pressure at wand is 500 psi. Easily controlled fan-shaped spray. Aero Wash Systems, Quakertown, Pa.

CIRCLE 200 ON READER SERVICE CARD



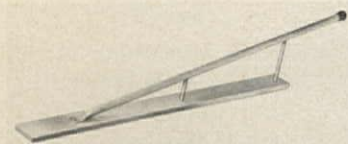
Multi-level scaffold has removable and reversible arms. If the front arms are removed, the platforms can bypass overhangs as much as 33" from the wall. If both arms are removed, the 20½'-high towers are easier to transport and store. Can be on one, two, or three levels, or any combination up to 90" wide. Morgen, Yankton, S.D.

CIRCLE 205 ON READER SERVICE CARD



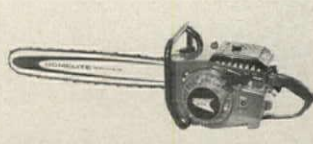
Conveyor belt carries roofing gravel, roll roofing, and other equipment and materials at angles up to 30°, may also be equipped to handle materials at elevations up to 40°. The 16"-wide chevron belt has hydraulic drive, comes in 42', 50', and 62' lengths, may be powered by gas or electric motors. Mulkey, Lee's Summit, Mo.

CIRCLE 206 ON READER SERVICE CARD



Long arm darby floats wide slabs without any knee planks. Hollow magnesium blade is 4" wide (1" wider than standard) and lightweight: the 5' length weighs six lbs., the 4' length weighs only 4¾ lbs. Goldblatt, Kansas City, Kans.

CIRCLE 201 ON READER SERVICE CARD



Automatic chain saw, engineered for more power and longer life, now has: a new type of combustion chamber, improved exhaust, increased air cooling, magnetic trigger ignition, and more. Homelite, Port Chester, N.Y.

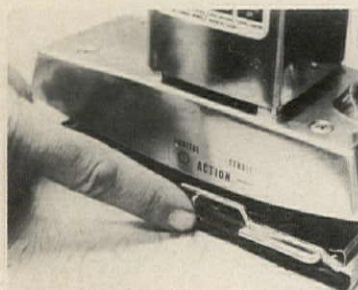
CIRCLE 202 ON READER SERVICE CARD



Versatile trencher, with selected attachments installed, can be towed to the site on its own trailer and used for trenching, direct-burial line-laying, horizontal bor-

ing, and backfilling—without ever changing attachments which are controlled from operator's seat. Davis, Wichita, Kans.

CIRCLE 207 ON READER SERVICE CARD



Convertible sander, at the flick of a switch (photo, left), changes from a straight sander to an orbital one (photo, right). The 1½-hp motor delivers 4,000 strokes or orbits a minute, is cooled by a powerful air intake, and has ball and oil-impregnated bearings.



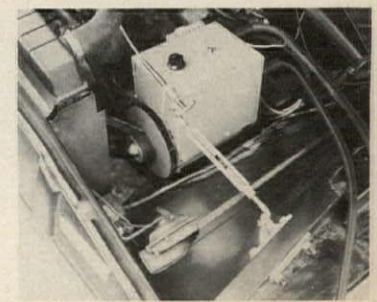
Without its auxiliary handle can go right into corners, may be used flush to adjacent right-angle walls. Pad is 3⅝" x 7¼", can be covered with paper for rough sanding, lambs wool for soft polishing. Stanley, New Britain, Conn.

CIRCLE 203 ON READER SERVICE CARD



Portable welder is powered by pickup truck engine. Designed for compact under-the-hood mounting, it takes up no truckbed space. The standard mounting kits available are for all late model Ford, Chevrolet, Dodge, and GMC pickups, and custom kits allow unit to be used with any other power supply. Speicher Bros., Celina, Ohio.

CIRCLE 208 ON READER SERVICE CARD



Miniature mixer goes into places where wheelbarrows are usually used. Its drum holds one yard of concrete for a patio or pool deck, for sign posts, light standards, maintenance jobs, etc. Mounts on pickup truck, has hydraulic drive and controls, comes with fenders, lights, and flaps for highway use. Gay Lee, Belmont, Calif.

CIRCLE 204 ON READER SERVICE CARD



Symtrol Valve Company, a subsidiary of Symmons Industries Inc.

**This is our new Temptrol '76,
the non-scald Shower valve you
won't get burned with.**

It's a lot of class for a little cash.

Our new Temptrol '76 pressure-actuated non-scald shower valve costs just about what you're now paying for conventional shower systems. Maybe a little less.

Installed, it looks like a million dollars.

There's never been a valve like it built for the home market before.

It's an all bronze and stainless steel unit,

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).

But maybe the real beauty of the Temptrol '76 is that it'll last and look good for the life of the house.

And make you look good, too.

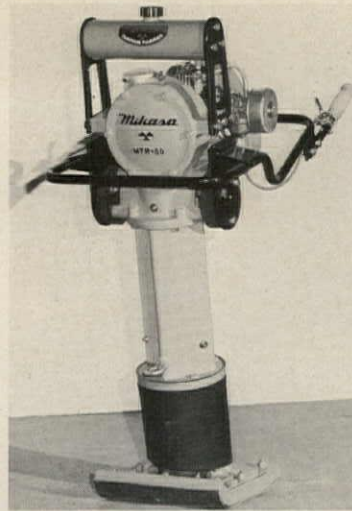
Our new Temptrol '76 is the most revolutionary part of the Bathroom Revolution. We've got a booklet that tells you how you can get in on it. Just write: Symtrol Valve Co. 31 Brooks Drive, Braintree, Mass. 02184.

Temptrol '76



Maintenance tractor, good for use on golf courses, around recreation areas and garden apartments, has a low turf compaction. Shown here with a 60"-wide three-blade center-mounted rotary mower, it can also be used to pull gang mow-

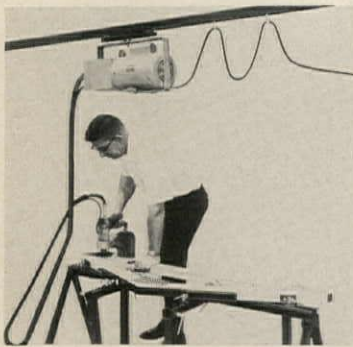
ers. It is powered by a 15-hp water-cooled engine, has a three-speed transmission, and panel-cluster controls. Other attachments include disc harrow and snow blade. International Harvester, Chicago. CIRCLE 209 ON READER SERVICE CARD



Tamping rammer is small and light, but delivers a high-impact force. Perfectly balanced tool will propel itself on level ground. Can be operated with one hand and comes with a cart so it can be transported by one man. Ataka America, Denver, Colo. CIRCLE 213 ON READER SERVICE CARD



Precision dado head has two outside $\frac{1}{8}$ "-thick saws, bevel ground for smooth cutting. Inside chippers are $\frac{1}{16}$ ", $\frac{2}{8}$ ", and $\frac{1}{4}$ ". Head comes in 4", 5", 6", or 8" diameter: two smaller diameters produce 10/16" cuts. Cocker Saw, Burt, N.Y. CIRCLE 214 ON READER SERVICE CARD

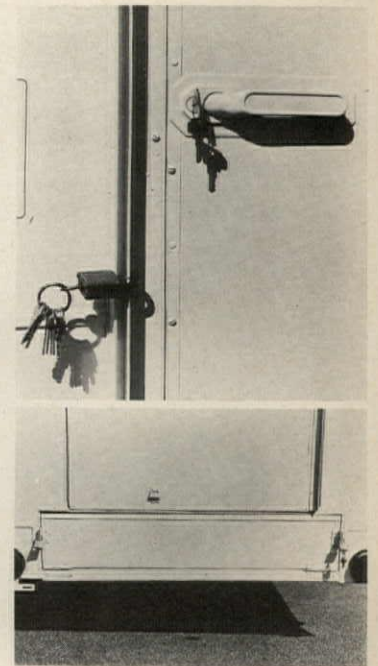


Truss press makes the manufacture of trusses not only a one-man operation but a one-handed one as well, as the man above demonstrates. The heavy-duty unit squeezes truss clips from both sides at once to eliminate turning trusses over and speed the process. Tool operates on 115v. Works with any truss design. Panel-Clip, Farmington, Mich. CIRCLE 210 ON READER SERVICE CARD



Vandalproof trailer is almost impossible to break into. Steel bars protect the small high windows. And, in addition to keyed locks on the doors (above right), padlocks can be used through the parallel angle iron rails, bolted to both

door and trailer, that run from top to bottom and act as reinforcement. There is also an underfloor compartment (lower right) which can be double padlocked. Wells Cargo, Elkhart, Ind. CIRCLE 215 ON READER SERVICE CARD



Undercutting saw cuts flush with, parallel to, and up to $\frac{1}{4}$ " above the floor; or it cuts flush with a vertical surface and downward; and it can cut into right-angle inside corners. It undercuts jambs or hanging doors in place. A safety feature requires that trigger switches in both handles be pulled. BuzzMaster, Evanston, Ill. CIRCLE 211 ON READER SERVICE CARD



Versatile landscraper has a new feature that increases its usefulness: a cutting edge and curved mouldboard at the rear of the tool. The cutting edge cuts and rolls the dirt when the scraper is going backward, and it is hinged at the top so it swings out of the way when the scraper is going forward. IMCO, Neodesha, Kans. CIRCLE 212 ON READER SERVICE CARD



Tractor scraper has new features: a V-8 turbocharged engine for more horsepower, an eight-speed semi-automatic transmission, redesigned fenders for greater wheel

clearance, an emergency braking system, a larger fuel tank, and an easier-to-service transmission. Caterpillar, Peoria, Ill. CIRCLE 216 ON READER SERVICE CARD



The Kingstowne as built by James E. Carey, Daytona Beach, Florida

Copyright © Boise Cascade Corporation 1970

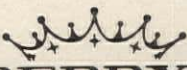
Now builder Jim Carey has a second source of income, all because of the Kingsberry Man.

Meet Jim Carey of Daytona Beach, Florida. A veteran of 18 years as a builder with 1200 homes to his credit. Which means Jim has a pretty thorough knowledge of the construction business. But until last year, he hadn't met the Kingsberry Man, and he had never built an apartment. Now that he has, the venture is really paying off. Jim built six apartment buildings. Thirty-six units. Solid, well-planned Kingsberry apartments.

And this is where the second business came in. Jim's apartments look great. Renting is no problem. So Jim owns, rents, and profits from his own creation. The Kingsberry Man was the key. Jim puts it this way: "He handles so many details for me—I have more time to supervise a broader operation and increase my production."

How does he feel about Kingsberry apartments? "Top quality materials and precise engineering—so everything fits together perfectly. And financing? I can tell you the Kingsberry reputation helped me get apartment money fast!"

From now on, Jim Carey plans to stay with Kingsberry. How about you? To meet the Kingsberry Man in your area, just mail the coupon.



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Rudy A. Brown, Director-Marketing/Kingsberry Homes/Dept. HH-9,
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Please send more information on the Kingsberry program and have the Kingsberry Man call on me. I presently have _____ lots ready to build on. I have built _____ homes and/or _____ apartments during the past twelve months.

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Address _____ Phone _____

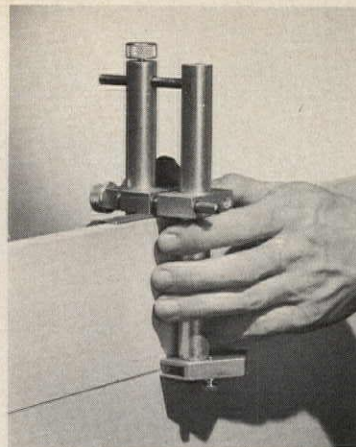
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Concrete pump, mounted on a one-ton pickup truck, becomes a mobile pumping unit for small contractors. Only a few bolts are needed to attach the unit to the truck frame, and it takes less than an hour. Features include: a 60-

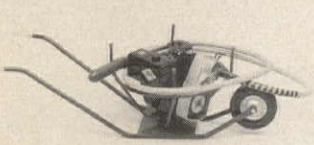
hp diesel engine, a pump throttle that controls the rate of flow from five to 50 yds. an hour, hinged side panels for easy access to all parts, and overhead storage racks for pipe. J.I. Case, Racine, Wis. CIRCLE 217 ON READER SERVICE CARD



Wallboard scribe uses two heavy-duty knife blades to score both sides of sheet, which can then be bent in either direction for a clean break. Tool eliminates uneven edges, broken sections, can be adjusted for any thickness between $\frac{1}{4}$ " and $1\frac{1}{4}$ ", is best for pieces less than 6" wide, such as those at doors and windows. W.H. Enterprises, Fremont, Calif. CIRCLE 220 ON READER SERVICE CARD

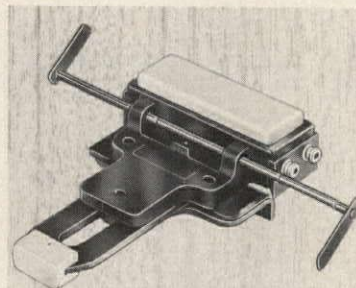


Variable speed drill operates at any speed between 0 and 2,250 rpm with just a squeeze of the trigger. The $\frac{1}{4}$ " drill can also be teamed with various accessories to hole saw, grind, sand, clean, score, bolt, or buff. Its heavy-duty plastic handle is contoured for a firm grip, is resilient, and impervious to heat or cold. Black & Decker, Towson, Md. CIRCLE 221 ON READER SERVICE CARD

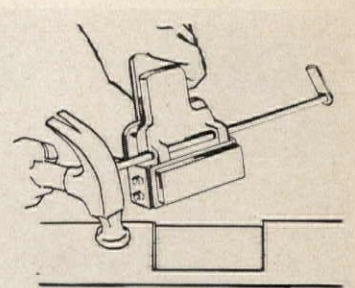


Heavy-duty vibrator has a 6-hp. gas engine, operates at 6,000 to 9,300 vibrations a minute. The unit comes with a wheelbarrow base (photo, left) or a pan base (photo, right), has a 360° swivel mount and flexible shafts from 3'

to 35' long. Four sizes of heads are available: $1\frac{1}{4}$ ", $1\frac{1}{2}$ ", $1\frac{3}{8}$ ", and 2" in diameter. The smaller ones also come with fins for more contact with concrete. Stow, Binghamton, New York. CIRCLE 218 ON READER SERVICE CARD



Mortise maker makes unvaryingly accurate mortises in half the usual time. Three vertical blades form the outline of the mortise, and a sliding chisel blade makes the undercut. There's no danger of splitting wood outside the out-



line, and depth is controlled. Tool makes a $3\frac{1}{2}$ "x $1\frac{1}{8}$ "x.125" mortise for $3\frac{1}{2}$ "x $3\frac{1}{2}$ " hinges exactly placed on a $1\frac{1}{8}$ " interior door. Blades are sharpenable, replaceable. LP Mfg., Chicago. CIRCLE 222 ON READER SERVICE CARD



Compact loader, designed for work in very tight areas, can turn 360° within its own length. It can lift up to 1,700 lbs. up to 10' high. It is powered by a V-4 air-cooled engine, has a variable-speed four-wheel drive with multi-disc trans-

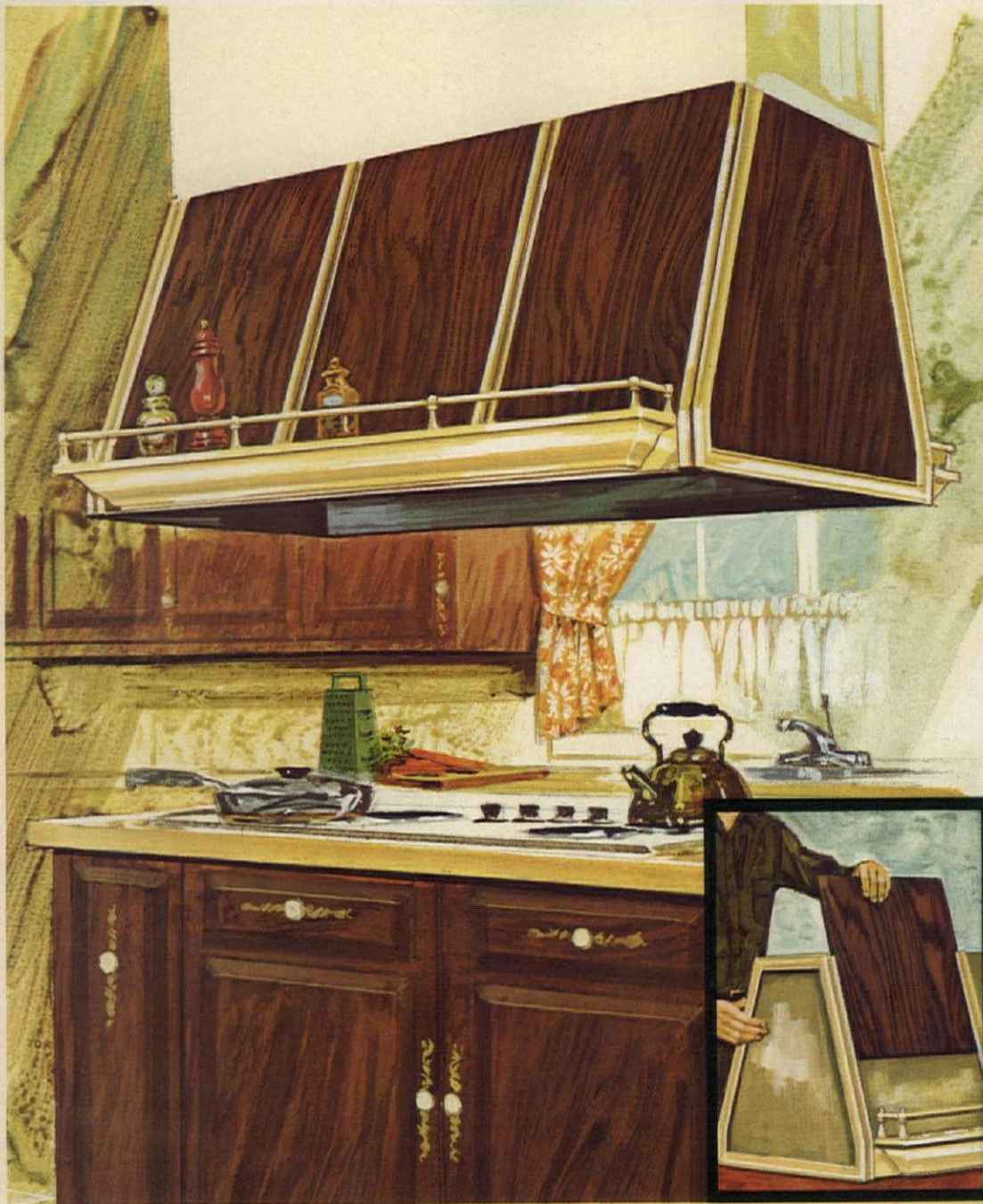
mission clutches for each wheel. Accessories include: all-weather cab with windshield wiper, roll bar, six buckets, two pallet forks, and front and rear working lights. John Deere, Moline, Ill. CIRCLE 219 ON READER SERVICE CARD



Instant flatbed is possible with a patented hitch that mounts in the bed of a pickup truck. To attach trailer, a crossbar is inserted; to use truckbed as usual, crossbar is removed in seconds. Flatbed is 25' long, 12' wide, can carry up to

10,000 lbs. on its tandem axle system. For loads up to 15,000 lbs. a third axle is available, and for loads longer than 25', longer units are available. Classic, Sturgis, Michigan. CIRCLE 223 ON READER SERVICE CARD

Leigh products help you sell!



Gourmet KITCHEN-CRAFTED HOODS BY Leigh

NEW . . . the only truly "decorator" range hood on the market today. The Gourmet range hood is available in wall and island/peninsula style in a choice of five colors: Avocado, Coppertone, Harvest Gold, Black or White. And . . . any model can be easily "customized" to match the wood of kitchen cabinets . . . simply insert your matching panels. Full length spice rack and trim in antique brass or pewter. Choice of Taskmaster (375 CFM) or Super (800 CFM) Power Pac blower units. Competitively priced for quick sale.

CIRCLE 14 ON READER SERVICE CARD



Alarm Lock by Leigh frightens away intruders. Two way protection — chain door guard and a continuous burglar alarm. Easily installed, no wiring (uses 2 size AA batteries). Packaged for quick sale. Award winning demonstrator.

CIRCLE 11 ON READER SERVICE CARD



A NEW line of decorator aluminum shutters in soft, glare-free white, green or black. See-through packaging plus a display carton makes the new Leigh shutters a quick moving high profit item.

CIRCLE 12 ON READER SERVICE CARD



Williams presents the Lady Guinevere line of fine bath vanities. A striking flaxen beauty styled in the tradition of silver blond hand-rubbed oak.

CIRCLE 13 ON READER SERVICE CARD



Leigh manufactures more than 200 building products

LEIGH PRODUCTS, INC.

MAIN OFFICE: COOPERSVILLE, MICHIGAN 49404

Manufacturing plants in eleven locations: East Coast Warehouse:

Edison, New Jersey. West Coast Warehouse: City of Commerce, California

CIRCLE 15 ON READER SERVICE CARD

H&H SEPTEMBER 1970 119

Tune in!



Stanley hardware makes doors slide beautifully.



Tune right in and slide! Stanley sliding door hardware features fine tune hangers that permit simple, visual door alignment. Nylon wheels slide along non-jamming V-groove tracks. Tan-colored glides blend attractively into most floor colors. A load of other

pluses make Stanley your one and only choice for sliding door hardware. Write for our brochure H411R. Stanley Hardware, Division of The Stanley Works, New Britain, Conn. 06050.

STANLEY
helps you do things right

In Canada: The Stanley Works of Canada Limited

You are looking at range hoods that are all brushed aluminum, with interchangeable decorator front panels. The unusual styling finally accomplishes for hoods a contemporary built-in look to match built-in kitchen appliances. Air King makes them in ducted and ductless models.

No one else makes anything like them at all.

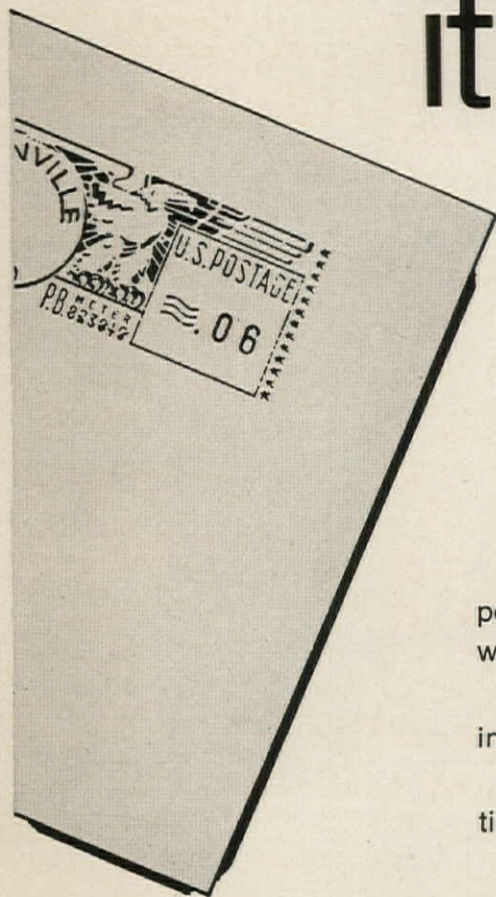


for the built-in look ***Air King***

NEW SQUARED-FRONT RANGE HOODS

BERNS AIR KING CORP., 3050 NORTH ROCKWELL, CHICAGO, ILLINOIS 60618

Shouldn't your business get what it's paying for, too?



No matter how much your business uses and depends on mail service, you're not getting your money's worth...unless you use ZIP Code.

It doesn't matter whether you're sending out an invoice. Estimate. Announcement. Brochure. Or what.

A ZIP Coded letter requires fewer sorting operations at your local Post Office.

Which means it has a better chance of getting out earlier.

And into your customer's hands sooner. (Even if he lives in the same town.)

Can you think of a better deal for three seconds of your time?

Mail moves the country - ZIP CODE moves the mail!



advertising contributed for the public good





Raynor builds garage doors for anything that rolls!

Highest quality overhead-type sectional garage doors for virtually every application. Residential. Commercial. Industrial. In every material . . . wood, aluminum, fiberglass, and steel. All backed by the finest guarantees in the industry; guarantees made possible by complete manufacturing control, exhaustive product testing, rigid quality control, and incorporation of the latest engineer-

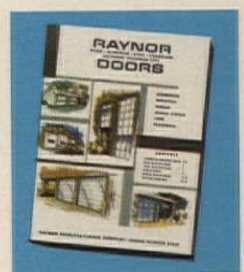
ing advances. Such as data film registration for permanent parts-list records. Custom-wound springs. Extra heavy tracks. Customized hardware to fit all installation situations. Electric operators for every door. You name it, Raynor has it. For selection, delivery, and quality . . . depend on Raynor Manufacturing Company, Dixon, Illinois 61021.



RAYNOR
The Brand You Can Depend On

CIRCLE 113 ON READER SERVICE CARD

Send for literature





Wood with an engineering degree

A glimpse into the beauty and efficiency of wood as a structural material is a look into the future. The historic ties between man and wood date from the dawn of time; now Potlatch laminates it into countless forms as

the most versatile of modern materials. It is lighter and more firesafe than metals, yet pound for pound it is stronger than steel. It can be precisely engineered to meet almost any conceivable requirement, yet retain the

beauty that only nature could create. So bring your building problems to our great engineers and technicians. They'll help you graduate, with honors. Potlatch Forests, Inc., P.O. Box 3591, San Francisco, Calif. 94119.

Potlatch

Potlatch, the forests where innovations grow... in wood products, paperboard and packaging, business and printing papers.

day & night



**No wash
...lots of wear:**

new Dustrap III electronic air cleaner

In this age of disposable items — vacuum cleaner bags, diapers, clothing — Day & Night brings you an improvement in electronic air cleaners: disposable collector pads.

No water, no messy wash kits, no shutdown for dryout time. So simple in concept (the collector pad section is slide mounted), the most routine maintenance can be done by the homeowner.

Dustrap III comes in three models with popular CFM ranges of 600-1200, 1000-1600, 1600-2400.

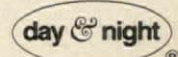
Engineered for trouble-free performance and designed for today's home requirements.

Here's how.

Fresh new styling... same air inlet/outlet dimensions with interchangeable elements, permitting right- or left-hand power-and-service access... completely removable power-access door contains all operating controls and *no* dangling connections... new voltage-monitoring power pack for lower operating costs and improved filtering.

Dustrap III has high efficiency in making the air indoors cleaner and freer of dust and pollen. Keeps furnishings, drapes, and wall coverings brighter, longer lasting.

From every viewpoint — architect, designer, builder, contractor, homeowner... and housewife, too — Day & Night's new Dustrap III wears well. And so does the home it's in.



DAY & NIGHT MANUFACTURING COMPANY
La Puente, California • Collierville, Tennessee

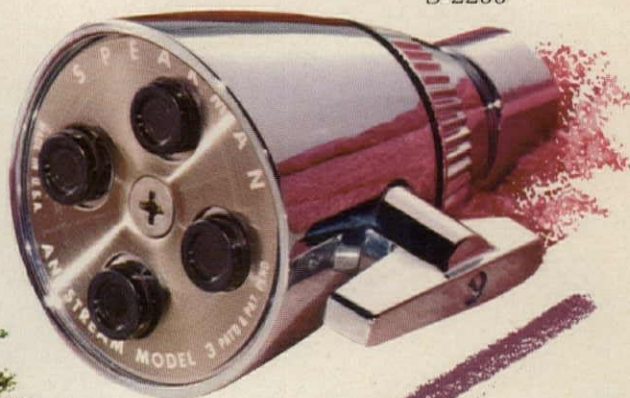
SPEAKMAN

Anystream[®]

SHOWER HEADS



S-2252



S-2253

You are looking at the world's most popular shower heads. In addition to distinctive styling and flawless workmanship, they offer design advantages found only in Anystream.

Even at low pressure, a solid spray pattern without center hollows or voids.

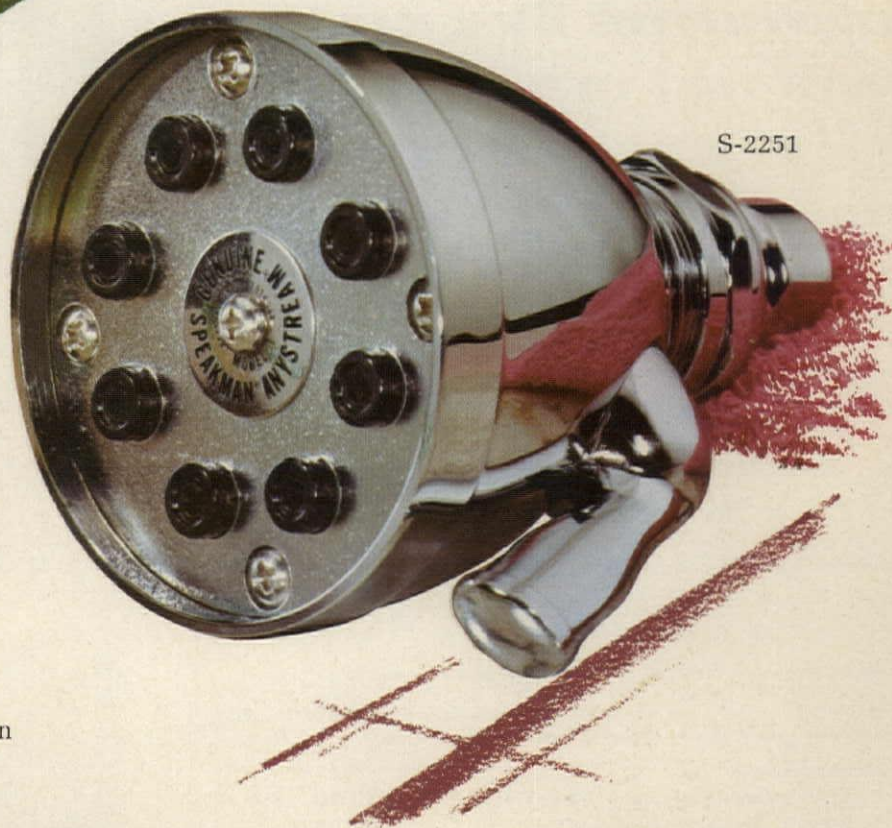
Adjustable through a full spectrum of spray patterns from needle to flood.

Non-stick, deposit-resistant Lexan* plungers to practically eliminate maintenance.

Each shower head available with AUTOFLO, Speakman's patented water-saver.

Selection includes swivel ball-joint, wall-type and vandal-proof models.

Speakman Anystream: An eloquent expression of your ideas.



S-2251

Over 100 years of service to the nation's builders.

*TM General Electric Co.



SPEAKMAN[®] COMPANY • Wilmington, Delaware 19899 • In Canada—Cuthbert-Speakman, Quebec

**Why Not Install the Finest . . . When it Costs No More?
FENESTRA all-steel FOLDING CLOSET DOORS**

Fenestra Folding Closet Doors are the finest quality in the industry. Savings result from quick, fool-proof installation. Sizes and designs to meet any decor. Check your local Fenestra distributor . . . he's listed in the Yellow Pages under "Doors-Metal." Or write for full color brochure.



CIRCLE 119 ON READER SERVICE CARD

**Covers like paint,
performs like stain,
will not crack, peel
or blister**



**Cabot's
OLD
VIRGINIA
TINTS®**

A proven product combining the best features of a paint and a stain, Cabot's Old Virginia Tints offer unique advantages to the builder and architect.

- An oil-base flat finish of great beauty and durability.
- Suitable for wood, metal, masonry; applicable to all surfaces . . . striated, rough-sawn, smooth, previously painted.
- 20 distinctive colors . . . matching colors available in Cabot's Ranch House Hues, an oil-base stain.
- Easy to apply and maintain; waterproof and weather-resistant.

Samuel Cabot Inc. Dept. 920

One Union St., Boston, Mass. 02108
Please send color cards on Cabot's Old Virginia Tints

CIRCLE 120 ON READER SERVICE CARD



Gutters need never be clogged with leaves, twigs, or anything else again. This durable plastic netting is easily installed over the gutter, can be cut with ordinary household scissors, and does not form sharp metal edges to cut you.

Also it is less springy than metal netting so will not get in the way when you're trying to install it. In 25' rolls and is 6" wide for residential gutters. DuPont, Wilmington, Del.,

CIRCLE 236 ON READER SERVICE CARD



Unlimited varieties of wall textures and colors result when this new raked concrete surface finish is applied to block, brick, poured concrete, etc. Colors are custom blended and uniformity can be maintained over large areas. Raking can be shallow, straight, deep, or wavy. Finestone Corp., Detroit, Mich.

CIRCLE 237 ON READER SERVICE CARD

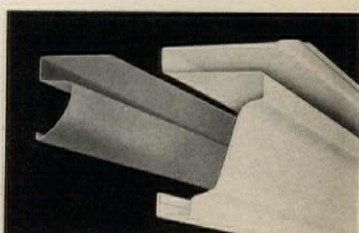


Beauty and practicality combine in these asphalt shake shingles of double-strip construction with self-sealing thermoplastic adhesive spots. Although they have the rough-hewn, cedar-textured look, they do not have the shortcomings of wood and come with a 25-year warranty. Bird & Son, East Walpole, Mass.

CIRCLE 238 ON READER SERVICE CARD



Deep-contour molding contributes to the total look in new homes as well as to the low maintenance afforded by aluminum soffit and fascia systems. The molding design projection is 2 3/4", which in



many cases eliminates a complete course of siding. Available in sage green, sandalwood, woodlawn brown, and white. Alside, Inc., Pittsburgh, Pa.

CIRCLE 239 ON READER SERVICE CARD

The Westinghouse Laundry Twins: they're stacked with savings.

You'll like the way they save you space.

Your prospects will like the Heavy Duty durability
that saves them trouble.




Here's how it stacks up: The Westinghouse electric dryer sits right on top of the Heavy Duty tumbler washer, and together they need only 27 inches of floor space. This means you can build a laundry room almost anywhere. In a kitchen, bathroom, or even a closet. And that's a feature that can help make your selling job a great deal easier.

You'll also appreciate the way the easy installation saves you time and money. You can even use our electric dryer that requires no venting. It has a water-cooled condenser that removes moisture from clothes and drains it automatically. As for your prospects, they'll be interested in the "Auto Dry" feature, ideal for permanent press fabrics.

They'll also like the Heavy Duty washer with its famous Weigh-to-Save™ Door, tumble action, multi-speed washing, self-cleaning porcelain wash basket, and automatic self-cleaning lint ejector.

And to top it off, everybody will love the beautiful styling of the Westinghouse Laundry Twins. Available in coppertone, avocado, goldtone or white.

You can be sure...if it's Westinghouse 

Make one stop at Westinghouse, your specialist for a complete line of major appliances backed by Sure Service.

OFFICE OF THE CLERK
UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA
P. O. BOX 28
Philadelphia, Pennsylvania 19105

LEGAL NOTICE

WITH RESPECT TO CLAIMS IN CONNECTION WITH PLUMBING FIXTURES

Pursuant to Rules 23(c)(2), 23(d) and 23(e) of the Federal Rules of Civil Procedure,
YOU ARE HEREBY NOTIFIED:

There are now pending in this Court approximately 300 related actions for treble damages for alleged violations of antitrust laws with respect to the sale of plumbing fixtures, trim, fittings and supplies. The defendants are certain plumbing fixture manufacturers, including those defined below as "Settling Defendants." Settling Defendants, while denying the alleged violations and liability on account thereof, have agreed to settle the claims of certain categories of claimants and, for the limited and exclusive purpose of effectuating such settlement, have agreed to the establishment of the temporary "Class" defined herein.

You may be a member of this Class and if so your rights may be affected by this litigation and the aforesaid settlement agreement. *This notice is not to be understood as an expression of any opinion by this Court as to the merits of any of the claims or defenses asserted by either side in this litigation or as to any amount that any claimant would receive on settlement*, but is sent for the sole purpose of informing you of the pendency of this litigation and the settlement described herein so that you may make appropriate decisions as to what steps you may wish to take in relation thereto.

1. The Litigation. The various complaints in this litigation generally allege a conspiracy among certain manufacturers (i) to fix prices on plumbing fixtures (including bathtubs, lavatories, sinks, water closets and urinals) as well as trim, fittings and supplies relating thereto, and (ii) to discontinue the manufacture and sale of regular (as opposed to the more expensive acid resistant) enameled cast iron plumbing fixtures. The time period of the asserted conspiracy is alleged in many of the aforesaid complaints to extend from at least 1956 to at least 1966. Recovery is sought for alleged overcharges on purchases either directly from the manufacturer (or indirectly, such as under installation contracts with contractors or from wholesalers or other distributors). In addition to the issue of liability each claimant would have to prove individual damages based on its own purchases. Defendants deny liability, contend that there was no illegal overcharge and assert that, in any event, the members of the Class are not necessarily the proper persons in the chain of title to any fixture entitled to recover even if liability were established. Accordingly, if the settlement described herein is not effectuated, and defendants prevail, members of the Class may receive no recovery whatsoever.

2. Defendants. The Settling Defendants consist of the following corporations: American Standard Inc., Kohler Co., Wallace-Murray Corporation, Universal-Rundle Corporation, Crane Co., Rheem Manufacturing Company, Borg-Warner Corporation and the Plumbing Fixture Manufacturers Association. In addition to the Settling Defendants, the following corporations have been named as defendants in some or all of the complaints filed in this litigation: Briggs Manufacturing Company, Gerber Plumbing Fixtures Corp., Ogdan Corporation, Mansfield Sanitary, Inc., Peerless Pottery, Inc., Kilgore Ceramics, Inc., Lawndale Industries, Inc. and Georgia Sanitary Pottery, Inc.

3. The "Class". The class to which the settlement is being offered consists of all (i) plumbers, plumbing and mechanical contractors and sub-contractors, and (ii) general contractors performing for others (each of which is severally referred to hereafter as a "Contractor"), excepting only persons named as defendants in any of the plumbing fixture antitrust actions presently pending against the Settling Defendants, persons having a controlling direct or indirect financial or managerial interest in any such defendant, and persons in whom any such defendant has any such interest.

If you are within the above defined category of persons, you will be a member of the Class unless you take the steps provided in this Notice to exclude yourself.

The following parties have been selected to represent the Class, and are hereinafter referred to as the "Class Representatives": The plaintiffs in *Nalco Plumbing & Heating Co., et al. v. American Radiator & Standard Sanitary Corporation, et al.*, Civ. No. 69-1256, presently pending in the

United States District Court for the Eastern District of Pennsylvania.

4. "Claims" of Members of the Class. This settlement relates only to claims arising out of purchases of plumbing fixtures, trim, fittings and/or supplies made by Contractors only when acting in the capacity as a plumber, and/or plumbing and/or mechanical contractor and/or sub-contractor, and/or general contractor performing for others and the terms "Claim" and "Claims" as used herein shall mean claims of Contractors arising out of such purchases in the aforesaid capacities only. By way of example only, if you have acted as a general contractor performing for others with respect to some projects, and have also acted as a builder-owner with respect to other projects, building on your own account, only your purchases made with respect to the first mentioned projects will be subject to this settlement.

5. The Settlement. In final settlement of all present and prospective Claims of all members of the Class, each of the Settling Defendants has agreed to pay the sum following its name (referred to hereinafter as the "Settlement Fund"): American Standard Inc.: \$849,000; Kohler Co.: \$399,000; Wallace-Murray Corporation: \$203,600; Universal-Rundle Corporation: \$183,400; Crane Co.: \$182,000; Rheem Manufacturing Company: \$98,000; Borg-Warner Corporation: \$85,000.

Commencing December 11, 1970, interest shall accrue on the Settlement Fund at the lesser of (a) 8% per annum or (b) the prime rate of interest as the same may be in effect from time to time, unless prior to said date the Settlement Fund has been deposited in Court.

All attorneys' fees allowed by the Court and all expenses of notice and administration incurred in connection with this settlement shall be deducted from the Settlement Fund.

In the event that any member or members of the Class request exclusion in the manner provided for below, any Settling Defendant which deems such exclusions to be substantial may withdraw from the settlement (and the Settlement Fund will thereupon be reduced accordingly) or, in the alternative, Settling Defendants may elect to have the Settlement Fund reduced by such amounts as may be agreed upon with the Class Representatives or which the Court may determine to be appropriate in view of the relative position of the members of the Class who have requested exclusion. If Settling Defendants representing in excess of fifty percent of the Settlement Fund withdraw, the Class Representatives may withdraw from the settlement on behalf of the Class.

The Settlement Fund, less the deductions and reductions (if any) referred to above, shall be divided among the persons entitled thereto in proportion to the number of "units" assignable to each such person. "Units" shall be assigned on the basis of Claims arising out of purchases made during the period October 1, 1962 to September 30, 1966, with the following items entitling the purchaser to the following "units":

A. Plumbers, plumbing and mechanical contractors and sub-contractors:

Item	Unit Value
Urinal or Bathtub	6 (six)
Water Closet, Lavatory or Sink	2 (two)

B. General contractors performing for others:

Item	Unit Value
Urinal or Bathtub	.6 (Six-Tenths)
Water Closet, Lavatory or Sink	.2 (Two Tenths)

If you are a member of the Class and neither exclude yourself in the manner provided below nor file a proper "Sworn Statement of Claim", you will be barred from any future recovery on any Claims and shall not receive notice of any further proceedings, hearings, or any other matter in connection with such Claims, including the entry of final judgment dismissing with prejudice any Claims you may have as a member of the Class against any and all of the Settling Defendants which are the subject of this litigation.

As a condition to disbursement of the Settlement Fund, the claims of all members of the Class who have not excluded themselves shall be the subject of final and unappealable judgments of dismissal with prejudice. However, such dismissals shall apply only to claims against those Settling Defendants that have not previously withdrawn from the settlement and their stockholders (other than a defendant), officers, directors, agents and employees, past and present. Such dismissals shall not affect the rights of members of the Class against Settling Defendants as to purchases made in any capacity other than as a plumber, plumbing or mechanical contractor or sub-contractor, or general contractor performing for others, nor the rights of the members of the Class against any other defendant; provided, however, that against any Settling Defendant which withdraws such class member shall have no right to recover for any sales directly or indirectly made by or attributable (by formulae or otherwise) to the remaining Settling Defendants.*

NOW, THEREFORE, TAKE NOTICE:

1. If you are a member of the Class defined herein, you will be bound to look only to the Settlement Fund for relief as to any Claims you may have against Settling Defendants, and will be deemed a party to this action to be included in and bound by any judgments rendered in connection with this settlement, unless, on or before October 12, 1970, you file a written election to be excluded from the Class.

2. If you are a member of the Class who does not elect to be excluded and you wish to receive a share of the Settlement Fund, you must file, not later than October 26, 1970, a Sworn Statement of Claim containing an acceptable covenant not to sue or you will be forever barred from recovery for any Claim you may have. A form for such Statement, containing this covenant, may be obtained from the Clerk of this Court upon request addressed to the address set forth in paragraph 3 *infra*.

3. Your election to be excluded from the Class, or your Sworn Statement of Claim, and all other documents to be filed of record in this litigation should be addressed to:

"Clerk
United States District Court for the
Eastern District of Pennsylvania
Attn: Contractors Committee
P.O. Box 28
Philadelphia, Pennsylvania 19105"

4. If you do not elect to be excluded from the Class, you may enter an appearance through counsel if you desire, and participate in the settlement through counsel.

5. If you are a member of the Class defined herein who does not elect timely to be excluded and who does not file a Sworn Statement of Claim on or before October 26, 1970, you shall not receive notice of any further proceedings, hearings, orders, or any other matters in connection with your Claims, including the entry of a final judgment dismissing with prejudice any Claim you may have against any Settling Defendant, and you shall be bound by all said proceedings, hearings, orders, or other matters.

6. If you have any questions concerning the matters dealt with in this Notice which you want to raise with counsel of record for the Class Representatives, the names and addresses of said counsel will be furnished on request.

John J. Harding,
Clerk

* Certain formulae for attributing unidentified sales to particular defendants are set out in the Agreement among certain defendants, dated as of November 1, 1968. Information concerning this Agreement as well as copies thereof may be obtained from the Clerk of Court upon request addressed to the address set forth in paragraph 3 *infra*.

We have great ideas going for you! Mellowood cabinets by Kitchen Kompact add up to a creative kitchen. A built-in wine rack is just one of the hundreds of features we can suggest to make your kitchen exciting.

But imagination is only part of

the story. More than 225 distributors cover the major market areas which means you get on-site delivery when you need it. There are many reasons why Kitchen Kompact is the number one cabinet manufacturer. Contact your nearest distributor. You'll find

him in the Yellow Pages. Or, write Kitchen Kompact, KK Plaza, Jeffersonville, Indiana 47130.



IMAGINATION!

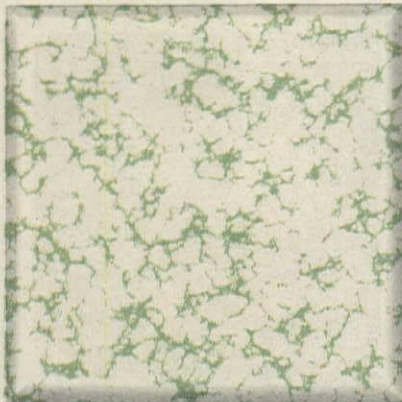


New from Oxford Tile ...

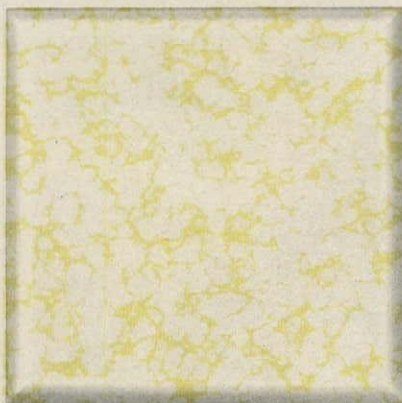
Morocco[®]

ceramic wall tile

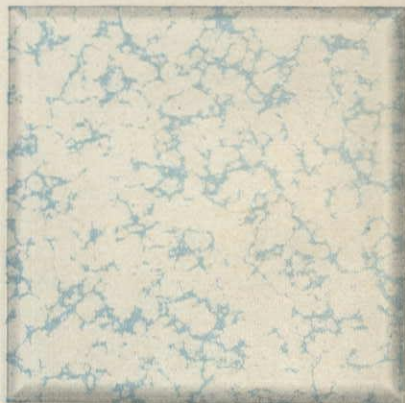
No. 203
Palm Green



No. 207
Dune Tan



No. 205 Citron Yellow



No. 204 Medina Blue

Morocco is an exquisitely beautiful tile comparing favorably with the finest handcraft ceramics of Safi. It has a marble-like pattern combined with delicate color and soft lustre. The effect is one of unusual charm and is especially recommended for whole wall installations such as in bathrooms and powder rooms. Morocco is also appealing in the kitchen or playroom

as well as in half-walls, room dividers, counter tops and other practical modern-day decoration.

The tiles are precision-edged and self-spacing. With the new adhesives and simplified method of application, installations are easy and foolproof.

Bathroom accessories available in harmonizing colors.

OXFORD TILE COMPANY,
CAMBRIDGE, OHIO





**To make it on the docks
you've gotta be tough.**

Tough enough to stand alone against the elements.

Tough enough to bear up under almost any weight.

Tough enough to be stepped on by 2000 people a day.

Grid Pattern Permaply® is that tough. Or it wouldn't be on the Governors Island ferry docks. And it's been there for more than 3 years. So think how long it could last on a patio, a balcony or beside a pool.

Grid Pattern Permaply combines the strength of plywood with a resin-fiber surface that withstands wear and tear.

The embossed grid pattern makes it skid-resistant. It needs no painting or finishing and is easily handled with regular carpentry tools. It comes in standard panels of 48" x 96", special sizes to 60" x 120", and in thicknesses from 5/16" to 3/4".

Grid Pattern Permaply is tough all right. Tough enough to last where other materials won't. Let's face it. Once you've made it on the docks, anything else has gotta be easy.



U.S. Plywood

A Division of U.S. Plywood-Champion Papers Inc.
777 Third Avenue, New York, New York 10017

LITERATURE

Transportation. The need for improved methods of transporting large quantities of people and products around the United States is the topic of a new 48-page booklet which deals with air, highway, and mass transportation. It reviews, through photographs and text, the problems and advances in transportation systems, and recommends ways for the reader and businessman to become active in improving our transportation, and hence, our environment. Caterpillar Tractor Co., Peoria, Ill. CIRCLE 300 ON READER SERVICE CARD

Prefab vacation homes. Ten brochure sheets with full color renderings and plans illustrate a new line of vacation homes from a two bedroom 480 sq. ft. cottage to a four bedroom Alpine house with 1,792 sq. ft. of living area. The line includes a complete range of styles and price ranges. Northern Homes, Hudson Falls, N.Y. CIRCLE 301 ON READER SERVICE CARD

Architectural panels. This new information sheet looks like the product it describes. It is a highly embossed, two-color sheet that simulates a dense, charcoal gray, monolithic architectural panel. The panels have the deep cleav-

age and texture of quarried stone but weigh one third less, and add a distinctive touch to accent walls, partitions, floors, fireplace facings, and any number of other areas in home, lobby, or reception area. Johns-Manville, New York. CIRCLE 302 ON READER SERVICE CARD

Educational Equipment. This 28-page, four-color catalog illustrates a complete line of visual communications equipment for school, conference room, office, or home. The line includes chalkboards, panels, bulletin board cases, and tackboards, and introduces a portable speech therapy unit for hospitals and schools. Includes installation instructions, specifications, detailed drawings, and photographs. Educational Equipment Corp., Kent, Ohio. CIRCLE 303 ON READER SERVICE CARD

Ceramic tile. Twenty-two high and low relief designs of large-scale tile are introduced in a new full-color brochure. Interior and exterior applications for floors and walls, installation details, and architectural specifications are included for fifteen colors of wear- and impact-resistant, frostproof tiles. American Olean, Lansdale, Pa. CIRCLE 304 ON READER SERVICE CARD

Cedar homes. A complete line of cedar cottages, A-frames, chalets, and clubhouses is described in a 36-page booklet, which includes full color photographs of one, two, and three bedroom houses with lofts, decks, terraces, and balconies. Designs suited to all ranges of family needs and budgets. Available for \$1 per copy from Lindal Homes, N.E. Inc., 2200 U.S. Highway 22, Union, N.J.



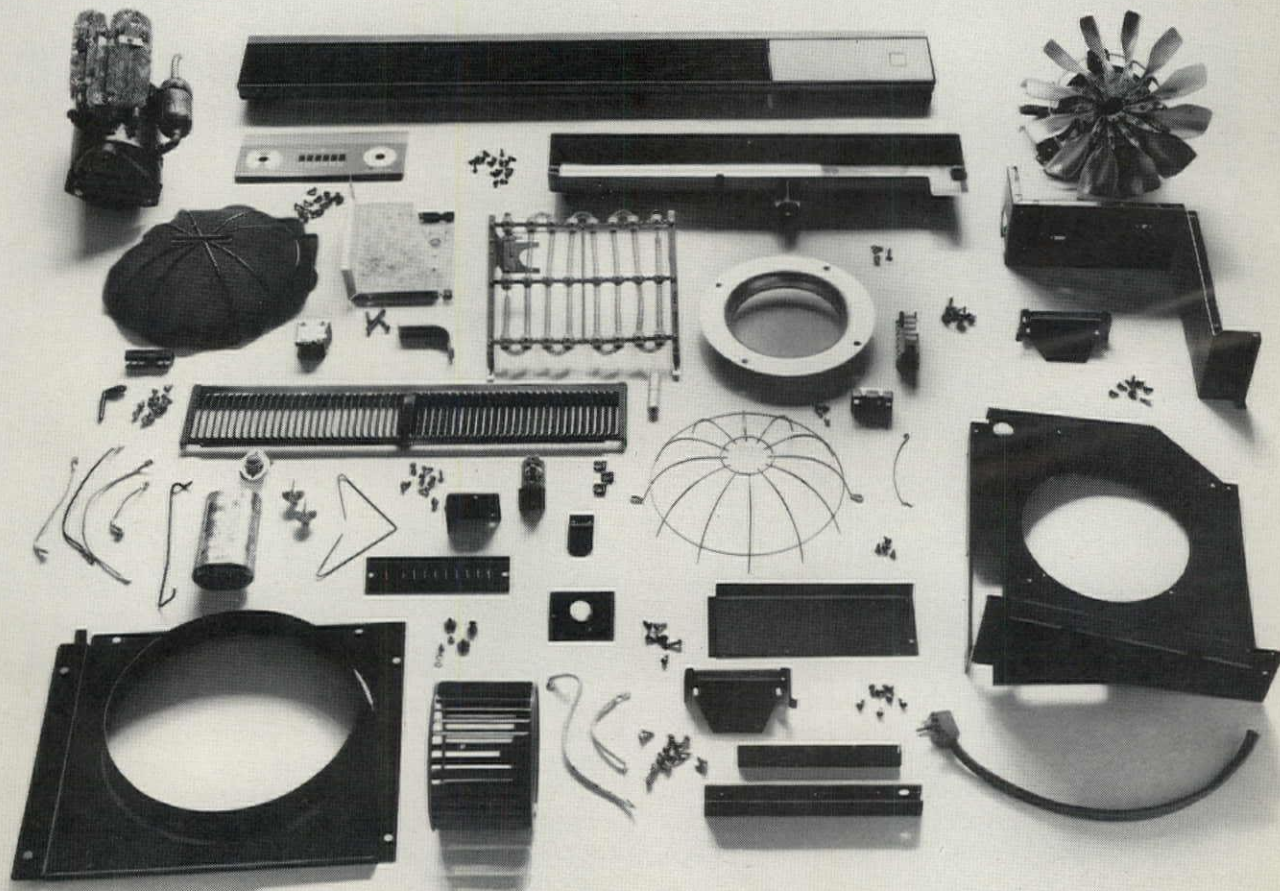
Redwood patios. Illustrations of typical applications, information on grades, finishing, and nailing, plus a diagram for laying a simple parquet patio floor similar to the one shown are included in a new data sheet which also discusses drainage and termite resistance properties of redwood. Low-main-

tenance redwood patios can be used effectively between beach or yard and house, and around pools. California Redwood Assn., San Francisco.

CIRCLE 305 ON READER SERVICE CARD

Product safety. The National Commission on Product Safety has issued its 1969 report of findings and recommendations dealing with the hazards of consumer products from toys and tools to architectural glass, household appliances, heating systems, paints, wiring, etc. Examples are cited to support the commission's findings on unreasonable hazards, and recommendations for government and industry standard regulation are made. Also included are studies of present safety regulations in this country and abroad, and of the legal roles of the various authorities—governmental and industrial—in supervising product safety. The final section of the report contains the commission's proposed Consumer Product Safety Act. A valuable aid in designing, building, and equipping safe and healthful homes. Available for \$1.75 per copy from the Superintendent of Documents, U.S. Printing Office, Washington, D.C. 20402

We made a few changes





Only you can prevent forest fires.

in our new Zonline heating/cooling unit.

We've made changes. Over 90 of them. Not just for the sake of change. To be better.

The new Zonline is quieter! We redesigned the air flow system and added a new two-motor fan system that automatically modulates air flow to cooling and heating requirements. We built a stronger room cabinet and gave it a urethane foam acoustical treatment for greater quietness.

The new Zonline is more rugged!

We're using heavier gauge metal in the outer case. The air/water seal has been laboratory tested in winds up to 75 miles per hour and the equivalent of 8 inches of rain per hour. This is rugged, heavy-duty commercial equipment built to withstand constant year-round usage.



Our new GE Zonline heating/cooling unit.

And the new Zonline is beautiful!

Inside and out. From an exterior grille that can be integrated into the building design to the new optional simulated molded wood-grain finish of the interior cabinet, Zonline is new and good-looking.

All controls are concealed under a door on top where they are easily reached.

If you're looking for terminal thru-the-wall heating/cooling units, see the new Zonline for office, hotel/motel, apartment, school or hospital. Available in deluxe and standard models for 208 V., 230 V., and 277 V., and a variety of installations. See your General Electric Central Air Conditioning distributor right away. Or write the Air Conditioning Dept., Commercial & Industrial Sales Section, Louisville, Kentucky 40225.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

ADVERTISERS INDEX

A

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 (Sub. of Rusco Industries, Inc.)108W1
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