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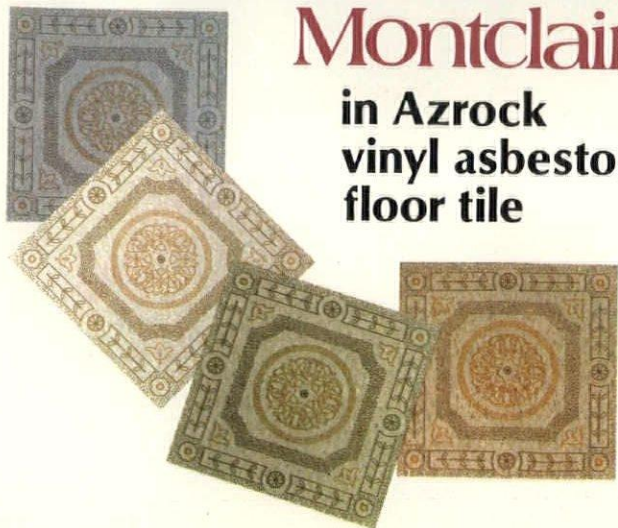
November 1973

# House & Home



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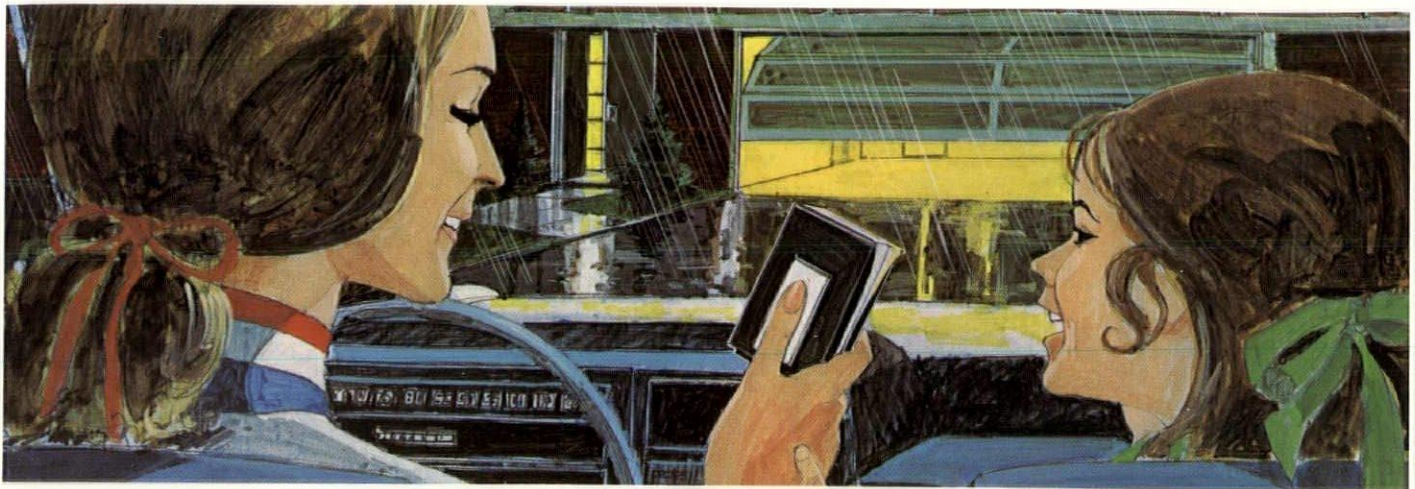
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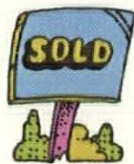
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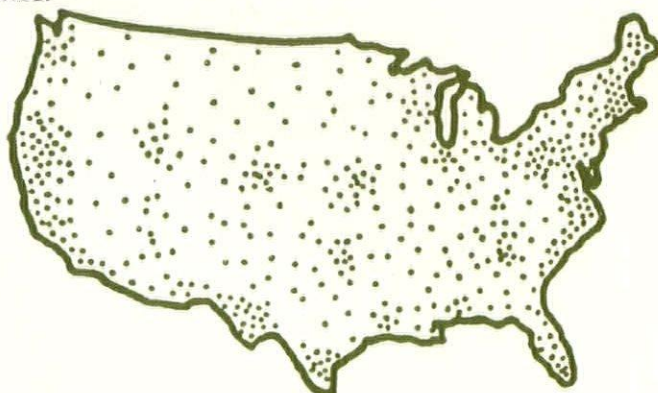
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This issue of House & Home is published in national and separate editions.

Postmaster: Please send form 3579 to Fulfillment Manager, House & Home, P.O. Box 430, Hightstown, N.J. 08520.

# House & Home

McGraw-Hill's marketing and management publication of housing and light construction

Volume 44 Number 5/November 1973

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Cover/Design by Colos

## President's program dilutes Lynn's bolder proposal for housing allowances

The President once again has told the housing industry how bad the old housing subsidy programs are—the programs frozen last January at his direction by outgoing Housing Secretary George Romney.

But the sweeping evaluation by the new secretary, James T. Lynn, failed to turn up any new programs that the President was willing to adopt.

The result was a housing message that grabbed headlines but contained less than met the eye.

Both the President and Lynn made it clear that, from their point of view, subsidy programs directed at stimulating the mere production of new houses are bad for the poor, bad for the housing industry and bad for the taxpayer.

**Lynn's proposals.** The headlines said that the President had recommended adoption of a housing allowance—or direct cash assistance, as Lynn prefers to call it. This would be a bold break with decades of federal housing policy. It would give families with very low incomes enough cash to buy or rent new or existing housing.

That was what Lynn recommended—but the President didn't buy it.

Lynn had sent to the White House in mid-August his proposals for handling both the short-term and long-term problems of meeting the needs of low-income families. Its major components:

1. A complete continuation of the freeze on the FHA's section 235 and 236 interest subsidy programs for construction of single-family houses and apartments.

2. A start-up on a housing allowance plan, directed first to the elderly poor but eventually to become the principal government housing program.

3. An interim program under which the government would lease housing for poor families—existing housing to the maximum extent possible, not new construction—with the government subsidizing the rents.

**President's version.** After delaying almost two weeks beyond the September 7 deadline Lynn had given the banking committees of Congress, the President came up with a message that was



White House press conference is scene for Secretary Lynn's presentation of President Nixon's housing program (September 19). Seated, with notebook: H&H's Don Loomis.

long on rhetoric but short on new proposals.

The package was fashioned to meet the budgetary and political needs of the White House—but it was a long way from what Secretary Lynn recommended and fought for.

The President's major recommendations were:

1. Several moves to ease the mortgage money squeeze.
2. Further study of the housing allowance idea.
3. Thawing of the subsidy

freeze to allow 150,000 new subsidized housing starts—half under the FHA's section 236 apartment program, half under the section 23 leased housing program—plus the leasing of an additional 50,000 existing housing units. (See box on this page.)

**Costs.** Sources at the White House and at HUD agree that the costs of even the beginning of a housing allowance made it easy for the President's aides to knock down the idea.

Budget Chief Roy Ash esti-

mated that the full-fledged scheme might run to \$20 billion a year eventually. President Nixon wound up by using an estimate of annual costs of \$8 billion to \$11 billion for the housing allowance—"as against \$34 billion annually for reaching all eligible families under current program."

The domestic counselor, Melvin Laird, who favors the cash payment idea, suggested that beginning such a program now would leave President Nixon's fiscal cupboard short of the wherewithal for new initiatives in health and welfare.

**First billion.** Of critical importance was the estimated \$1 billion first-year cost of mounting even modest housing allowances for the elderly poor, as Lynn had recommended. This \$1 billion, or a major part of it, would show up as spending in the President's fiscal 1975 budget, being prepared for presentation to Congress in January.

In his housing message the President played down the importance of the long-term housing problem. Instead he placed equal—or greater—emphasis on immediate moves to put more funds into the pipelines that supply mortgage money to the middle class and the affluent home buyer, who is now squeezed by the federal reserve's tight-money policies.

The President's message made few recommendations for reshaping and simplifying FHA insurance programs. It made no proposals for rural housing.

**'Out of housing.'** As the Congress began its consideration of the President's proposals (see page 8), some Administration officials were justifying the fears of critics who worry about an end to federal help for housing. One top HUD official said the objective of the Lynn study was to move forcefully toward "what the President wants—to get the government out of the housing business."

At the White House an insider put it this way: The President's officials are seriously questioning the need for a federal housing agency any longer.

"We really don't need a HUD very much," he says.

—DON LOOMIS

McGraw-Hill World News,  
Washington

### THE PRESIDENT'S HOUSING PROGRAM

#### SHORT-TERM: FOR THE MORTGAGE MARKETS

- (1) \$2.5 billion in loan commitments from the Home Loan Bank Board to enable savings and loan associations to commit to purchase mortgages in future at today's rates.
- (2) \$3 billion to the Government National Mortgage Association so it can buy mortgages again under the Tandem Plan, a subsidy operation that limits discounts to 4 points.
- (3) Elimination of FHA and VA interest ceilings on insured mortgages.
- (4) Experimentation with lower monthly payments for younger buyers in early years of mortgage. Help for older buyers temporarily unable to meet payments because of illness or unemployment, by allowing them to add skipped monthly payment to principal. Aim is to obviate defaults.
- (5) A new 3½% income tax credit for lending institutions with 70% of their portfolios in mortgages, an incentive aimed particularly at pension funds.
- (6) FHA re-insurance for private mortgage insurance companies with the aim of promoting secondary markets for their insured mortgages.
- (7) A request to Congress to raise to \$45,000 the present \$33,000 ceiling on FHA mortgages.
- (8) More flexible terms and longer repayment periods for mobile home buyers, and FHA insurance of loans bearing rates up to 9.6%. The aim is to establish a significant secondary market for mobile home loans.

#### SHORT-TERM: FOR LOW-INCOME HOUSING MARKET

- (1) Reopening of section 236 interest-subsidy program for another 75,000 apartment starts, but only for urban renewal projects, new communities, Indian programs and disaster relief.
- (2) Approval of interest subsidies for 75,000 starts under the section 23 leased-housing program—some contracts to be let through local housing authorities, balance by FHA area offices. Additional subsidy may be recommended to make contracts attractive to builders.
- (3) Leasing of 50,000 more units of existing housing under section 23.

#### LONG-TERM: FOR POOR FAMILIES

- (1) Possible presentation to Congress "in late 1974 or early 1975" of recommendations for a housing-allowance or direct cash-assistance program, probably limited to the elderly poor at the start. Meantime HUD will continue to study advisability of allowances.
- (2) Changes in public housing project program—to come next year.
- (3) An effort by HUD and the Department of Agriculture to find ways to grant more credit for rural housing construction.
- (4) \$60 million more for section 312 rehab loans. Home improvement loan maximums rise to \$10,000, terms to 12 years.

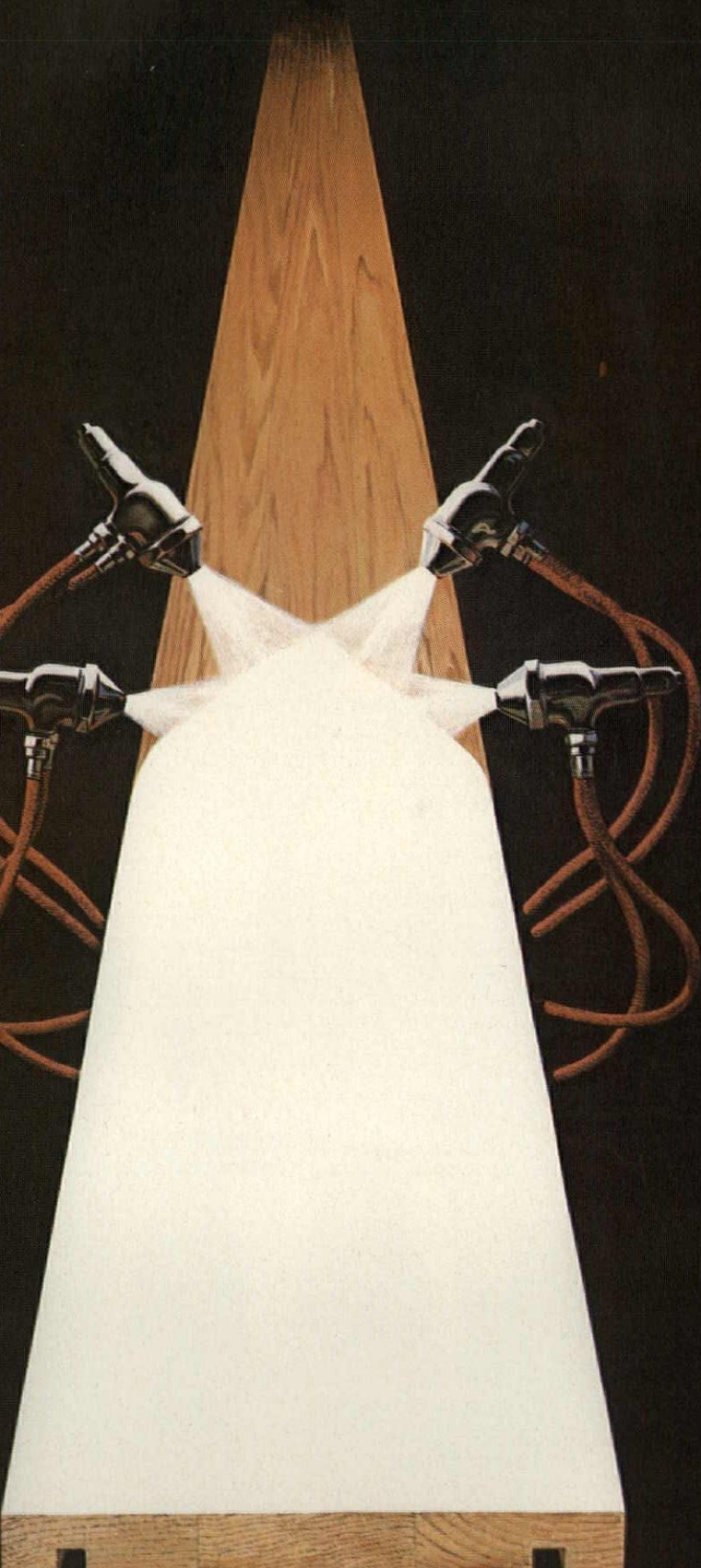
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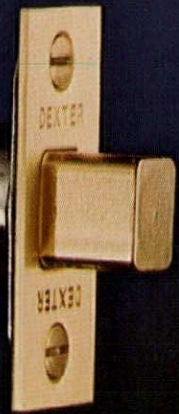
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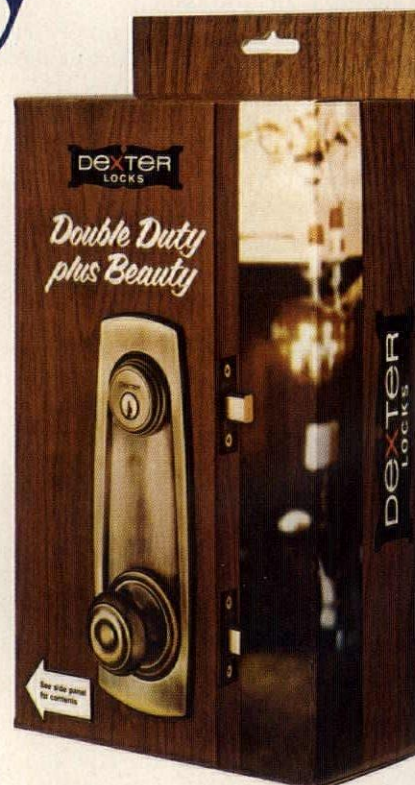
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## Under threat of veto, Congress heads for showdown with President on housing

The Nixon Administration would like to turn the housing subsidy back to pre-1968, or even earlier—by ending most subsidy programs.

But it isn't yet ready to turn the clock ahead to housing allowances (or direct cash payments) as a way of meeting the poor's housing needs.

As a result, when Housing Secretary James T. Lynn appeared before the Senate Housing subcommittee to explain—and defend—the Administration's proposals publicly, he had already been privately warning of a Presidential veto of the legislation the Democratic Congress is expected to send to the President sometime next spring, summer or fall.

**Lack of support.** By the time the three days of hearings ended, it was abundantly clear that the Administration had almost no support from committee Democrats, and only lukewarm support from Republicans. The major interest groups who testified—the homebuilders, mortgage bankers, mayors and spokesmen for poor families—were almost unanimous in backing the Democrats.

**Subsidy dispute.** The legislation finally passed will most likely include a good many of the provisions the Administration wants—including some liberalization of the housing allowance experiments.

But the bill is almost certain to contain a much bigger subsidy program for constructing new units for poor families than the President wants, and more liberal provisions for low-income public housing. On these, Lynn and the President appear to be adamant in their opposition. But the housing legislators appear equally adamant in their insistence on reviving the discredited subsidy programs instead of phasing them out—and in linking the subsidy programs to the community-development grant programs the mayors want so badly.

The assumption, openly discussed during the three days of hearings held by Senator John Sparkman's housing subcommittee on the President's housing proposals, is that the Congressional leaders and the Administration are so far apart that a compromise bill may well be



NAHB team appearing before Senate housing subcommittee includes legislative aide Carl Coan Jr., President George Martin, Executive Vice President Nat Rogg and Economist George Sumichrast. Photo was taken ten days after Martin's New Orleans injury (page 16).

a complete impossibility.

**The veto.** Lynn met for three hours with 13 mayors the evening before they testified. Those present said later that Lynn made it plain that unless something very close to the President's proposals was adopted by the Congress, a Presidential veto should be anticipated. And Lynn indicated his doubt that Congress could ever muster the votes to override.

Sources close to the National Association of Home Builders had said earlier that Lynn had told them the same thing.

**Nixon victory.** Fresh in the minds of Lynn, the homebuilders, the mayors and the senators was the President's victory when Congress extended for a year—to October 1, 1974—the FHA's authority to insure mortgages.

The Senate had tried to insist on two amendments—one by Senator William Proxmire to force the Administration to end the subsidy moratorium, and the other by Senator Adlai Stevenson (D., Ill.) to compensate buyers for serious defects in FHA-inspected and insured homes they bought under the section 203(b) and 221(d)2 programs. (Such payments are already being made under the section 235 program.)

With Administration backing, the House refused to agree. It stripped out the amendments, and both House and Senate then sent the extender to the President on a voice vote. The action strengthened the Administration's hand appreciably.

**Guerilla war.** This refusal to compromise was the fear the mayors chanted during their appearance on the second day of the hearings. Mayor Joseph

Alioto of San Francisco (who had just announced he was seeking the Democratic nomination for governor of California), said that "guerilla warfare between the Administration and the Congress might result in the legislation falling between the cracks."

In opening the hearings, Sparkman, who generally tries to take an optimistic tone, said the committee was "far apart in our thinking from that of the Administration." He said he hoped Lynn would indicate how a compromise could be worked out that would be "mutually satisfactory." Sparkman said the Congress would "wrap community development together with housing." That requires housing for low- and moderate-income housing, Sparkman said, which means "we must, therefore, have a subsidy program."

**Critics.** Proxmire was most critical—citing the Administration's explicit abandonment of the housing goals, the reduction or abandonment of subsidized new construction programs, and "a vague and feeble proposal involving housing allowances."

Senator John Tower (R., Tex.) the leading Republican on the subcommittee, was also critical of Lynn and the Administration. He noted that as a result of HUD's study of the existing programs, "some have been found to be defective, in fact, and others not." But he pointed out that Lynn had "up to this time submitted no factual evidence to the committee" which would "substantiate your claims and proposals."

**NAHB's complaints.** In a slashing attack, George Martin, president of the NAHB, made a point-by-point denial of most of the facts, figures and conclu-

sions in the President's message. Martin told the subcommittee the President's proposals for low- and moderate-income families are "little short of disastrous" and "disgraceful."

Martin saw "no indication of any effort to bring down the cost of mortgage money." The Congress is being asked, he said, "to revert to what has not worked in the past—maximum reliance on the existing housing stock and the disciplines and economies of the free housing market." The "trickle-down theory" of providing housing for the poor, Martin told Proxmire, "didn't work and hasn't worked."

Proxmire found Martin's statement "superlative" and "irrefutable."

**The mortgage men.** Speaking for the Mortgage Bankers Assn., Kennon V. Rothchild, chairman of H. & Val J. Rothchild of St. Paul, said that the housing for the poor "will require a range of subsidy programs . . . which may well go far beyond the Administration's direct cash assistance proposal."

Norman Strunk, executive vice president of the U.S. Savings and Loan League, told the committee that "to us, the significant feature of the housing message is its recognition of the need to, in its words, 'alleviate the immediate housing credit problem.'" But more significant, he said, was congressional action aimed at ending the wild card certificate of the deposit-rate war. (see page 18).

Sparkman said he had hopes for getting a bill out of the Banking Committee and even through the Senate by the end of October. But there's no chance for House action this year.

—D.L.

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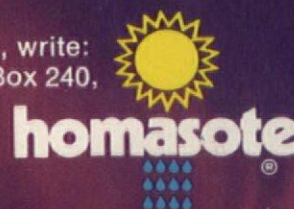
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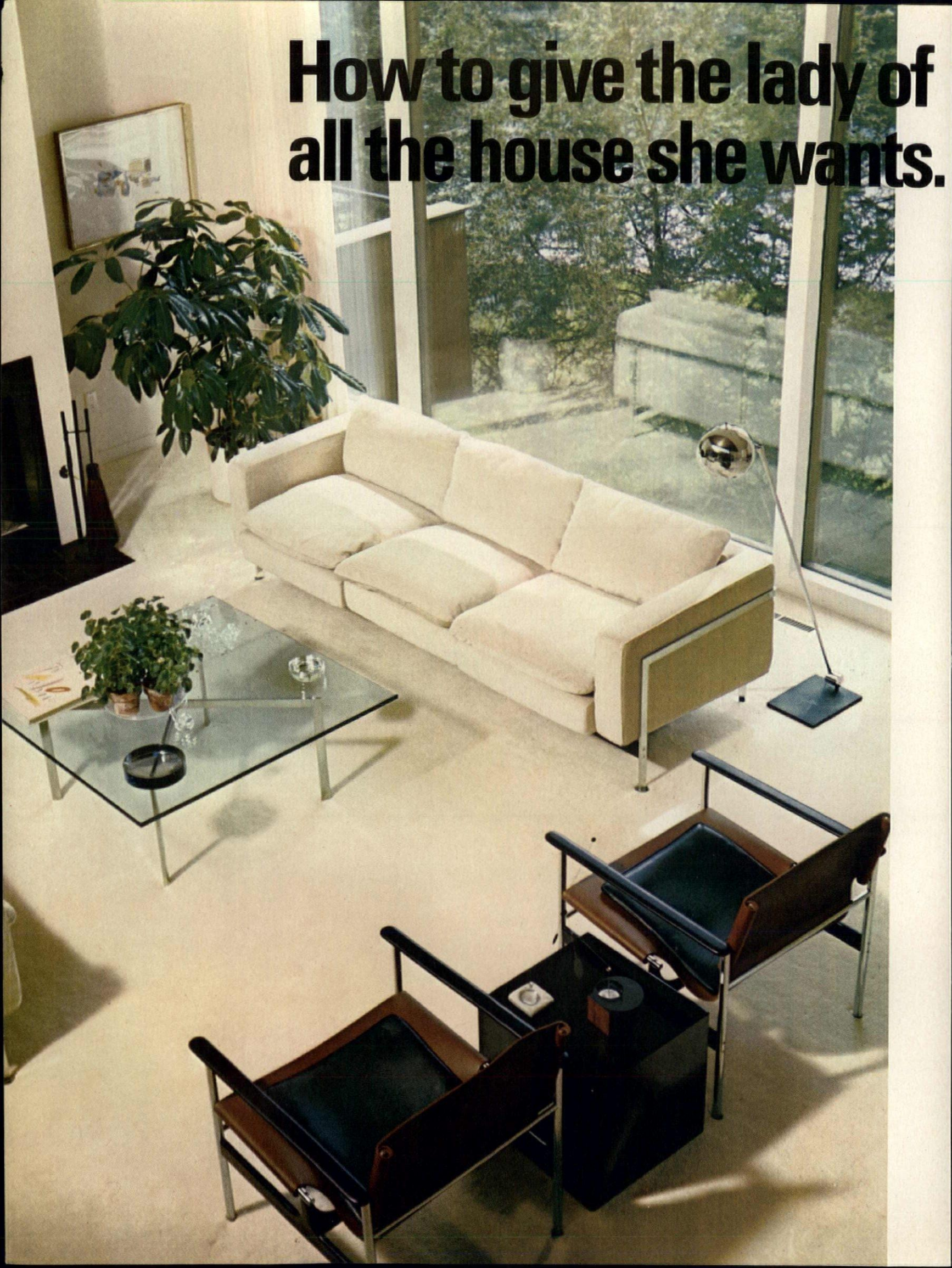


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# the house

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*Architect: John Bloodgood, AIA.*

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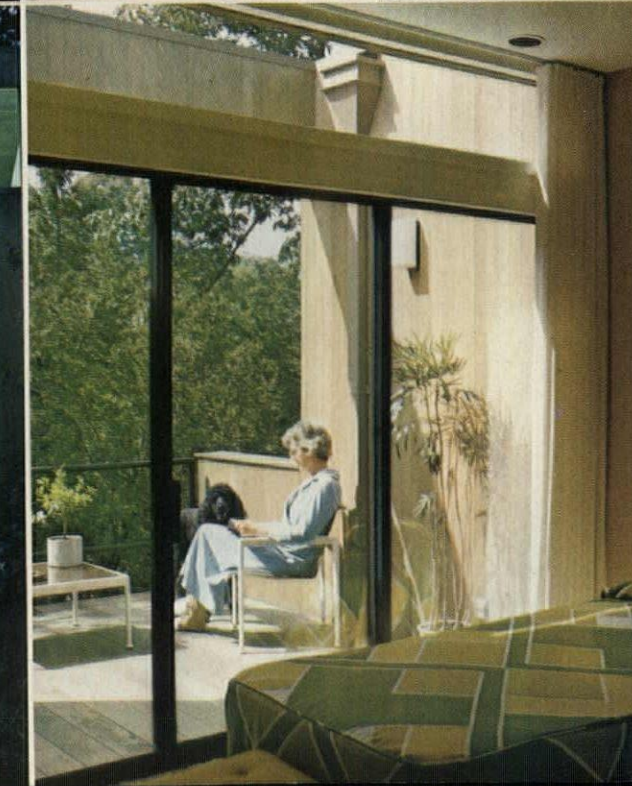
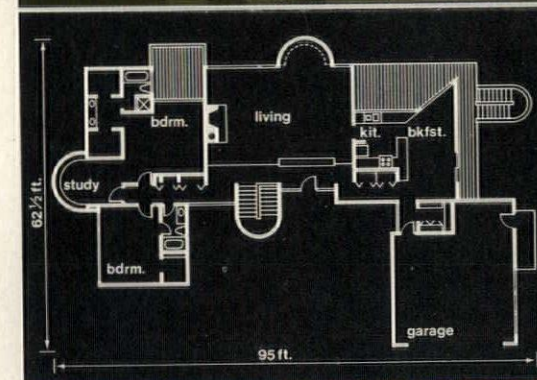
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## The Agnew debacle: Mortgage banker and a consultant played key roles

The destruction of Spiro T. Agnew was brought about in large part by the sworn admissions of I. H. (Bud) Hammerman II, the widely known Baltimore housing developer and mortgage banker, and by several other prominent Maryland businessmen.

Hammerman, according to the Department of Justice, admitted to soliciting payoffs from "approximately eight" engineering companies for Mr. Agnew while the latter was governor of Maryland. Hammerman also collected cash payments from seven of the companies, allegedly at Mr. Agnew's behest, and split them up, 50% for Mr. Agnew and 25% each for himself and Jerome B. Wolff, then chairman-director of the Maryland State Roads Commission.

Wolff is an attorney and president of Greiner Environmental Systems Inc., a building consulting firm. He, too, has allegedly made a sworn statement describing his role.

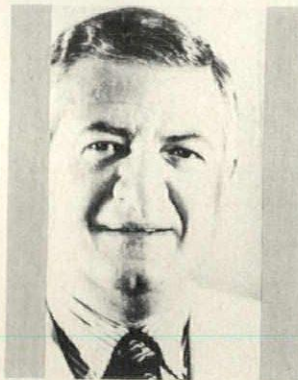
**The charge.** Here is how the U.S. Attorney's charge against Agnew described the alleged three-man game.

It began in 1967, when Governor Agnew called his longtime personal friend and business associate, Hammerman, to a private meeting at the new governor's Annapolis office.

Mr. Agnew had frequently complained about his modest financial position to his friend and was now apparently in a mood to do something about it. Wolff, a brand-new Agnew appointee, would be passing judgment on all roadwork consulting, engineering and construction contracts that came through the state—and they would be subject to the governor's approval. Engineering companies seeking the lucrative contracts would therefore be expected to "do their share."

Hammerman, Governor Agnew allegedly suggested, should get in touch with Wolff and set things up.

Hammerman says he did so, according to the government: Wolff agreed to keep him apprised of which engineering companies were up for contracts, and Hammerman was to keep Wolff up to date on which of the firms were paying off and therefore entitled to preferential



DEVELOPER HAMMERMAN  
He managed the money



CONSULTANT WOLFF  
He handed out the plums

UPI PHOTOS

treatment—subject to the governor's approval.

**The man to see.** After some haggling that established the 50-25-25 split, the plan went into operation. Engineers quickly came to understand that Hammerman was the man to see for state roads work, and several sought meetings.

There was usually no need for crudities, it seems. The engineers' representatives would describe their interest in state work, and the talk would then turn to the value of "political contributions."

The engineers were understanding. So was Hammerman. Although Wolff told him that 3% to 5% of the face value of the contract being sought was "appropriate," Hammerman would accept any reasonable sum.

**Banker's role.** Hammerman also acted as banker, collecting, forwarding Wolff's share and holding Mr. Agnew's portion until the governor called for it.

Agnew was not crude either, by this account; he would call periodically and ask Hammerman how many "papers"—how

many thousands of dollars—the mortgage banker was holding for him. He would then ask Hammerman to bring the papers over to the governor's office.

**Contracts.** Wolff, by his own account, was competent and conscientious in awarding contracts; he would use only qualified companies regardless of payoffs, and he took pains to avoid creating a pattern of selection that might arouse suspicion.

This does not seem to have been easy; in addition to Hammerman's stable, he had to steer business to the companies of two Maryland engineers, Allen Green and Lester Matz, who say they were making their payments directly to Mr. Agnew. When one engineering firm balked and complained of Hammerman's solicitations—to Governor Agnew—Wolff reduced but carefully did not eliminate that firm's share of work.

**Bond business.** Hammerman reportedly said he also performed at least one major chore for Mr. Agnew without Wolff's aid. He passed the word to a fi-

nanial institution (not named in the charge to protect future prosecutions) that the highly profitable state bond business they sought would require a substantial contribution. Although Mr. Agnew had previously described the principals of the institution as a "cheap bunch" who "don't give you any money," they did so under Hammerman's ministrations—and they got the bond business.

Green and Matz were also part of the Justice Department's case against Mr. Agnew. Both admit to making payments to him while he was governor and continuing the payments for a time while he was vice president.

Matz's payments extended all the way back to Mr. Agnew's days as county executive in Baltimore. Even so, he evidently appreciated the seriousness of what he was doing. After delivering \$10,000 to Mr. Agnew in Washington, Matz said, according to the Justice Department, that he told his business associate, John C. Childs, that he was "shaken" because he had "just made a payoff to the Vice President of the United States."

**Denial.** Mr. Agnew, in his carefully worded statement to the U. S. District Court, specifically denied that the money he received was bribes, even while admitting he received it. He still called the funds "contributions."

"I deny deny the assertions of illegal acts on my part . . ." Mr. Agnew said. "I am aware that government witnesses are prepared to testify . . . I stress, however, that no contracts were awarded to contractors who were not competent . . . I deny that the payments in any way influenced my official actions . . . At no time have I enriched myself at the expense of the public trust."

**Plea.** Mr. Agnew then pleaded *nolo contendere* to a charge of income tax evasion and received a \$10,000 fine and three years' probation.

The plea bargaining that preceded the court appearance protects Mr. Agnew from further federal criminal prosecution, but not from civil action by the IRS to recover back taxes and penalties nor from possible criminal prosecution at the state or local level.

—H.S.

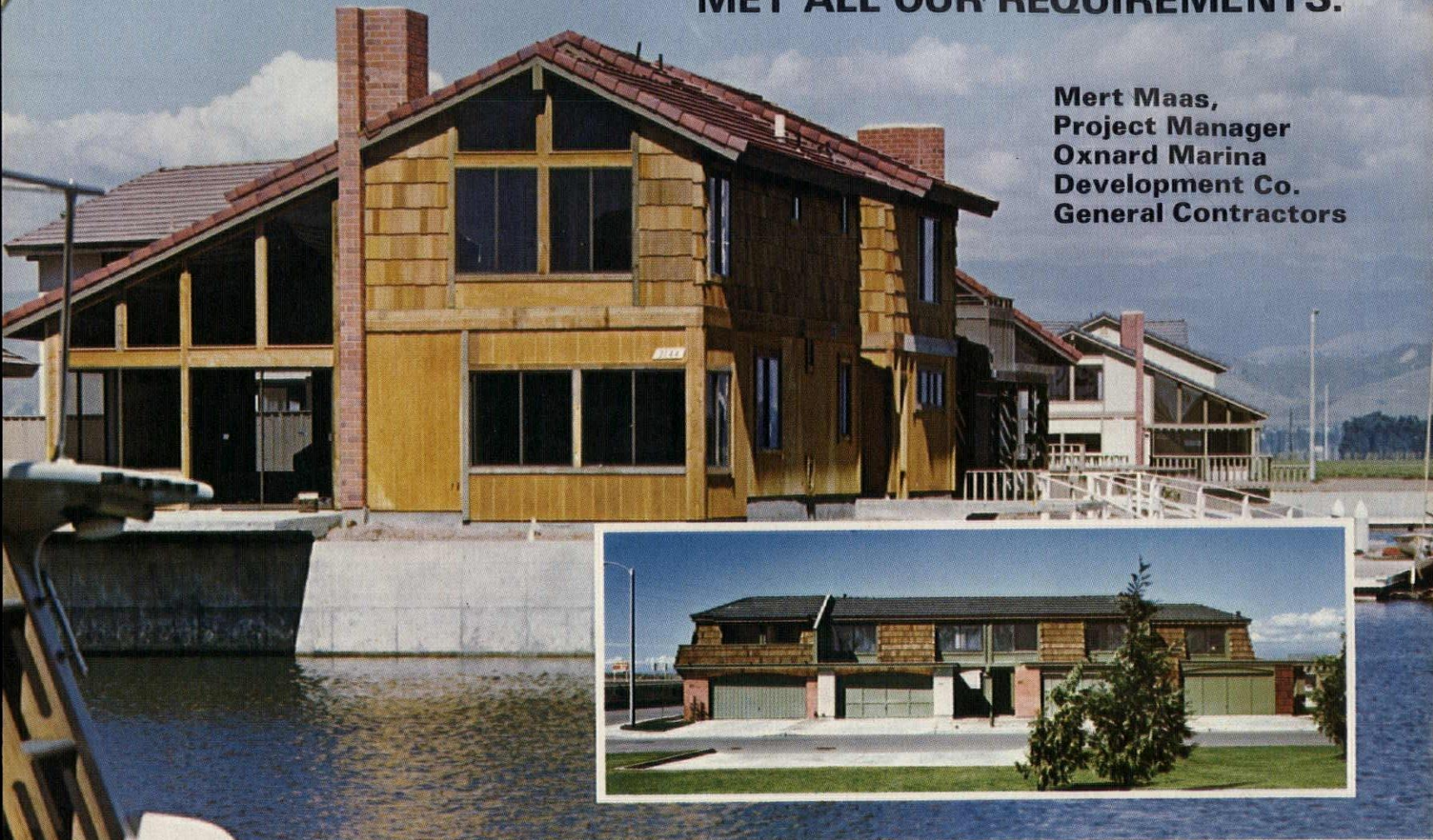


Spiro T. Agnew in his first appearance before the building industry at the 1972 NAHB convention in Houston. His last address as Vice President was also to this industry; he told the New York Building Congress the day before his resignation that subsidized low- and middle-income housing programs had proved to be a "costly failure."

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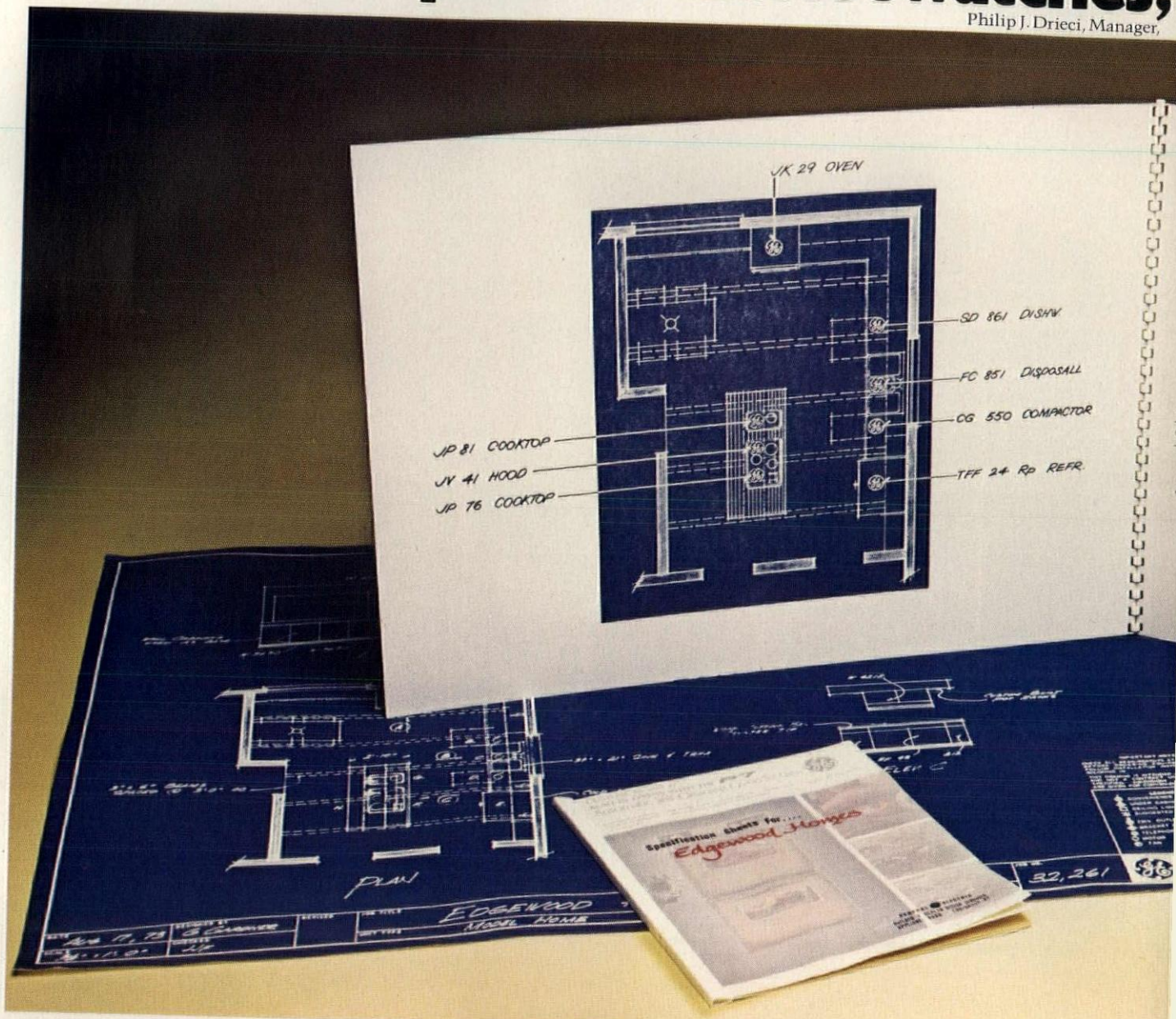
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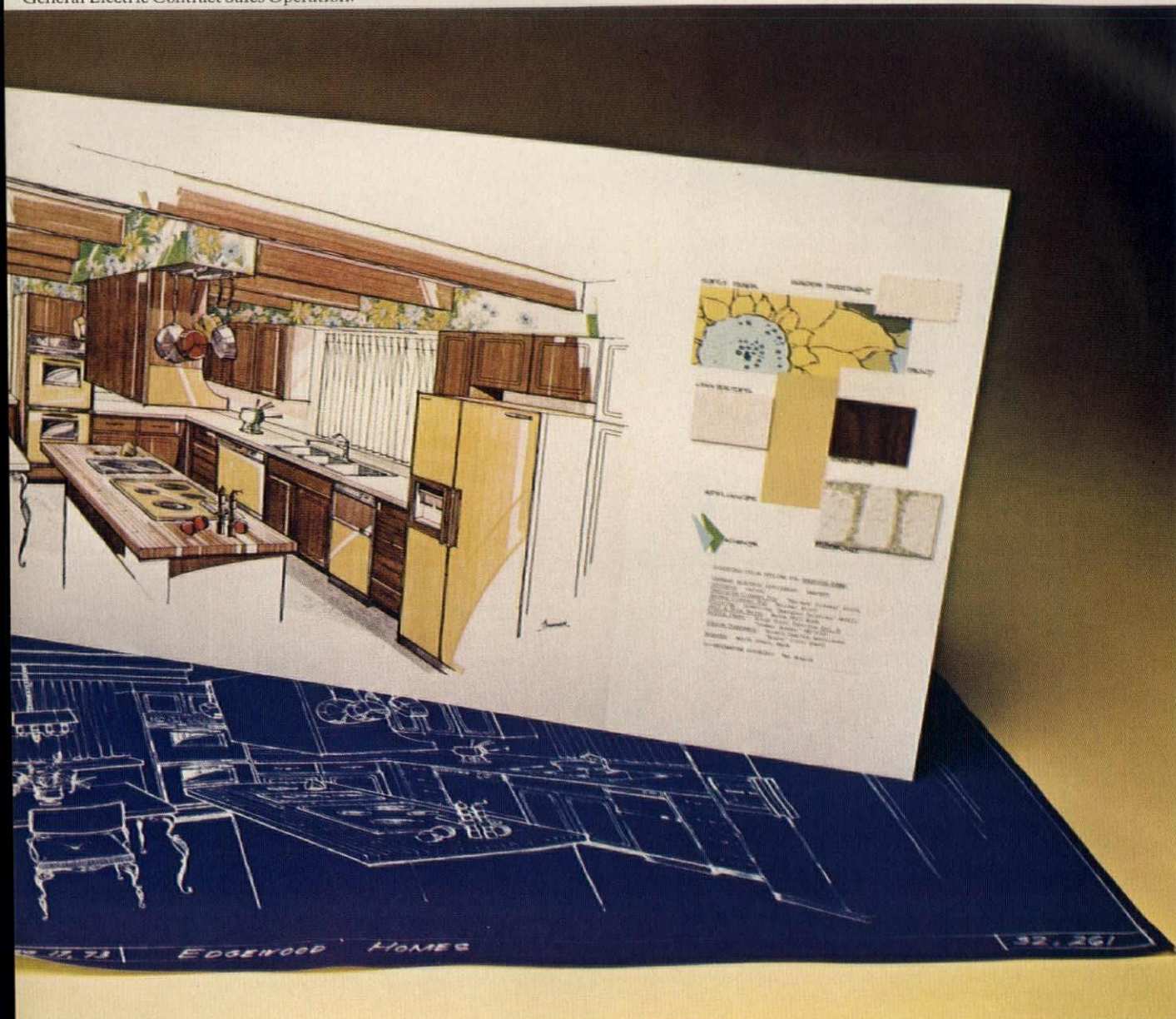
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## NAHB house warranty plan wins directors' approval over spirited opposition

The NAHB's insured home warranty program cleared its last hurdle at the fall board of directors meeting in New Orleans.

The board voted to create a Home Warranty Council and directed it to negotiate insurance contracts and to franchise local warranty councils.

The parent council, a wholly owned NAHB subsidiary, was instructed to "develop final details and bring into operation and administer a home warranty program." The enabling resolution set the NAHB's 1974 Houston convention (January 20-24) as the council's target date for initiating the program in selected areas.\*

**Pleas for delay.** Directors who had studied a summary sent to them a few days before the meeting were disappointed to find there would be no opportunity for them or the general membership to hammer out details. The board was merely asked to create the council and, in effect, give it carte blanche to set up the program.

Several locals wanted to postpone a decision until the Houston meeting. Bill Lester of Burlington, N.C. explained:

"North Carolina passed a resolution against the warranty last week. We want a warranty, but our builders felt they didn't have enough information about it. We should not take final action until the information has been disseminated to all the members."

Mario Bumbara of the big Long Island Builders Institute agreed. He told the board that because he had left for the meeting a day late, he had received drafts of the warranty certificate and agreement which the other members had not seen.

"It seems strange that you as astute businessmen can remove yourselves from the authority and the searching inquiry into your obligations and the spending of your money," he said.

**Urgency.** The NAHB leadership, however, was eager to create the council so that it could negotiate with the insurance companies from a position of strength. It sought to create the impression, through slides and

reprints of proposed laws, that it was now or never: If the directors did not act, Congress and state legislatures would set up warranty programs and builders would have to comply.

**Backlash.** The hurry-up strategy triggered a backlash.

"I resent the implication that if we don't act today we're in trouble," said Bob Campbell of Las Vegas. "We've had more problems in this one year than we've ever had before. Our house is on fire and we're worrying about squeaking doors."

When the resolution finally came to a vote, the nays were so loud that for a few tense moments it appeared that the council had lost. However, a count showed that the resolution had passed overwhelmingly.

So the NAHB locals may now ask permission of the national council to set up local councils. Under the proposed program, if a local joins the plan voluntarily it can decide whether to make the program mandatory for all members. If a local does not join, there appears to be no way for a member to participate.

**Costs.** On the basis of talks with insurance companies, the NAHB believes a charge of 0.2%

of the price of a house will cover insurance premiums and full operation of the program.

Treasurer Mickey Norman cited this sample budget:

On 5,000 units at an average price of \$30,000, a local council's income would be \$60 a unit or \$300,000.

Half, or \$150,000, would go for insurance premiums.

The other half would be spent this way:

National council—\$75,000

Local promotion—\$15,000

Salary for full-time administrator, secretary and conciliation officer, plus equipment—\$30,000

This leaves \$30,000 for reserves and office expenses.

The local association could also set up a \$3-per-unit charge for conciliation, adding \$15,000 for office expense, rents, supplies, processing and adjustments.

The council is also considering charging an initial registration—and perhaps a re-registration—fee to builders to defray administrative overhead.

**\$35,000 ceiling.** Discussion brought to light a possible \$35,000 unit liability limit.

Vice President Lew Cenko

admitted that the \$35,000 limit had been proposed by one insurance company and said that the question was open.

**Warranty.** The program makes the builder responsible for defects due to faulty workmanship or defective materials and for major construction flaws in the first year. In the second year he is again responsible for major construction flaws and for plumbing, electrical, heating and cooling systems defects not covered by a manufacturer's warranty.

In the third through the tenth years the insurance company covers major construction defects. It also underwrites the builder's performance in the first two years and makes good on any arbitration awards if he fails to honor his commitment.

**Specs.** Standards could be the FHA, VA, FmHA standards or such local building codes as are determined acceptable. An industry standards manual is also being developed.

Builders are watching the question of standards, for they could add more to the price of the house than the warranty.

Complaints would be handled through conciliation procedures operated by local councils. Unresolved disputes would go to binding arbitration, possibly by the American Arbitration Assn.

**Resolutions.** In other actions, the board voted no-confidence in the Administration's housing policy and those who administer it.

It reaffirmed its 12-point program to alleviate the mortgage squeeze and added proposals to extend FHA and FmHA insuring authority and to open the Federal Reserve discount window to thrift institutions, raise the maximum deposit insurance ceilings of the FSLIC and FDIC to \$50,000 and require the pension funds to invest a substantial portion of their assets in residential mortgages.

The board called for faster FHA processing and an expansion of the VA's guaranty authority. It also asked that the SEC set up a permanent real estate advisory committee, including builders, to simplify stock registration requirements and exempt from SEC regulation any offering that involved dwelling units. —N.G.

## Martin injured in New Orleans

NAHB President George Martin had his cheekbone broken in several places when he was punched by a security guard in Pat O'Brien's, a popular French Quarter night spot.

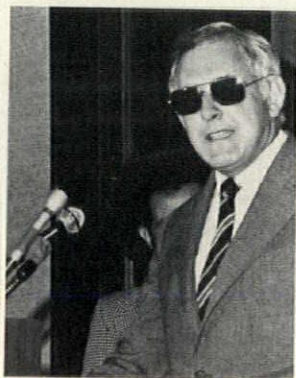
Martin says he was trying to join some friends who were already at a table. When he started to walk past the waiting line, however, the security guard, later identified as George Armer, challenged him.

George Oschsner, general manager of Pat O'Brien's, declined to comment on the incident but said the restaurant's attorneys would issue a statement at some future date.

Martin is filing a civil action against Armer.

**Plastic surgery.** The injury prevented Martin from presiding at the Sunday and Monday board meetings, but he was on hand to watch the warranty debate.

Martin underwent plastic surgery in Louisville and was able



NAHB'S MARTIN  
The day after the incident

to testify before a congressional committee ten days after the incident (see page 8).

**Mayor's apology.** New Orleans Mayor Moon Landrieu appeared before the NAHB board to apologize for the incident, which came at a particularly embarrassing time for him. He was also at the meeting to invite NAHB to hold its 1978 national convention in New Orleans.

\*Among associations that want to be first with the program are New Orleans; Kansas City; Portland, Ore.; Milwaukee; Louisville; and south Florida.

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## S&L lobby tries to spike the wild card: King Canute sweeping back the sea?

Congress rushed through legislation last month ordering interest rate ceilings on all time deposits of less than \$100,000 in commercial banks and thrift institutions.

President Nixon signed the legislation two weeks later. The Federal Reserve immediately imposed a 7¼% interest ceiling on consumer-type certificates of deposit in commercial banks. The Federal Home Loan Bank Board set a 7½% limit on such CDs issued by federally insured savings and loan associations. The Federal Deposit Insurance Corp. fixed the 7¼% limit for banks that do not belong to the Federal Reserve System and a 7½% rate for savings banks insured by the FDIC.

The moves, the direct result of intensive lobbying by the savings and loan industry, are more of an exercise in political fence-mending than a serious effort to solve the thrift institutions' problems, according to most observers on Capitol Hill.

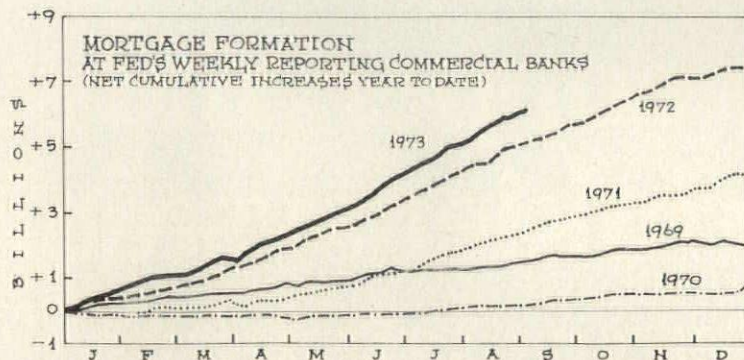
The savings and loan industry has been beside itself in fury over the elimination last July 5 of savings rate ceilings on four-year deposits over \$1,000. The dividend rate had gone as high as 8% and even 9% on such deposits.

Savings and loan associations claim that this put them at a considerable disadvantage *vis-a-vis* banks in the offering of so-called wild card certificates, since the banks can afford to pay higher interest. And so, the argument goes, there has been a shift of savings from the S&Ls into the banks.

**Missing the point.** There is no question that a shift of funds into banks has occurred in some areas. But the question of just how much of this intro-intermediary dislocation, as some call it, has occurred is an open one.

As one Federal Home Loan Bank Board official explains: "As near as we can tell, the flow of savings from S&Ls into open-market securities is so great that it washes into insignificance anything the banks are getting."

In August, for example, the net savings outflows from S&Ls totaled \$1.2 billion, a loss of investment capital exceeded only by outflows of \$1.5 billion in July 1966 and \$1.4 billion in January 1970. And the outflows for September continued heavy.

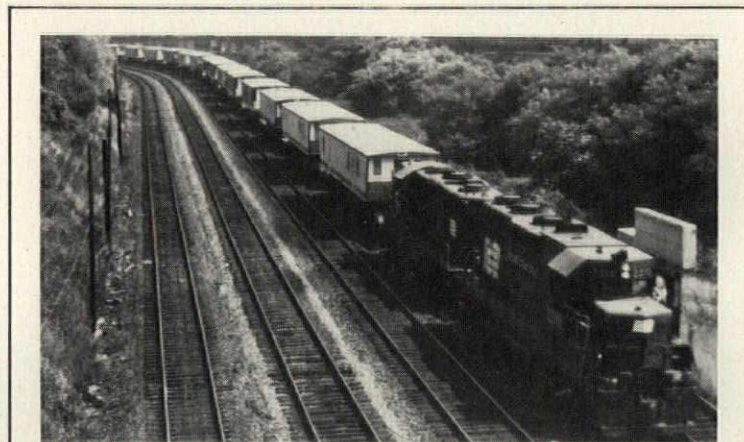


Commercial banks have taken more of the mortgage burden in the current money squeeze than in 1969-70. Regulation Q ceilings on interest paid to savers were in effect during the earlier credit pinch, limiting the banks' deposit inflow and likewise their ability to buy mortgages. The banks reduced their net takedown of mortgages in mid-1969 and took in no new mortgages for much of 1970. They re-entered the market in April 1971, however, and increased their participation throughout 1972. This participation continued to rise, surprisingly, through the first eight months of 1973. The principal reason for the difference has been the relative freedom of the banks to acquire money through the issuance of CDs that pay high interest rates to depositors. Legislation just passed by Congress (*story this page*) would restrict this freedom. These data are from Salomon Brothers, the New York City bond and stock brokerage house.

**Mortgages.** S&Ls have been able to maintain a fairly high rate of mortgage loan closings—\$4.8 billion in August—but this figure largely reflects the working off of prior loan commitments that still amount to a colossal \$12 billion. New lending and commitments by S&Ls have

slowed in many areas.

The new legislation, which directs the Treasury, the Federal Reserve, the Federal Deposit Insurance Corp. and the FHLBB to set a ceiling on savings deposits of less than \$100,000, is expected to have but a negligible effect. Still, in the heat of the intense



### Will mobile homes move by rail?

The Penn Central Railroad thinks they might some day, based on recent experiments with unit-train shipments for HUD like the one above. Such trains, which can carry 50 mobile homes at a clip, may soon become part of HUD's disaster relief efforts.

The railroad is also looking at the mobile-home industry itself. A switchover to rails by the manufacturers could take thousands of new mobile homes off the highways at substantial savings in fuel

and other costs.

But apparently this won't happen any time soon. Production is divided among scores of small, regional plants that rarely if ever build for markets more than 300 miles away. Rail transport is not feasible at such short distances.

While the rails could compete beyond 700 miles, the relatively high cost of long hauls, whatever the shipping mode, makes such wider distribution impractical now.

lobbying that went on, wild cards became symbolic of all the many complex ills of the S&Ls. Congress, with almost no debate, figured it had better go along with this powerful industry.

"After all," says one congressional staff aide, "if it didn't, and savings outflows continued really bad, the finger of blame would be pointed right at us. Nobody wants to be in that position."

**The consumer.** The financial weekly, *Barron's*, warned about the measure's effect on small depositors. Writer Kurt Bloch observed in his "World at Work" column:

"Once the President signs the measure, the agencies involved—the Fed, FDIC, Comptroller and HLBB—must set an upper interest rate limit on wild-card savings certificates. And the hapless consumer once again will be stripped by his chosen representatives (Congress) of his right to get a return on his money comparable with that available to corporations and others with huge sums to invest."

—DEXTER HUTCHINS  
McGraw-Hill World News,  
Washington

### Miami builder draws one year in prison

John Priestes, the Miami homebuilder who confessed to fraudulent activities under the FHA's section 235 program, has been sentenced to a year in prison.

He will begin serving two concurrent one-year sentences after a 50-day grace period to wind up his affairs: one sentence for falsifying a sales agreement to report a \$400 down payment when none was made, and one for signing a corporate tax return concealing \$210,150 in kickbacks from subcontractors.

Priestes has reportedly told the FBI that the bulk of the kickback money—about \$170,000—was for bribes he paid to William Pelski, then FHA director for south Florida, and Larry Williams, a former aide to Senator Edward Gurney (R., Fla.).

The builder has signed a formal agreement to cooperate with government authorities in exchange for immunity on other counts.

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## From toilets to textiles, builders are caught short—Building is delayed

The wag whose bumper sticker reads: "I have no beef with President Nixon"—a sign of his displeasure with the recent meat shortage—is not alone. The homebuilder, were he so inclined, could similarly register his disapproval of shortages of a wide range of building materials and home furnishing items—but no one has designed a pithy bumper sticker for him.

The frustration may be the toughest part. Depending on whom one talks to, shortages range from minor irritations to catastrophes. Some builders are short of toilets or textiles. Others complain of the lack of steel or chandeliers. And just as a builder overcomes one shortage, say of concrete, he is hit with another, perhaps of brick or lumber.

**No synthetic relief.** For years builders in need of certain materials had a fall-back position. If natural products were short, they could shift to synthetics. Those days may be over, however.

The textile industry, for instance, already caught in a shortage of nylon and polyester, is about to get squeezed in another direction. Acetate, another manmade fiber, is being shipped in large quantities to eastern Europe. So—a shortage of acetate.

Shortages are not the only thing plaguing builders. Delivery delays are cropping up.

**Substitutes.** Some builders are struggling to make do by substituting materials—say plastic for porcelain in bathroom fixtures. Others are reducing the number of bathrooms. But any approach to the problem increases the risk of consumer unhappiness.

While everyone talks about shortages, not everyone agrees on just how bad the situation is. The climate of shortages feeds on itself. Thus, horror stories of shortages become more horrible in the retelling.

The federal government is trying to put a damper on this climate. One official made a statement that would have prompted his lynching at a homebuilders meeting:

"I would be inclined to say, 'No, we don't have any building materials shortages in a historical context. Things are a little tighter than they have been.'" The speaker was Aaron Sabghir,

manager of the construction and materials management program of the Commerce Department's Bureau of Competition Assessment and Business Policy.

**Building delays.** When pressed, however, Sabghir turns cool. And he admits that "we (government statisticians) do have evidence that the length of construction has increased"—apparently as a result of materials and other shortages.

Sabghir estimates that the average single-unit dwelling was completed in 4.8 months in 1971. The same unit will take 6.6 months to complete in 1973.

If the structure has 100 or more units, the completion time has gone from 15.4 months in 1971, to 18.2 months in 1972 and to around 20 months this year.

**The pinches.** When realism creeps into government pronouncements, some admissions that officials make are:

- Insulation "is very tight." The new interest in energy conservation has increased demand, and a shortage has resulted.

- Asphalt is in short supply in some parts of the country.

- Steel reinforcing bars are in short supply all over the country. While few building jobs have been shut down, delays are being experienced.

## High-rise market gets rise out of K&B

President Eugene S. Rosenfeld took Kaufman & Broad into highrise condominiums with the announcement of plans for a 21-story tower in the New York metropolitan area.

The project is the result of a year's research. The company found a lack of housing in the urban Northeast. It also discovered that buyers were dissatisfied with both middle-priced suburban single-family homes and urban apartments—the urban housing alternatives presently available.

**Return to cities.** Rosenfeld, discussing urban housing problems and the buyers' concern, explained: "We expect that during the next several years the drive to return to the cities and make them livable . . . will intensify as these problems demand solutions."

Kaufman and Broad's solution for this reverse migration is the

- Concrete suppliers have been caught in a crunch caused by environmental restrictions on their plants and by a price lid, imposed by the Cost of Living Council, that hampers plant improvements.

- Lumber, for a multitude of reasons, is short and no immediate relief is expected.

**The lowly toilet.** One of the most vexing problems is vitreous china toilets and other bathroom fixtures. Manufacturers have told the National Association of Home Builders not to expect an easing of the shortage until the third quarter of 1974.

An already tight market was further squeezed when American Standard, which makes one-third of the nation's supply, was struck from June 1 until August 9. The better part of a month was required to refire kilns necessary for resuming production.

Even so, there is a need for greater manufacturing capacity and it takes about two years to build a plant that can augment capacity.

**Tubs and stalls.** There is also a shortage of the raw plastic used in glass fiber bathtubs and shower stalls. American Standard's spokesman says this situation should ease by mid-1974.

creation of a subsidiary, Kaufman & Broad Condominium Communities Inc., to produce residential high-rises in cities.

**\$18 million tower.** The first K&B high-rise, Greenhouse, is located in Cliffside Park, N.J., twenty minutes from the George Washington bridge. The \$18 million tower will have 134 one-bedroom and 204 two-bedroom condominiums that will sell for \$35,000 to \$85,000. A general contractor broke ground October 19 and will complete the job in 18 months.

Ira Norris, formerly president of Kaufman & Broad's eastern division, is president of the new subsidiary. He wouldn't disclose plans for projects other than Greenhouse (at the announcement festivities September 19), but he did indicate deep interest in the burgeoning metropolitan New York and Washington, D.C. markets.

Meanwhile, he expects a continuation of an "acute" problem.

A four-month delivery delay can be expected in regular white toilets, but builders can expect even longer delays for the colored models preferred by the decorators.

If the bathroom fixture problems are vexing, the lumber problem is downright disastrous.

**Help on lumber.** The government, however, is doing something about lumber shortages. A Presidential panel recently recommended a sharp increase in the harvest of timber from federal forest land—a suggestion that caused environmentalists to come unglued.

But the panel's recommendations, immediately endorsed by President Nixon, would go a long way toward ending the problem. It also recommended a tax break for private forest lands as a way to stimulate increased timber supply, and further negotiations with Japan "to reduce their disruptive log buying activities."

The panel, headed by former Interior Secretary Fred Seaton, wants builders to be a little more careful in their use of wood. "Construction designs and techniques are known that make possible savings up to 25% in the total timber required for house construction, but their use requires new labor skills, updated building codes, close inspection, quality control and improved management of construction operations on the building site," the panel said.

**No easy answer.** To push for these innovations, the report calls on the government to grant small business loans, investment credit and depreciation allowances for equipment. This would require new legislation.

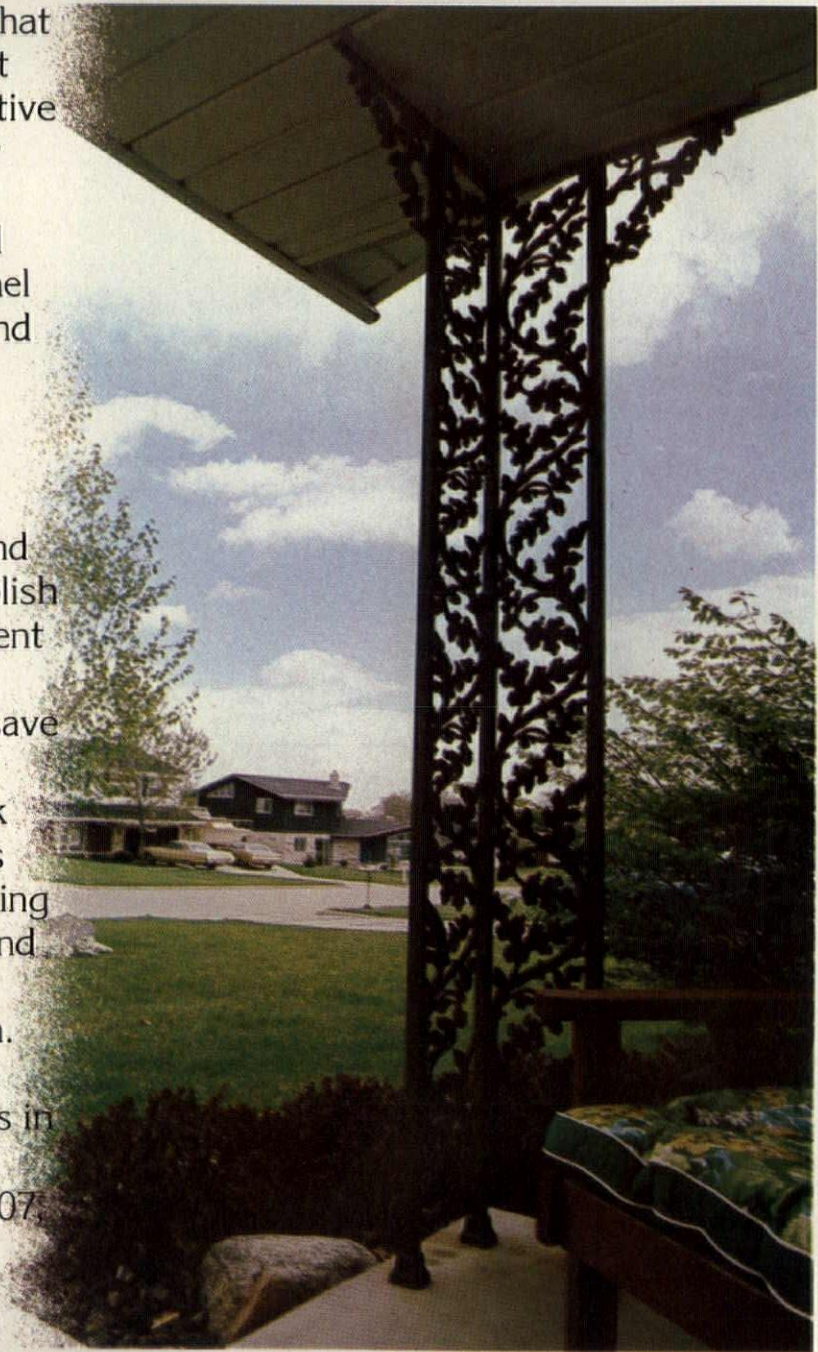
The Seaton report is optimistic in the long run, but it sees a continuation of the price increase spiral. This is expected to add "incentives to explore all methods to achieve greater utilization of timber."

No one in Washington is willing to hazard a guess as to when all the shortage problems will end. And the frustration is expected to grow before it gets better.

—WILLIAM HICKMAN  
McGraw-Hill World News,  
Washington

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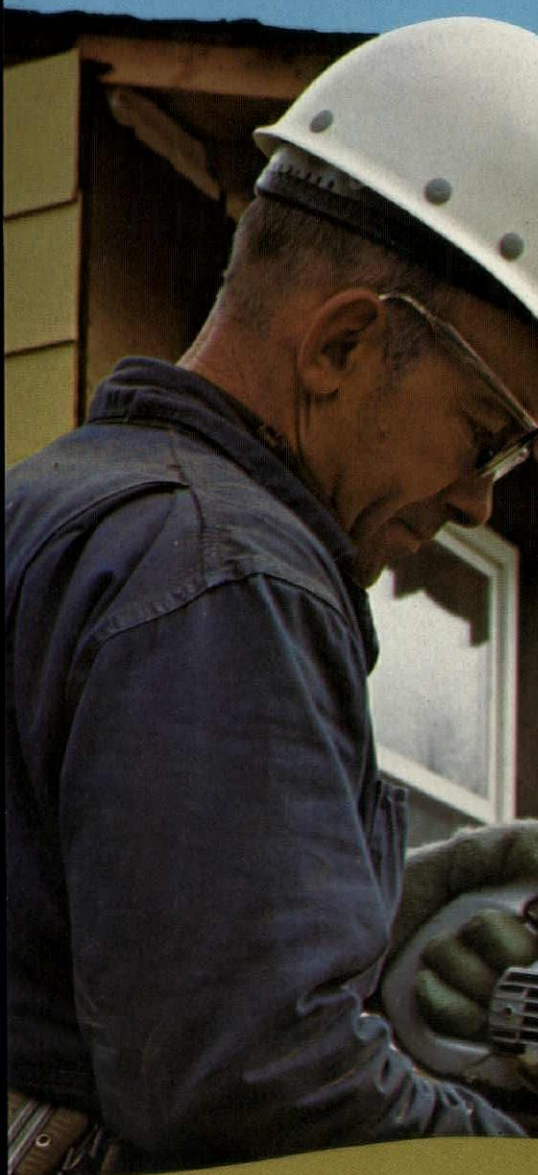
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## Irvine Company's new boss on regulators: If you can't lick 'em, join 'em

The president of the Irvine Co. has strong opinions about dealing with regulation.

He is **Raymond L. Watson**, 46, and he was elected on Sept. 12 to head the big California land developer. The post had been left vacant by the death of **William R. Mason** [NEWS, Sept.].

"A nearly unbelievable change has taken place in society during the past several years," Watson observed two weeks later, addressing the seventh Pan-American congress of the American Institute of Real Estate Appraisers, Valuers and Counselors. In the 1950s and into the 1960s, he said, the developer was a hero, providing the middle-class citizen with a home of his own in the suburbs.

**The best defense.** Now, however, the industry must "pre-sell the community at large or they will pick at the developer, haunt the agencies, pack public hearings, write letters, demonstrate, erect signs and finally file costly class action suits."

Thus, Watson argues, "the developer can no longer afford to

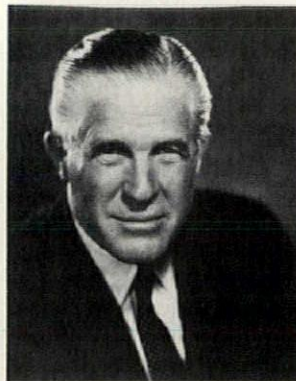


IRVINE'S WATSON  
*Advice for the non-hero*

hit out at his adversaries as he once did." His prescription:

Change from opposing regulation to working as a partner with regulatory agencies.

**Cooperation.** Watson apparently plans to follow his own advice. His company is even becoming a working part of various public and quasi-public agencies. And more than 10% of Irvine's 775 employees now work at determining what regulators and communities will accept and at providing public information on development activities.



EX-SECRETARY ROMNEY  
*Returning to private life*

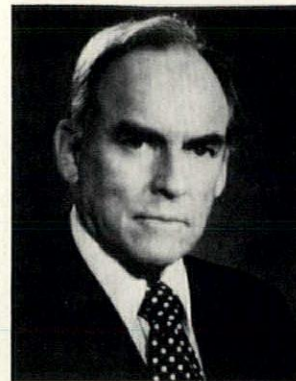
### Romney says no to Senate race in Utah

**George Romney**, the former Michigan governor, former Secretary of Housing and Urban Development, and onetime GOP Presidential contender, has decided against trying to add a Senate seat to his laurels.

The possibility of running opened with the impending retirement of Utah Republican **Wallace F. Bennett**. Romney reached his decision amid reports that his potential candidacy had roused considerable controversy among Utah Republicans and the possibility of a primary fight.

Romney, 66, was recently elected a director of the Johns-Manville Corp.

Romney, who left the Cabinet last spring to a fanfare of announcements that he'd rally a new "coalition of concerned citizens" to rescue the cities, says goodbye to all that too. Washington insiders hear he wrote recently to **John Gardner** of Common Cause that there just weren't enough concerned citizens to make it all worth while.



NATIONAL'S FLYNN  
*Into the president's chair*

### National Homes names Frank Flynn president

There's been a management shuffle at National Homes after a first-half \$4.3 million loss (sales were \$111,561,000).

After 26 years of running the mortgaging subsidiary, **Frank P. Flynn Jr.** moves up to president and chief executive of the parent. He replaces **George E. Price**, who becomes vice chairman of the board. Flynn's post with National Homes Acceptance Corp. goes to his executive vice president, **John S. Trombello**.

**Charles A. Winding**, head of Marine Midland Banks Inc., replaces **James Price**, George's brother, as chairman of National's executive committee. Jim remains board chairman.

The changes were announced at the big prefabricator's headquarters in Lafayette, Ind.

The first half loss may be the company's biggest, but is not its only recent difficulty: A proposed merger with Kaufman & Broad fell through late last year, and a racial-bias suit against National was filed in Texas last May.

## New building ventures shape up on Coast

**Jack Wrather**, the Beverly Hills, Calif. industrialist who built and operated the 1,000-room Disneyland Hotel and owned the Lassie entertainment property, Muzak and a variety of oil, land and recreation ventures, sets up a new company—Wrather Investments (not affiliated with the older Wrather Corp.). Wrather Investments, based in Newport Beach, Calif. says it will develop and manage leisure-oriented properties inside and outside the U.S.

**Alfred Dayan**, an alumnus of Levitt and Sons of Calif. and of Kaufman & Broad, forms his own

company in Los Angeles. The Alfred Dayan Co. will build and manage luxury residential developments in the West. The company goes into partnership with National Life of Vermont to begin a 93-home project at the Las Vegas Country Club.

Evans Products Co. (Portland, Ore.) assigns **H.C. (Jack) Hubbard** as sales manager of its nationwide trailer leasing service.

**Robert Gale**, president of the Gale Organization of White Plains, N.Y., a residential developer, enters the Florida market with purchase of a 44.3-acre Fort Lauderdale tract.



DEVELOPER WRATHER  
*Entering leisure market*



BUILDER DAYAN  
*Making a bet on Las Vegas*

## Congressman defends lobbying with FHA

Representative **William V. Chappell Jr.** (D., Fla.) acknowledges a newspaper's charge that he sought to get a Florida developer's loan application moving when it appeared stalled in the FHA's offices in 1969.

The developer wanted to use Chappell's electrical company on its project (and eventually did). Chappell also wrote a favorable reference on the developer's behalf—all this while a member of the House committee with jurisdiction over FHA.

Chappell says he sees nothing wrong in his actions, that he did not try unfairly to influence the outcome of FHA's deliberation.

**DIED: William W. Wurster**, 77, founding dean of the University of California's College of Environmental Design at Berkeley. Among his firm's projects: Ghirardelli Square, the Golden Gateway Complex and the Bank of America headquarters, all in San Francisco.

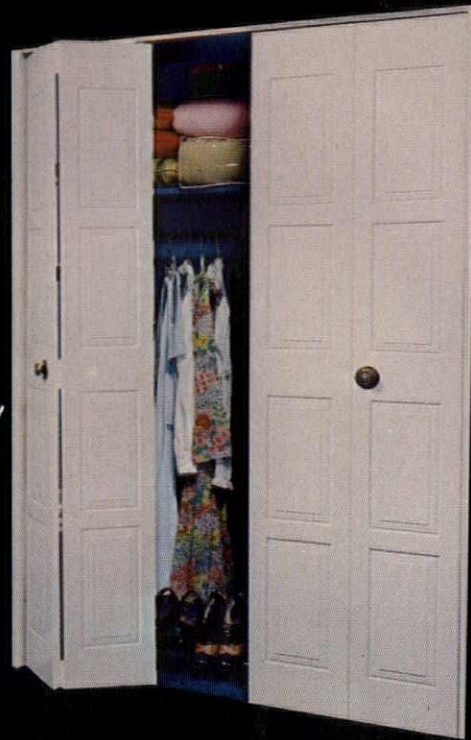
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# PRODUCTS '74

New Products from House & Home Advertisers

## a timesaving guide to the 1974 NAHB exhibits

Builders attending the big sprawling NAHB convention in Houston next January will face a bewildering array of products, new and old, spread out over a huge exhibit area. Products '74 has been created by House & Home and its advertisers to organize your shopping tour of this impressive display. Copies will be available free at Houston.

### see the best, newest, most exciting

This pocket sized guide to the exhibits is a collection of building products, materials, tools and equipment . . . in each case especially selected by the exhibitors themselves as being the best, the newest, the most exciting they will be offering in 1974. Each product will be handsomely illustrated in full color, described in detail and identified by company and booth number.

### save time and steps

The order of presentation in Products '74 will be by booth sequence enabling you to move quickly and



efficiently through the aisles pin-pointing just the specific products of interest to you.

The booth numbers will also be color coded to match the carpeting and banners that identify the different sections of the exhibit area. This means you can start your Products '74 tour at any exhibit and still save hours of time and thousands of footsteps.

### can't make the show?

If you can't make the show this year you can use Products '74 to see for yourself just what the participating exhibitors are displaying as their


best, their newest, their most exciting. Every copy of Products '74, including those distributed in Houston, will have two reader service cards so that you and your associates can request catalog information by mail.

### reserve your copy now

If you can't make the show, you can reserve a copy now by sending two dollars along with your name and address to Products '74, House & Home, 1221 Avenue of the Americas, New York, New York 10020. Your copy will be mailed immediately on publication in January.

Be sure to attend the NAHB Convention in Houston: January 20-24, 1974

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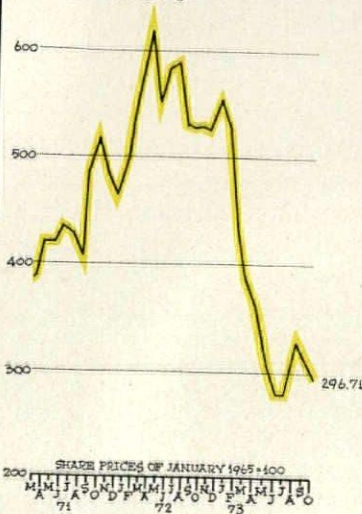
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CIRCLE 27 ON READER SERVICE CARD

# The rout in MGIC shares hauls housing stock averages downward

The stock of the big Milwaukee mortgage insurer took a stunning loss of 19 5/8% in the month ended October 3. That took MGIC's price down to 46 1/8, or less than half of its high for 1973.

The debacle pulled the entire housing stock index down, although the building companies and the S&Ls had a fairly good month. HOUSE & HOME's composite index of 25 representative housing stocks plunged to 296.71 from 314.87. Here is the composite graph.



Here's how the five companies in each group performed.

	Oct. '72	Sept. '73	Oct. '73
<b>Builders</b>	450	282	317
<b>Land develop.</b>	367	142	147
<b>Mortgage cos.</b>	1,289	1,065	840
<b>Mobile homes</b>	1,492	573	482
<b>S&amp;Ls</b>	234	130	146

Company	Oct. 3 Bid/Close	Chng. Prev. Month
<b>BUILDING</b>		
Alodex	OT 1 1/8	- 5/8
AVCO Comm. Devl.-d	PC 1 3/8	- 1/8
American Cont. Homes	OT 6 1/4	+ 3/4
American Housing Sys.	OT 1 3/8	- 3/8
American Urban Corp.	OT 2 1/8	- 1 1/8
Bramalea Cons. (Can.)-d	OT 5	+ 20
Building Systems Inc.	OT .05	- 58
Campanelli Ind.	OT 5 1/2	+ 1
(New America Ind.)		
Capital Divers. (Can.)-d	OT .36	- .02
<b>*Centex Corp.</b>	<b>NY 18 1/8</b>	<b>+ 2 1/4</b>
Cenvill Communities	AM 12 1/2	+ 2 1/2
Cheezem Dev. Corp.	OT 2 3/4	- 1/2
Christiana Cos.	AM 3	+ 3/4
Cons. Bldg. (Can.)	TR 2.60	- .15
Dev. Corp. Amer.	AM 19 1/2	+ 3 1/4
Dev. Int. Corp.	OT 5	- 5/8
Edwards Indus.	OT 4 1/2	- 1/4
First Builders Bancorp.	OT 2 1/4	
First Hartford Corp.	AM 4	+ 1/8
FPA Corp.	AM 7 1/2	+ 1/8
Carl Freeman Assoc.	OT 6 1/8	+ 5/8
Frouge Corp.-d	OT 5 1/2	
General Builders	AM 1 3/8	
Gil Development-d	OT 1/4	
Hallcraft Homes	OT 3	- 3/4
Hoffman Rosner Corp.	OT 3	
Homewood Corp.	OT 7	- 1/4
Hunt Building Corp.	OT 2 1/8	- 1/8
<b>*Kaufman &amp; Broad</b>	<b>NY 25 1/4</b>	<b>+ 1 3/4</b>
Key Co.-d	AM 3 3/4	+ 1/2
Leadership Housing	OT 4 3/4	+ 7/8
(includes Behring Corp.)		
Leisure Technology	AM 7 1/4	+ 1/4
Lennar Corp.	AM 8 1/2	+ 1/2
McCarthy Co.	PC 2 1/8	
McKeen Const.	AM 3 1/2	+ 1/2
H. Miller & Sons	AM 9 1/4	+ 3/4
Mitchell Energy & Dev.	AM 26 1/4	+ 2 3/4

Company	Oct. 3 Bid/Close	Chng. Prev. Month
National Environment (Sproul Homes)	OT 2 3/8	
L. B. Nelson Corp.	AM 3 7/8	- 1 3/8
Oriole Homes Corp.	AM 11 1/4	+ 5/8
Prel. Corp.	AM 4 3/4	- 1/8
Presidential Realty	AM 11 3/8	+ 1 1/2
Presley Development	AM 5	+ 1 1/2
Pulte Home Corp.	AM 3 3/8	+ 1/8
F. D. Rich Housing Corp.	OT 1 1/2	- 1/8
Robino-Ladd Co.	AM 7 1/4	+ 3/8
Rossmoor Corp.	AM 6 1/2	+ 1 3/8
<b>*Ryan Homes</b>	<b>AM 25</b>	<b>+ 3 1/2</b>
Ryland Group	OT 7 1/2	- 1
<b>*Shapell Industries</b>	<b>NY 14 1/2</b>	<b>+ 4 3/8</b>
Shelter Corp. of America	OT 1 1/2	+ 1/8
Standard Pacific	AM 2 1/2	+ 1/8
Universal House & Dev.	PC 1 1/2	- 1/2
<b>*U.S. Home Corp.</b>	<b>NY 10 5/8</b>	<b>+ 1</b>
Valley Forge Corp.	OT 4	- 3/4
Washington Homes	OT 1 1/2	- 1
Del. E. Webb	NY 5 7/8	+ 1
Western Orbis	AM 7 1/8	- 1/8
Westchester Corp.	OT 2 3/8	- 5/8

SAVINGS & LOAN ASSNS.		
American Fin. Corp.	OT 14 3/8	+ 3 1/8
Calif. Fin.	NY 4 5/8	+ 1/4
Empire Fin.	AM 9 1/4	+ 7/8
<b>*Far West Fin.</b>	<b>NY 7 1/8</b>	<b>- 3/8</b>
Fin. Corp. of Santa Barb.	AM 15 1/4	+ 2 1/8
<b>*Fin. Fed.</b>	<b>NY 16 1/4</b>	<b>+ 2 1/4</b>
<b>*First Charter Fin.</b>	<b>NY 19 1/4</b>	<b>+ 2 3/4</b>
First Lincoln Fin.	OT 3 1/8	- 1/8
First S&L Shares	AM 14 3/8	+ 1/4
First Surety	OT 4 1/4	+ 5/8
First West Fin.	OT 1 7/8	+ 1/8
Gibraltar Fin.	NY 17 3/4	+ 1 1/8
Golden West Fin.	NY 15 1/4	+ 3/8
<b>*Great West Fin.</b>	<b>NY 21 3/8</b>	<b>+ 1 1/4</b>
Hawthorne Fin.	OT 8 1/4	+ 1/4
<b>*Imperial Corp.</b>	<b>NY 11 1/4</b>	<b>+ 1 1/4</b>
Trans World Fin.	NY 8 1/8	- 1/4
Union Fin.	AM 8 3/4	+ 1/8
United Fin. Cal.	NY 9 3/8	+ 3/4
Wesco Fin.	NY 14 3/8	+ 2 3/8

MORTGAGING		
Charter Co.	NY 21	- 2 1/2
CMI Investment Corp.	NY 29 1/8	- 7 3/4
<b>*Colwell</b>	<b>AM 14</b>	<b>+ 3 1/4</b>
Cont. Illinois Realty	NY 18 1/8	+ 2 1/8
Excel Investment	AM 14 7/8	- 1
Fed. Nat. Mtg. Assn.	NY 22 1/2	+ 3 1/8
Financial Resources Gp. (Globe Mortgage)	OT 2	
FMIC Corp. (formerly First Mtg. Ins. Co.)	OT 14	- 2 1/2
<b>*Lomas &amp; Net. Fin.</b>	<b>NY 14 1/4</b>	<b>+ 3 3/8</b>
<b>*MGIC Inv. Corp.</b>	<b>NY 46 1/8</b>	<b>- 19 1/8</b>
Midwestern Fin.	AM 10 1/4	
Mtg. Associates	OT 14 1/2	+ 2
Palomar Fin.	AM 4 1/8	+ 5/8
Western Pac. Fin. Corp. (formerly So. Cal. Mort. & Loan Corp.)	OT 2 1/2	+ 1/4
UPI Corp.	AM 2 3/4	+ 1
(United Imp. & Inv.)		

MORTGAGE INV. TRUSTS		
Alison Mtg.	NY 27 1/2	+ 5/8
American Century	AM 17 1/2	- 1 1/8
Arlen Property Invest.	OT 15	+ 1 1/4
Atico Mtg.	NY 17 1/2	+ 1 1/2
Baird & Warner	OT 17 1/8	+ 1 3/8
Bank America Rlty.	OT 27 1/4	+ 1 1/8
Barnett Mtg. Tr.	NY 27 3/8	+ 1 1/8
Beneficial Standard Mtg.	AM 27 1/4	+ 3 1/4
BT Mort. Investors	NY 30 3/8	+ 3 3/8
Builders Investment Gp.	NY 32 3/4	+ 3 3/8
Cameron Brown	NY 23 1/2	- 2
Capitol Mortgage SBI	NY 25	+ 1 1/4
Chase Manhattan	NY 59 1/8	+ 5 1/8
CI Mortgage Group	NY 18 1/8	+ 1 1/4
Citizens Mtg.	AM 17	+ 1 1/8
Citizens & So. Rlty.	NY 37 3/8	+ 6 1/2
Cleve. Trust Rlty. Inv.	OT 21 3/8	+ 2 3/8
Colwell Mtg. Trust	AM 30	+ 2
Conn. General	NY 22 1/2	+ 3
<b>*Cont. Mtg. Investors</b>	<b>NY 11 1/8</b>	<b>+ 1</b>
Cousins Mtg. & Eq. Inv.	NY 27 1/4	+ 2 3/8
Diversified Mtg. Inv.	NY 24 1/8	+ 1 1/8
Equitable Life	NY 25 1/8	+ 3 3/8
Fidelco Growth Inv.	AM 34 7/8	+ 7 3/8
Fidelity Mtg.	AM 29 1/4	+ 1 1/2
First Memphis Realty	OT 20 3/8	+ 1 1/8
<b>*First Mtg. Investors</b>	<b>NY 18 1/8</b>	<b>- 1/8</b>
First of Denver	AM 23	+ 1 1/8
First Pennsylvania	NY 23 1/8	+ 4 1/8
Franklin Realty	AM 8 3/8	+ 3/8
Fraser Mtg.	OT 15 1/4	+ 1/4
Galbreath Mtg.	OT 22	+ 1 1/4
Gould Investors	AM 8 1/8	- 3/8
Great Amer. Mtg. Inv.	NY 37 3/8	+ 4 3/8
Guardian Mtg.	AM 37 1/2	+ 3
Gulf Mtg. & Rlty.	AM 18	+ 3/4
Hamilton Inv.	OT 21 1/4	+ 3 1/2
Heitman Mtg. Investors	AM 13 1/2	+ 3/4
Hubbard R. E. Inv.	NY 19 1/4	+ 1/8
ICM Realty	AM 20 3/4	+ 1 3/8
Larwin Mtg.	AM 25	+ 4 1/4
Lincoln Mtg.	OT 7	+ 1/4
Mass Mutual Mtg. & Rlty.	OT 20 1/4	+ 2

Company	Oct. 3 Bid/Close	Chng. Prev. Month
Median Mtg. Investors	OT 11 1/4	+ 1/2
Mony Mtg. Inv.	NY 10 7/8	+ 3/8
Mortgage Trust of Amer.	NY 14	- 2 1/8
National Mortgage Fund	OT 13 1/2	+ 1/2
North Amer. Mtg. Inv.	NY 29	+ 2 3/4
Northwest Mut. Life Mtg. & Rlty.	NY 24 1/8	+ 2 1/8
PNB Mtg. & Rlty. Inv.	NY 21 1/4	+ 2
Palomar Mtg. Inv.	AM 13 3/4	- 5/8
Penn. R. E. Inv. Tr.	AM 12 1/4	+ 1/2
Property Capital	AM 16 1/8	+ 3 3/8
Realty Income Tr.	AM 15 3/8	+ 1 1/4
Republic Mtg. Inv.	NY 16 1/4	
B. F. Saul, R.E.I.T.	NY 16 1/4	- 1/4
Security Mtg. Investors	AM 9 1/4	+ 1/2
Stadium Realty Tr.	OT 5 1/2	- 1/2
State Mutual SBI	NY 21 1/8	+ 1 1/8
Sutro Mtg.	AM 15 1/2	+ 1 1/8
Unionamerica Mtg. & Eq.	AM 22 1/2	+ 1 1/4
U.S. Realty Inv.	AM 14 1/4	+ 5/8
Wachovia Realty Inc.	NY 25 7/8	+ 2 1/4
Wells Fargo Mtg.	NY 22 1/4	+ 2 1/4

LAND DEVELOPERS		
All-State Properties	OT 3 1/4	+ 1/8
American Land-d	OT 1 1/8	+ .001
<b>*AMREP Corp.</b>	<b>NY 6 1/2</b>	<b>+ 7/8</b>
Anvida Corp.	OT 9 1/4	+ 1/4
Atlantic Imp.-d	OT 4	
Canaveral Int.	AM 2 3/8	+ 1/4
Cavanagh Communities	NY 3 1/4	+ 3/8
Crawford Corp.	OT 6 1/4	+ 1/4
<b>*Deltona Corp.</b>	<b>AM 11</b>	<b>- 1/2</b>
Disc. Inc. of Amer.	OT 1 7/8	+ 1/8
Evans & Mitch. Ind.	OT 4 3/4	+ 1/8
Fairfield Communities	OT 1 1/8	- 1/4
<b>*Gen. Development</b>	<b>NY 8 1/2</b>	<b>+ 1 1/2</b>
Getty Financial Corp.-d (Don the Beachcomber)	OT 3 1/4	
<b>*Holly Corp.</b>	<b>AM 2</b>	<b>+ 1/8</b>
Horizon Corp.	NY 10	+ 2 3/8
Landmark Land Co. (Gulf State Land)	AM 2 1/4	+ 1/2
Land Resources	OT 3 1/8	- 1/4
Major Realty	OT 4 1/4	- 1/4
<b>*McCulloch Oil</b>	<b>AM 5 1/8</b>	<b>- 1/2</b>
South. Rlty. & Util.-d	AM 5	

MOBILE HOMES & MODULES		
<b>*Champion Home Bldrs.</b>	<b>AM 4 1/8</b>	<b>- 3/4</b>
<b>*Commodore Corp.</b>	<b>AM 2 1/4</b>	<b>- 1/4</b>
Concheco-d	AM 11	- 1/8
De Rose Industries	AM 3	+ 1/8
<b>*Fleetwood</b>	<b>NY 8 1/8</b>	<b>- 2 3/4</b>
Golden West	OT 3 3/4	- 5/8
Moarco Corp.	AM 2 1/8	- 3/8
(Formerly Mobil Americana)		
Mobile Home Ind.	AM 11	- 1/2
Monarch Inc.	OT 1 7/8	- 1/8
<b>*Redman Ind.</b>	<b>NY 8 1/8</b>	<b>- 1 1/8</b>
Rex-Noreco	NY 3 3/4	+ 5/8
<b>*Skyline</b>	<b>NY 17 1/2</b>	<b>- 3 3/8</b>
Town & Country Mobile	AM 3 1/8	- 1/8
Triangle Mobile	OT 2	
Zimmer Homes	AM 4 1/2	- 5/8

DIVERSIFIED COMPANIES		
Albee Homes	OT 1/2	- 1/4
ASM Ind.-d (Formerly AABCO)	OT 1/4	
Brigadier Ind.	OT 2 5/8	- 3/8
Environmental Commun.	OT 3 1/4	+ 1 3/4
Hodgson House	OT 3	- 1/4
Liberty Homes	OT 2 3/4	+ 1/8
Lindal Cedar Homes	OT 4	- 3/4
Modular Dynamics	OT .03	
Nationwide Homes	AM 6 1/8	- 1/8
Shelter Resources	AM 4 1/4	- 7/8
Swift Industries	OT 7 1/8	- 1/8
Amer. Cyanamid	NY 26 1/8	+ 2
Amer. Standard	NY 15 1/8	+ 1
Arlen Realty & Develop.	NY 4 1/8	+ 1/4
AVCO Corp.	NY 10 3/4	+ 1 1/4
Bethlehem Steel	NY 33 1/2	+ 7 1/4
Boise Cascade	NY 17 1/8	+ 3 3/4
Building & Land Tech.	OT 6	- 1/2
CNA Financial (Larwin)	NY 14 3/8	+ 1 1/4
Castle & Cooke (Oceanic Prop.)	NY 17 3/8	+ 4
CBS (Klingbell)	NY 35	+ 4 1/2
Champion Int. Corp. (U.S. Plywood-Champion)	NY 21 1/4	+ 1 1/8
Christiana Securities	OT 194 1/2	+ 42 1/2
Citizens Financial	AM 4 1/8	- 1/4
City Investing (Sterling Forest)	NY 15	+ 2 3/8
Corning Glass	NY 117 1/4	+ 3 1/4
Cousins Properties	OT 24 1/4	+ 1 1/2
Davos Inc.	OT 1/2	- 1/2
Dreyfus Corp. (Bert Smokler)	NY 10	+ 2
Environmental Systems	OT 1 1/2	- 5/8
Evans Products	NY 18 1/8	+ 1 1/8
Ferro Corp.	NY 41 1/8	+ 1 3/4
First Gen. Resources	OT 3 1/8	
First Rlty. Inv. Corp.	AM 5	+ 1
Fischback & Moore	NY 60 1/4	+ 8
Forest City Ent.	AM 8 1/8	+ 3/4
Flagg Industries-d	AM 3 1/8	- 1

Company	Oct. 3 Bid/Close	Chng. Prev. Month
Frank Paxton Corp. (Builder Assistance Corp.)	OT 9 1/4	+ 3/4
Fruehauf Corp.	NY 27 1/8	+ 1 1/8
Fuqua Corp.	NY 14 1/4	+ 1 1/2
Georgia Pacific	NY 40	+ 3 1/4
Glassrock Products	AM 4 1/2	
Great Southwest Corp.	OT 5 1/8	+ 1/8
Gulf Oil (Gulf Reston)	NY 24 3/4	+ 2 1/2
INA Corp. (M. J. Brock)	NY 40 3/4	+ 5/8
Inland Steel (Scholz)	NY 30 1/4	+ 2 1/8
International Basic Econ.	OT 3 1/4	- 1
International Paper	NY 50 1/4	+ 4 1/4
Inter. Tel. & Tel. (Levitt)	NY 38 1/4	+ 6 1/4
Investors Funding	AM 4 1/4	+ 1/2
Killearn Properties	AM 4	- 1/2
Leroy Corp.	OT 3	
Ludlow Corp.	NY 14 1/4	+ 1 1/8
Monogram Industries	NY 7 1/8	+ 1 1/8
Monumental Corp. (Jos. Meyerhoff Org.)	OT 24 1/4	+ 3
Mountain States Fin. Corp.	OT 7 1/4	+ 3/4
National Homes	NY 4 1/2	+ 1/4
Occidental Petroleum	NY 10 3/4	+ 1 1/8
(Occ. Pet. Land & Dev.)		
Pacific Coast Prop.	AM 1 1/8	- 1/8
Perini Corp.	AM 5 1/8	

# The built-in things that mean a lot.

## Make more sales with Thermador built-in convenience.



Model CO-1

Install the new Thermador Toaster or the dependable Can Opener in wall or cabinet location—wherever they are used most. In promoting the end to counter clutter you are also promoting kitchen sales.

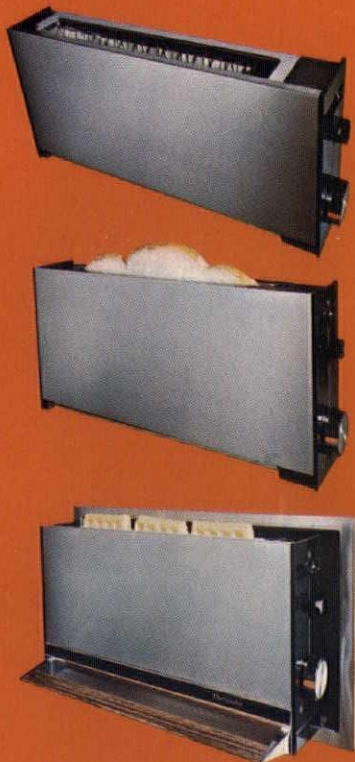
The Can Opener is a real time saver. It pierces any size or shape of can, severs lid, shuts itself off and holds the can until you lift the handle. Cutting blade of heat treated tool steel. Face plate with attractive design, may be covered with wallpaper, vinyl or paint to match kitchen decor.

The slim-line Toaster lifts out of its mounting for ease of cleaning, or for use at your table. The color selector lets you order the exact amount of toasting you want. It holds an extra large slice of French or Shepherder's bread or two regular size slices plus all the handy toastable foods. Brushed lifetime stainless steel finish with vinyl simulated woodgrain handle. Write for details.

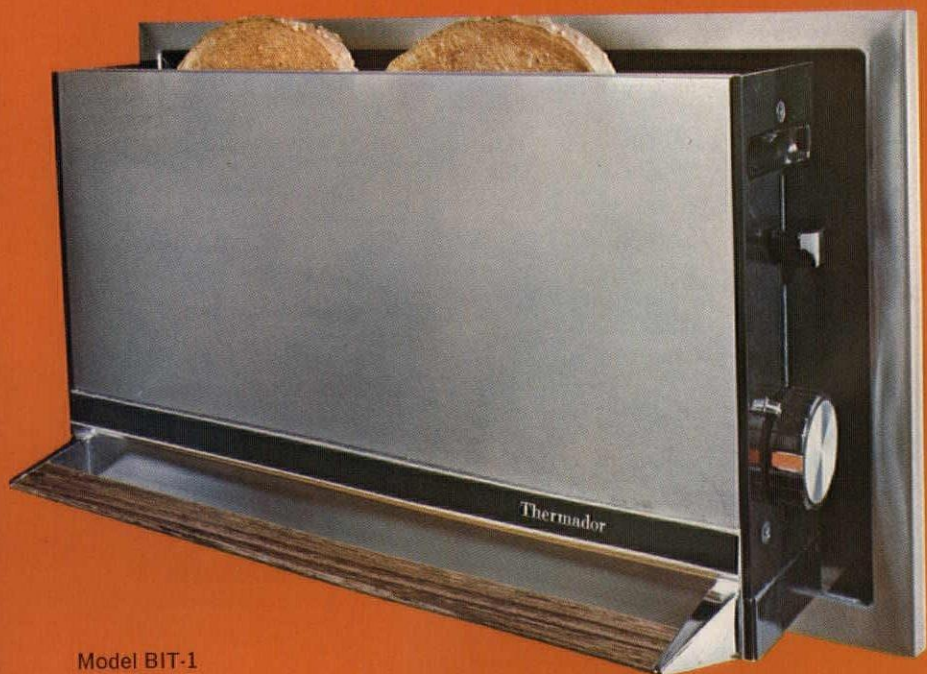
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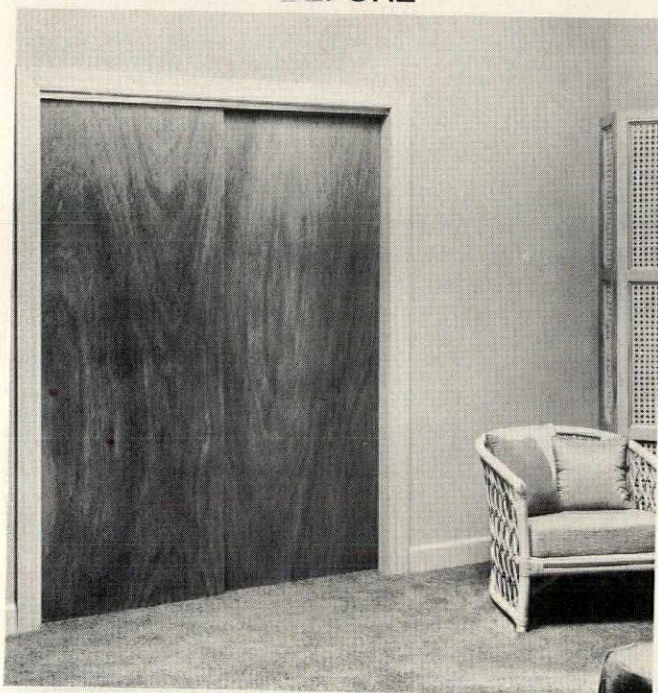


Model BIT-1

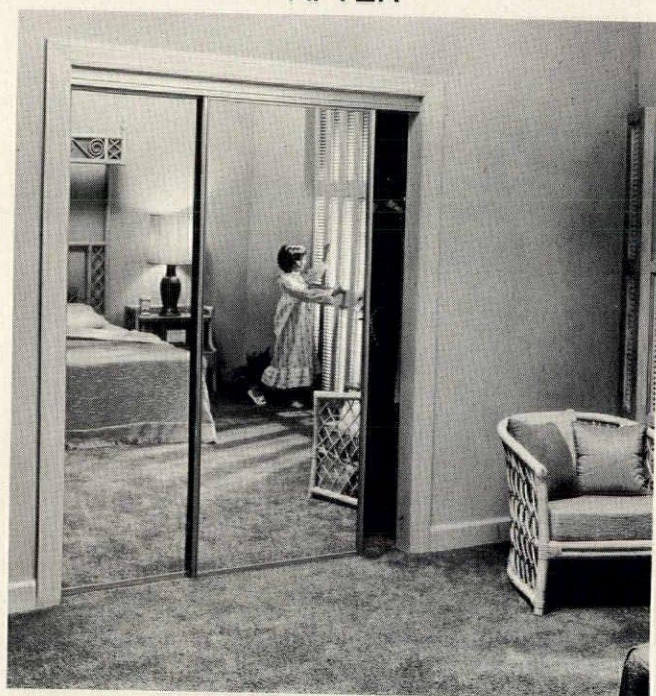


# Mirrors do make a difference

BEFORE



AFTER



As the above pictures illustrate, sliding mirrored wardrobe doors are the bright, modern cheerful way to conceal a closet. These wardrobe doors that "smile back at you" not only add glamour to any bedroom—but they dramatically expand the room's dimensions, too. And the ladies, especially, appreciate this generous head-to-toe grooming convenience.

Sliding mirrored wardrobe doors aren't nearly as expensive as you might think—and as a functional part of the structure, most lending institutions allow full credit on installations of this type. If you want to see other ways to put the magic of mirrors to work for you and where to buy them, send the coupon for our free

24-page color book—"Mirrors For All American Homes." Also, stop in and see us at Booth 1004 at the INBEX show, Nov. 27, 29.

Yes, please send me your free book along with a Directory of Members of the National Assn. of Mirror Manufacturers.

Name \_\_\_\_\_

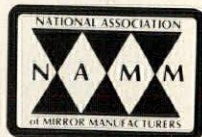
Company \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

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We build our cabinets to be forgotten. First, we get them there as scheduled... individually cartoned to protect the "family-proof" finish. We make them simple to install... doors and drawers won't warp. Finally, they're priced to give you more value for the dollar.

Like fine furniture, KK cabinets enhance every decor. Decorating and accessories can change the mood from Mediterranean to Early American.

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Check the Yellow Pages for the distributor nearest you. Or write, Kitchen Kompact, KK Plaza, Jeffersonville, Indiana, 47130.



Forget  
Them!



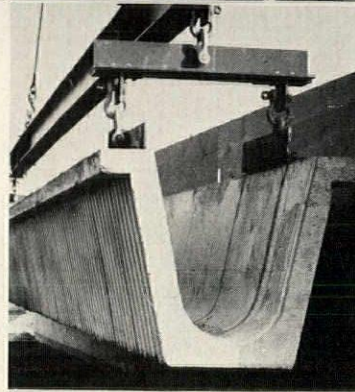


## On the waterfront: two ways to make a big splash

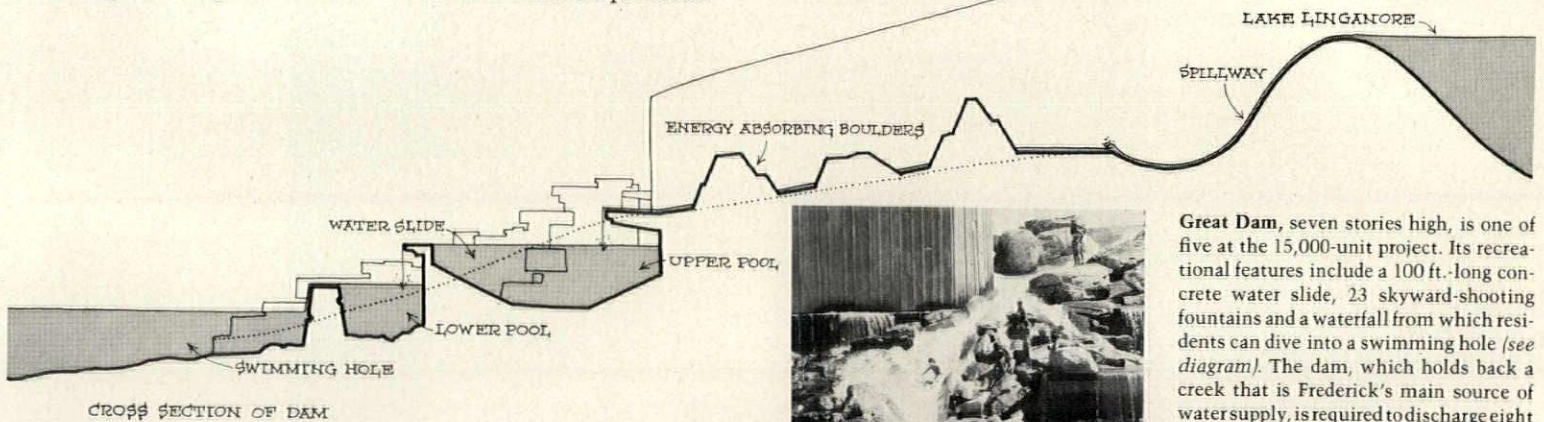
What with the popularity of water-oriented projects, developers Bill and Louie Brosius are going all out to turn their Lake Linganore at Eaglehead recreational project into a waterfront playground.

The brothers, long-time champions of preserving and enhanc-

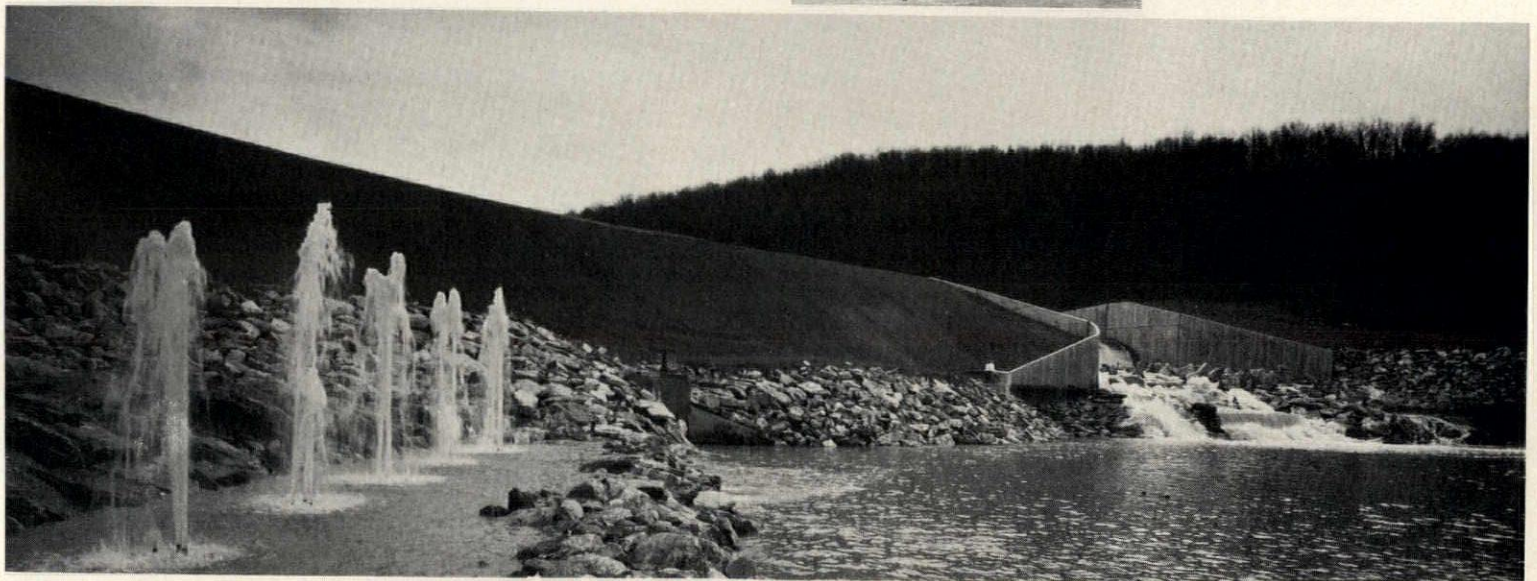
ing the environment, were not content merely to create seven lakes on the 4,000-acre site near Frederick, Md. They've added extra amenities, two of which are shown here: a dam that's more than a dam and a lakefront esplanade that solves an environmental problem.



Esplanade for strolling and bike riding solved an engineering problem—transportation of sewage through a steep hill rising above the project's largest lake. The 3,000' precast concrete esplanade consists of flat slabs placed atop 65 U-shaped sections (photo, left) through which sewage flows. The cost, including set-up of a pre-casting plant, was about \$340,000. A conventional sewer line through the hill area would have cost under \$100,000, but would have resulted in destruction of hundreds of full-grown trees.



**Great Dam**, seven stories high, is one of five at the 15,000-unit project. Its recreational features include a 100 ft.-long concrete water slide, 23 skyward-shooting fountains and a waterfall from which residents can dive into a swimming hole (see diagram). The dam, which holds back a creek that is Frederick's main source of water supply, is required to discharge eight million gallons of water daily. Cost of the dam and the lake: \$1,100,000.



# No matter how you color it - Temple's new textured hardboard siding looks great!

Temple's new textured primed panels solve many traditional siding problems—with a look that's tradition itself.

These panels make painting simple. Their rustic grain patterns look great under any of a rainbow of colors, and the factory-primed finish eliminates half the painting job entirely. You can even wait up to sixty days before applying the surface coat.

Because Temple textured siding is made entirely of wood fibers, it offers many of the advantages of wood, and some others besides. It will not split or crack during cutting or nailing, even when nails are driven

flush. Each panel is uniform, free from knotholes, and simple to install. It is warp resistant, with no resins to bake out in the sun.

Available in grooved or ungrooved panels, Temple siding can save you time and money on your next construction job. Judge it against the siding you're using now—for both quality and price. See your building supply dealer—you may be surprised at how economical it really is.



**TEMPLE INDUSTRIES**

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# VALLEY



## Just the right touch

For the feather-touch control it's Valley's deck model with the exclusive "hydroseal", leak-proof internal design. Many years of protection are yours with the mirror-like "tri-plate" chrome finish.

For the touch of added elegance, in the bathroom, Valley features the Starburst series. The Starburst design is the complete new shape in acrylic handles—a shape that sets both the water flow and temperature with just the right touch.

**VALLEY FAUCET**

**EASTMAN CENTRAL D**

a division of

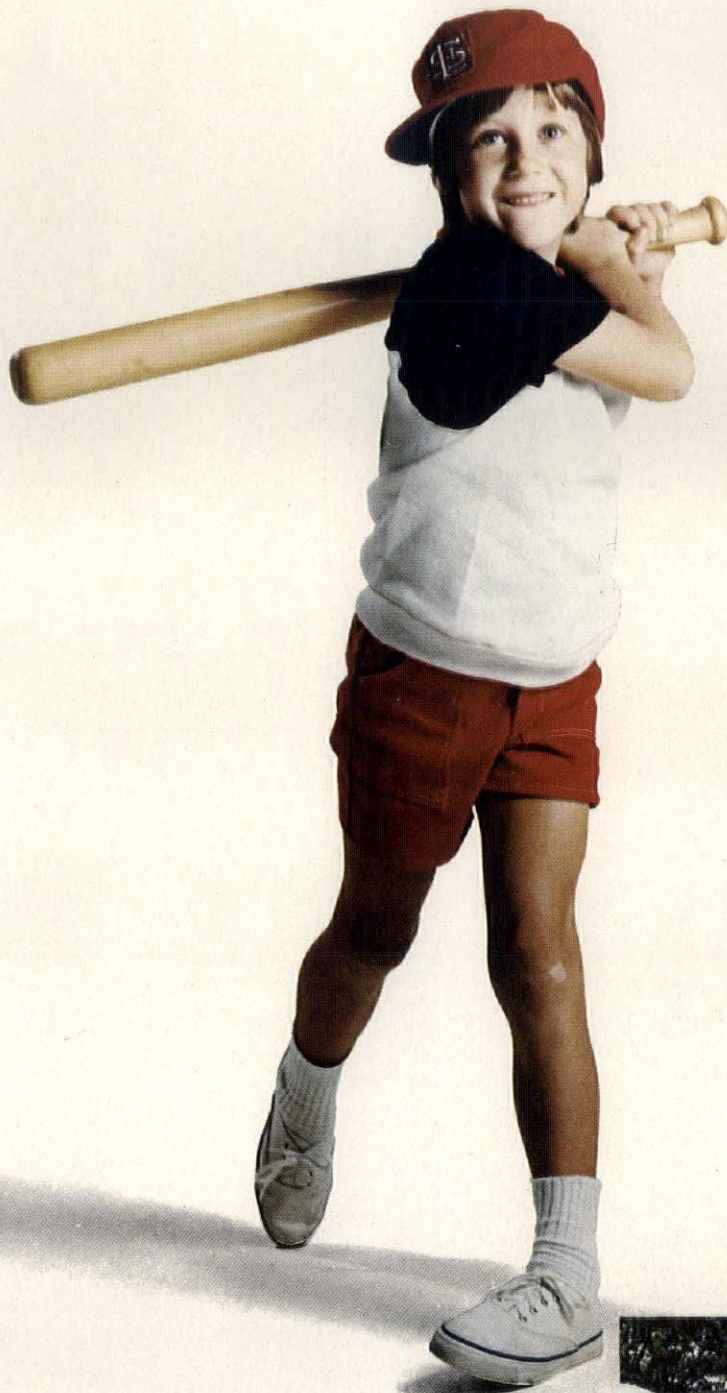
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SUBSIDIARY OF HYDROMETALS, INC.

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C-E tempered glass builds up a lot of resistance to the clash and crash that patio doors are subject to. Three to five times stronger than ordinary annealed glass, C-E Arm-R-Clad® tempered not only protects against hail and storm fury but it provides that extra margin of safety for doorway traffic.

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C-E Glass has tempering facilities in 12 unique locations, nationwide, for better service over wider areas. And our tempering techniques are specially monitored for precise quality control.

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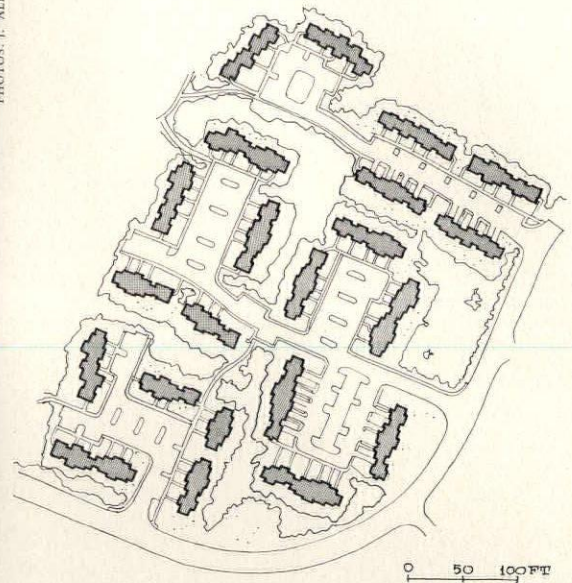


**CE GLASS**

COMBUSTION ENGINEERING, INC.

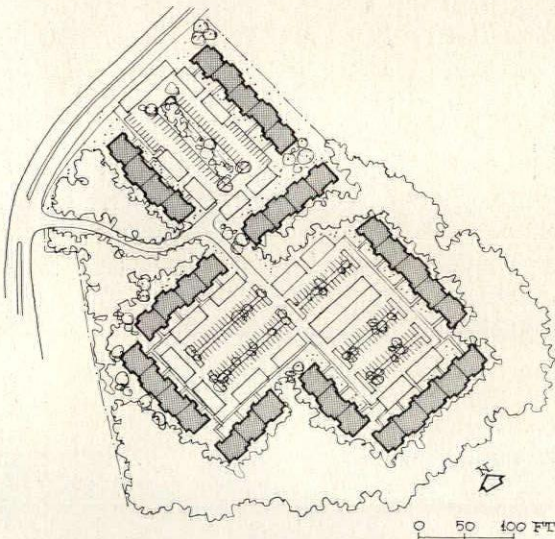


PHOTOS: J. ALEXANDER



Townhouse condominium project, Bentana Woods, comprises 156 units on a 24.5-acre site. Land costs were about \$4,000 per unit.

**Quick switch: Brisk condo sales in this townhouse development ...**



Garden apartments of Bentana Park face parking area and landscaped dividers. Land cost for the 14.7-acre site was \$2,000 for each of the 240 apartments. Land costs for both projects included roads and utilities run up to the site by the developers of Reston.



**... lead to conversion of this rental apartment project**

It was a case of being in the right place at the right time with the right product, says James Driscoll, president of Bennett of Virginia.

The place: two Reston, Va. sites separated by a 1,000'-wide school yard; the product: 156 \$60,000 townhouses on one side of the yard and 240 garden apartments slated to rent for \$215 to \$295 on the other side.

"By the time we had rented 125 apartments, townhouse

sales were proceeding so briskly that we knew we were in an exceptionally strong condo market," says Driscoll.

"The townhouse project, Bentana Woods, was selling in the upper-middle price range at a rate of seven to eight units a month, but we were getting a lot of requests for lower-priced units. Our competitors had very little to offer in the \$30,000 range. And what was offered was quickly snapped up."

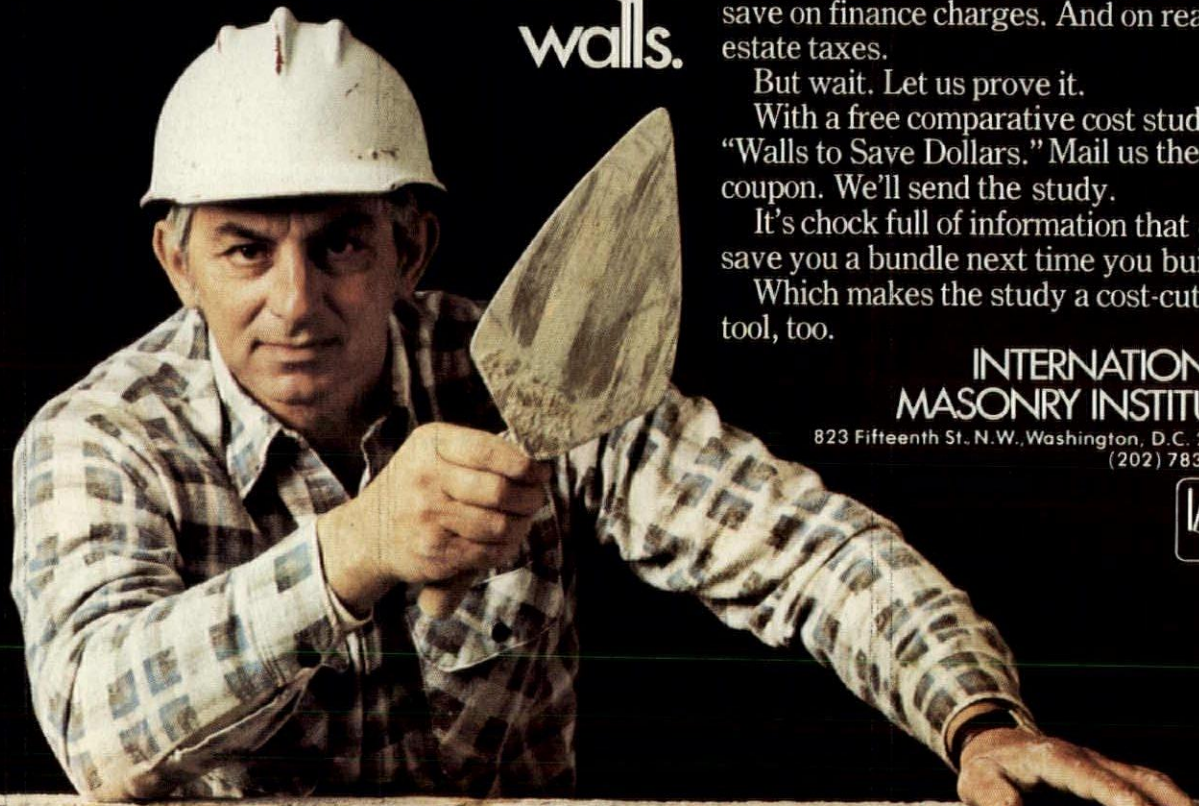
So in July Driscoll started selling the garden apartments at an average price of \$30,000. Within two months, 67 of the 240 units were sold. Twenty five percent of the 125 renters decided to buy. The remainder will leave at the end of one year leases.

"The garden apartments," says Driscoll, "have been selling well despite 9¾% mortgages."

Confirming his right time, place and product theory, Dri-

TO PAGE 43

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20% on your  
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What's more, because masonry buildings aren't as expensive, you can save on finance charges. And on real estate taxes.

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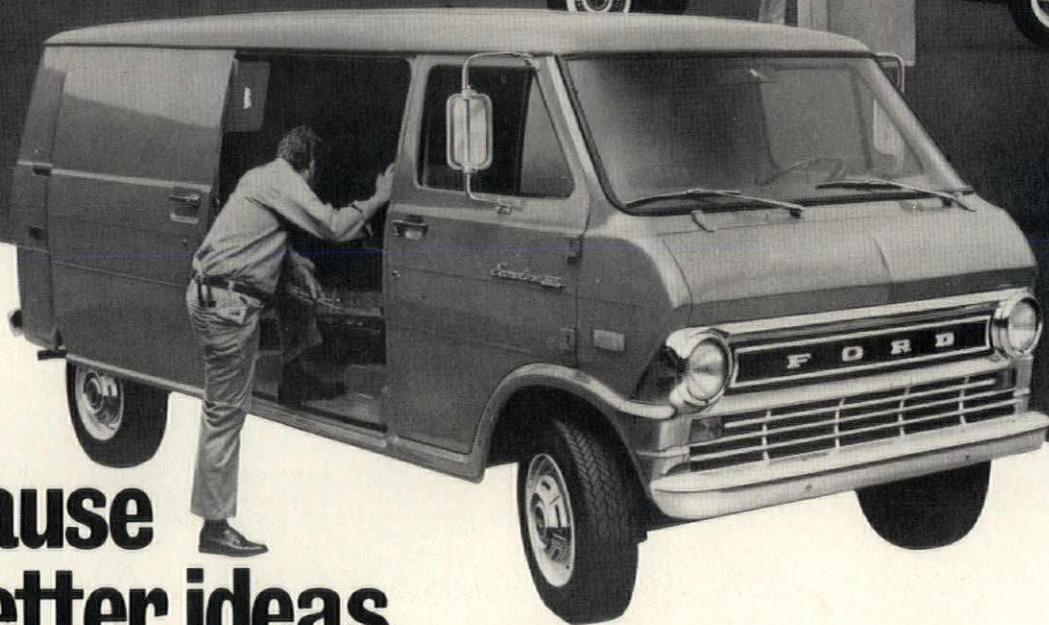
Company

Address

City  State  Zip

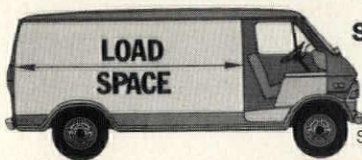
Nature of business  HH

# Best selling vans for 13 straight years...



## because of better ideas like these

**Swinging or sliding doors—same price.** Choose to suit your needs: The hinged side doors pictured at top. Or a sliding door with unique three point track system, shown in the lower illustration. Ford offers both.



**Short outside, big inside.** Even the SuperVan is substantially shorter than comparable vans. So

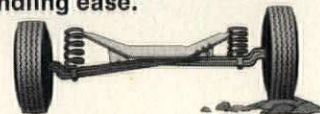
parking and maneuvering are easy. Yet inside you have over 10 ft. of clear loadspace. And it can carry over two tons.



**Walk-thru parcel vans.** Newest Econolines, they offer your choice of 10- or 12-ft. body. You can step from the driver's seat into the 6 ft. high cargo area. And huge 66" x 60" rear doors make loading easy.

### Twin-I-Beam handling ease.

Only Ford has it. Two big front coil springs for smoothness combine with two forged front axles for ruggedness. You get good stability in crosswinds, too.



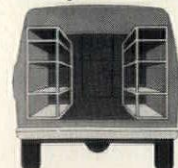
### Out-front servicing.

It's a big time-saver. Raise the mini-hood and your routine service points are right at hand—water, oil, battery, voltage regulator, and lots more.



### Complete choice of built-ins.

Any Econoline can be ordered with your choice of optional built-ins: racks, bins, cabinets, baskets. They fit into Econolines well because the body-sides are nearly vertical. Like more information on vans? Just ask your Ford Dealer.



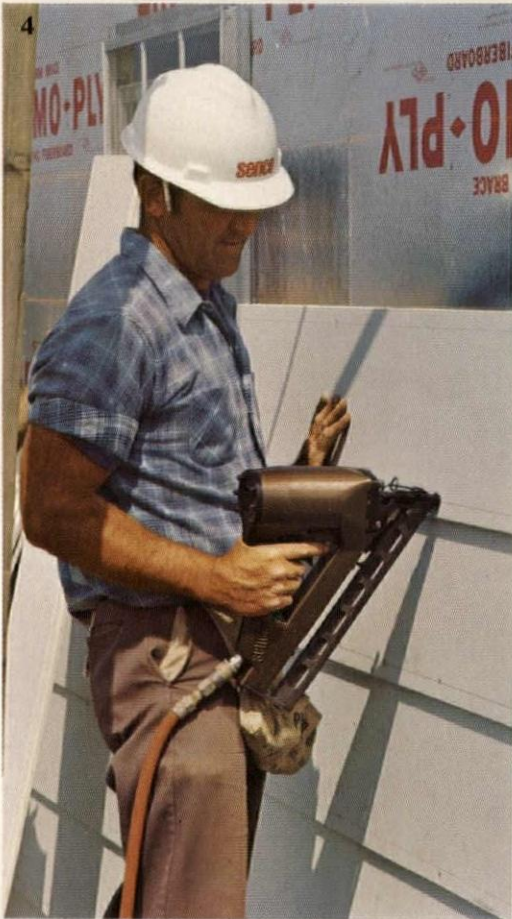
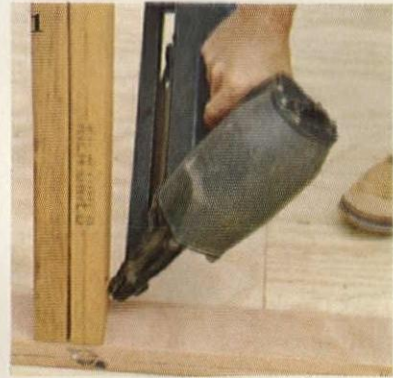
## FORD ECONOLINE VANS

FORD DIVISION



A better idea for safety: Buckle up.





- Lightweight, balanced Senco equipment reduces operator fatigue. 1
- Roof decks and finished roofing jobs are a snap. 2
- Senco automatic fastening system means better productivity, increased profit. 3
- Siding and sheathing—insulation is applied trigger fast. 4

## Framing. Sheathing. Trim. Roofing. You name it. Senco saves you time and money.

Whatever the application, a Senco automatic nailer or stapler will do the job fast. One large builder reports an 80% reduction in man hours for shingle application is common. Exterior siding is applied 25% faster than by conventional methods. Builders are increasing their profits with similar savings in fascia and soffit attachment, interior trim, framing, application of insulation—to name just a few of the time-saving uses for Senco equipment.

Senco offers the lightest, best balanced and most efficient nailers and staplers in the industry. And, the fasteners they drive — Sencote® nails and staples—provide phenomenal holding power, equal to or better than most more expensive deformed shank fasteners. Sencote fasteners are easy to drive, minimize wood splitting and result in better craftsmanship.

Our interest in the builder goes beyond the sale, too. The unique Senco Construction Specialist Program means our sales representatives are trained and eager to help you keep Senco equipment in good operating condition through regular, on-site calls; help train your workers in the most proficient use of the equipment; and, assist you in setting up an economical, under-roof component operation.

Contact us for complete details, and for the name of the Senco Construction Specialist nearest you.

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# senco

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## Simpson Ruf-Sawn 316. The textured plywood panel for solid color finishes.

When you put a coat of paint or solid color stain on Ruf-Sawn 316 siding, it stays there up to three times longer than on natural wood.

That's because Ruf-Sawn 316 has a resin-impregnated overlay permanently bonded to the plywood substrate. This process produces a surface that's ideal for taking and holding solid color finishes. It won't chip, crack, or peel, and you won't see any knot patches or fuzzy grain spots, either.

Yet it's a surface that looks and feels like wood. With a rough-sawn, actual woodgrain pattern deeply

embossed into the overlay.

Ruf-Sawn 316, available in plain or grooved patterns, is easy to handle and install. It saws, shapes and nails better than composition. And it meets or exceeds APA "303 Siding" specifications and FHA requirements for racking strength without sheathing.

See for yourself. We'll send you additional literature on Ruf-Sawn 316's superior performance, plus a free sample. Write Simpson Timber Company, 2000 Washington Building, Seattle, Washington 98101. Or call (206) 682-2828.

# Simpson

Write Ed Young, Simpson Timber Company, 2000 Washington Building, Seattle, Washington 98101. Or call (206) 682-2828.

FROM PAGE 38

scoll cites these points:

- Demand was very strong and few builders in the area had units ready.
- In addition to being adjacent to an elementary school, both projects are a few minutes' walk from a shopping center, a nursery, swim center and a park.
- There's diversity of product, therefore an appeal to a broad segment of the market. To wit: two-bedroom apartments and three three-bedroom townhouse plans ranging in size from 2,130 to 2,470 sq. ft. And buyer profiles reflect the differences.

The typical garden apartment buyer is a couple under 35, both work; the income level is \$17,000; 30% commute to downtown Washington, D.C.

The townhouse buyer, on the other hand, is a couple 39 years old with a \$24,000 income level; only one third of the wives work; two-thirds have at least one child; most men are professionals who commute to downtown.

Additionally, Driscoll sees the increased cost of housing and mortgage money as a strong factor in causing people to buy.

"At one point early in 1973, we experienced panic buying in the townhouse project," he says.

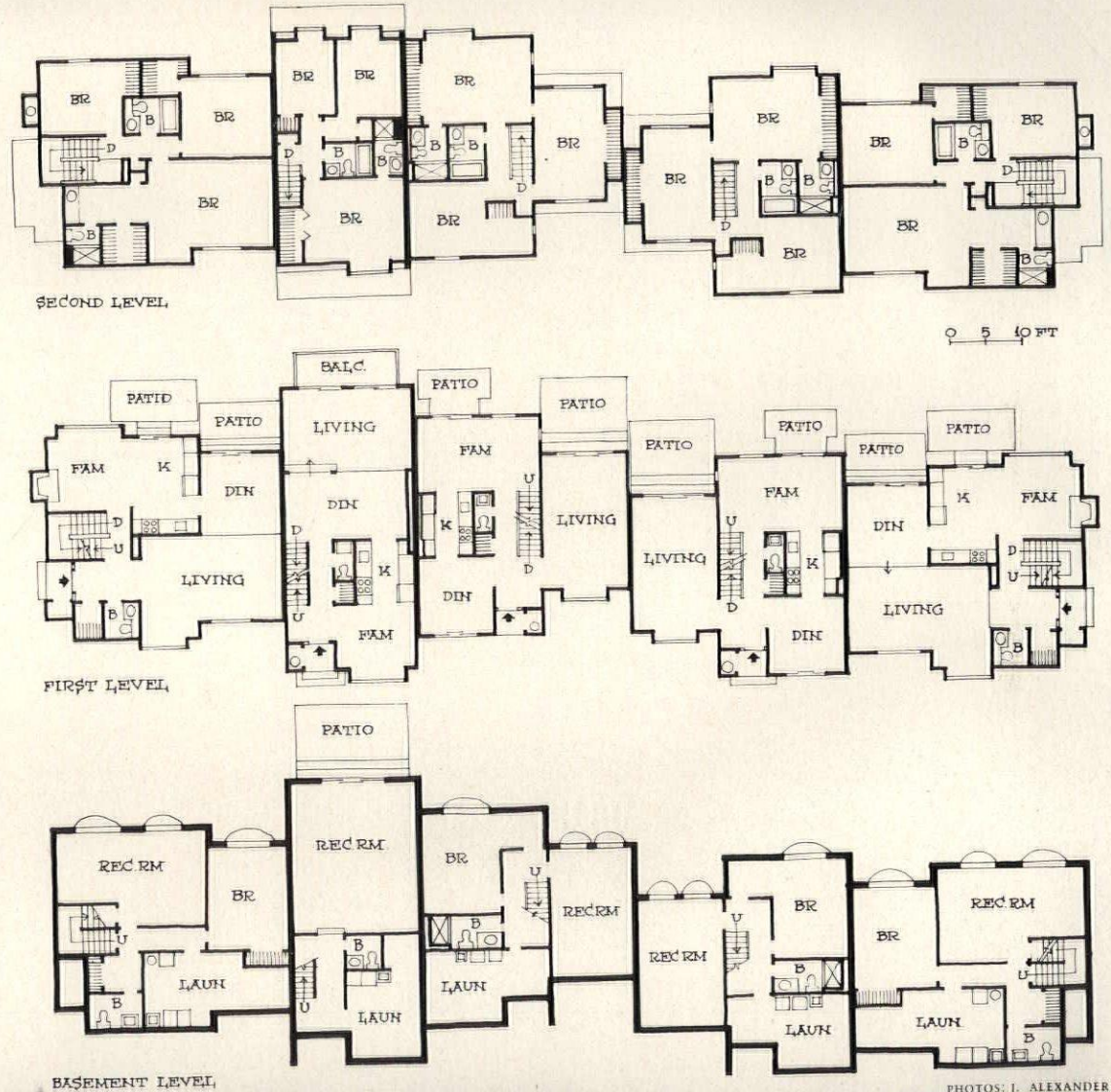
"I was upping the prices almost every day while, at the same time interest rates were soaring. But people continued to buy because they felt prices would go still higher."

While garden apartment sales are considerably ahead of schedule, Driscoll finds his hybrid situation somewhat onerous. The reason: The project is completely built out so he is paying interest on the entire project without fees or rents from some 80 units, which cost \$230 per month to carry. "Despite this, he expects sales income to eventually produce "a good profit."

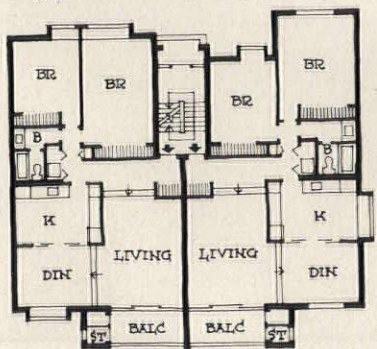


Rear townhouse balconies are staggered to provide greater privacy between units. Townhouse floorplans (below), which range from 2,130 to 2,470 sq. ft., show how units are arranged within a typical

building group. The builder, Bennett of Virginia, is a subsidiary of Edmund J. Bennett Associates. Architecture and landplanning for the two projects: Cohen, Haft & Associates.



PHOTOS: J. ALEXANDER

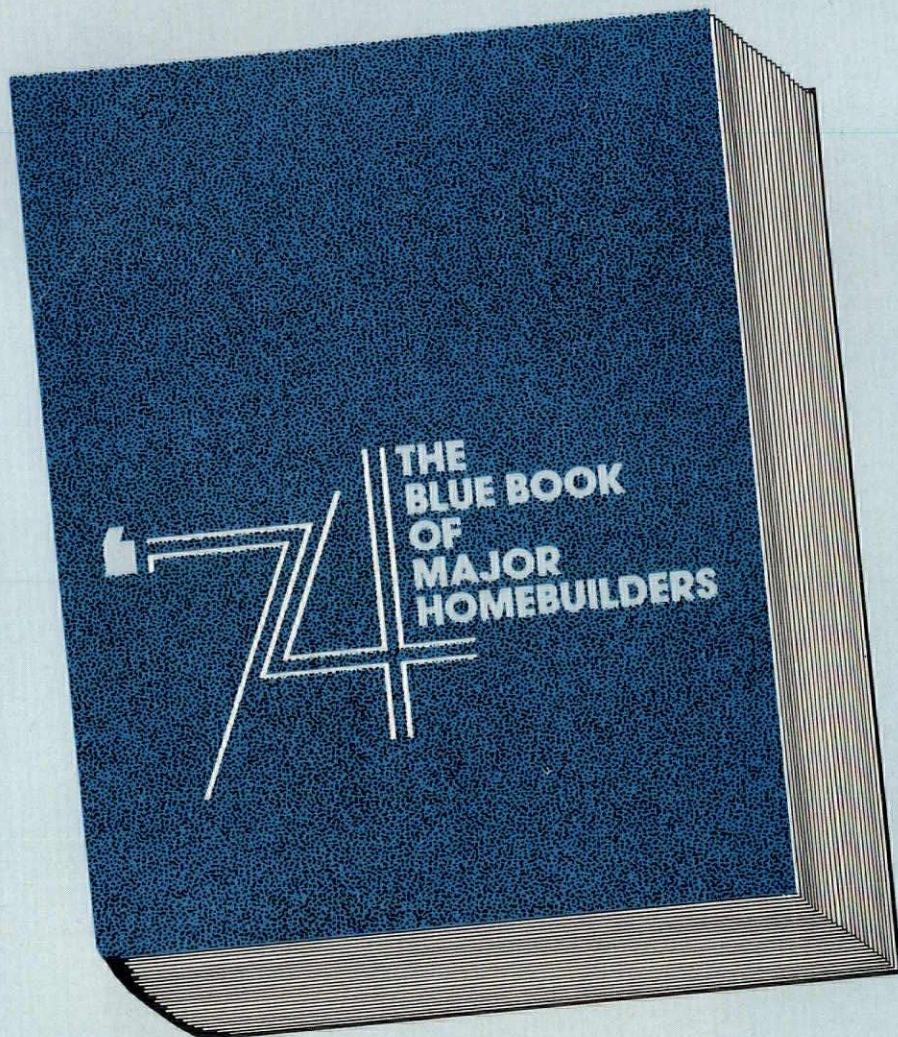


APARTMENT PLAN  
Outdoor living areas—balconies on upper floors, patios at ground level—of the garden apartments are at the rear.



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### BUILDING MATERIALS SUPPLIERS

- "We use it to target our marketing opportunities. Each of our regional managers has a copy as do all of our salesmen working in the larger metro areas."
- "The Blue Book is an excellent marketing tool - we use it for market planning and market research."
- "The Builder reports tell us what we need to know to make an intelligent sales call. All of our salesmen have their own personal copy."
- "The 1973 edition has saved us a great deal of time in gathering detailed information about our customers."

### ARCHITECTS AND ENGINEERS

- "By knowing who is building what, we can gauge the changing nature of the nation's new homes and apartments."
- "An excellent reference in determining the development trends in the larger metro areas."
- "To find new clients."
- "In understanding the relative positions of the major home builders."
- "We must know who the leaders are!"

### REALTY CONSULTANTS

- "An excellent source of information on 'out of town' builders operating in our metro area."
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- "As a broker for numerous land owners, the Blue Book is a valuable source reference."
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### LENDERS AND INVESTORS

- "Provides back-up data on builders to whom we provide loans."
- "We use the book in trying to determine large builder share of specific markets, assessing the builder's outlook and screening acquisition candidates."
- "We have used the book for several years. It is well done and is constantly being improved in its scope and detailed information."
- "The only complete reference to all of the building firms who have participated in the recent housing boom."

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- "The Blue Book puts it all in one place. We would be lost without it."
- "Its uses are too numerous to mention."
- "The most handy reference to 'where the action is' that we have ever found."
- "An invaluable tool in helping our clients."
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Quotes are in response to solicited comments from 1973 Blue Book buyers.

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**"If we don't get more professionalism into apartment management, we'll wind up with more governmental meddling in our business"**

Apartments seemed to be eclipsed by condominiums this year. But while construction of new apartments lagged, the job of managing existing apartments went on. In fact, the job got a little tougher because the supply of experienced apartment managers continued to shrink.

The professional needs of the apartment management business exist independently of apartment construction. They're unaffected by mortgage rates, tax incentives and all the other factors that cause spurts and declines in apartment building. And most multifamily housing, whether it's for sale or for rent, requires the daily supervision of on-site management personnel.

But who gives serious thought to developing and replenishing an adequate supply of capable apartment managers? Hard-pressed as we are today to find enough qualified managers to run the apartments we already have, what's it going to be like in future years as the nation's inventory of apartments continues to grow?

There's a corollary issue. Not only do we need professional managers to keep our complexes running profitably but also to dispel the feeling of some local governments that additional regulations and even licensing ordinances are needed to control the management of apartments.

**The basic problem.** Experienced managers are in short supply because efforts to train new managers are lacking. Traditionally, apartment managers are people in their forties, fifties and sixties who drift into the apartment business after careers in other industries or professions. They turn to apartment management to escape commuting, to enjoy more independence in their work or to find a more promising occupation. Whatever the reason, these people start their apartment management careers halfway through their working lives, so their time in the business is relatively brief.

Young people have not been attracted to apartment management because they aren't interested in the same job features that appeal to middle-aged people. Young people want the opportunity to acquire professional training that will lead to a worthwhile career.

We've been taking on people with no experience and teaching them the ropes through a combination of on-the-job training and classroom instruction. But running your own training program, regardless of how big and profitable your company may be, is expensive and often erratic. Aside from the increased administrative burden, the suc-

cess of such a trainee program fluctuates with your rate of new apartment construction. The inducement to enter our apartment management division at the trainee level is the expectation of advancement based on increased experience and learning. But our ability to fulfill that expectation depends on how steadily we can create new jobs so that people can be moved up. If construction temporarily slows down because of a soft market or a change in product emphasis, new jobs can't be opened up, trainees can't be advanced and we risk losing them.

Without the capacity to absorb their own trainees, companies that run manager training programs often do so for the benefit of competitors that don't invest in training.

But owner/managers who raid our company for apartment managers don't bother me half as much as those who don't look even that far for qualified apartment managers because their complexes stay rented up with or without good managers. These landlords who couldn't care less about the tenant conflicts and poor public relations perpetrated by bad apartment managers are of deep concern to me because they create an impression that rubs off on the entire industry.

**Excuse for civic controls.** Such a glaring lack of professionalism is the perfect justification for a government body to step in with new regulations and licensing programs. And that is happening.

In Palo Alto, Calif. we've been watching the progress of a city ordinance to license apartment managers. The main objective of this ordinance was to have been the prevention of racial discrimination in apartment renting by requiring managers to purchase operating licenses. These could then be revoked if the managers failed to meet any of the ordinance's stipulations. The rules would have included posting for public view a daily list of all available apartments and their rental rates so that minority prospects could not be turned away with false information.

The licensing ordinance went into effect, but only after all the measures designed to prevent discrimination were eliminated by an appeals court on the ground that state anti-discrimination laws pre-empted the need for similar city laws.

So Palo Alto apartment managers are now required to buy a city license in addition to the landlord's business license. And in view of Palo Alto's success in licensing apartment managers, the neighboring community of

Menlo Park has announced plans to develop a similar ordinance.

Aside from special interests and ulterior motives, the only reason employees should have to be licensed in any business is to make sure they're competent enough for their jobs and won't be a hazard to society. So the only logical reason for licensing apartment managers would be to insure that they have the judgment and the skills necessary to treat residents intelligently and to keep their complexes up to acceptable standards.

But how do you display enough professionalism to convince the public that you don't need more licensing and regulating?

**Needed: industry-wide programs.** The most effective answer doesn't lie in company-run training programs where the rate of personnel output depends on a company's rate of production. To create a large and steady source of new talent, training has to be encouraged and organized on an industry-wide scale.

Our *property* managers have for years been able to take instruction under the Institute of Real Estate Management (IREM) to earn the license of Certified Property Manager. But until just recently the same kind of industry certification has not been available for apartment managers even though these are the people who receive the public's attention when apartment management policies are scrutinized.

Some local apartment associations have been offering instruction for apartment managers for some time, but without significant accreditation, without national recognition and without concerted support from apartment owners.

Now, however, a national effort finally is being made by two different organizations (the National Apartment Association and the National Association of Homebuilders) to set up uniform schooling, testing and accreditation for apartment managers. Each association has separate programs run out of their Washington, D.C. headquarters through local affiliates.

With wide support from apartment owners, these national programs can be the answer to developing a supply of apartment management talent and displaying a reassuring level of professionalism to apartment residents and the public in general. Probably the most effective kind of support developers and owners can provide as an inducement to draw new people into the field is to subsidize apartment management schooling for promising individuals.

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CIRCLE 47 ON READER SERVICE CARD



**"Looking for a change in zoning? A good record for project maintenance can score some Brownie points for you"**

A developer's reputation has a lot to do with whether or not a town will approve a PUD or any higher-density project. If the developer's past performance shows that his projects are well managed and maintained once they're built out, there's a good chance for rezoning approval. On the other hand, if the developer's image is negative, negotiations can be crippled.

The critical point is that an increase in the quantity of land use must be offset by quality management, particularly in terms of maintenance. So the developer who wishes to build at higher densities on a regular basis should be certain that his maintenance track record is exceptionally good. Town officials will be looking as much to past experience and to the quality of the environments he has created as to the sophistication of his architecture and land planning.

Quality management involves considerable money. And too often this expense is overlooked in the developer's preliminary budget. The tendency is to emphasize initial capital expenditures and to slight long-term operating costs which, unfortunately, can make or break a project. Initial construction may be able to carry itself, but may not generate enough cash flow to properly balance operating costs. These costs are the developer's responsibility, however, and the acceptance of his application for higher densities may depend upon the degree to which he can deliver. With this in mind, let's review some principles of selecting and maintaining landscape with an eye to establishing a budget which is not too high or unreasonable.

A developer should budget enough money to cover the cost of initial planting. It's a fair statement that the higher the project's density the more plant material necessary, if only as a buffer to absorb the sound of air conditioners and other noise. A budget of \$500 to \$600 per unit for plant material is not unreasonable, and perhaps it is worth reducing a commitment to sophisticated architecture to get better and more buffering.

**Expert advice.** A local landscape contractor or nursery known for quality work should be engaged to put together a planting scheme. They will charge more than the typical plantsman who works with the speculative developer. But for the developer who makes a long-term commitment to his project and who wants to satisfy town officials, the investment should certainly pay off. One difficulty the developer may encounter is specifying the flora he wants. A 2" caliper tree, for instance, may be any one of four or

five different types which can't be distinguished by the uninitiated. A quoted difference in cost may or may not reflect a difference in the quality of vegetation. The developer working in an unfamiliar location can get help from a landscape architect who will select the proper plants for different locations and program a reasonable budget.

The best way to reduce landscaping costs is to protect existing plants or trees. They have a head start on any new plantings and a value which the initial site plan should maximize. Even in areas where there are no trees, but only good prairie grass, existing cover is far more easily and cheaply maintained than planted vegetation.

A primary concern is the total maintenance cost for a project, especially when it is carried by condominium and homeowners associations in a PUD. Total maintenance costs should not exceed 10% of monthly mortgage payments and should cover all maintenance including recreational lawn care, snow removal, road maintenance, etc. The monthly allocation also ought to supply a capital fund for resurfacing pavement every five to seven years and repairing occasional hurricane damage.

**Lawn maintenance.** Many lawns have to be cut on an almost weekly basis, especially during the heavy growing season. As a project gets larger, however, and particularly when it includes common open space, mowing schedules ought to differentiate by location and types of grass. Grass very close to buildings should be cut weekly, but grass 25 to 50 feet away could be mowed monthly like a park system. Common open spaces could be mowed two or three times a year, or they might even be hayed yearly so that they maintain themselves more naturally and so that wildflowers can survive. Obviously, only a large project can be maintained in this way. And even in this case the initial design should anticipate and ease the transition from high to naturally maintained areas.

**Ornamental planting.** Here the developer should think in terms of large trees as opposed to smaller plants. Within three to five years, a 2" caliper tree has a very good chance of growing to fairly substantial size—large enough to give shade and to sit under. In contrast, smaller trees (bare root, for example) require excessive water and maintenance, and the loss rate often runs higher than 25%. A developer is wiser to plant balled and burlaped trees, fewer if necessary, but larger, to achieve a substantial effect within a reasonable time period. By and large,

it pays to use locally grown flora and to plant massed rather than foundation planting. Foundation shrubs that are backed up against concrete dry out very fast in winter, are exposed on their rear sides to sunlight reflected off the buildings and, in general, grow poorly and require a high maintenance effort for a low return. In order to frame views, improve visual quality and minimize maintenance, it is far better to grow good, solid freestanding plants away from the buildings.

**Watering programs.** A tree or new shrub wants to be deeply watered once a week. A sprinkler system that wets down about six inches is effective for grassed areas, but larger plants should be hosed weekly with the equivalent of one inch of rain during the two years they require to become established. A plant should be allowed to dry out in the interim each week so that its roots keep growing deeper to seek water. If it's wetted down too often, its chances of survival in future dry periods will be considerably reduced. In a 200-unit project, one maintenance man's primary summer function should be watering the trees and shrubs, particularly as mowing responsibilities ease up. He might work on a commission—be paid a premium for every tree that survives and docked twice that premium for every tree he loses.

Trees and shrubs should be mulched with at least 6" of wood chips or some other coarse grain material to shield the water from evaporation. Peat moss, which tends to absorb water from the soil and to blow away when dry, should not be used. Most trees and plants could also be given a shot of balanced fertilizer every six weeks from March through late June and again in October. This should be carefully done; especially the first year, to protect the planted material from fertilizer burn. If a high nitrogen count fertilizer is used to maintain luxuriant foliage, the watering schedule should be accelerated. Profuse leaf structure evaporates ground water and requires much irrigation.

One final, if admittedly limited, suggestion for lawn maintenance: In relatively rural areas you might consider grazing animals. Although most residents would not want to be downwind from a herd of sheep, cattle or horses will not detract from—and can even add to—the quality of life in a development. They should pasture in open areas of five or more acres. In many cases farmers will be willing to pay for grazing rights while their animals serve as quiet, effective surrogate lawnmowers.

**JOHN RAHENKAMP**, PRESIDENT, RAHENKAMP, SACHS, WELLS AND ASSOCIATES INC., PHILADELPHIA, PA.



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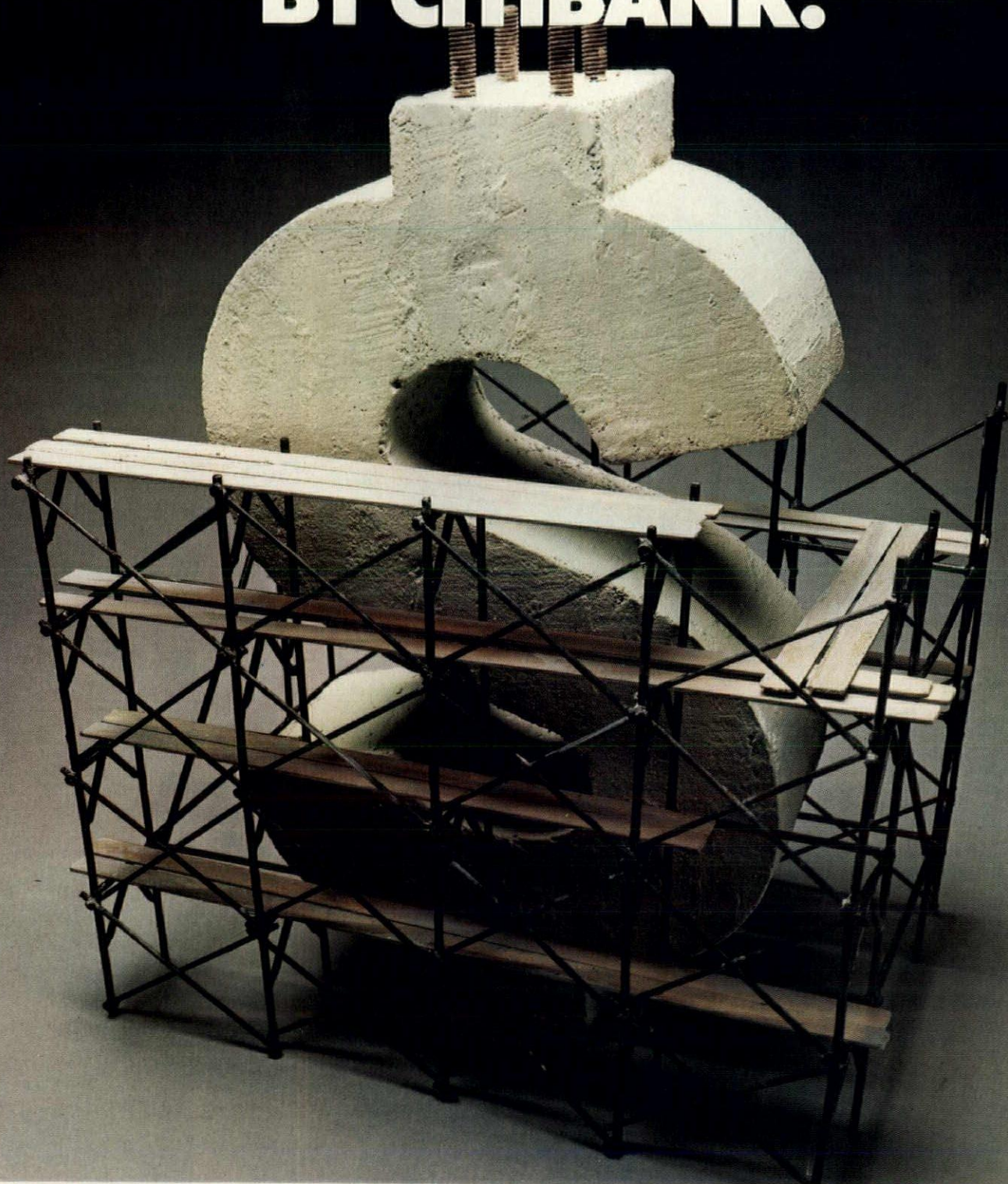


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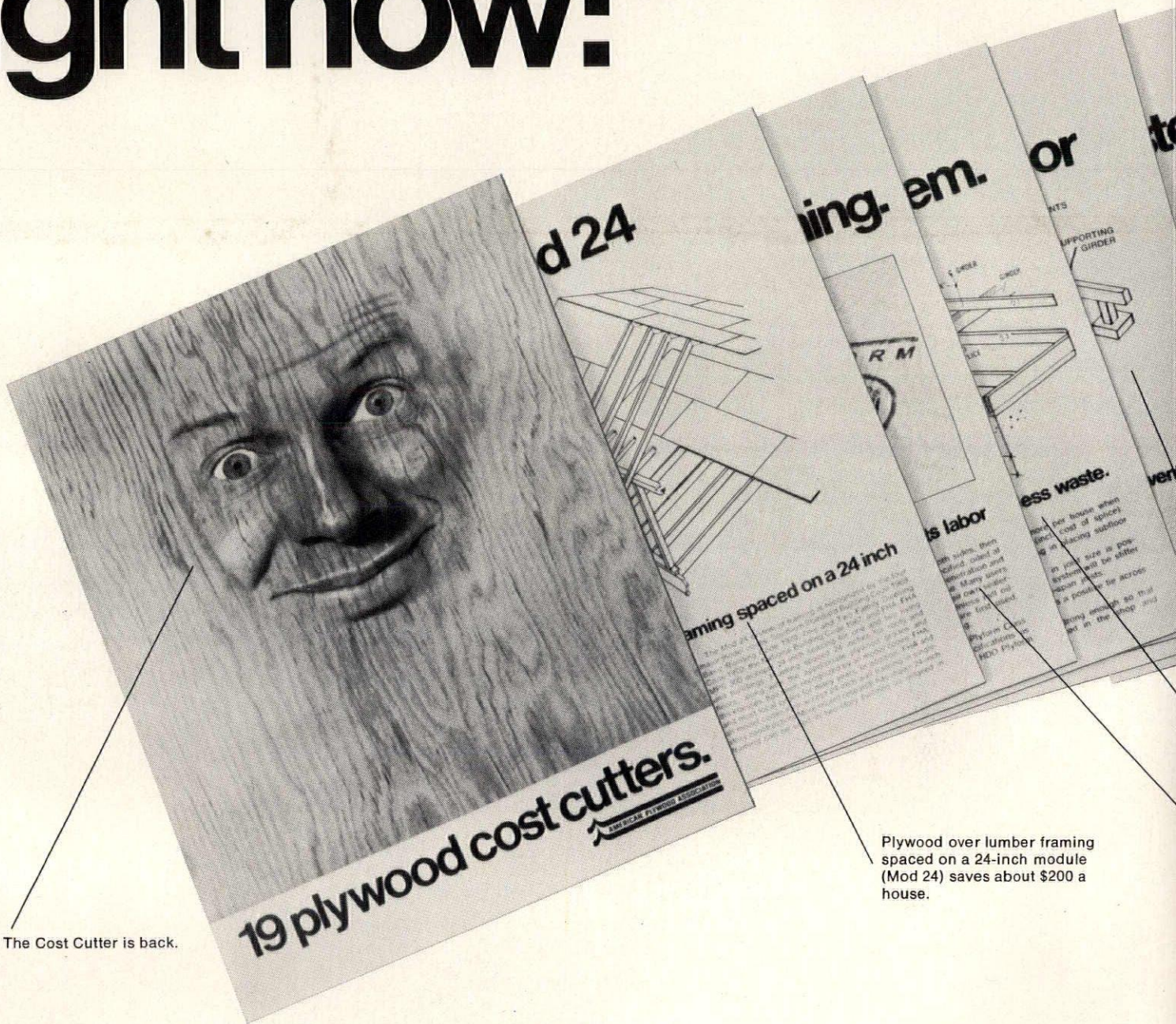
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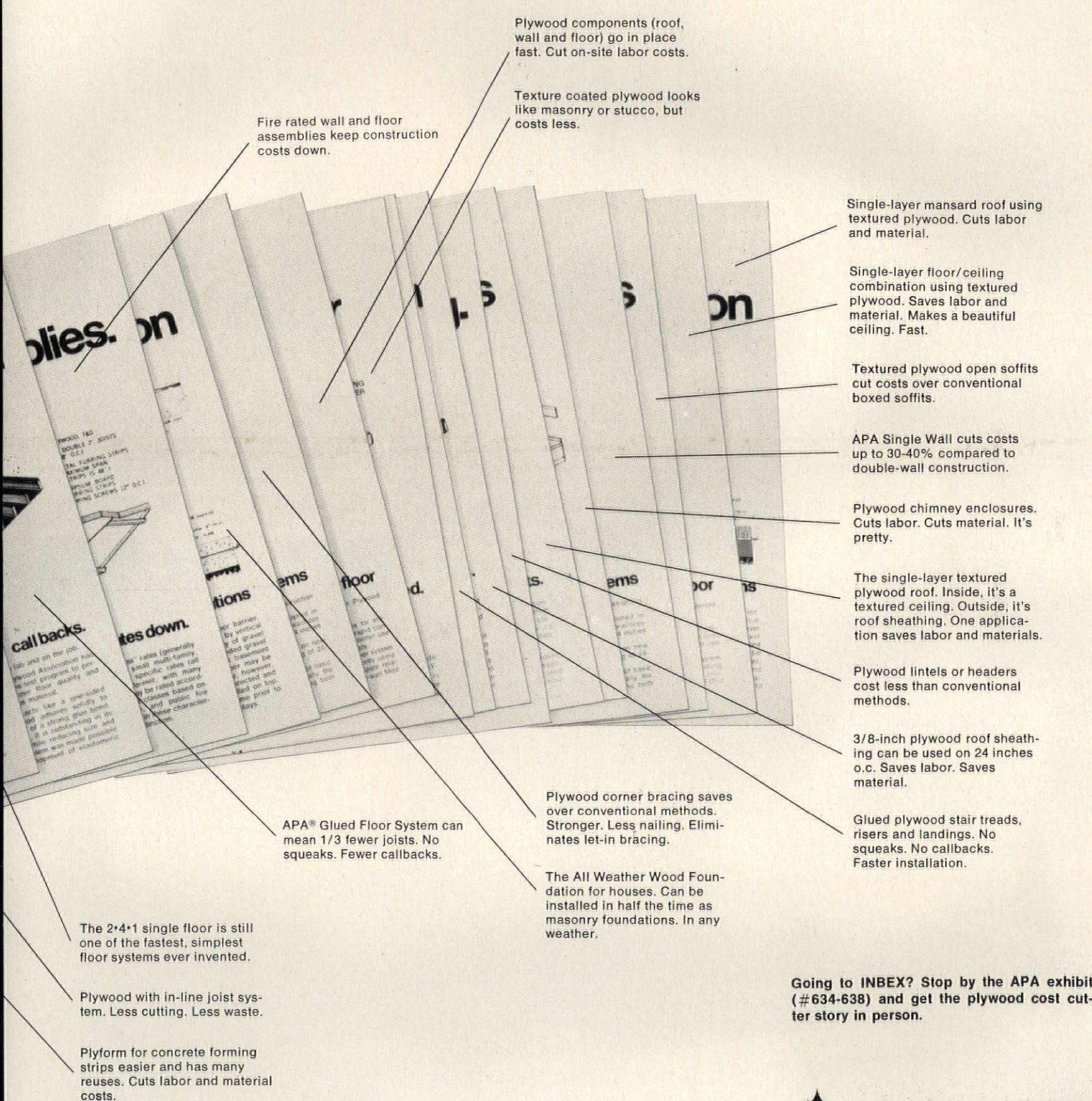


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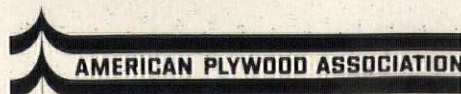
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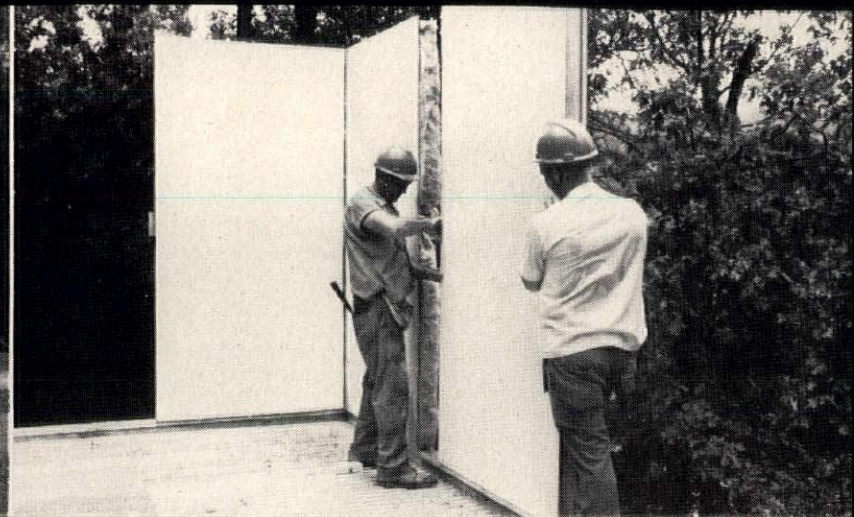
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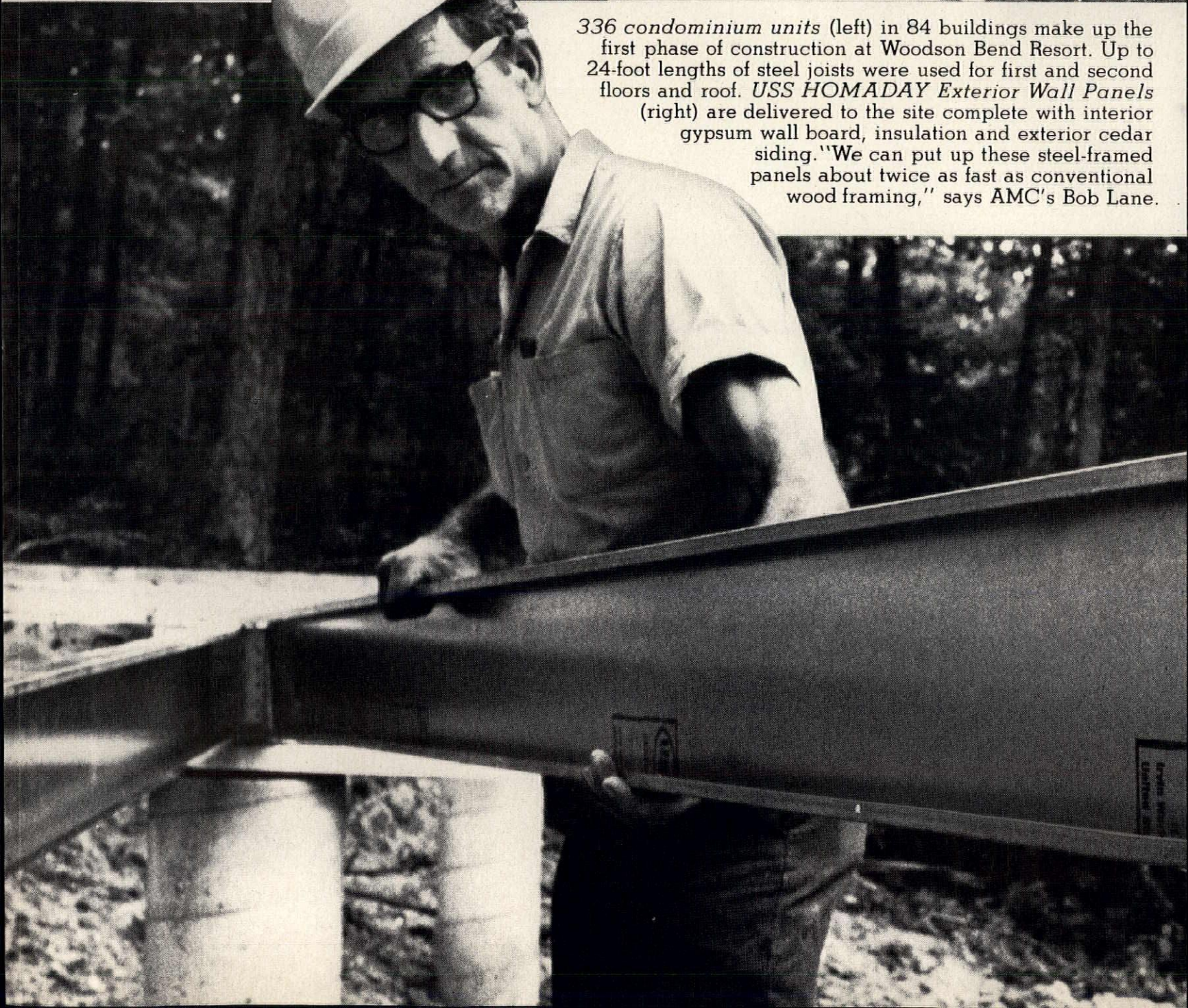
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# American Modulars saves



336 *condominium units* (left) in 84 buildings make up the first phase of construction at Woodson Bend Resort. Up to 24-foot lengths of steel joists were used for first and second floors and roof. *USS HOMADAY Exterior Wall Panels* (right) are delivered to the site complete with interior gypsum wall board, insulation and exterior cedar siding. "We can put up these steel-framed panels about twice as fast as conventional wood framing," says AMC's Bob Lane.



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American Modulars Corp. is one of the largest and most professional builders in the Midwest—with projects under construction in 4 states.

One interesting project is Woodson Bend Resort, near Somerset, Kentucky—where AMC is a turnkey contractor. This project was planned from the start around steel joists.

As a subsidiary of U. S. Steel, AMC had a special interest in investigating Super-C Steel Joists, which were developed by U. S. Steel. "Using steel joists with a steel deck and lightweight concrete, we installed our floors faster and saved \$600 a building," says Bob Lane, Vice President of AMC. "Also, steel joists can't shrink or warp—so floors don't squeak."

Super-C joists are hot dipped galvanized steel. They can be used with either plywood or steel decking. A growing list of builders are using these joists in single family houses, apartments and vacation homes.

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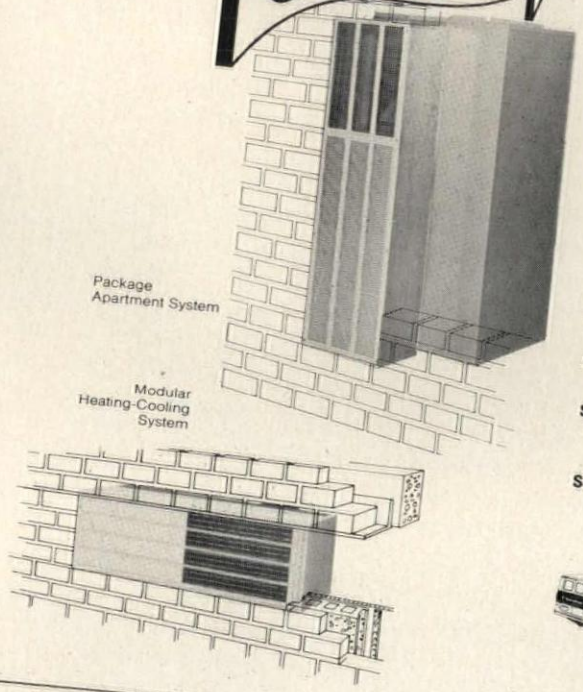
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CIRCLE 57 ON READER SERVICE CARD

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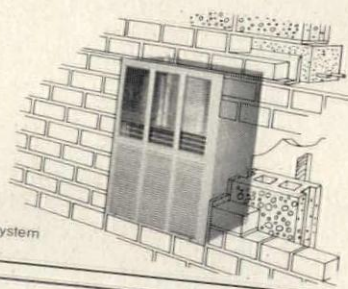


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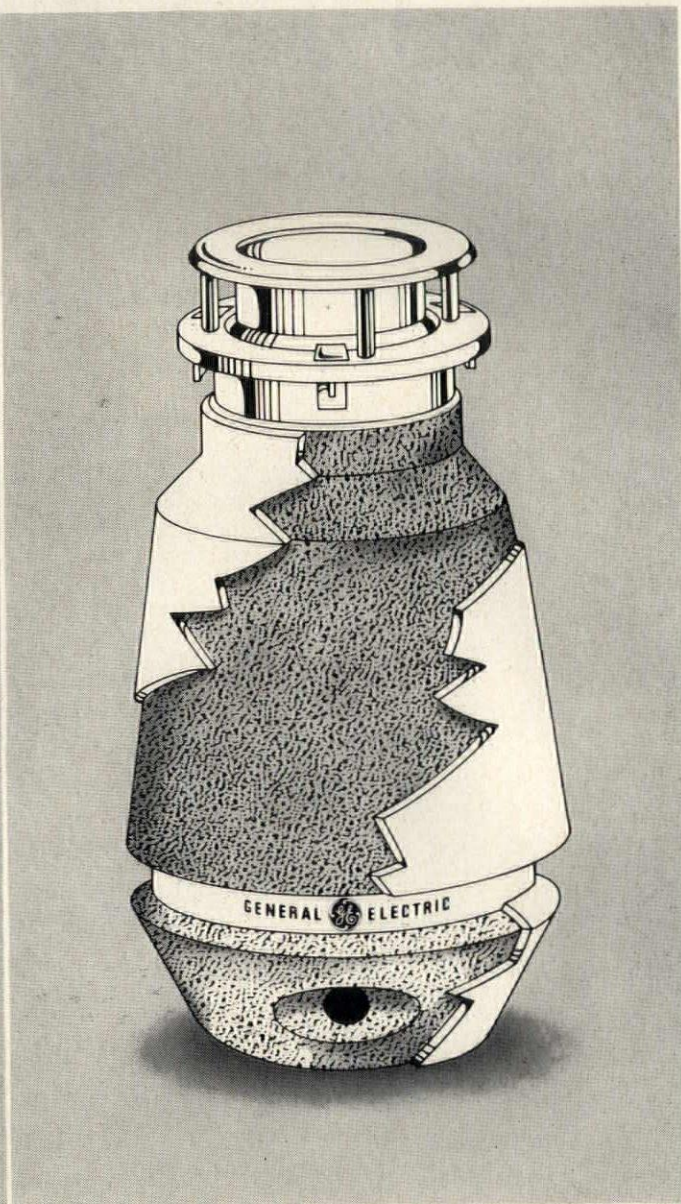
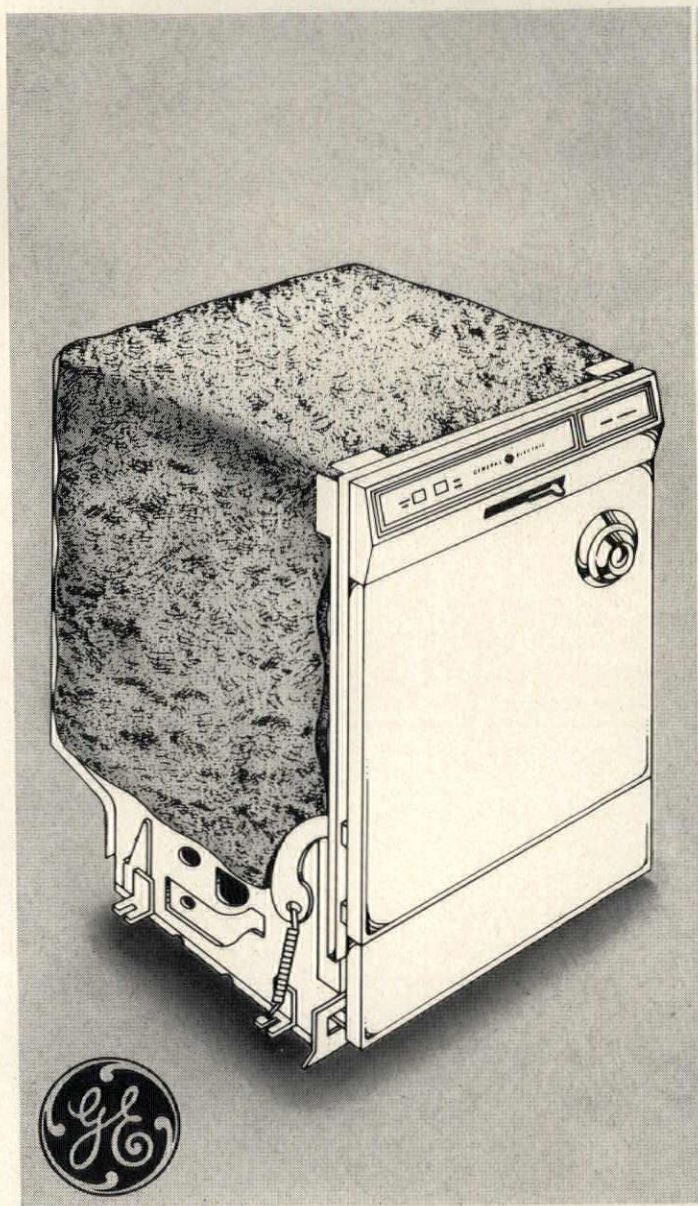
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	1-T	3-T	6-T	12-T			
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Per Inch	\$.83.50	\$.80.50	\$.77.50	\$.74.50			
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Jay Cranmer  
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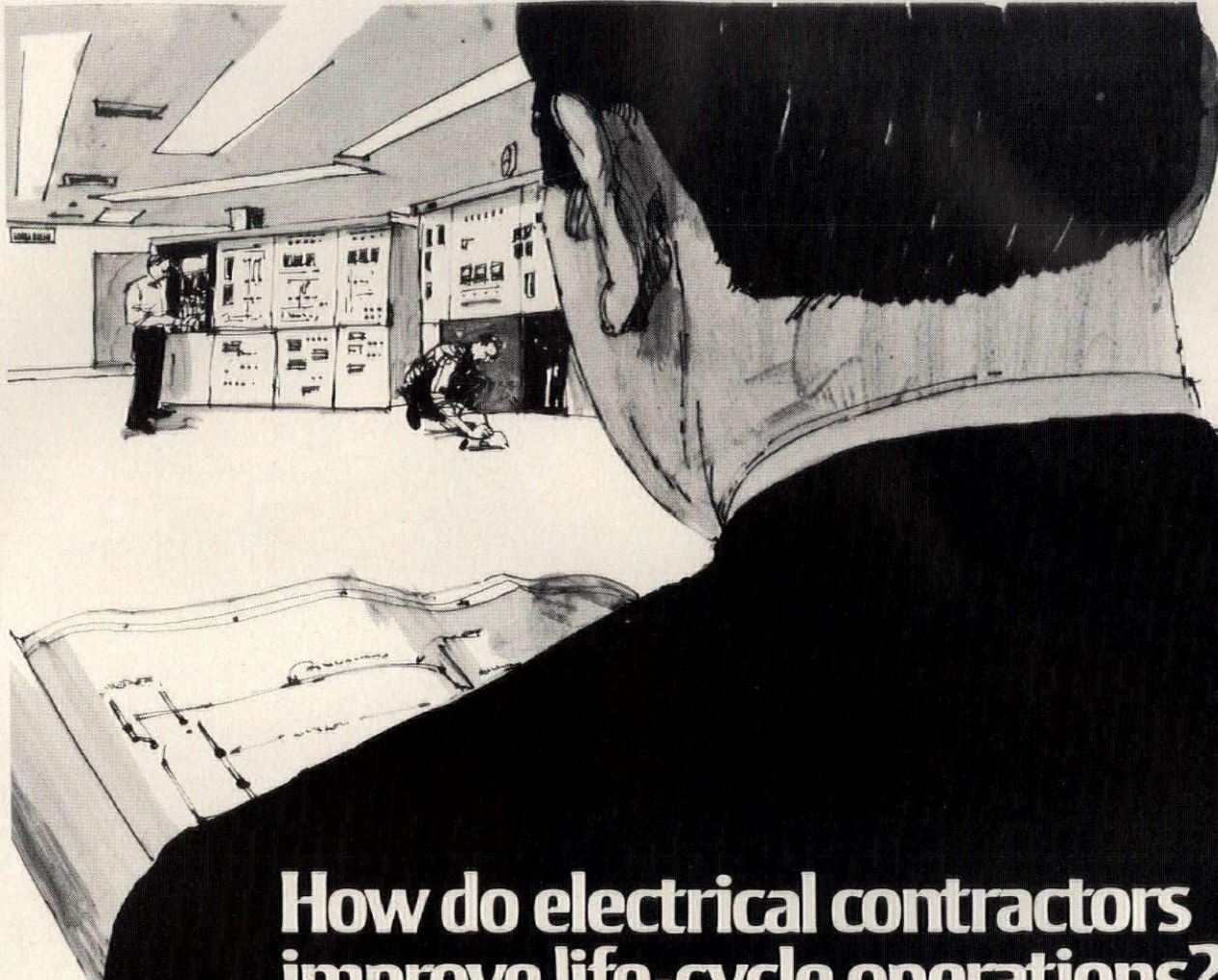
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## How do electrical contractors improve life-cycle operations?

### NECA study reveals opinions of general contractors.

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The majority of participants agreed: the full benefit of complex and sophisticated electrical systems can only be realized when regularly maintained by professional electrical contractors. Reasons? As members of the building team, electrical contractors possess specialized

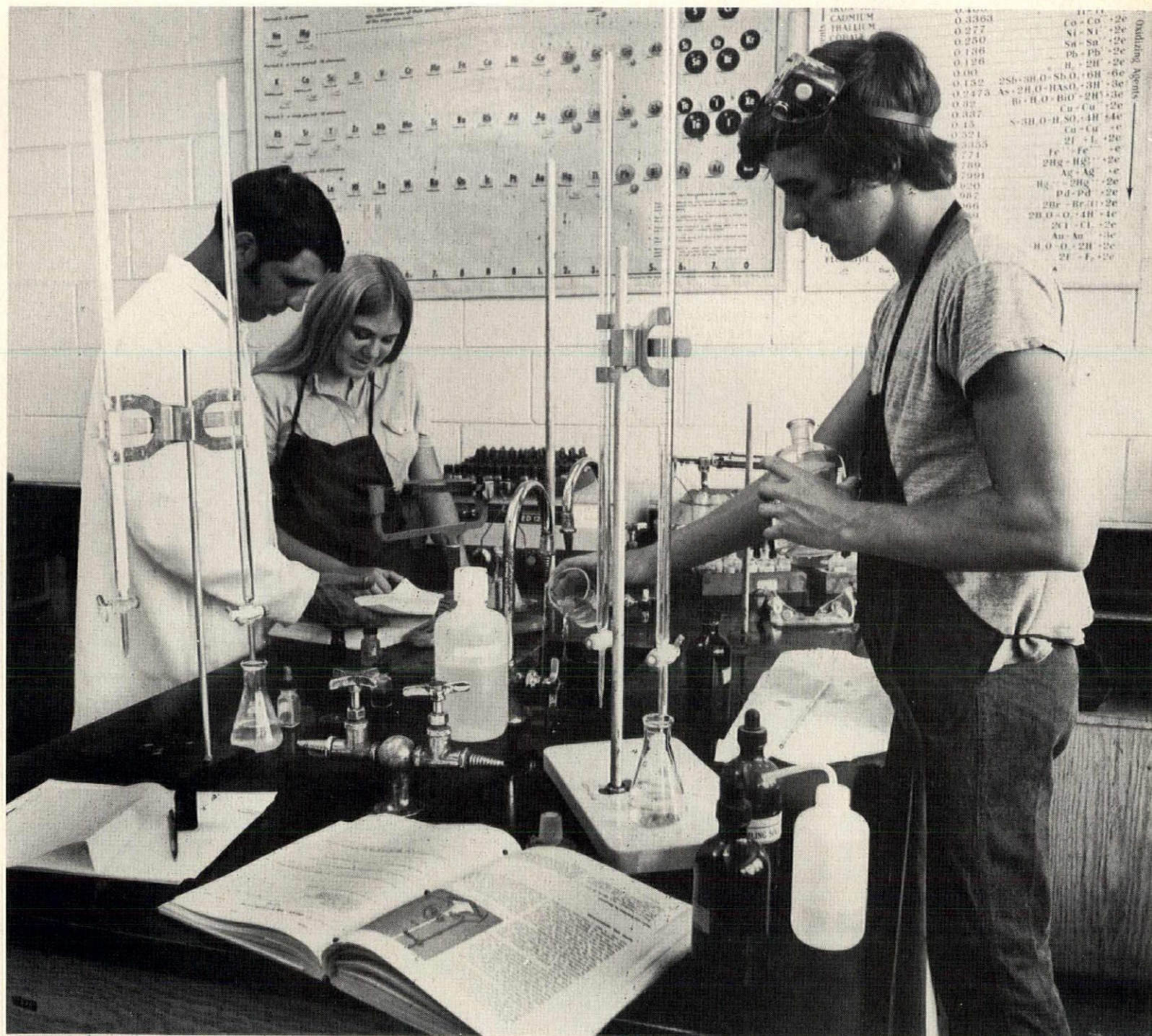
knowledge and electrical applications experience. They understand the benefits of electricity and the potential operational difficulties that can arise... even in expertly designed buildings. They know that the best way to solve operations and maintenance problems is to correct them before trouble results.

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**If electricity makes it possible, electrical contractors make it practical.**



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This drainage piping of PVC has survived countless classroom assignments, plus an unknown quantity of exotic extra-curricular mixes dreamed up by students.

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you're facing in pipe, ask us about PVC. If you're interested in easier installation, lighter weight, cost savings, ask us. We're the people who started it all in PVC pipe. B.F. Goodrich Chemical Company, Dept. H-30, 6100 Oak Tree Boulevard, Cleveland, Ohio 44131.

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# Please, let's not start all that nonsense about industrialized housing again

*Maybe we're naive, but until just recently it seemed as though the industrialized-housing craze of a couple of years ago had finally succumbed to common sense.*

*It seemed that the Operation Breakthrough fiasco had convinced all but the extreme diehards that low-cost housing—or any other housing, for that matter—doesn't get any cheaper when it's produced on an assembly line in a plant.*

*It seemed that Wall Street had finally given up beating the drum for industrialized housing, not for any logical reasons but because so many of its highly touted modular companies had gone belly up over the last few months.*

*Most important, it seemed that as all the shouting and hustling died down, the real possibilities of industrialized housing might have a chance to develop and grow in a quiet, sensible manner.*

*Apparently not. The drums are starting again.*

*This time the message is that industrialized housing isn't coming, it's already here—so much here, in fact, that something like 90% of all housing units are at least partly industrialized, and this is a big, important thing.*

*Much of this talk is self-serving, but that's not the point. The point is that a lot of people on the edges of the housing industry will listen and start believing that so-called industrialization can cut construction costs.*

*This will inevitably pull attention away from the real cost problems—namely, financing, land, zoning and unworkable environmental strictures. And it will also dilute the importance of real industrialized housing, which now has a chance to gradually take over a small but healthy segment of the housing market.*

*So in the pages that follow, we have tried to do two things:*

*First, to define as simply and clearly as possible just what industrialized housing is—and is not.*

*Second, to pinpoint one area of industrialization that has, we believe, great future possibilities.*

# Industrialized housing:

## What is it...really— and where is it going?

*We're going to look at these two questions separately and the first thing that has to be done is to get rid of a lot of popular misconceptions. So...*

**The best way to define industrialized housing is to start with what it isn't.**

**It isn't component construction.** Pre-hung doors, ready-made windows, finished cabinets, assembled roof trusses and the like have been standard for decades; there's nothing new here. But there are only a limited number of areas where components make sense—chiefly areas where mechanized processes in a plant can replace expensive (and now virtually nonexistent) skilled on-site labor.

**It isn't panelization.** Panels—actually a form of component—are the basis of so-called prefabrication, and they can help get a house tight to the weather a day or two faster than conventional construction. But panelization is really little more than a slightly more sophisticated way of selling lumber. Its impact on cost is usually nonexistent, which is why prefabricated housing has remained only a very minor segment of the housing industry.

**It isn't utility cores.** The most complex of components, cores have cropped up again and again over the years, but despite their theoretical possibilities, they haven't really gone anywhere. Cores are occasionally used in multifamily projects where there is heavy repetition of floor plans, and they can cut building time. But they save little if any cost, and they put severe restrictions on design flexibility. Consequently they aren't used enough to warrant manufacturers' tooling up to assemble them.

*All of these construction techniques make sense under certain conditions. But it's nonsense to call them industrialized*

*housing, because they're all just modifications of the way we've been building for centuries—on site, using mostly skilled labor. The parts being assembled on-site may be bigger, but that's all. And what's more important, none of them produce any real cost savings.*

### **So now we can come up with a basic definition of what industrialized housing is:**

**First, it's built almost entirely off the site.** Walls, floor, roof, kitchen, baths and all exterior and interior finishing are built, assembled and finished in a factory, and then trucked to the site as three-dimensional modules, or sections.

**Second, it's built by relatively unskilled labor, which means the assembly line.** Usually working in the \$3-to-\$4 an hour range, this labor performs repetitive functions under controlled factory conditions.

**And, third, it's standardized because that's the only way it can be put on an assembly line.** Basic dimensions and configurations remain constant because variations, other than very minor ones, slow down the production line.

**Based on these definitions, what kinds of housing can really be called industrialized?**

### **There are four real kinds of industrialized housing**

**Single-wide mobile homes, or simply mobiles, are a form of industrialized housing.** They are built on a steel chassis of light wood framing and aluminum skin, are 10', 12' or 14' wide and from 50' to 70' long. They do not meet conventional building codes.

**Double-wide mobile homes, or simply double-wides, are a form of industrialized housing.** They are built of two mobile-home sections side by side and are 20', 24' and 28' wide and from 50' to 70' long. They may be put on pads like mobiles or on permanent foundations. Many mobile manufacturers call their double-wides sectional homes, but this is misleading. Many double-wides are more heavily constructed than mobiles. But few meet typical building codes, which they would have to do to properly be called sectionals. More on this later.

*Neither of the preceding types is considered permanent housing by most communities. The following two are, and in both quality and specifications they are the same as site-built housing.*

**Multifamily modulars, or simply modulars, are a form of industrialized housing.** Buildings are made by assembling a variety of modular boxes into one-, two-, and sometimes three-story structures. Construction materials and specifications are identical to those of conventional low-rise multifamily housing.

**Single-family sectionals, or simply sectionals, are a form of industrialized housing.** Like the double-wides, they are made up of two 10', 12' or 14'-wide sections attached side by side; unlike double-wides, they meet conventional building codes and are always built on conventional foundations.

*All these housing types meet our definition of the term industrialized, but they are very different—especially in terms of their future possibilities.*

So let's look at each of them in more detail.

## The single-wide mobile

*Last year, 417,000 residential single-wides were sold, swelling the ranks of the millions already sold. Florida, California, Texas and Arizona are among the largest markets for the single-wide.*

### These are its strengths . . .

**Low price tag.** Though a few deluxe single-wides retail for \$18,000, most range from \$6,000 to \$10,000. For this the buyer gets a fully furnished one-, two- or three-bedroom home that doesn't require purchasing land.

**Complete interior package.** The chattel mortgage, which most buyers use, covers furniture for every room as well as wall-to-wall carpeting, kitchen appliances and curtains and draperies.

**Strong marketing.** Local mobile-home dealers merchandise aggressively and effectively. Often moving hundreds of units annually at mark-ups from 20% to 35%, they utilize a slick sell equalled in lubricity only by automobile dealers. The best customers are young marrieds on a tight budget and retirees moving south or west.



### **... and these are its weaknesses**

**High monthly costs.** Medium-price units in decent mobile-home parks generate monthly payments like these: With a typical 20% down payment, a \$10,000 single-wide on a \$60-a-month pad will cost \$200 a month. (This assumes a 12% chattel mortgage for seven years.)

**Rapid depreciation.** Usually, the mobile-home owner believes he's building equity during the term of his chattel mortgage. But, in reality, the mobile home's market value is depreciating at a much faster rate than equity can build. At the end of the mortgage's term, a \$10,000 mobile is typically worth only \$4,000 to \$5,000, according to the *Official Mobile Home Market Report Blue Book*.

**Increasing local resistance.** Mobiles have a poor quality image, resulting among other things from news pictures of mobile carcasses strewn across the landscape after floods and storms. Also, the typical mobile park leaves much to be desired esthetically and environmentally. Most parks continue to be a high-density sprawl of pastel-colored shoe boxes. So some communities are beginning to rule out mobile parks or to require all mobiles to meet building codes, which in effect rules them out.

## **The double-wide mobile**

*Last year, some 85,000 double-wides were sold. This is an explosive rise in popularity for a product that was rarely seen a decade ago. Most double-wides are 24' wide; an appreciable number is sold for use on scattered sites as well as in mobile-home parks.*

### **These are its strengths . . .**

**Size.** Double wides come 20', 24' and 28' wide, which significantly increases the square footage and the possible variety of floor plans over the single-wide mobile home.

**Low price tag.** A family can buy 1,000 to 1,400 sq. ft. of shelter for \$11,000 to \$18,000.

**Better design.** The extra width of the double-wide permits a low pitch roof; the result is a real houselike appearance, as opposed to the boxy, often bizarre look of the single-wide. Thus, some of the shoe box stigma of the single-wide is avoided.

**Better financing.** A few months ago, when banks found themselves with excess funds, some real mortgages were given for double-wides on permanent foundations. The present money market has pretty much stopped this, but it could happen again.

**... and these are its weaknesses**

**High monthly costs.** Except for the few who manage to find conventional mortgages, the double-wide owners have the same problems as single-wide owners. For example, a typical \$15,000 double-wide, with a \$3,000 down payment, will cost \$300 a month to carry. This assumes a \$12,000 chattel mortgage for seven years at 12% plus and \$75 a month pad rent.

**High depreciation.** The rate of depreciation for a double-wide is about the same as a single-wide—an average of 10% a year. But in the first two years, it's often 40% to 50%. Examples: A seven-year-old 20' double-wide that sold for \$25,000 new is now worth \$5,900; a five-year-old 24' unit that sold for \$12,000 is now worth \$5,500; and a two-year-old \$12,000 double-wide now sells for \$6,925—a 40% drop in value.

**New codes.** The double-wide sales boom has helped spark a widespread movement for state industrialized-housing codes. These codes, in effect, say: If you want to sell a double-wide on a single lot or in a tract—any place other than a mobile-home park—then it must conform to our housing code. And as they are presently being built, double-wides simply don't meet these codes. New York, Virginia, Maryland, Ohio and Pennsylvania have or are about to enact such code legislation. Specifications and enforcement have been tough—equal or better than conventional building codes. As other states follow suit during the next few years, double-wide markets will shrink severely.

## The multifamily modular

*Last year production was about 16,500, far short of the grandiose predictions of a couple of years ago. These predictions were based on government subsidy programs and on Operation Breakthrough—both dead ducks—so it's anybody's guess how many will be manufactured and sold this year.*

**These are its strengths . . .**

**Rapid erection.** Modules can be set on foundations at a rate of three or four living units a day and made ready for occupancy at the rate of three or four units a week.

**Controlled costs.** Modules are sold on a fixed price contract, so there is only a minimum of site work where costs can get out of hand.

**... and these are its weaknesses**

**Transportation.** As with all industrialized housing, the modular market area is limited by truck transport costs. A distance of 200 to 300 miles, at roughly \$1 to \$1.50 a mile per module, is usually the maximum.

**Weather delays.** Bad weather—snow, rain and high winds—stops site work just as it does with conventional construction. Until a module is zipped up and closed in at the site, it can be badly damaged by the elements, so modules have to stay under cover until the weather is right.

**Peak-and-valley production.** A plant can operate efficiently only if a steady volume of work runs through the assembly lines. But this is not the nature of the multifamily business; it may take months for a project to be approved, then there is a sudden demand for units and following that, another hiatus. The only way out of this is some sort of market aggregation plan: HUD supposedly had such a plan for low-cost housing as part of Operation Breakthrough, but it never materialized.

**Higher costs.** An efficient on-site operation can almost always beat the cost of a modular operation.

## The single-family modular sectional

*According to a HOUSE & HOME survey, 1972 production was 37,717 units. Results are not in yet for this year, but it's estimated there will be slippage because of the mortgage squeeze, the temporary suspension of the Farmers Home Administration loan program and the high cost of carrying inventory. A guesstimate is that this year's production will be in the 30,000 to 32,000 range.*

### These are its strengths . . .

**Fast erection.** Once a foundation is complete and utilities run in, a unit is typically dropped on its foundation and ready for living in two to three days.

**Controlled costs.** In this respect the sectional is the same as the modular.

**Fewer peaks and valleys.** Hundreds of small builders ordering one or two houses at a time make for a relatively constant flow of orders. In winter months demand drops in the northern states, but this is a predictable drop and a plant can be programmed accordingly.

**Virtually no code or zoning problems.** The single-family sectional is in every respect a conventional house and thus can meet local and state building codes, FHA-VA requirements, etc. State industrialized-housing codes, which virtually wipe out the mobile double-wide, have no effect on the sectional.

### . . . and these are its weaknesses

**Transportation.** Trucking costs, as with the multifamily modular, restrict the marketing range to a practical maximum of about 250 miles. And the nearer the better: Builders know

that the closer the plant, the better the post-delivery service they'll get.

**Higher cost.** A good conventional operation can beat the sectional costwise, just as with the modular. But there is an exception: Out in the boondocks, where conventional labor might have to travel many miles to reach a site, sectional houses can offer a real cost advantage.

**Based on all this, we can now make some pretty sound judgments on where industrialization is going.**

## **Here's how the future looks—right now—for the four basic types of industrialized housing**

**Single-wide mobiles' rate of growth** is certain to slacken in the 1970s. Increasingly, they'll be hurt by restrictive zoning. And codes may push them out of some communities. These set-backs will be offset somewhat by the continued strong acceptance of mobiles in their traditional southern and southwestern markets. The annual rate of growth—now 8.5%—will drop to 4% to 5% by the end of the decade.

**Double-wide mobiles have some growth left, but their long term prospects are questionable.** Again, codes and zoning will take their toll. As code restrictions get tighter, manufacturers will be forced to upgrade. And when a double-wide becomes fully code-compliant, it turns into a sectional, losing the cost advantage—roughly \$4,000 on a typical unit—it now enjoys over the sectional.

*Since, both legally and in fact, neither the double-wide nor the single-wide mobile is permanent housing, and since neither is a product of the housing industry, let's now drop them from this discussion of industrialized housing's future.*

**Multifamily modulares have had it, at least for the moment.** Hundreds of millions of dollars have been spent trying to make this concept work; the fact remains that, without federal subsidies and federal market aggregation, modulares just aren't viable.

**So it's the sectional that seems to offer the greatest promise in the industrialized-housing field right now.**

## Specifically, there are three key markets in which the sectional can grow:

The rural market, where housing demand is growing, but good on-site labor is scarce and expensive.

The vacation market, for the same reason.

The small-town, small-volume subdivision market, where sales are too slow to permit an efficient on-site operation.

*But before modular sectionals can realize their full potential in these markets, manufacturers are going to have to make improvements.*

## There are three areas where improvement is needed—badly

**Production flexibility must be improved.** Many plants now must manufacture three or more houses a day just to break even, while in slack periods, demand may drop to one house a day. Therefore the break-even point should be reduced to one unit or less per day, without hurting the plant's ability to reach peak production when necessary.

**Design must be improved.** Many sectionals are, to put it mildly, undistinguished, while others are downright ugly. The vacation-home buyer doesn't want a house that looks just like his ranch house back home, nor does the primary-home buyer want anything less than the design quality of nearby stick-built houses. Standardization may limit design variety, but it need not limit basic design quality.

**Marketing must be improved.** The sectional builder has to take up the merchandising cudgel and use it as effectively as mobile-home dealers and stick-built builders do. Models must be furnished and accessorized and landscaped. Salesmen should effectively close sales, not passively accept orders. And advertising, promotion and public relations should be keyed to strong campaign themes.

*If sectional manufacturers will wake up and start making these improvements, sectional housing could turn out to be industrialized housing's best growth market in the decade ahead.*

—MICHAEL J. ROBINSON



ROB MUTR

## PROJECT PORTFOLIO

# 14

PROJECT: The Oaks of Woodlake  
LOCATION: Houston, Texas  
DEVELOPER: Jake Williams, Vernon Young  
and Irby Simpkins  
PRESENT OWNER: Easterling/Levering Properties  
ARCHITECT: Longwith, Wilson, King & House  
LANDSCAPE ARCHITECT: Landscape Design Inc.  
SITE AREA: 26 acres  
NUMBER OF UNITS: 556  
RENTAL RANGE: \$189 to \$464



*Environmental quality is making this rental project an extraordinary success despite some very negative marketing factors. To wit: The area's average vacancy rate is 15%; the project is in a problem school district from which families with children have been moving, and the site is not choice in relation to downtown Houston. Yet the first section of 246 units has been and continues to be almost 100% filled, and renting is keeping pace with construction in the 310-unit second section. All of which pinpoints the value of deed restrictions (there is no zoning in Houston); it insures continuing environmental control for the entire 300-acre planned community of Woodlake, in which The Oaks is the first complex to be built.*

A mark of the project's high quality is its landscaping, which not only is extensive, as the photos show, but expensive. The owners estimate that more was spent on The Oaks' trees, shrubs, flowers, etc. than was budgeted by any other three projects in the area combined. Another indication of quality: Construction costs were higher than in nearby projects—about \$6,000 more per unit.

Strict architectural controls, man-

dated for the 300-acre Woodlake community, show up in The Oaks' overall planning and balanced choice of exterior building materials. Both factors contribute to the project's overall ambience. For example, as indicated in the site plan, the two-level townhouse apartments and single-level flats-over-flats are grouped in various configurations, obviating the look of sameness that pervades many rental complexes.



And further variety is assured by the use of brick, stained cedar boards, stucco and cedar shakes as siding for the two-story buildings. These architectural controls and previously mentioned deed restrictions were mandated by Friendswood Development Corp. (a subsidiary of Exxon) which developed the entire Woodlake community.

Environment, however, is not the only drawing card at The Oaks. Rec-

reational facilities and security play a big role. Rec facilities include four heated pools, adults-only sauna and exercise facilities, pool tables, three lighted tennis courts, two indoor air-conditioned handball courts and a game room for teenage residents.

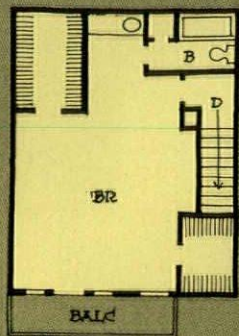
Security is two-pronged. The Oaks maintains its own 24-hour armed-guard service and the Woodlake community also furnishes guards who patrol the area continually.



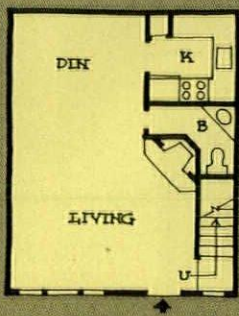


PHOTOS: ROB MUIR

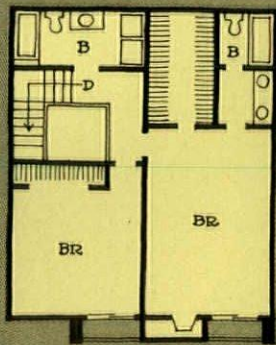




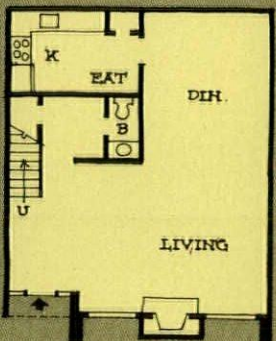
UPPER LEVEL



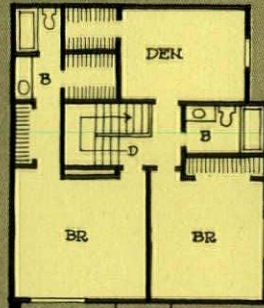
LOWER LEVEL  
1-BR TOWNHOUSE



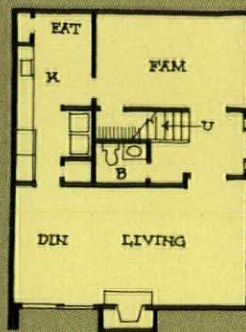
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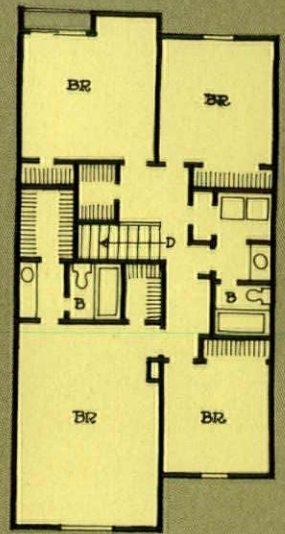
LOWER LEVEL  
2-BR TOWNHOUSE



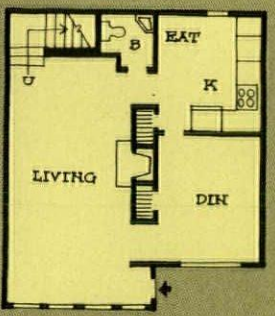
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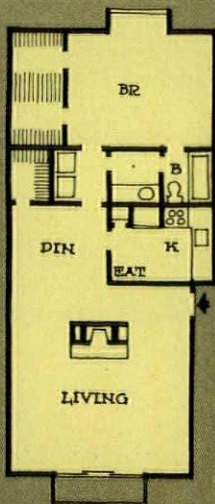
LOWER LEVEL  
3-BR TOWNHOUSE



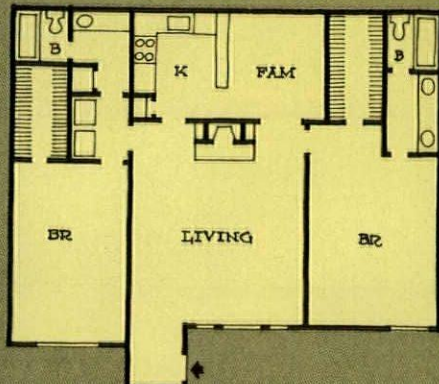
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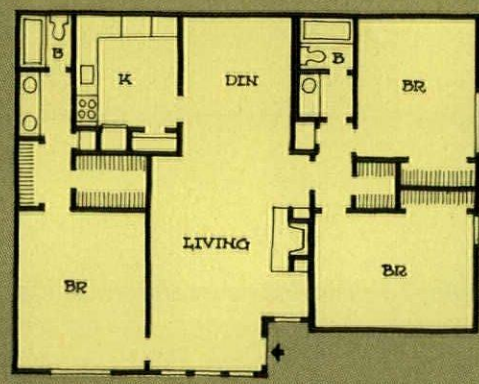
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4-BR TOWNHOUSE



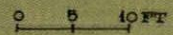
1-BR APARTMENT



2-BR APARTMENT



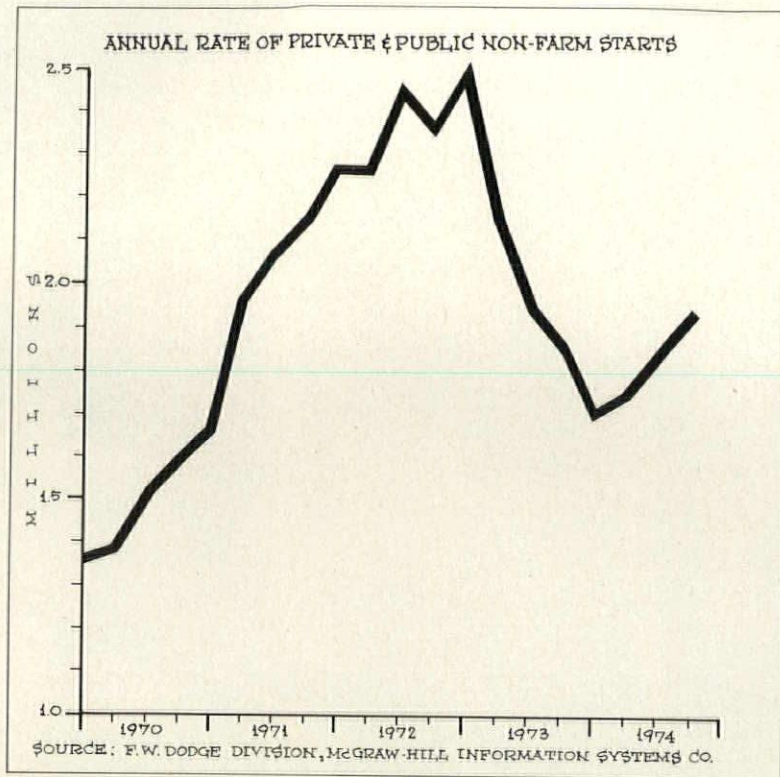
3-BR APARTMENT



A wide range of apartment layouts and rents helps The Oaks draw a broad spectrum of tenants, from singles to large families. Seven plans are shown above; in all there are seven choices of one-bedroom layouts, three 2-bedroom plans, two 3-bedrooms layouts and one 4-bedroom arrangement. One-bedroom units (some with dens) range in size from 611 to 1,100 sq. ft. and rent for

\$189 to \$294. Two-bedroom apartments run from 1,235 to 1,520 sq. ft. and rent for \$319 to \$404. Three-bedroom plans, with 1,688 and 1,770 sq. ft., rent for \$379 and \$439. And the 1,888 sq. ft. four-bedroom unit rents for \$464. About half of the project's first phase was built for families; the others for adults-only. The second section is approximately two-thirds adults-only.





## A nosedive, then a strong recovery—and 1.8 million starts

By any measure except one, 1973 will go down on the record as a big year for the construction business. Most of the dollar values for the year as a whole are coming out as high or higher than for record 1972. The one shortcoming: The boom of the early 1970s is over. Each quarter brings less new construction than the one before it.

What, besides the unrelenting passage of time, brought the construction boom of the early 1970s to its eventual end?

From the second week of January the industry began working under an accumulation of handicaps that eventually sapped its vitality. First came the President's suspension of housing subsidy programs. Meanwhile, federal spending for public works was being tightly restrained by impoundment and veto. And by summer the money markets were in chaos—for the third time in less than a decade.

### Still harder times in '73.

Even so, it took time for these events to reverse the strongly upward thrust of construction contracting.

The negative effect of the January subsidy freeze, for example, was blunted by a backlog of a couple of hundred thousand units previously approved but not started.

Money market conditions had a lagged effect too. By midyear the mortgage squeeze was on. Interest rates soared, and the flow of savings to thrift institutions dwindled.

Housing starts dropped a bit, but nowhere in proportion to what was happening to the supply of mortgage money. Through early fall lending was being sustained by earlier commitments; the money squeeze of mid-73 was taking its toll on commitments for later lending.

Now, with subsidy work due to run out, and with mortgage money vanishing, the housing market faces its most difficult months in what's left of 1973.

### Peak-out and plunge.

It's conceivable that the housing boom of the early seventies might have reached its turning point sometime in 1973 even without a subsidy freeze or a credit squeeze.

Some of the support for the extraordinary volume of building during 1971 and 1972 was demand that had been carried forward from the lean years of the late sixties, and most of that need has been satisfied by now. Without a backlog of demand, and with annual household formations now around 1½ million, and replacement demand at something short of a million, the presently sustainable limit of production has to be somewhere around 2½ million units. Yet 1972 saw *three* million shelter units produced—2.4 million conventional dwellings, plus 600,000 mobile homes.

If the housing boom was ripe to peak out in 1973, the subsidy and mortgage problems are hastening that decline, turning what

might have been an orderly adjustment to a sustainable level of production into what threatens to become a rout.

### Problems—the big four.

Now that the cycle has clearly entered its downward phase, the obvious questions become:

How far down will the rate of homebuilding sink before turning upward again?

When will the next upturn occur?

Four hurdles stand in the way of an early recovery of homebuilding: mortgage availability, localized overbuilding, construction cost and the lack of housing subsidies. None of these—except possibly the last—looks formidable.

### Mortgage availability.

In the last two credit crunches, as mortgage money became increasingly scarce, the rate of housing starts fell drastically. This time around we can expect something better. At mid-1973 the thrift institutions were in better shape to withstand the drain of a brief period of very high interest rates.

For one thing, the extraordinary volume of savings in 1971 and 1972 left the S&Ls with a great deal more liquidity than in either of the two earlier crunches. What's more, through the support of the Federal Home Loan Bank and Fannie Mae, they can expect to maintain a reasonable degree of liquidity while honoring some \$15 billion of outstanding commitments. Further, the combination of higher rates paid on deposits by the thrift institutions, and the depressed state of the stock market helped to slow the process of disintermediation during the summer of '73.

And if these aren't enough to get by the balance of 1973 without disaster, the Administration has recently proposed granting additional authority to the FHLBB and GNMA to "moderate the tight mortgage situation."

All this suggests a period of some financial discomfort, but something short of crisis for the mortgage lending industry. And depending upon when the Federal Reserve decides to relax its mid-1973 tightness, we can look ahead to improving mortgage availability through 1974.

Mortgage rates are not apt to rise as high over the next several months as the tightness of the market would seem to justify. State usury laws will set an artificial upper limit, and the squeeze will take other forms: points, equity participation, etc.

By the same token, next year's easing won't bring mortgage rates down very far, either. Inflation, more than money supply and demand relationships, is the underlying problem and it sets a high lower limit on the range in which the price of money can fluctuate.

### Overbuilding.

It would be hard to make much of a case for overbuilding . . . except on a local basis. The great surge of housing starts since 1971 hasn't yet begun to push up vacancy rates significantly. That's partly because of the backlog of housing demand carried forward from the low building years of the late '60s, partly because current household formation is rising rapidly, and partly because a large block of the million or more new apartments started during the most recent twelve months aren't yet ready for occupancy—and therefore technically aren't vacant.

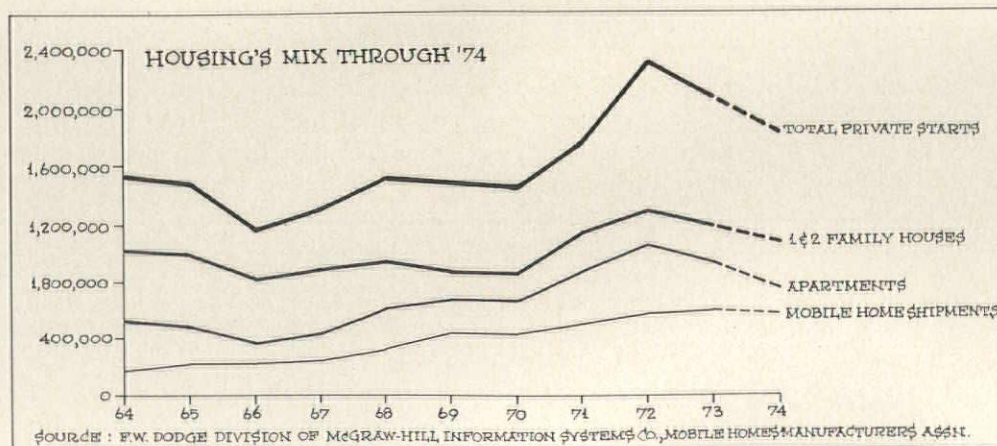
The national vacancy rate will undoubtedly rise over the next six to 12 months as projects now in progress reach completion. But with the rate currently less than 6%—a low rate by past standards, and showing remarkable stability despite the record volume of building—an increase of a percentage point or so would be only a minor deterrent to further building.

Regional vacancy rate comparisons show that although rental building has become excessive in the South and West in the last year, it has been inadequate, if anything, in the Northeast, where the rate is very low, and in the Midwest, where vacancies have actually declined since mid-1972.

### Construction costs.

Homebuyers have been getting a double dose of inflation lately—paying an inflated price for housing and then financing it at an inflated interest rate.

Due mainly to the severe run up in lumber and plywood prices, single-family housing cost 10% more per square foot to build in



1973 than in 1972. That's \$2,500 added to the price of an average \$25,000 house, excluding land, just since last year. One result: Mobile homes increased their penetration of the shelter market to more than one-third of combined one-family/mobile home volume in the first six months of 1973.

With forest products prices coming back to reality again, homebuilders should be able to do a better job of holding prices down in 1974... and just maybe sell a few more homes that way.

**Subsidized housing.**

Since the President's January moratorium on housing subsidies, starts under the government programs to assist the production of housing for low and moderate-income families have fallen to their lowest level since the mid-1960s. This year's subsidized starts, less than half the peak volume reached during 1971 and 1972, were mainly leftover work—projects that were approved but not yet started at the time new approvals were frozen. This work that was in the pipeline is now running out, and there is bound to be a sizable gap in subsidized housing starts before HUD's proposed new approach to housing the needy (as modified by Congress) can be set in motion.

**President's policy.**

The alternatives from which a new housing policy will be derived over the months ahead are:

1. Revival of existing subsidy programs (sections 235, 236, 221d3, etc.) but with better administration at the local level.
2. Emphasis on the revenue-sharing approach by which federal housing funds are allocated to state and local governments for use however these local groups consider most appropriate.
3. A switch to the welfare concept by which housing allowances (cash or credits) are paid directly to families qualifying for assistance.

Recently we learned some of the details of the Administration's housing policy recommendations. They involve all three alternatives, plus expanded support of the residential mortgage market. Next year's authorization for new subsidized housing would be limited to about 150,000 units as the housing allowance system is phased in. The object: to maximize the use of existing structures in meeting the national commitment to raise housing standards among the poor. Congress has shown some interest in the housing-allowance approach, but *as an addition to and not as a replacement for* rent and interest supplements. It's unlikely that Congress will pass the Administration's new housing legislation on the basis of only 150,000 new subsidized units.

It will be quite some time (not in 1973, anyway) before the executive and legislative branches iron out differences and settle on a new national housing strategy. In the meantime, we face a period of low production of subsidized units at the same time that credit market conditions will be inhibiting privately financed building.

**The outlook.**

The negative influences of credit scarcity and subsidy review will dominate the housing market in the near future. Then, as these problems are resolved, the positive force of the underlying demand for housing will make itself felt in a second-half recovery.

The lowest point of the cycle should come in the first quarter of 1974, when declining starts level at an annual rate of about 1.7 million. Easier credit will spark a spring rise of privately financed housing, which will later be augmented by a revival of subsidized units, bringing the rate above 1.9 million by the final quarter.

At 1,825,000 for the year (1,075,000 one- and two-family houses and 750,000 apartments), the number of units in 1974 will be 13% lower than this year's volume. But inflation will limit the drop in residential contract value to 8% for a total of \$43 billion.

**CONSTRUCTION CONTRACT VALUE**  
(millions of dollars)

	NATIONAL			NORTHEAST			MIDWEST			SOUTH			WEST		
	1973 pre-liminary*	1974 forecast	per-cent change	1973 pre-liminary*	1974 forecast	per-cent change	1973 pre-liminary*	1974 forecast	per-cent change	1973 pre-liminary*	1974 forecast	per-cent change	1973 pre-liminary*	1974 forecast	per-cent change
1- & 2-family homes	\$29,000	\$27,500	- 5%	\$5,200	\$5,000	- 4%	\$ 6,700	\$6,300	- 6%	\$11,000	\$10,400	- 5%	\$6,100	\$5,800	- 5%
apartments	15,000	13,000	13	3,500	2,900	-17	3,100	2,800	-10	5,400	4,600	-15	3,000	2,700	-10
nonhousekeeping	2,500	2,500	—	500	400	-20	500	500	—	1,000	1,100	10	500	500	—
<b>TOTAL</b>	<b>\$46,500</b>	<b>\$43,000</b>	<b>- 8%</b>	<b>\$9,200</b>	<b>8,300</b>	<b>-10%</b>	<b>\$10,300</b>	<b>\$9,600</b>	<b>- 7%</b>	<b>\$17,400</b>	<b>\$16,100</b>	<b>- 7%</b>	<b>\$9,600</b>	<b>\$9,000</b>	<b>- 6%</b>
				Conn., D.C., Del., Mass., Md., Me., N.H., N.J., N.Y., Eastern Pa., R.I., Va., Vt.	Northern Ill., Ind., Iowa, Ky., Mich., Minn., N. D., Ohio, Western Pa., S. D., Wis., W.Va.			Ala., Ark., Fla., Ga., Southern Ill., Kans., La., Miss., Mo., N.C., Nebr., Okla., S.C., Tenn., Tex.			Alaska, Ariz., Calif., Colo., Hawaii, Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo.				
*eight months actual; four months estimated															

**Builders know they're headed down: but how far, how fast the upturn?**

Builders are at once hopeful and worried about next year.

Most of those reached in a nationwide survey were convinced that underlying demand was still strong; hence their hope.

But many also said that sales are down because of high mortgage rates and an apparent nosedive in consumer confidence in the economy. They know these factors will hurt in 1974 too, but they don't know how much. Hence their worry.

Milton J. Brock Jr., president of M. J. Brock & Sons, Los Angeles, expressed the view of most builders: "It's really difficult to assess the 1974 market. We've never had as many problems simultaneously as we do now."

**Interest rates.**

"The big problem is money at reasonable cost," observes Sam Hechtman, president of Practical Home Builders Inc. in Oak Park, Mich. "There's no shortage of money, it just costs too much to get it."

Other builders concur. But John Mackay of Mackay Homes in San Francisco adds:

"The buyer of our homes has a house to sell to somebody else, who then has to find mortgage money on his own. So providing financing for the first buyer doesn't necessarily mean that he will buy our house."

Smaller builders—Mackay is putting up 521 units this year—are likely to feel even less sanguine. Richard Pevey, vice president of the Kickerillo Co. in Houston says:

"Tight money and high interest rates have forced the smaller builder of lower-priced

**DEVELOPER BROCK**  
*'Too many problems at once'*



**MAC KAY OF MAC KAY HOMES**  
*'Having financing isn't enough'*



**PEVEY OF KICKERILLO**  
*Sees small builders forced out*



**CENTENNIAL'S RIDGEWAY**  
*Sees big builders in clear*



**CROSLAND'S CROSLAND**  
*Usury laws restrict financing*



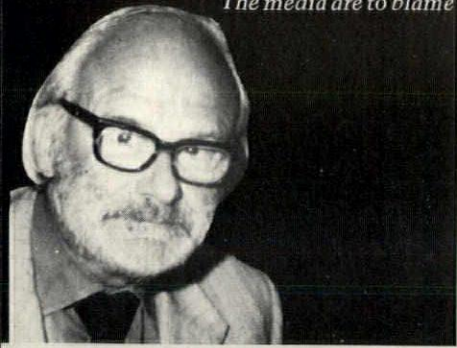
**SHAPELL'S SHAPELL**  
*'Mortgage rates will drop soon'*



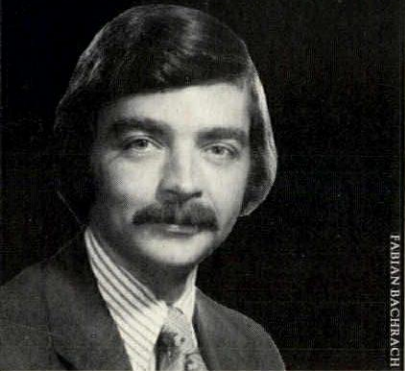
**EVERGREEN'S HANSEN**  
*On Washington: 'I've had it.'*



KENNEDY'S KENNEDY  
*The media are to blame*



PREL'S MAINERO  
*A 5,000-acre hedge in land*

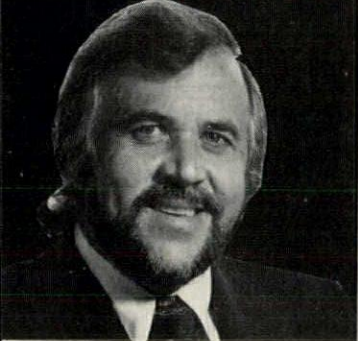


FABIAN BACHRACH

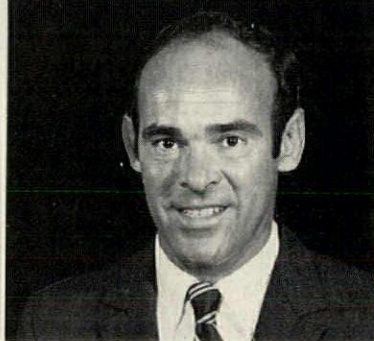
LEVITT'S ANDLINGER  
*An environmental revolution*



HOMWOOD'S SKESTOS  
*Cites rise in labor costs*



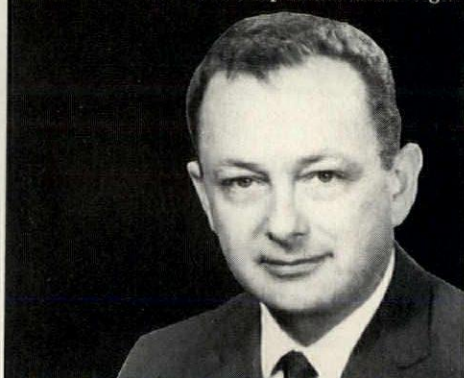
LENNAR'S MILLER  
*Same kinds of shortages in '74*



GIVENS & ROLWES' GIVENS  
*A 20% decline next year*



WEINER'S NIBLACK  
*10%-15% drop looks about right*



DELTONA'S MACKLE  
*Expanding in Florida*



LAMONTE-SHIMBERG'S SHIMBERG  
*Florida's hot for him too*



units almost out of the market here. If things don't ease, more will be forced out."

Lawson Ridgeway, chairman of another big Texas operation, Centennial Homes in Dallas, is more Darwinian:

"Increasing cost of money tends to favor volume builders. It weeds out some smaller, marginal builders who tend to underprice their homes. When things pick up, we will see the stronger builders in good shape."

Builder John Crosland Jr. of Charlotte, N.C., was one of several who noted another facet of the money problem: "Money is particularly tight in North Carolina because the state's usury statute holds the rate to 8%."

Most of the industry seem to expect interest rates to stay high through much of the first quarter. But a few are willing to hazard a guess that rates will break earlier or later.

"It's my personal belief and wild prediction that interest rates may drop to a little over 8% by the end of this year and not rise higher than 8% in 1974," says Nathan Shapell of Shapell Industries in Los Angeles.

"I think the government will use the housing industry to help stimulate recovery from a mild recession. The government may possibly lower FHA and VA interest rates and consider extending maturity dates from 30 to 40 years."

#### Government and rates.

Other builders are not so well disposed toward Washington. Harold Hansen, president of Evergreen State Builders in Tacoma, Wash., for instance: "We're being sacrificed in the fight against inflation," he says. "I've had it with this Administration."

Meanwhile the consensus view builds from its early spring timetable for easier money and looks for a bottoming of the housing starts rate in the first half and a strong recovery throughout the rest of the year. This is very close to economist George Christie's scenario for the industry (see page 78).

A great many of the builders interviewed said they were planning to make their next big trip to the money markets around the end of the first quarter. If they all do as they now plan, it will be interesting to see what happens to mortgage rates then, since almost everyone will be talking to his bankers at the same time.

#### The wary buyer.

Builders hope that an eventual drop in interest rates will help them out with their second big problem: a suddenly skittish consumer.

Charles Gordon, vice president in charge of housing for the Key Co. in Greensboro, N.C., says of this phenomenon:

"It's an even bigger problem than the interest rates themselves. People see these devaluations, they see mortgage rates go way up, they see food prices shoot out of sight, and they say 'What the hell is going on here?' They're too scared to come out and look at houses.

"We have houses; we have financing at



favorable rates; we don't get customers. We went from 50 to 60 units a month in late June to 15 to 20 a month by late August—this is offers to buy. Meantime the rental market went from overbuilt to underbuilt around here in just those two months."

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#### Bad press?

The chief officer of The Kennedy Co., Robert J. Kennedy, unhappily follows the softening in the nearby Chicago market and assigned much of the blame to the press:

"The kind of publicity the media are giving the credit problem is to tell people not even to try to buy a house—don't even go look! So it's like someone turned off a switch."

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#### Land costs.

The next most pressing problem around the country was the price of land.

The rises in land prices are far from uniform. While builders in some localities report dramatic inflation of real estate values—25% in Dallas, for example, an average of 30% in New Jersey—others find the current rise in line with past experience.

Responses to this problem vary. In New Jersey Frank Mainero, a vice president of Prel Corp., reports that his company holds 5,000 acres in a land bank. While Prel is not looking for any more land, it is conserving what it has and picking up jobs from smaller builders for the time being.

Gordon's Key Co., on the other hand, like many others, still minimizes its landholding by buying only for current use.

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#### Moratoria.

Questions about building moratoria brought sharp reaction.

Robert Carnicello, vice president of Wood Bros. Homes in Denver, was fairly typical. "Moratoria are becoming more and more a threat to the construction industry. The 'no growth' policy seemingly fostered by environmentalists and shortages of utilities—water, gas and sewers—will curtail efforts in many areas."

The general sentiment among builders seems to be that such restrictions will increase. But most expect to be able to live with them.

Gerhard R. Andlinger, president of Levitt and Sons, summed up: "There is a revolution going on in this country that will radically and unalterably change the nature of the building industry. Stated simply: People will no longer allow unchecked growth . . . [but] we have the tools and the expertise to do the job that the people and the times demand."

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#### Headaches.

Several other problems persist, but they are of less concern or magnitude, or both. The moratorium on federally subsidized housing, surprisingly, drew relatively little comment. (Harvey Steinberg, vice president of Beacon Construction Co. of Boston, was one exception. He found the moratorium "very serious." His firm was involved this year in

new housing for the elderly.)

And shortages in labor or materials do not yet seem to be widely felt.

Labor, in particular, appears to be in adequate supply on most sites. "It's just that it keeps getting more expensive," complains George Skestos, president of Homewood Corp. of Dayton, Ohio.

There are materials shortages, but some builders expect this pinch to ease because of the slowdown in starts. Florida's Leonard Miller, chairman of the big Lennar Corp. (3,000 starts this year), concludes:

"I would look for the same kinds of shortages in 1974 as in 1973, but they will probably be less serious because of lower building volume."

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#### Builders' plans.

In view of their expectations, many builders, logically enough, are planning fewer units in 1974. Thus Ed Givens, president of Givens & Rolwes, St. Louis:

"We projected 175 homes for 1973, but it looks like we'll be 20% short. And we expect a similar decline in 1974."

And Ray Niblack, vice president at Leon N. Weiner & Associates of Wilmington, Del., thinks a 10% to 15% dropoff "a good figure" for his building area—the middle Atlantic states.

There are plenty of exceptions, though, and Florida's Deltona Corp. is one of them. President Frank Mackle Jr., says he's building 1,000 units this year, and plans 1,400 to 1,500 in 1974:

"If things get bad, we might reduce that to 1,200 to 1,300."

Deltona operates in the red hot south Florida market, which does much to explain the firm's aggressiveness. Even a recession might not halt expansion there.

Mandell Shimberg, president of LaMonte-Shimberg Corp. in Tampa, says his firm is also planning an increase in starts next year—a more modest 15%.

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#### Housing mixes.

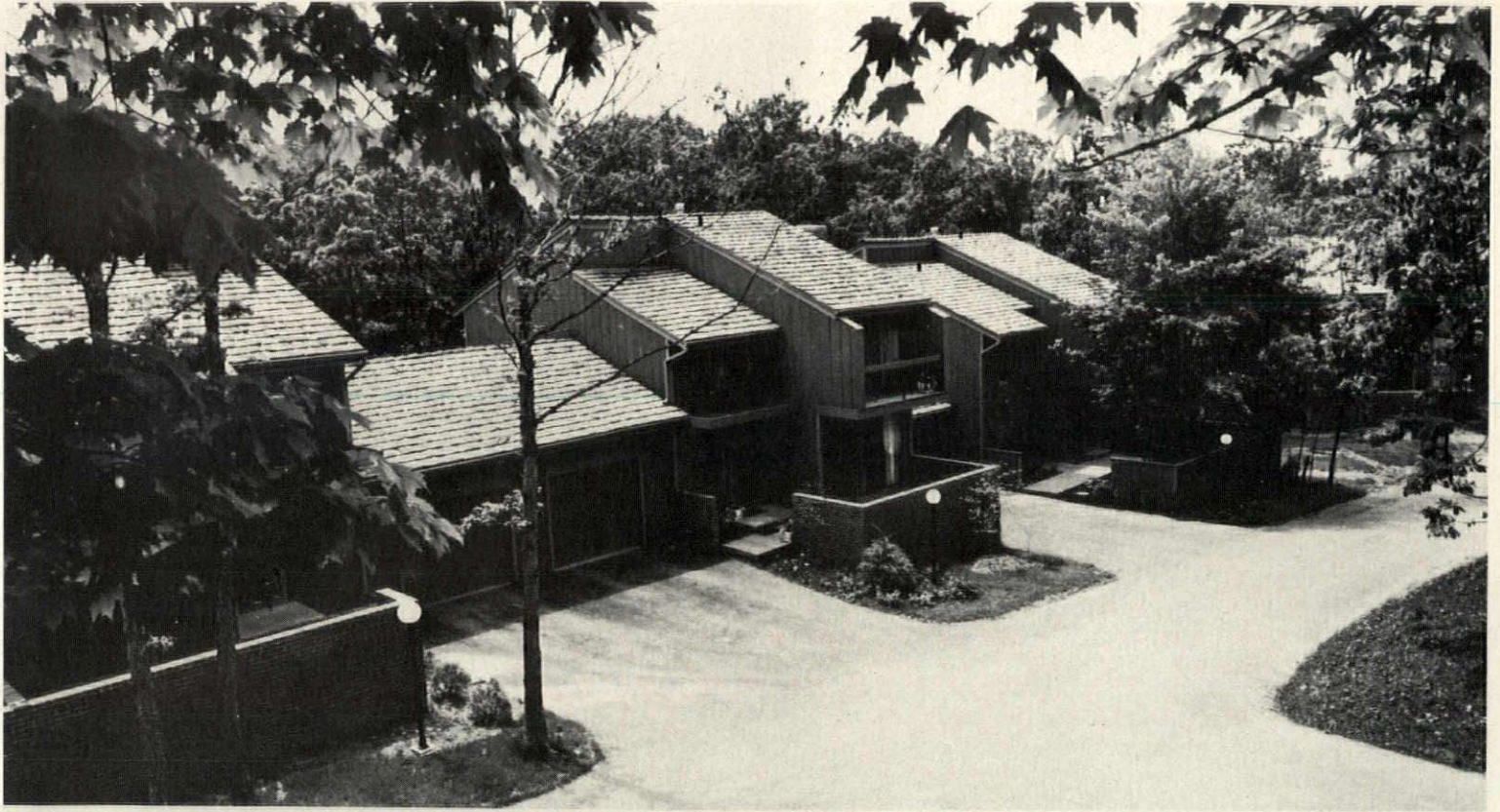
A lot of builders, whether cutting back or not, are shifting the mix of housing types in their '74 plans. But there is no universal trend; many appeared satisfied with their present mix or had made no decision yet.

This may be because builders feel they already made enough drastic changes in 1973, when a great many abandoned apartment construction.

Where there were changes, they reflected local conditions and rising costs (there were several marked shifts toward multiple or cluster housing). Some said they were planning smaller single-family houses for next year. And one—the Key Co.—is eliminating middle-priced single houses altogether in favor of both lower-priced and higher-priced units.

"We find those are the steadier markets when money tightens up," Charles Gordon explained. "And the higher-priced models are the more profitable."

—HAROLD SENEKER



# What's a nice PUD like this doing in Chapter 11?

*Greenwood Village [H&H, March '73] is a showplace: good design, award-winning land planning, luxurious amenities; in fact, everything a PUD should have—except a bottom line. It went into bankruptcy three and a half years after it opened.*

*Part of the trouble stemmed from something the developer couldn't have foreseen: a bank merger left him with a new joint-venture partner who disagreed with his approach. But ultimately a series of mistakes—some large, some small—that anyone might make tipped the scales from success to failure. If developer Bill Wargo had it to do over again, here's what he'd keep in mind . . .*

## **A PUD is not just an overgrown single-family subdivision**

When Bill Wargo, together with his brother Ed and cousin Ted Billings, began planning Greenwood Village back in 1967, they seemed to have everything going for them.

First, location. Their 900-acre site was 15 miles south of Cleveland, 15 miles north of Akron, directly adjacent to a 3,000-acre forest preserve and a five-minute drive from four major interstate highways and two commercial and industrial areas.

A giant shopping mall was 15 minutes away; two neighborhood shopping centers were within five minutes. The school system was one of the most sought after in the state.

To add to the advantages, the Wargos were working on their home turf. They knew the market from 21 years' experience in the area, first as real estate agents and later as builders. They had almost 1,000 homes to their credit and good relations with the zoning board.

But all their experience with single-family

subdivisions had not prepared them to cope with the intricate planning and heavy negative cash flow associated with the long lead time and high front-end costs of PUD development.

A minor example: Who paid any attention to the environmentalists back in 1967? But by 1969 Greenwood had to pay an extra \$500 a site to have logs hauled away because the environmentalists succeeded in having burning outlawed.

The long lead time really hurt when Greenwood's opening—October 1969—turned out to be right in the depths of a recession. And for all their experience in the local market, the Wargos couldn't have foreseen that Cleveland would not rebound with the rest of the country but would remain a slow market because the metropolitan area was losing population at a .9% rate, or nearly 20,000, between 1970 and 1972.

In the meantime, the Wargos were running up big bills by doing things in a 4,000-unit PUD the way they had always done them in single-family subdivisions.

For example, it was only through hard experience that they learned to break all of their jobs into phases and have their contractors give new bids for each phase rather than one bid for a whole project.

"Construction estimates generally include a cushion for uncertainties due to newness of design, unfamiliarity with the product, location of the building site and many other factors," says Wargo. "If your tradesmen are any good you'll probably get lower prices for subsequent phases."

They also learned that using one contractor in each construction trade for a project the size of Greenwood Village could become costly when volume grew to the point where the contractor had to hire subcontractors.

It took the Wargo group some time to realize that they didn't have to pay architects, lawyers, planners, engineers and even advertising people their usual percentage but that they could negotiate far more favorable rates on the basis of the size of the project.

But this was only after fees to professionals had run so high that an in-house staff of experts seemed justified. At one time the Greenwood Village payroll included an architect, an engineer, two landscape architects and a certified public accountant. However management learned that it takes a large volume of sales to cover this kind of overhead, and all were eventually laid off.

"In the end we found that in 1972, the year we did our largest volume of business, we had the smallest in-house staff," says Wargo.

A PUD developer has to be prepared to deal with time and cost factors that his competition—the average subdivision builder—need not contend with. For example, the average builder doesn't have to go through the time-consuming and costly process of getting a community to adopt a PUD ordinance. He can do his planning in stages without first having to develop an overall plan. He can postpone much of the site development work. He can avoid the legal ramifications of setting up a homeowners association and preparing condominium documents.

In short, the competition's overhead is minimal compared to that of a PUD developer. Yet houses in a PUD must compete with those of a conventional subdivision.

"Determine from the start how much of your selling price can be allocated to front-end costs," says Wargo. He warns:

"Don't go in with the attitude that you're not going to make any money for the first year or two and that you'll make up for it later on. It may be a good idea to start with a minimum profit and increase the margin as time goes on. But don't think that you can make this year's profit next year or the year after. There may be no year after. . ."

### **If you can't live with your financing, it doesn't matter what else you're doing right**

Wargo blames Greenwood Village's present plight on the unexpectedly slow market combined with the heavy front-end costs.

However this does not tell the whole story.

The problem really began back with the purchase of the land—some 900 acres for \$1.3 million cash.

As Wargo explains it, his group was negotiating to buy the tract on a release basis when a local group headed by Cyrus Eaton Jr. matched his price and offered cash on a one-year payout. This deal hit a last-minute snag, however, and the Wargo group was back in the picture again. And although it had little cash, it agreed to the same terms the Eaton group had offered.

This meant the Wargos and Billings had to come up with over \$400,000 in six months and the \$800,000 within a year. They turned to a local S&L, Shaker Savings Assn., for the money, pledging all of their income properties and even their homes.

By chance Shaker's president, Loren Mintz, had become interested in PUDs and had traveled all over the country to study them. He was enthusiastic about Greenwood Village and proposed a joint venture: Shaker would put up \$1.8 million, which would pay for the land and leave \$600,000 to begin development, if the Wargo group would pledge its properties for security and if it could obtain the necessary zoning and prove feasibility.

Wargo and his associates accomplished all of this in record time, but at the price of some zoning concessions that were later to prove burdensome (see page 87).

In the meantime Shaker Savings had been acquired by the giant Ogden Corp. and the Wargo group found itself with a new partner. Ogden Corp. replaced Mintz as Greenwood's board chairman with architect Charles Luckman, whose company was part of the Ogden group. Instead of the \$1.8 million loan from Shaker, Ogden negotiated a \$5.5 million loan with the Metropolitan Life Insurance Co.

By the time the Metropolitan loan came through in February 1969, however, Greenwood had already spent some \$2.5 million on the land, loan fees, engineering and architectural fees and administrative expenses. So net capital actually came to about \$3 million.

It quickly became apparent that the Wargo/Ogden/Luckman combination was not working, and so in June 1969 Wargo convinced a group of local investors (including David W. Swetland who was later to take a more active role) to buy Ogden's interest for \$400,000 plus payment of all current bills. But the unhappy partnership left Greenwood with an expensive legacy of delays and cost overruns.

Nor was the Metropolitan loan without its problems. The loan was in effect a \$5.5 million mortgage at 8¼% interest. This meant that the builder could not start construction without first getting title to a portion of the land by paying for it according to a schedule of release prices that had been agreed to for each type of housing.

For example, the release price for an apartment unit was \$1,000; thus in order to begin work on a 100-unit high-rise, Greenwood first had to pay \$100,000 to obtain title to

the necessary seven or eight acres of land. For single-family houses the release price was as high as \$7,500 a site.

"When we got into a financial squeeze we appealed to Metropolitan and they subordinated their release price up to \$100,000," says Wargo. "But it was like waiting until a guy was critically ill before giving him any medicine."

Another problem with the Metropolitan loan was that it was set up so that repayment would be on an accelerated basis. This meant the entire loan would have been repaid by the time approximately 700 of the 900 acres were developed. Wargo feels that to compensate for the heavy front-end costs of a PUD, it would have been better had the loan called for minimum release prices at the beginning and maximum release prices toward the end.

By late 1970 it was necessary for Greenwood to refinance the Metropolitan loan, which had been paid down to \$4.75 million. This time the interest was 8¾%. Refinancing the loan back up to \$5.5 million yielded \$650,000. There was a stipulation, however, that this money could be used only for completion of improvements in process; none could be used for operating capital.

The Metropolitan loan contained another feature which was later to prove troublesome to Greenwood: It called for a one-third participation in the profits. While this may seem academic in view of the lack of profits, it served to make Greenwood unattractive to other large investors who were later offered the project.

In June 1972 the financial squeeze had become acute and David Swetland agreed to purchase two sections of Greenwood Village—a 12-acre shopping center site and a 7.6-acre apartment site—for \$880,000. As part of the deal he received a controlling interest and became president of Greenwood Village Inc.

"You might say, 'Why would you let somebody do this to you?'" says Wargo. "At that time it seemed like a dream come true."

Wargo believed that Swetland had the financial ability to see the Greenwood project through and he thought he would give it a new lease on life. But the dream turned into a nightmare in March 1973 when Greenwood Village went into bankruptcy.

### **You pay a price for pioneering**

Although the PUD concept was brand new in the Cleveland area at the time Greenwood Village was started, Wargo and his group managed to obtain the necessary zoning in just four months. They accomplished this by waging an energetic campaign. Even before the first official meeting of the zoning board, they had already conducted a house-to-house solicitation of all voters and taken the Sagamore Hills public officials on a flying tour of planned communities in the Washington, D.C. area.

It took 21 meetings to hammer out an agreement and Wargo made some conces-

sions he was later to regret. For example, he accepted a limitation of 1.8 bedrooms in the multifamily areas and also agreed not to put in a den, library or family room that might be converted into a bedroom.

Thus the market for the first 49 townhouses was limited because most were two bedroom and a relatively few were three bedroom. Then, to neutralize this mix, it was necessary to put an excessive number of one-bedroom units in the garden apartments.

"The one-bedroom garden apartment turned out to be a relatively slow seller," says Wargo. "Not impossible, just difficult."

The den-library-family room restriction was appealed and finally dropped, but the 1.8 bedroom restriction is still in effect.

Another zoning concession that proved costly was a requirement that the clubhouse, roadways, underground improvements and sewers be completed before any units could be sold. Thus, when the single-family models were opened and interest in Greenwood Village was at its height, no sales could be made because the clubhouse was not finished. Greenwood finally obtained a variance that allowed it to sell provided it deposited sufficient money in escrow to complete the clubhouse and the improvements. Not only did this tie up some \$300,000, but sales momentum was lost in the time it took to get the variance.

A third costly zoning concession was an agreement to assist the North Hills Water Board in supplying Cleveland water to Greenwood. This assistance turned out to be a four-year, interest-free \$450,000 loan for the installation of 3¼ miles of water main. Again, this tied up front-end money that Greenwood itself was borrowing at 8¼%.

"We agreed to these restrictions because we felt so lucky to get the radical change in zoning from one to five units per acre," Wargo admits.

Not all of the penalties of pioneering are in the zoning. Problems can crop up in the most unexpected areas when you deal with a community that has not had experience with PUDs and condominiums.

In Greenwood Village, for example, there was no way to tell prospective buyers what their taxes would be because the town had not yet determined how it would handle assessments.

Then the tax assessors decided to base their assessments on purchase price, just as though they were dealing with single-family homes. In addition, they assessed the common facilities, including the open land, clubhouse, tennis courts, etc. separately, not recognizing that the purchase price of each unit had actually paid for a portion of the amenities as well. Wargo considers this as double taxation and is fighting the assessments in court.

Still another tax problem contributed to Greenwood Village's cash flow problems last year. For some reason the town stopped dividing the tax bills on condominiums so that each unit would have its own bill. This meant that Greenwood could not show a



PHOTO-ILLUSTRATORS

The Gallery House, one of four single-family models, has a cedar shake roof, wood siding and brick trim to make it blend with Greenwood's wooded landscape. Single-family homes range from \$75,500 to \$78,000.



THOM ABEL

Village Commons condominium townhouses, shown here from the rear, were designed so that buyers could choose among four different floor plans for the upper level. Prices ranged from \$36,500 to \$47,500.



WILLIAM LACZKO

Village Houses, Greenwood's first condominium townhouses, were popular with buyers partly because their ground-level basements could be turned into recreation rooms. They cost from \$37,000 to \$55,000.

clear title to the condominium units when it sold them. It tried to solve the problem by establishing a reserve for payment of taxes. The title company accepted this; however, the buyers' lawyers, fearing that their clients might be held liable for taxes on the whole condominium, refused to allow them to close on this basis.

When Greenwood went into bankruptcy it had thirty or forty families living there with their downpayments in escrow because of this tax problem. The company has filed a mandamus action to force the auditor to go back to splitting the taxes.

Looking back, Wargo admits that the success or failure of a project such as Greenwood is dependent on such a variety of factors that if a major one, such as zoning or taxes, cannot be resolved it might be better not to go ahead.

Another problem that still plagues Greenwood came about because of bad advice from the community. When the project first started it had a major sewage disposal plant designed at a cost of around \$50,000. However local officials did not want the plant built on Greenwood property, first, because they were not certain that this would be the best location to service the rest of the community, and second because they did not want to maintain it.

They convinced the Greenwood management to put in a temporary facility because an interceptor sewer was planned that would link Cleveland's southern suburbs to a Cleveland sewage disposal plant.

Needless to say, the interceptor sewer still has not been built nor does it seem about to be. Today it would cost about \$1 million to build a major plant for Greenwood, which of course is impossible in its present situation. But lack of major facilities has discouraged outside developers and investors who might otherwise have put in new capital.

### **No matter what you put into a project, it's worth only what your market is willing to pay**

Those ten months when architect Charles Luckman was in charge of Greenwood Village were crucial to the project, for they set it on a path that was not at all what was originally envisioned.

Wargo and his associates had projected single-family units that would sell in the \$35,000 price range, two- and three-bedroom townhouses that would sell from \$25,000 to \$32,000, garden apartments priced at about \$15,000 to \$18,000 and high-rise units from \$17,000 to \$24,000.

However the architects had something else in mind, and by the time they were finished Greenwood Village was aimed at the upper middle to luxury market: single-family homes in the \$60,000 range, townhouses from \$36,000 to \$70,000 and apartments starting at \$30,000. The clubhouse, which had originally been budgeted at \$400,000, finally cost \$700,000.

"I was wrong to permit well intentioned experts to overrule my gut reaction and

judgment of the market," Wargo admits. "All of a sudden we were putting \$60,000 houses in a \$40,000 neighborhood and this really got us off to a slow start."

But he is still convinced that the real problem was the market itself:

"If our houses had cost even \$45,000 we could have sold them more readily, but I don't think that alone would have saved the project. The market just couldn't sustain the volume we needed."

Wargo also feels that the slow market should have dictated staging the amenities rather than putting them all in at first, as required by the zoning ordinance.

"Here we are with \$1 million in amenities for 400 families and we're in Chapter 11. It would have been much better to have \$300,000 or \$400,000 in amenities with \$600,000 budgeted for later phases of development," he says.

Another advantage to staging the amenities would have been that people wouldn't have been frightened off by them.

"It doesn't take a very sophisticated guy to start figuring that all those amenities cost a lot of money to maintain and that the owners are going to have to pay those costs," says Wargo.

He estimates that on top of the heavy maintenance costs, heat and electric bills for the clubhouse come to \$10,000 a year.

One luxurious feature of Greenwood is a long boulevard with 50' easements on either side that loops through the entire project. Wargo believes this scenic approach enhances the value of the individual homes, but not to the extent of the \$500 a unit that it actually cost.

"Beware of unique features," he warns. "A buyer assesses value largely on the basis of comparison, and he has nothing with which to compare a unique feature."

One area where the buyers were willing to pay more than had been invested was for the land planning. For example, one portion of Greenwood Village was built on what was essentially a flat meadow. To accent the design of the buildings, however, the land was bulldozed into rolling mounds. These units proved very popular.

However, tampering with the topography is not always successful, as Wargo also learned.

Village Houses, a 49-unit group of townhouses, was one of the most popular sections of Greenwood Village. One reason was that these units had ground-level basements that many families turned into recreation rooms. When it came time to build the next group of townhouses, Town Falls, Wargo instructed the architect to design as many ground-level basement units as possible. But this time they were forcing the basements into unsuitable terrain and thus had to change the grade considerably. Needless to say, the market was not willing to pay the additional cost.

The Town Falls houses were also a mistake from another point of view: They were essentially just larger, upgraded versions of the Village Houses.

"You must face the fact that in a PUD you're inevitably going to be competing with yourself as you bring each new product onto the market," says Wargo. "To minimize this competition you must design your second group to differentiate it as much as possible from the first. You probably should reduce prices on the remaining units in the first group as well to get them off the market and out of competition with current models."

### **Expert advice doesn't always apply to your market**

Wargo feels he should have been tougher in evaluating expert opinion in several other areas besides the price range of the houses.

For example, he learned at a seminar that the best way to phase a PUD was by starting with single-family houses, then gradually going into townhouses and finally into apartments. But the seminar took place in 1967, before the condominium market had begun to burgeon.

"So we started with the slow seller instead of the market leader," he recalls. "And while we were waiting for momentum to build we were paying out hundreds of thousands of dollars in interest and carrying charges."

In the Cleveland area it would have made more sense to build a variety of housing types right from the start, especially as the PUD concept was new to the market and was thus attracting large crowds.

"As potential buyers went through the single-family homes and found they were not the answer to their needs, they could have gone across the street to the condominiums," Wargo says. "This could have given us some much-needed momentum."

As it turns out, those throngs who trooped through Greenwood's opening never returned to see the later sections, even though the company had worked diligently to get their names and keep them advised.

Trendy features can be another source of trouble if they are not right for your project. For example, his study of PUDs had almost convinced Wargo that a PUD without pedestrian walkways and tunnels was no PUD at all. He was all set to put one in when he decided that it would constitute more of a security hazard than a benefit. Now all he regrets is the time and the \$10,000 it cost him to reach that conclusion.

Another piece of expert advice that Wargo wishes he had ignored was that it is necessary for a PUD to have a central sales office to sell the overall concept.

"Looking back, the central sales office was an unnecessary luxury that we could have and should have done without," he says. "No matter what you do in the way of displays, movies and promotions, you still need localized sales offices in each of the building types. There's no reason you can't train your salesmen to sell the PUD concept there as well."

In fact Wargo disagrees with the truism that if you sell the PUD concept the product will sell itself. He regrets the money he spent

not only on the central sales office but on institutional advertising.

The reason, he says, is that the average buyer is buying product and location first. The advantages of the PUD concept are counterbalanced by its disadvantages, because the buyer who places the highest value on living in a traditional single-family neighborhood is put off by the prospect of living alongside of renters.

At one stage Greenwood Village was spending \$1,500 per unit sold for advertising because the budget had been based on over-optimistic sales projections.

"If I had it to do over again," says Wargo, "I'd have 25¢-to-35¢ sales brochures instead of the \$2 and \$3 award-winning Picassos we had. And any advertising I did would be product oriented."

Wargo also discounts the value of market research in an area where PUDs are new because he feels the only kind of research that really applies is that done directly on PUDs themselves. He had commissioned in-depth interviews with his first hundred buyers but considers them a waste of money because he did not learn anything of value.

### If you lose momentum, you're dead

In the fall of 1972 the Greenwood management decided that the inventory of completed units was excessive and it stopped construction.

"That was what triggered our demise," says Wargo. "When you stop construction your carrying charges continue, and suddenly everything comes due. Your builders want to be paid and your construction loans are dwindling or gone. And you can only pay them out of profits."

Wargo admits that production should have been planned better so that the inventory would not have gotten so high. But he feels that it is necessary to keep building those products that are successful and to absorb the losses of the ones that are unsuccessful by reducing prices to near cost.

Since Greenwood Village went into bankruptcy, building has begun again in accordance with a court-approved plan whereby the banks advance the money, the contractors complete their work and when the units are sold the proceeds are set aside in a fund out of which the lienors can settle their claims. Buyers thus get clear titles.

"Before long one-quarter of the planned 4,000 dwelling units will be built and occupied," Greenwood's president, David Swetland told the *Cleveland Plain Dealer*. "Greenwood is alive and the grand plan will be finished, but not when the planners expected it."

But the troubles are not yet over. In September some Greenwood creditors filed a \$562,910 suit charging that the directors of the company had schemed to defraud them. Among those named were Swetland, Bill and Ed Wargo, Ted Billings and Loren Mintz.

—NATALIE GERARDI



Recreation building, with indoor and outdoor swimming pools, was planned for 4,000 families and cost \$700,000. Today there are only 400 families living at Greenwood and using these luxurious amenities.



Oak Knolls rental complex combines one- and two-bedroom apartments with two-story townhouses. All have enclosed garages. Rents range from \$230 for a one-bedroom apartment to \$450 for a townhouse.



The Wargo Group, (left to right) Ed Wargo, Ted Billings and Bill Wargo, as they met to plan one of their projects in the days before they set out to tackle the complexities of PUD development.

## Lighting: Make it an integral part of your project's plan—not an afterthought

The builder who tries to save on lighting may be missing a merchandising opportunity. One indication of this is a nationwide study conducted a few years ago by the American Home Lighting Institute in cooperation with home builders.

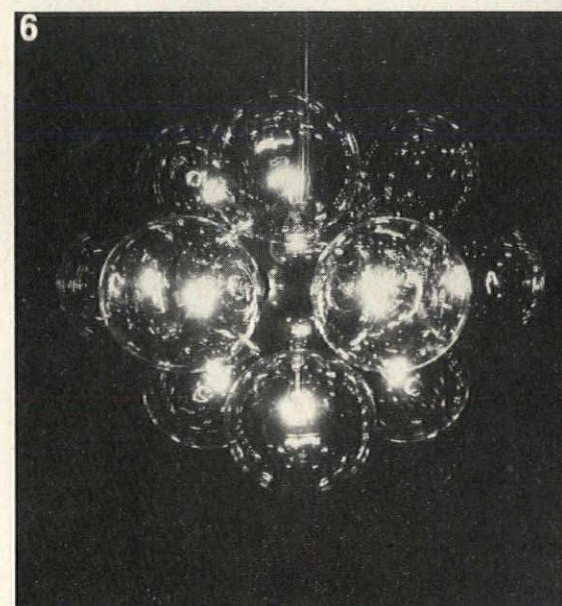
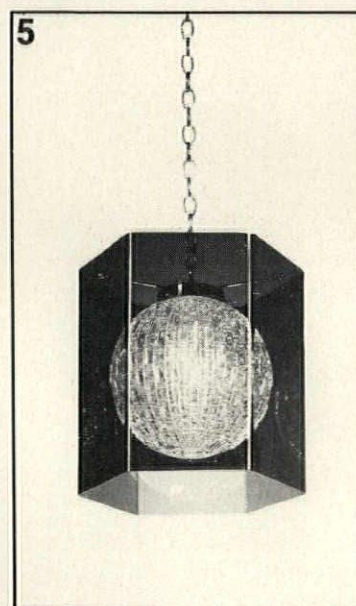
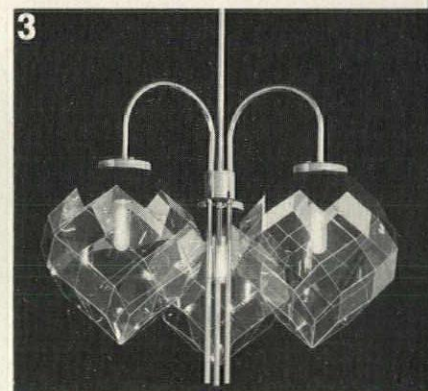
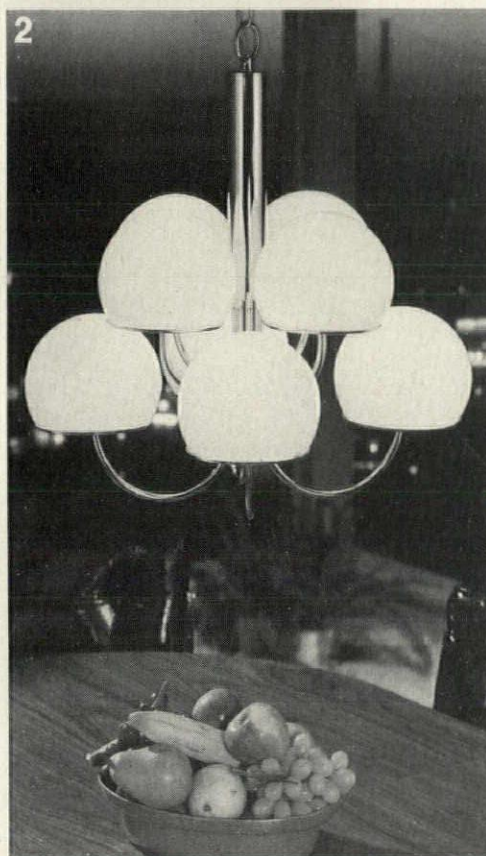
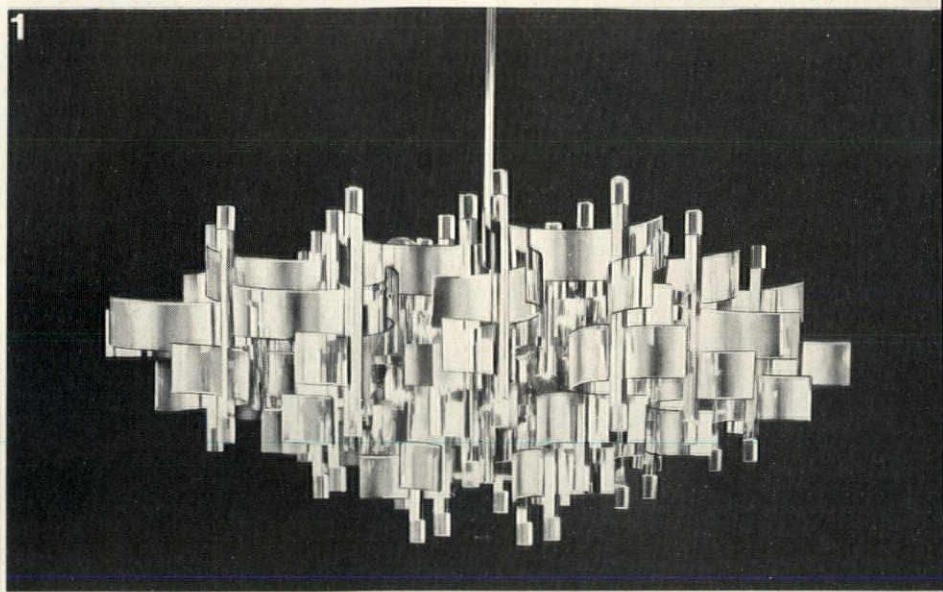
Half the homes in the experiment were conventionally lit and the other half planned with a "luminous environment." Homes were identical except for lighting costs. In every case the better lit homes—priced \$500 higher—sold up to 3 to 1 over the merely adequately lit ones. This held true in all price ranges—from low to luxury.

Participants in the study agree good lighting can be a quiet, subtle yet surprisingly effective marketing tool. Here's why.

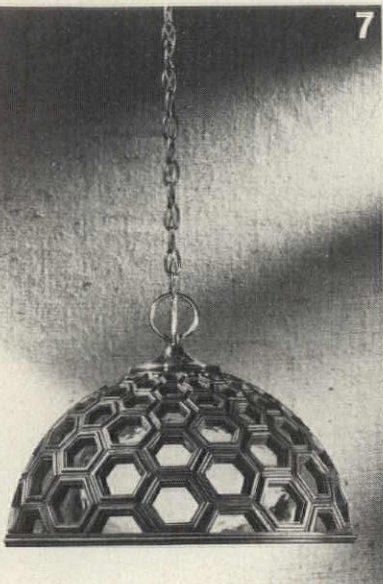
Lighting can single-handedly change the appearance or color of a room, set a mood, or create an interesting landscape. It can make a project seem safe and secure, add a feeling of warmth in the coldest climate or convey coolness in the tropics.

But lighting can do these things only if it is integrated into a project's plan at

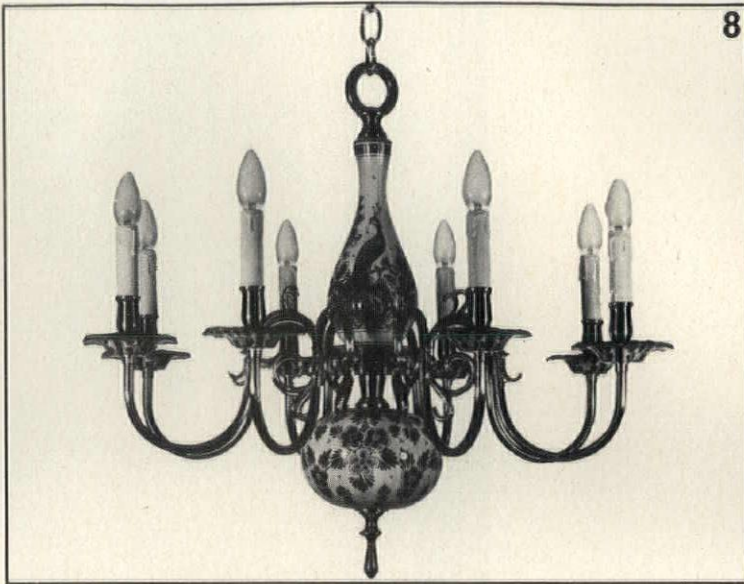
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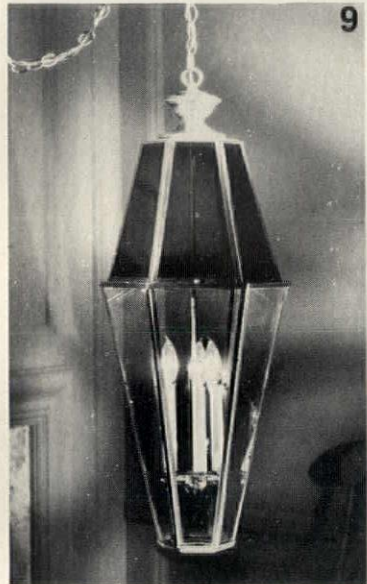




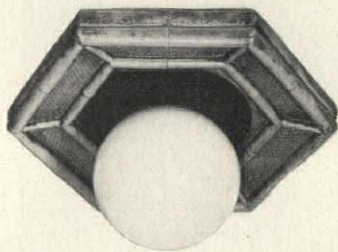
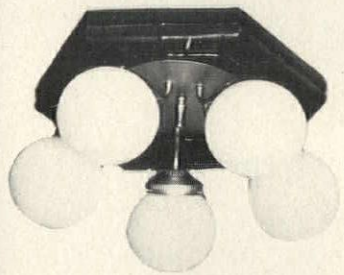
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**Contemporary chandelier (1)** has a sculptured look. The fixture consists of ten lights nested in curved stainless steel leaves and squared, polished brass uprights with clear lucite ends. Progress, Philadelphia, Pa.

CIRCLE 255 ON READER SERVICE CARD

**A cluster of opal glass semi-spheres (2)** provides warm contemporary lighting. The eight lights, which seem to float in space, are actually connected to the chrome linear-shaft by graceful, curved polished-chrome arms. Lightolier, Jersey City, N.J.

CIRCLE 256 ON READER SERVICE CARD

**Exciting contemporary light fixture (3), "Crystal facet"**, combines structural glass with mirrors and polished chrome. The effect is dazzling. Available in four basic units, fixtures can be adapted to table lamps, pendants or the triple chandelier shown. Morrison, San Francisco.

CIRCLE 257 ON READER SERVICE CARD

**Romantic chandelier (4)** features six black wrought iron scrolls, each holding a tall white candle. These lights surround a center downlight in a cage with amber acrylic panels. The fixture comes with a three-way switch. Del-Val, Willow Grove, Pa.

CIRCLE 258 ON READER SERVICE CARD

**Contemporary pendant fixture (5)** consists of hexagonally shaped smoked-bronze acrylic set over a prismatic crystal globe. Reflections of the crystal in the acrylic create ambient lighting while downlight is clear. Virden, Cleveland, Ohio.

CIRCLE 259 ON READER SERVICE CARD

**A cluster of 12 clear globe lights** tightly set around a polished chrome sphere creates a vibrant contemporary chandelier (6). The space-age "Satellite" reflects and refracts light in all directions for an exciting effect. Tsao Designs, New Canaan, Conn.

CIRCLE 260 ON READER SERVICE CARD

**Geodesic dome fixture (7)** is a urethane casting realistically finished in

warm oak. Hammered amber acrylic inserts send soft light in all directions. The contemporary dome is available in chain pendant or swag models. To receive the Lightcraft of California catalog send \$1.50 to The Lightcraft Div. of NuTone, P.O. Box 9050, Cincinnati, Ohio 45209

**Solid brass colonial-style chandelier (8)** is available plain or with deltblue or polychrome ceramic parts as shown. Offered in polished and antique brass or pewter finishes in a wide range of sizes, the foundry-cast fixtures are competitively priced. Dutch Products, Yardley, Pa.

CIRCLE 261 ON READER SERVICE CARD

**Traditional swag fixture (9)** is an interpretation of a Federal period lantern. The weathered-brass-finished luminaire features authentic details such as a bottom latched door panel for relamping and smoked glass at the top. Large-scale unit is 34" high and 13" wide. Artolier, Garfield, N.J.

CIRCLE 262 ON READER SERVICE CARD

**Ceiling lights (10)** are available in one, three and five light versions. "Bamboo and Cane" fixtures with molded polyurethane hexagonal bases are finished in natural with antique staining, woodtone or white. Metal inserts come in 14 colors. Melolite, Mineola, N.Y.

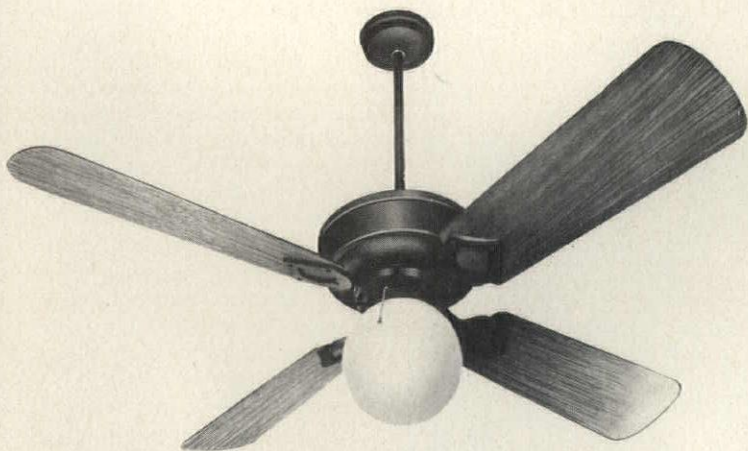
CIRCLE 263 ON READER SERVICE CARD

**Track lighting system (11)** consists of off-white fixtures attached to a central track. Track can be recessed, surface-mounted or suspended from stems. Individually switched lights can be swiveled and angled as desired. Thomas, Louisville, Ky.

CIRCLE 264 ON READER SERVICE CARD

**Ceiling-fan chandelier (12)** is available in 46" or 52" diameters. The 15 lb. unit comes in black, avocado or red. Fan, with walnut-stained wood blades, operates at a slow speed for effect only, not cooling. City Knickerbocker, New York City.

CIRCLE 265 ON READER SERVICE CARD



12

the earliest design stages. So experienced lighting people—manufacturers, designers or your own electrical contractor—should be consulted from the outset.

Says New York architect, John Crews Rainey AIA, "The actual selection of fixtures may be done later, after the style motif is established, but the location and function must be considered from the original concept."

In a lighting plan two distinctive areas should be examined—the interior and the exterior.

**Inside the house** proper illumination must include task lighting for comfort and efficiency in work and recreational activities, safety lighting to prevent accidents and decorative lighting to create a spacious atmosphere.

Here are various methods of lighting that can help you attain this.

*Ceiling and wall mounted fixtures* are usually used for general lighting. Incandescent or fluorescent lights—dimmer controlled—help expand rooms visually and offer basic brightness for ease of movement and safety.

*Hanging fixtures* provide area lighting while accenting the interior design.

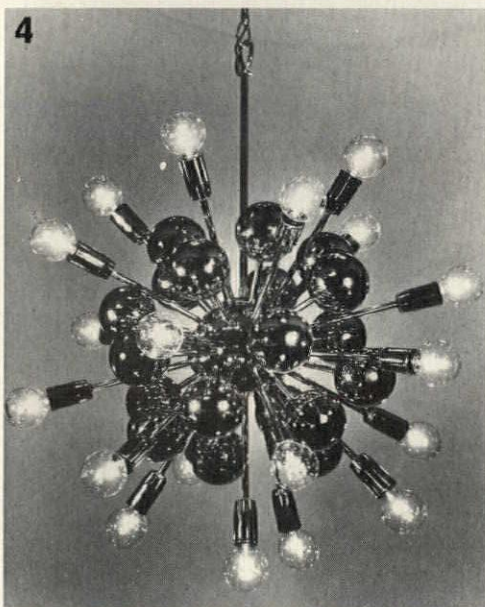
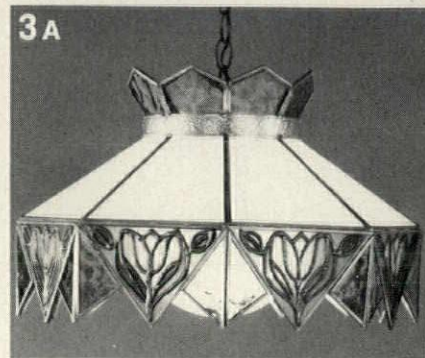
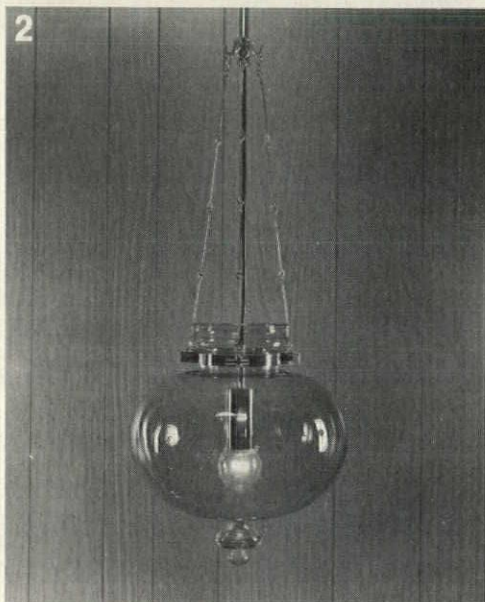
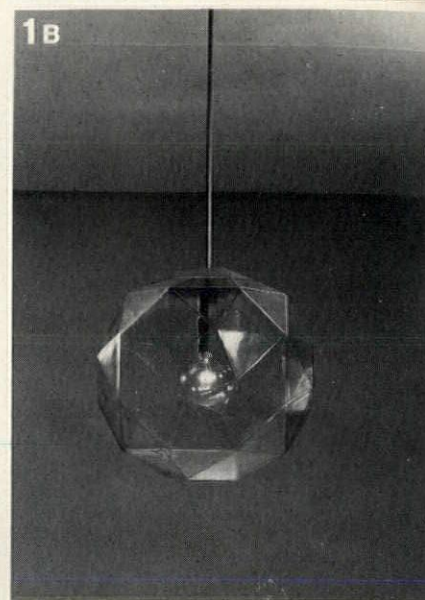
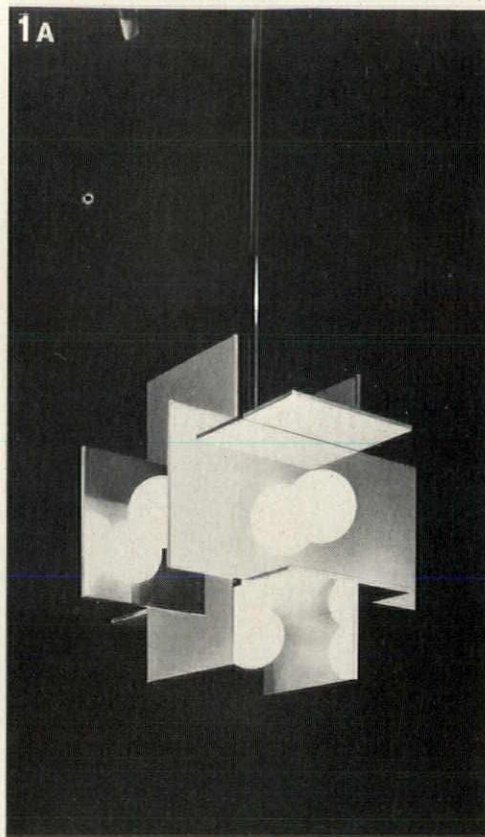
*Fluorescent tubes or incandescent pin spotlights* are used for dramatic wall-washing where light is directed onto a vertical surface to emphasize a texture or setting.

*Track lighting*, relatively new in the residential field, highlights action or display areas.

These forms of lighting plus table, floor and furniture lamps can and should be mixed to provide quality home illumination.

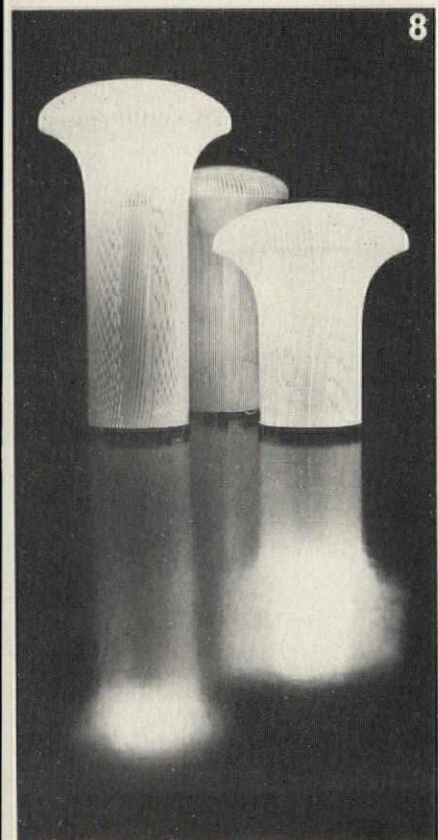
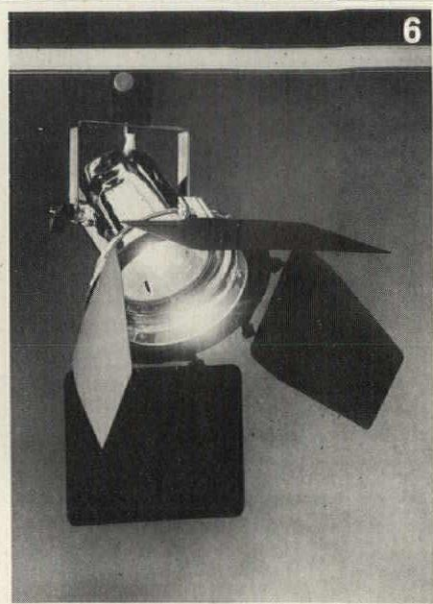
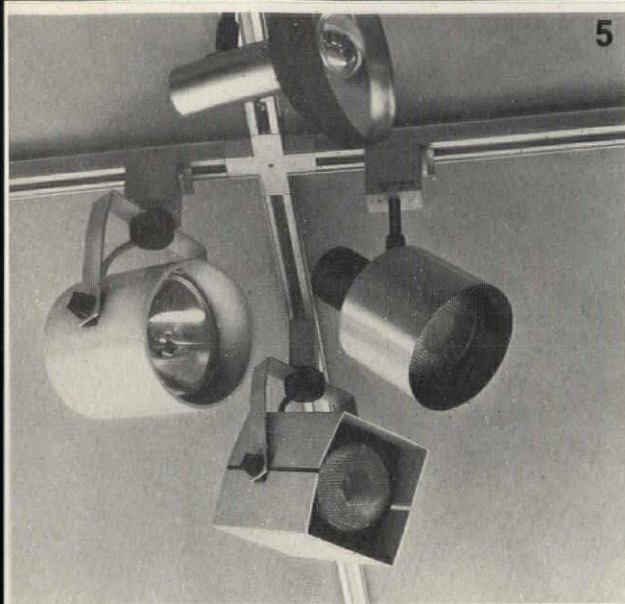
**Each room has its own function and**

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**Contemporary pendant light fixtures (1A & B)** are supplied with 5" diameter canopies, hang-straight swivels and cross bars for attachment to standard outlet boxes. The polished-chrome "Multi-reflector" pendant (1A) comes in 9½" and 14½" overall sizes. The five-light fixture hangs from a matching stem available in 3" increments to 40' long. "Transparent Cenosphere" (1B) is a cast-in-one-piece, seamless plastic globe composed of 86 planar triangles and squares. Fixtures in clear, transparent bronze or gray come with matte black or medium bronze stems. Habitat, New York City. CIRCLE 266 ON READER SERVICE CARD

**Incense-burner lighting fixture (2)** combines traditional form and contemporary materials. Blending with any interior, the unit features



slightly smoked imported crystal and chrome fittings. Fixture hangs from three chains that join at the canopy. The lamp itself is suspended from a cord and hangs freely within the glass. Unit comes in the single light version shown or in a larger three light model. Koch & Lowy, New York City.

CIRCLE 267 ON READER SERVICE CARD

**Tiffany lamp reproductions (3A & B)** provide a touch of antiquity that blends with any decor. The hand-decorated leaded-glass fixtures can be swag or ceiling chain hung. Colorful units in a variety of designs come complete with 8" opal glass globes. Sheridan, New York City.

CIRCLE 268 ON READER SERVICE CARD

**Suspended contemporary fixture (4)** is a sparkling mixture of metal and

light. Twenty-one spherical lamps emit light, which is reflected and refracted off the various metal surfaces of the fixture. The polished chrome- or brass-finished unit also comes in a larger 31-light version, a smaller, 21-light model and 2 ten-light ceiling-mount styles. Illuminating Experiences, Linden, N.J.

CIRCLE 269 ON READER SERVICE CARD

**Versatile track lighting system (5)** "StarTrack", is composed of extruded aluminum track and a choice of 41 adjustable light fixtures. Three separately controlled circuits are housed within the track. Suitable for recessed, surface-mounted or suspended installation, tracks come in 4', 8' and 12'. "Star-Spot" fixtures include a square contemporary unit. Swivelier, Nanuet, N.Y.

CIRCLE 270 ON READER SERVICE CARD

**Inspired by theatrical lighting,** "Showlites" (6) are an attractive source of direct or indirect light. The "Multi-six" shown as well as the "Mini-six" and "Mini-pro" models can be adapted to most track systems. All fixtures come in chrome or a selection of gleaming colors with tungsten halogen light sources and dimmer controls. Berkey Colortran, Burbank, Calif.

CIRCLE 271 ON READER SERVICE CARD

**Flemish-designed brass chandelier (7)** is a decorative light source for traditional interiors. Eight white candle lights are supported by horns mounted on a ring. The handcrafted natural brass fixture, with solid castings, is 28" in diameter, 13" tall and has a minimum overall height of 24". Metropolitan, New York City.

CIRCLE 272 ON READER SERVICE CARD

**Contemporary light sources** are also pieces of modern art (8). Fixtures are manufactured in Italy by a unique process known as Tessuto in which threads of white glass are fused into clear glass. Each unit is slightly different from all others. Lights, offered in 14", 18" and 22" sizes, can be used as floor lamps as shown or ceiling mounted. Venini, New York City.

CIRCLE 273 ON READER SERVICE CARD

**Arched chrome floor lamp (9)** is a welcome addition to any contemporary home. The light source, which seems to float in the air, is actually supported by a sweeping arc with a span of about 6'. Unit features a highly polished aluminum dome which is adjustable so that light can be aimed. A black steel base provides stability. Schiller-Cordey, Hackensack, N.J.

CIRCLE 274 ON READER SERVICE CARD

must therefore have its own formula for good lighting. Permanent fixtures are essential in foyers, hallways, dining rooms, baths and kitchens. Additionally, switch controlled outlets should be included in any area without permanent lighting.

Certain rooms particularly lend themselves to merchandising with lighting. Spending a little more on the dining room chandelier can help sell your home. Top-of-the-line fixtures here and in entryways affect the overall appearance of the unit.

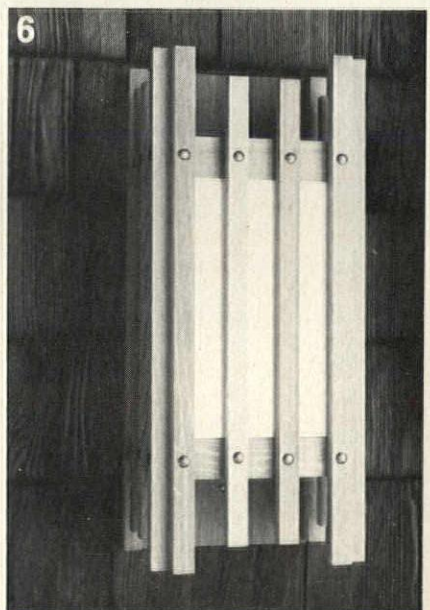
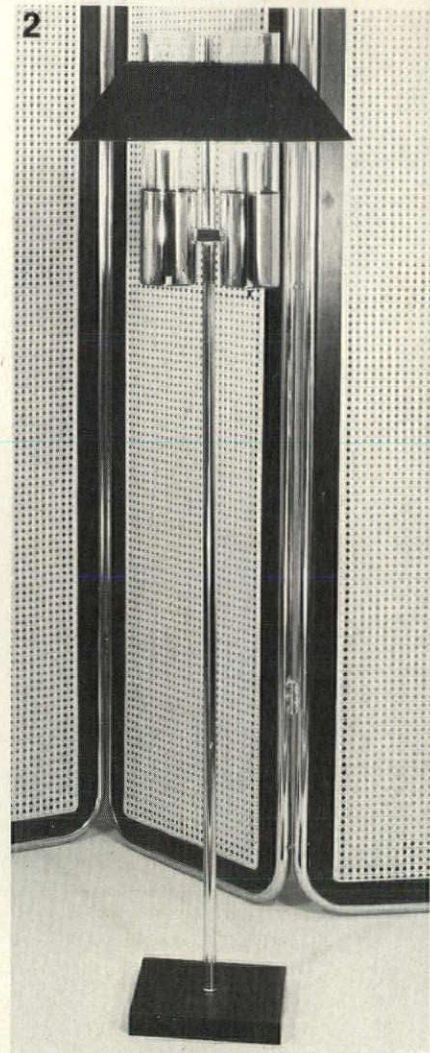
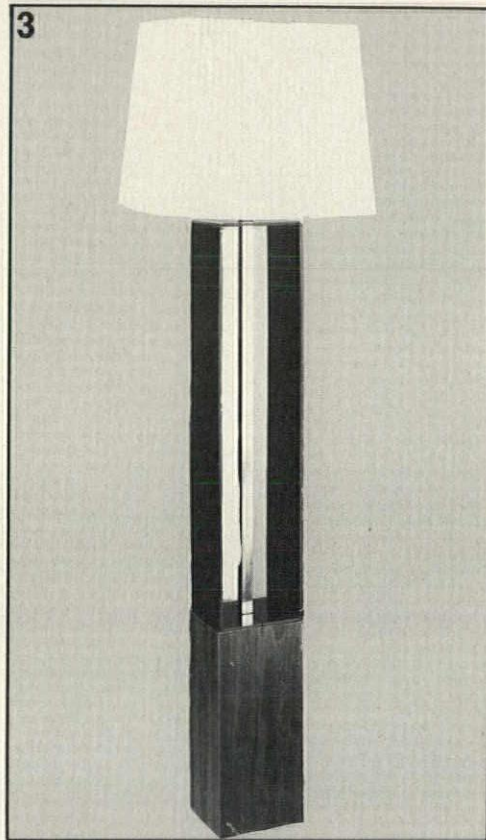
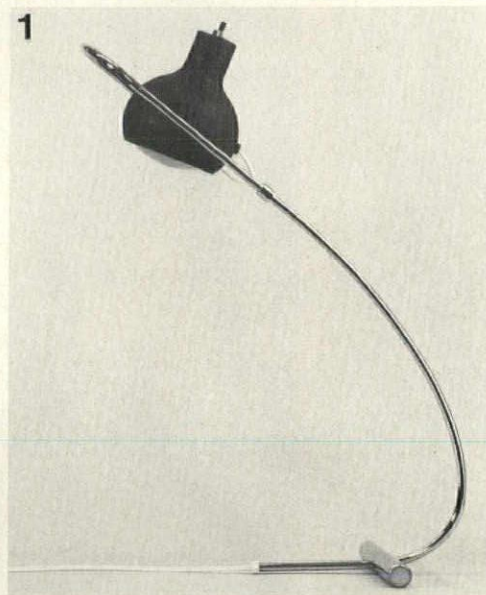
Kitchens also can pack a wallop. Either a recessed illuminated ceiling system or a good combination of work-area and decorative lighting is most effective.

Says John Heppy, vice president in charge of purchasing for Scarborough Homes, Cherry Hill, N.J. "Kitchens are where we like to blow 'em out with something special and lighting can help there."

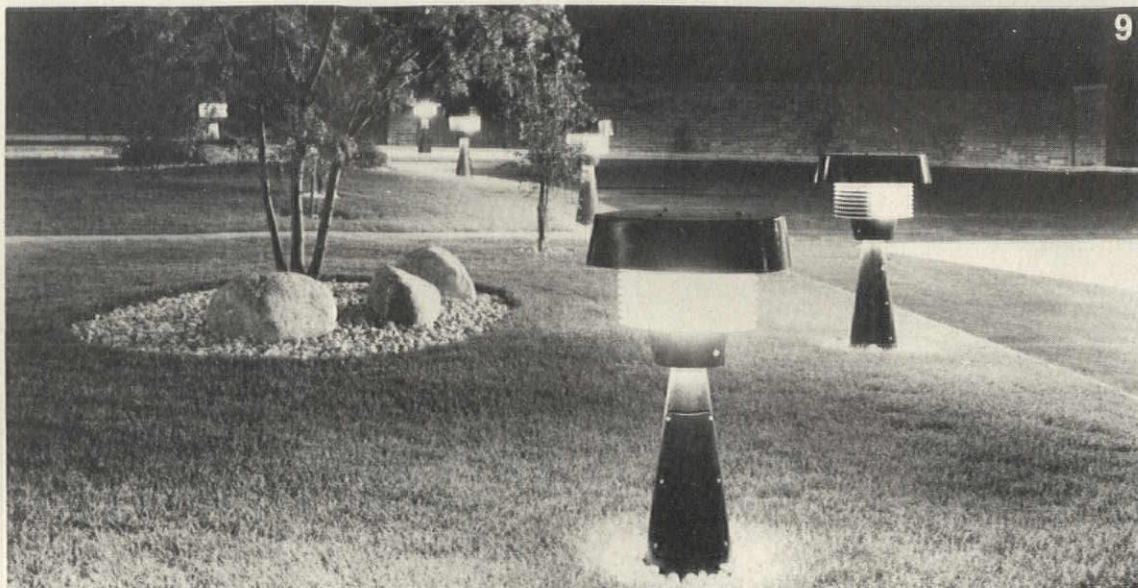
**Exterior lighting** should be approached differently. You need unobtrusive functional illumination that brightens the grounds while dressing up exterior elevations and landscaping. Outdoor lighting should accent your project's high points—pools, patios or garden areas. It is here that you set a tone for ambience, security and well-being.

Since many prospects visit in the evening, your project's nighttime appearance is especially important. Before your model units open, view them at night. Be sure your lighting doesn't overkill or undersell.

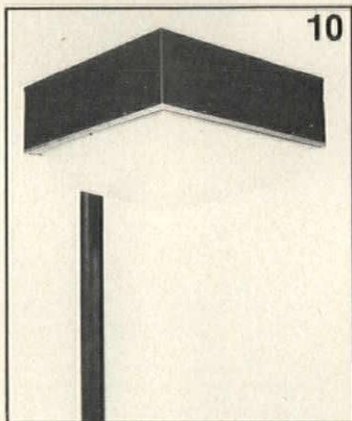
Interiors should look warm and inviting; exteriors safe and secure. You may be surprised at how your prospects get turned on by good lighting. ■



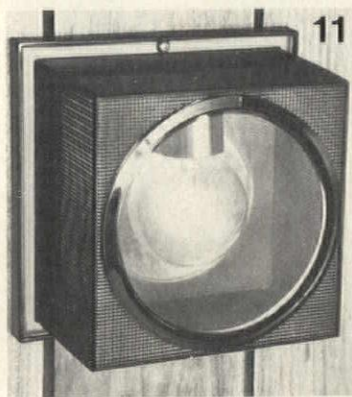
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9



10



11

**Contemporary table lamp (3)** is constructed of the most popular materials used in modern decors. Unit features a rosewood base with translucent smoked Plexiglas® and polished chrome tubing. Fixture is topped with an unusual square pleated shade of off-white Belgian linen. Lamp is also available in a table model. Bruce, Philadelphia, Pa.

CIRCLE 277 ON READER SERVICE CARD

**Classic swing-arm lamp (4)** is an offspring of a series designed by Walter Von Nessen circa 1927. Fixture with a metal light reflector is available as a wall lamp for outlet box mounting or with cord and plug and as an adjustable height floor lamp. Units come in brushed or polished brass, satin or polished chrome finishes. Nessen, Bronx, N.Y.

CIRCLE 278 ON READER SERVICE CARD

**Mansard-top post luminaire (5)**, for area lighting, is constructed of high impact acrylic and ABS plastic. Available in 21" and 27" sizes, the unit can accommodate from 100 to 400 watt mercury vapor with any type ballast. A cast aluminum slip-fitter is for 2 3/8" to 3" O.D. poles. Exposed hardware is noncorrosive. ITT Landmark, Southaven, Miss.

CIRCLE 279 ON READER SERVICE CARD

**Distinctive redwood wall lamp (6)** is a practical accent to any walkway, entry or pool and patio area. Fixture provides light through sides and front as well as top and bottom openings. Units can be mounted high to light large areas or low for decorative effects such as plant illumination. Available in two sizes, the pre-assembled unit has brass fittings. Victor Mfg., San Carlos, Calif.

CIRCLE 280 ON READER SERVICE CARD

**Low-glare site lighting (7)** "Pericline Contemporary" provides broad, even illumination. Single and multiple light models come in two sizes for use with 100-700 watt mercury vapor, 75-400 watt metal halide or 250 & 400 watt sodium lamps. Unit,

including pole, is of extruded aluminum. It is offered in a choice of finishes with clear Lexan or acrylic panels. Moldcast, Newark, N.J.

CIRCLE 281 ON READER SERVICE CARD

**Below eye-level luminaire, "Field-lite" (8)** is a rugged, tamperproof gasketed fixture. Constructed of diecast aluminum with a textured black finish, unit features a white opal polycarbonate diffuser. Compact fixture uses a 75 watt incandescent lamp and fits a 1/2" pipe or conduit. Prescolite, San Leandro, Calif.

CIRCLE 282 ON READER SERVICE CARD

**Driveway lighting fixtures (9)** "Cavalier Low-Level Lights" emit no blinding glare. Clear, prismatic reflectors and specially designed louvers aim the light from the 400 watt metal halide lamp below the motorist's line of vision. Units are of cast aluminum and ABS plastic protected by black Korad "A" acrylic film. Guardian Light, Oak Park, Ill.

CIRCLE 283 ON READER SERVICE CARD

**Outdoor luminaire, Brevard™ (10)** is designed for large area lighting. The contemporary styled fixture uses HID lamps of mercury vapor, metal halide or Lucalox.® Light is evenly distributed over vast areas by a diffuse acrylic lens and a high reflectance interior. Unit, which can be side or top mounted, features a compact design and an integral ballast. Geometric-shaped luminaire comes in a choice of colors. General Electric, Washington, D.C.

CIRCLE 284 ON READER SERVICE CARD

**Vandal resistant luminaire (11)** is of dark bronze tinted polycarbonate. The durable, decorative fixture remains operative even under extreme physical abuse. The unit accommodates G-lamps, flicker, chimney and other decorative lamps of any wattage and 100 watt incandescents. Fully gasketed luminaire is also offered in clear or opal versions. Art Metal, Vermilion, Ohio.

CIRCLE 285 ON READER SERVICE CARD

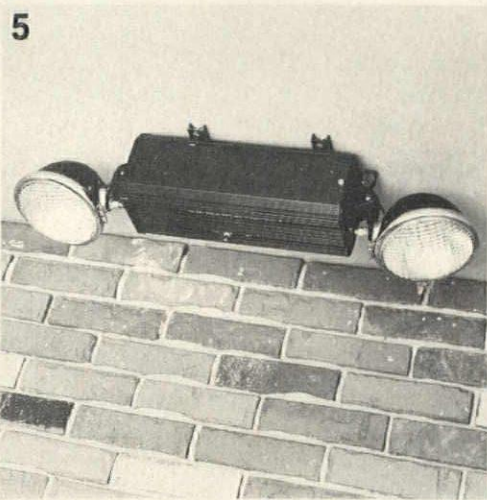
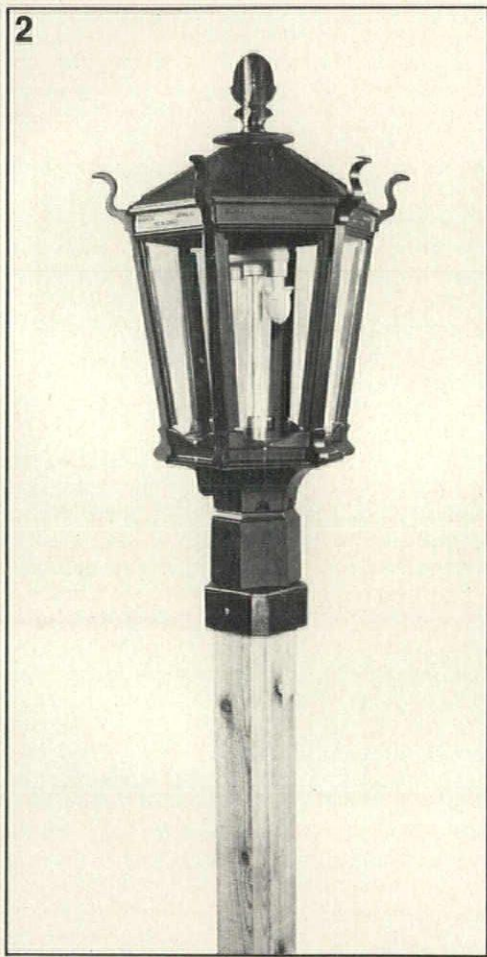
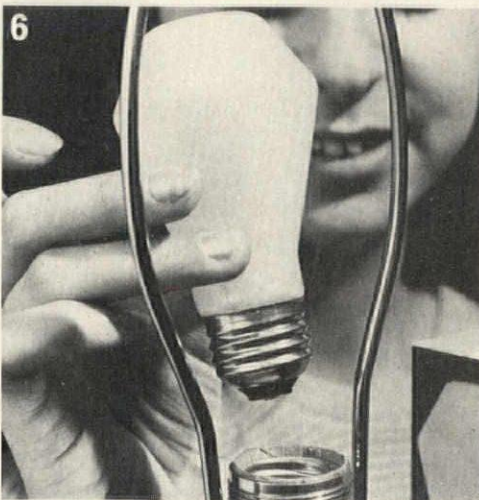
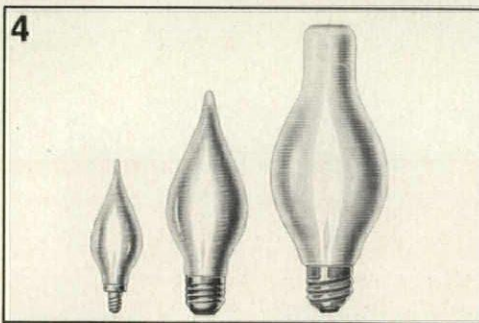
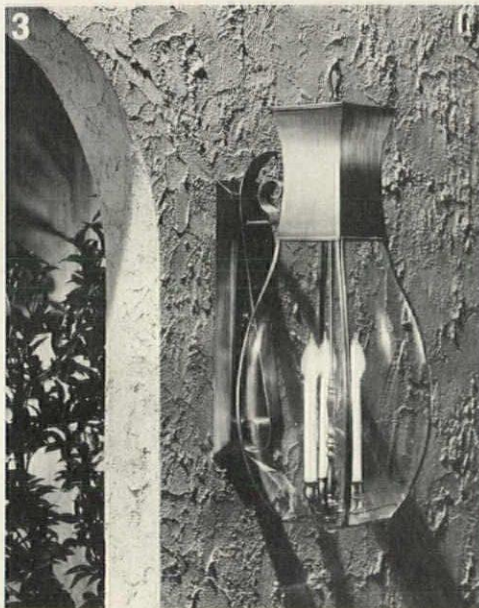
8

**Graceful, contemporary table lamp (1)** has a simple elegance of form. Everything but the basics has been eliminated. Finished in highly polished chrome, the unit stands 23" high. A rotating eyeball light source is 5" in diameter and takes a 50 or 75 watt reflector bulb. Lamp can create direct or indirect lighting. Lennart Johnson, New York City.

CIRCLE 275 ON READER SERVICE CARD

**Unique floor lamp (2)**, designed by Ed Whiting, combines traditional and contemporary styling. Inspired by 18th and 19th century gas coach-lights, the four-light "Tole" lamp offers a touch of nostalgia with a modern look. A thin polished chrome stem and squared-off base complete the eclectic mix. Raymor Richards, Morgenthau, Ridgely, N.J.

CIRCLE 276 ON READER SERVICE CARD



**Low voltage outdoor lights (1)** are designed to blend with the landscape. They are constructed of solid California redwood—kiln-dried and sealed against deterioration and discoloration. Units for ground or wall-mounting, come in four standard sizes. Sylvan, Canoga Park, Calif.

CIRCLE 286 ON READER SERVICE CARD

**Outdoor gas lamps (2)** are supported by genuine laminated cedar standards from Potlatch Forests. Cast aluminum fixtures, in a choice of burner styles, feature removable tempered glass panels and a brass tuning valve.

Charmglow, Antioch, Ill.

CIRCLE 287 ON READER SERVICE CARD

**Old world style lantern for wall mounting (3)**, features clear acrylic panels and a choice of brass or old bronze finish. The "Amphora" accommodates three candelabra base bulbs, up to 60 watts each, extended from a hang straight ball swivel.

Georgian Art, Lawrenceville, Ga.

CIRCLE 288 ON READER SERVICE CARD

**Fluorescent bulbs (4)** produce the look of gas flame lighting through electricity. Bulbs are available in a range of sizes and shapes including chimney-lites and torch-shaped bulbs with standard or candelabra bases.

Duro-Lite, Fair Lawn, N.J.

CIRCLE 289 ON READER SERVICE CARD

**Emergency incandescent luminaire, "Big Eye" (5)** is a theft and vandal-proof unit that lights instantly in the event of power failure. The luminaire features sealed spacecraft-type batteries and mounting brackets that permit it to be installed at any angle.

Holophane, Montvale, N.J.

CIRCLE 290 ON READER SERVICE CARD

**Triple-life super bulb (6)** has an average life of 3,000 hours, or from two to three years of normal use. Bulb, available in 60, 75 and 100-watt sizes, contains krypton to retard the burning of the tungsten filament.

Westinghouse, New York City.

CIRCLE 291 ON READER SERVICE CARD

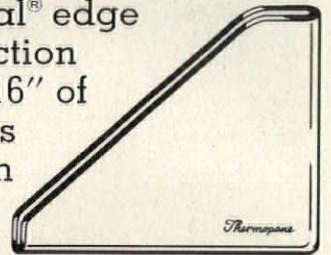
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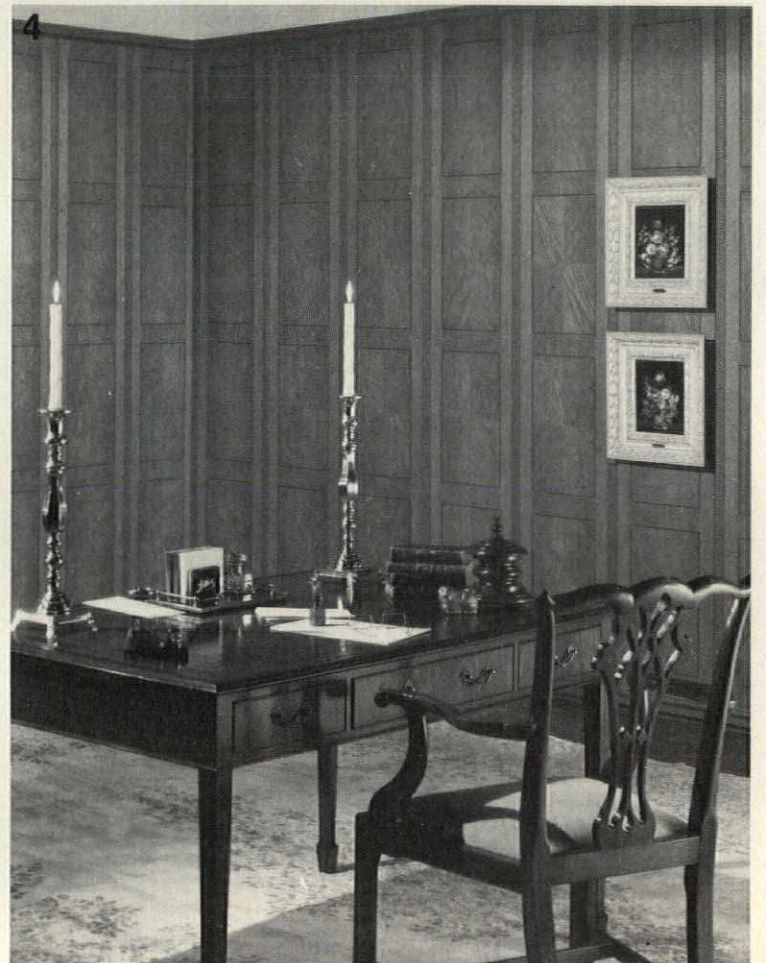
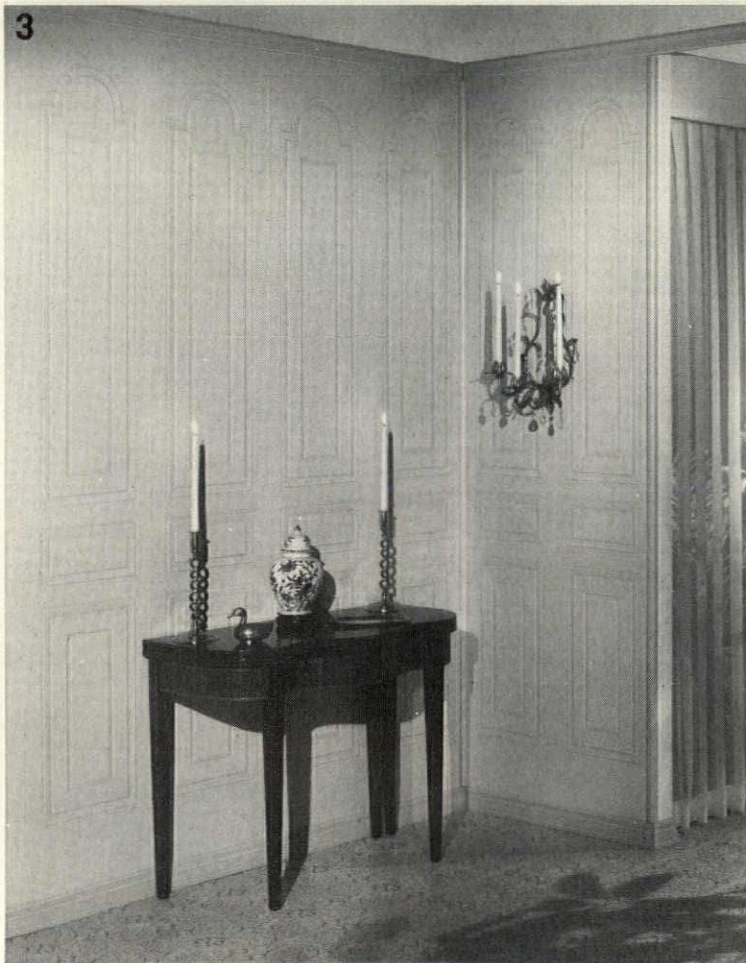
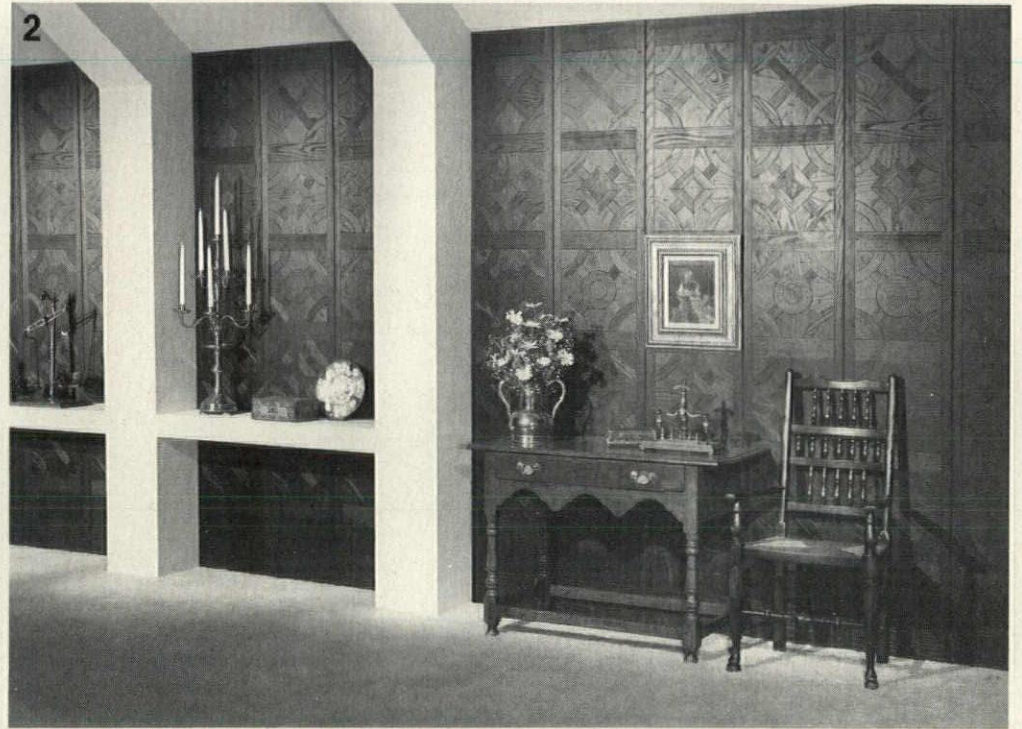
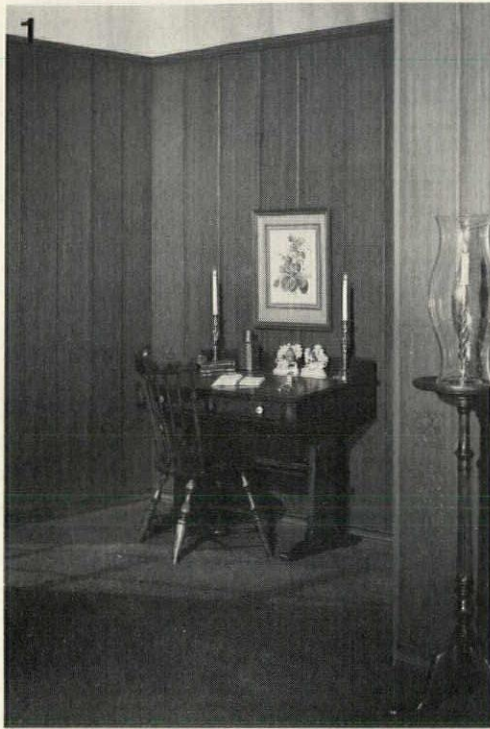
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# LOF

## History repeats itself in wall paneling patterns

The architectural past of four nations is represented in the "Historic Collection" of hardboard wall paneling. The unique line of 4'x8' panels provides rich, custom-look walls without custom price-tags. Colonial America is captured in "Deerfield" (1), a warm, deep, walnut-toned replica of aged plank New England walls. A deep embossed motif accents the wainscot area. The panel creates the illusion of being five individual planks hand-fitted together. Dark, bold, Spanish-inspired "Presidio" (2) is a reproduction of the intricately styled walls in upper-class 18th century homes. Each chestnut-colored panel is made up of 18 individual carved blocks which are set into three vertical rows of six each. Panels create an overall design ideal for use on accent walls.

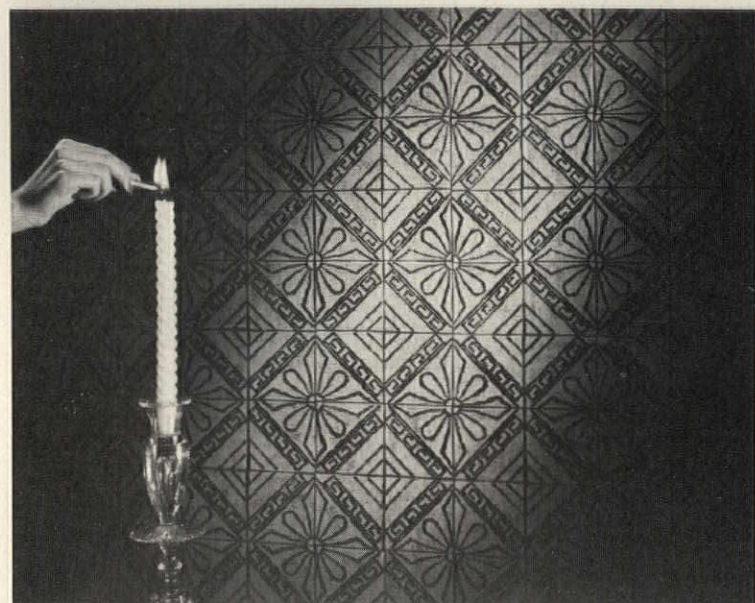
"Provence" (3), reminiscent of the 18th century French provincial period, features framed, delicately detailed insets in a soft off-white coloring. Panels, with a hand-fitted look, are divided into three narrow visual sections. Stately manor houses of Old England were the famous ancestors of the "Briarcliff" design. (4). The formal pattern, well-suited to studies, libraries, and dens, achieves a handcrafted look with textured, detailed insets and carved decorative divider strips. All of the panels feature a tough, durable, easy-to-maintain finish that will not fade or discolor. A series of coordinated prefinished moldings in four different profiles is also offered. Masonite, Chicago. CIRCLE 202 ON READER SERVICE CARD







Decorative ceiling tile pattern, "Abstract," is a contemporary blend of lines and textures. The non-directional design and interlocking T&G edges make for fast, easy installation. Tiles, with an easy-to-clean acousti-crylic finish, provide a monolithic appearance. They can be applied with adhesives or staples or by the metal furring method. Gold Bond, National Gypsum, Buffalo, N.Y. CIRCLE 203 ON READER SERVICE CARD



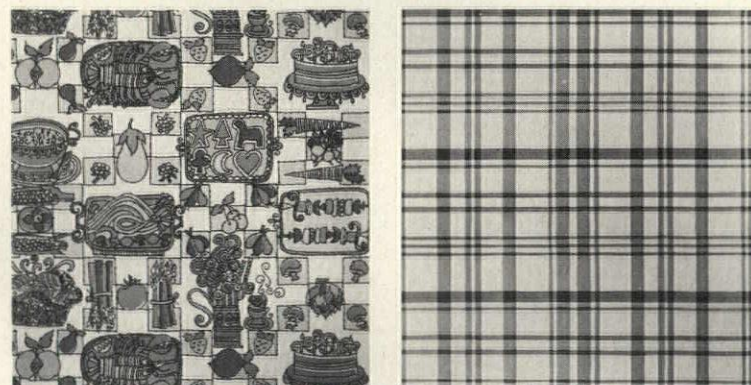
Ceramic wall tile with a Mediterranean flavor, "Madeira" is part of the "Summit-styles" line. Tiles, in 4"x4" squares, have a handcrafted appearance with individual pattern variations. Design comes in five colorings: beige and brown, beige and blue, beige and gold, tan and brown or red and black. Summitville Tiles, Summitville, Ohio. CIRCLE 204 ON READER SERVICE CARD



Intricately patterned paisley wallcovering, "Mata Hari," is a traditional design pattern with boldly contemporary. Part of the "Ovations" collection, the pattern, with an oversized 42" repeat, comes in blue/orange/green on silver mylar or in combinations of blue, yellow/orange, rust and neutral. J. Josephson, Hackensack, N.J. CIRCLE 206 ON READER SERVICE CARD



Antique white brick replicas have been added to the "Brick-craft" line of high-impact polystyrene reproductions. The lightweight simulated bricks feature authentic rough textures and deep dimensions. Easy-to-install bricks are permanently bonded to the wall by an adhesive that also serves as mortar. Decro-Wall, Elmsford, N.Y. CIRCLE 205 ON READER SERVICE CARD



Tasty, tasteful wallcovering, "Kitchen Domino" (left), is a collage of good things to eat offered in three colorways. "Fancy Plaid" (right), available in four combinations, has a light, airy, watercolor effect. Part of the "Here/and/Now" collection, both patterns are on easy-to-clean vinyl. James Seeman Studios, Garden City, N.Y. CIRCLE 207 ON READER SERVICE CARD



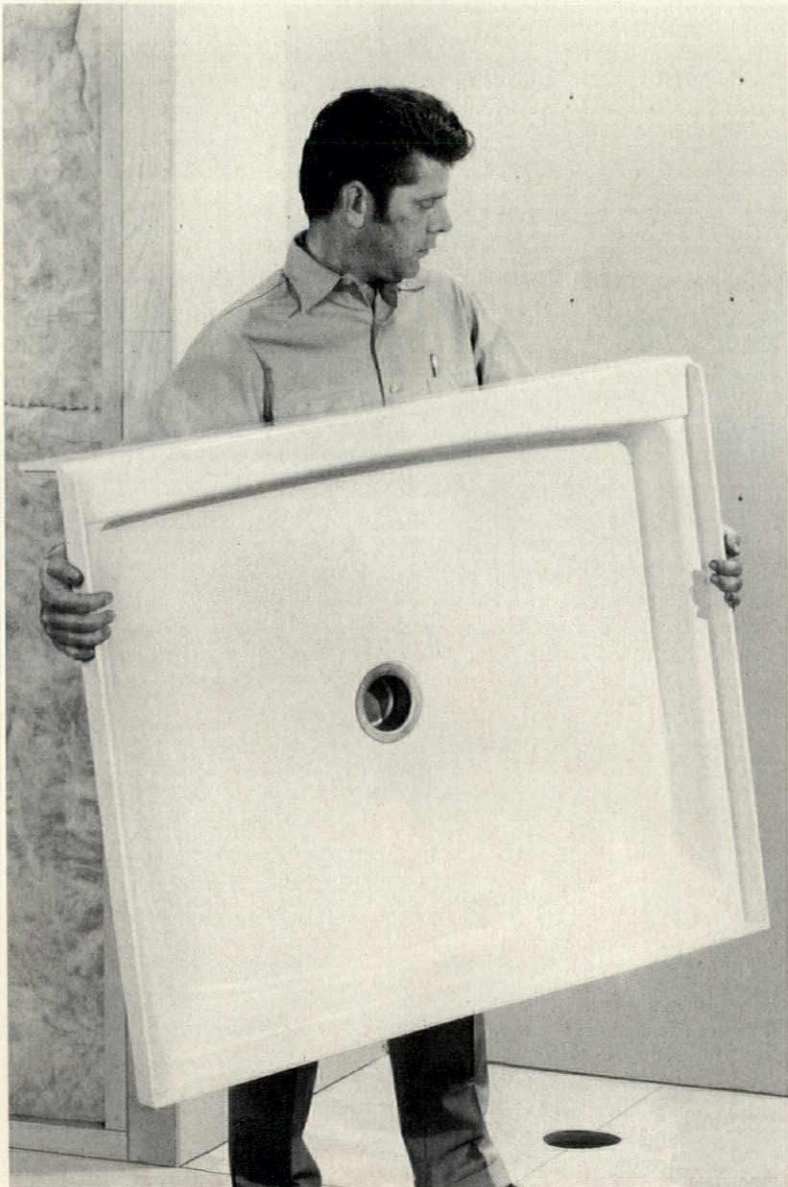
Cornice moldings of lightweight polyurethane simulate plaster architectural artwork of the past. The easy-to-ship and -install reproductions are available in the old English style shown or in Classic Rosette, Georgian, Modillion and two egg and dart designs. A line of ceiling medallions is also offered. Focal Point, Marietta, Ga. CIRCLE 208 ON READER SERVICE CARD

# Cascade<sup>®</sup> Molded-Stone<sup>®</sup> shower floors— stronger than stone and 1/5 the weight!

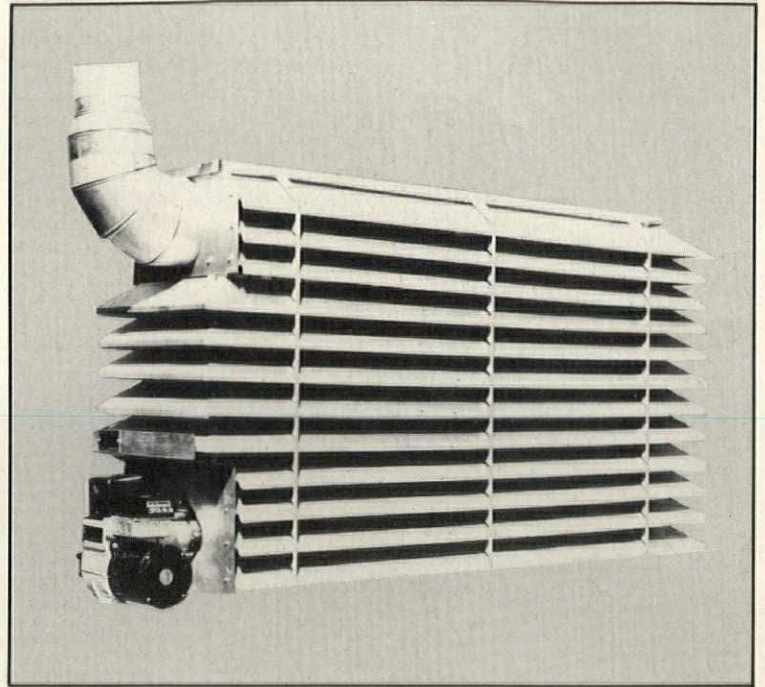
You'll find lightweight Cascade<sup>®</sup> shower floors as easy to install as they are to sell. It's a fast, easy job for one man. A factory-installed stainless steel drain prevents leakage problems, makes for a permanent, trouble-free installation. Optional Jiffie-Joint<sup>®</sup> connector eliminates caulking. The non-absorbent Molded-Stone<sup>®</sup> surface won't rust, corrode, or be affected by normal household chemicals. To help you clinch the sale, you can offer five decorator colors, three shapes and eight sizes. Contact your Fiat representative or write Dept. HH-11.

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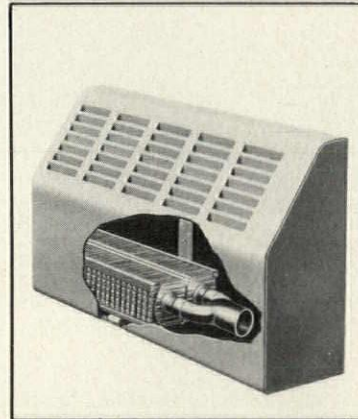


## PRODUCTS/HEATING, COOLING



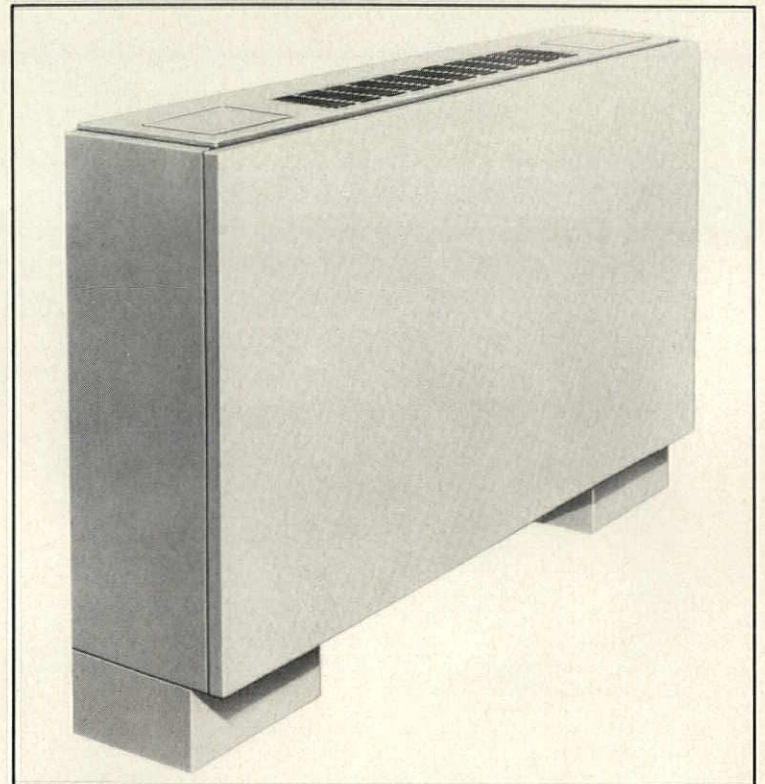
**Oil-fired infrared heater** uses only one gallon of fuel per hour. The overhead-mounted unit, "Solar-Temp", radiates sunlike heat and eliminates drafts in wide open areas. All major components are UL listed. Schlosser Steel, Hatfield, Pa.

CIRCLE 248 ON READER SERVICE CARD



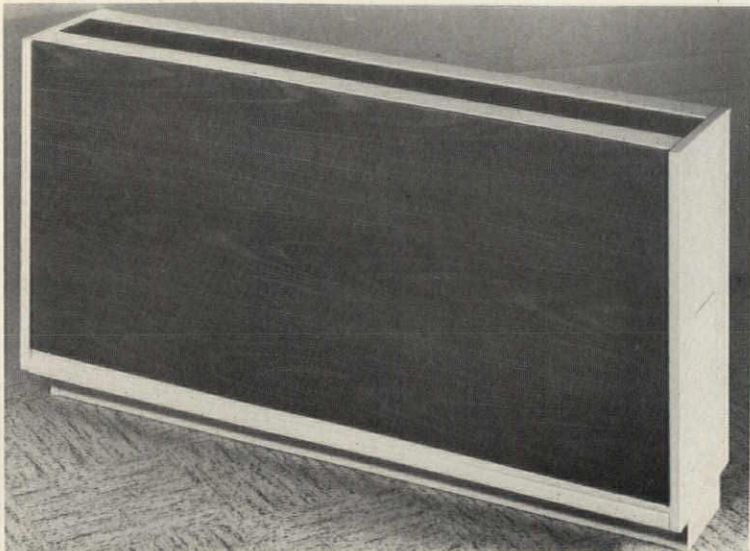
**Four valve enclosures** have been added to the line of accessories for hydronic twin tube baseboard radiation. Enclosures fasten to covers and offer access to the valves. Edwards Engineering, Pompton Plains, N.J.

CIRCLE 249 ON READER SERVICE CARD

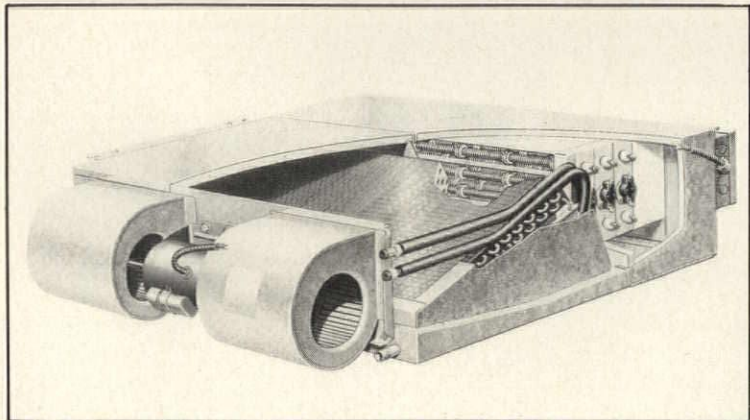


**A line of fan coil units** in 200 to 1100 cfm capacities consists of 17 vertical models for floor or wall mounting and 7 horizontal units for concealed or ceiling applications. All models can be installed with 2, 3 or 4 pipe systems. A variety of optional accessories is offered. Mueller Climatrol, Milwaukee, Wis.

CIRCLE 250 ON READER SERVICE CARD



Through-the-wall environmental conditioner, "Weather-Twin", provides four-season heating, cooling and air filtration at the touch of a dial. The unit, in a wide range of capacities, can be operated with electricity, steam or hot water. A selection of decorator style cabinets is offered. Embassy, Farmingdale, N.Y. CIRCLE 251 ON READER SERVICE CARD

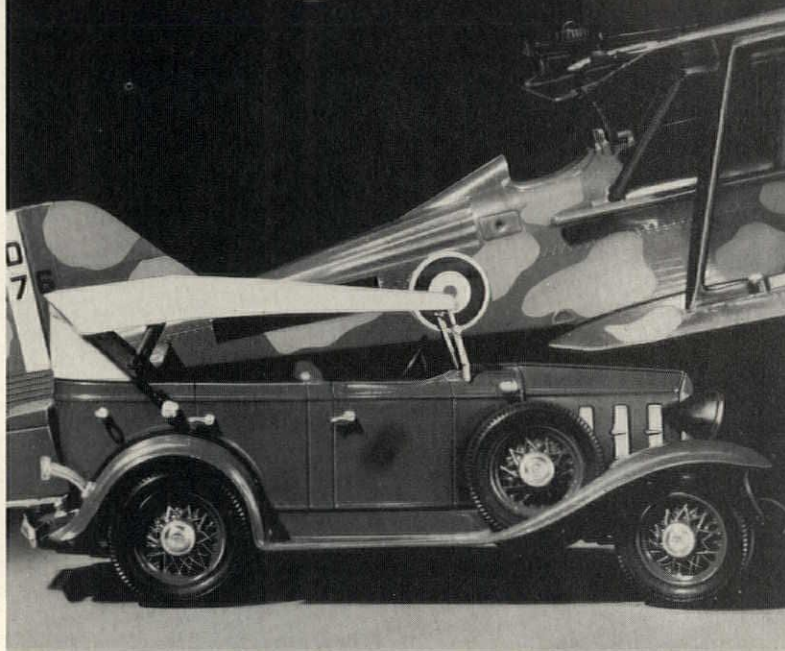


Blowercoil units come in 1½-, 2- and 2½-ton nominal cooling capacities with a wide range of heating options available. Units, which can be installed either vertically or horizontally, feature balanced, three-speed, twin direct-drive blowers. Valve-free Refrigerant Flow Control™ is standard. Lennox, Marshalltown, Iowa. CIRCLE 252 ON READER SERVICE CARD

Portable electric baseboard heater produces hot water heat without plumbing. The plug-in unit is controlled by an automatic thermostat. Heater consists of an electric heat element and a recycling water and antifreeze solution hermetically sealed in copper tubing. Intertherm, St. Louis, Mo. CIRCLE 253 ON READER SERVICE CARD



# Raynor Doors For The Most Unlikely Garagemates



Granted, most people don't keep a biplane and a restored '32 Chevy in their garage. But if they did, Raynor makes garage doors to handle them. If the door your plans call for isn't a stock size, Raynor can make it for you. And you can choose from fiberglass, wood, steel or aluminum, in an imagination-stirring choice of styles. If you're building enclosures for anything from mini-cars to giant locomotives, check with Raynor for the best garage door solution. Even if your current projects don't call for garage doors, be ready—send for your catalog.

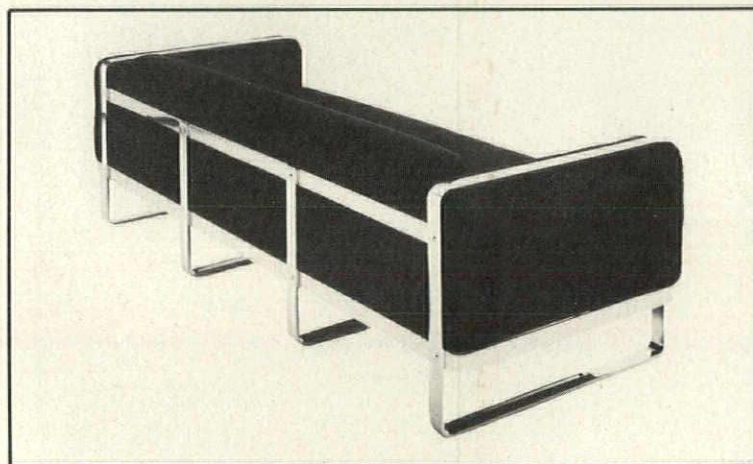
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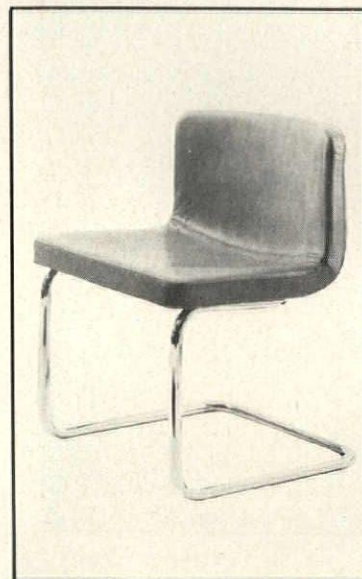
**RAYNOR.**  
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Simple architectural lines highlight the "Building Block" upholstered furniture group. Squared seating in arm or armless versions have softened outlines that are just barely rounded-off with triple-sewn seams. Pieces are constructed of wood frames with dacron foam cushions. A choice of upholstery fabrics is offered. Marden, Chicago. CIRCLE 223 ON READER SERVICE CARD

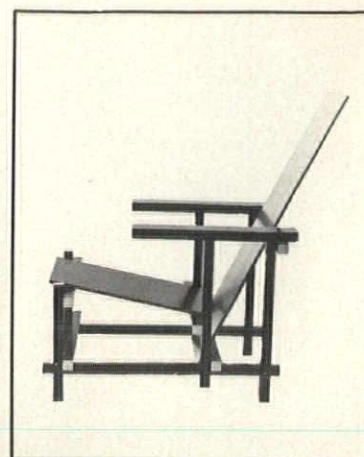


Plush contemporary chrome-strapped sofa is available in a wide variety of fabrics. Part of the "Spectrum 75" series, the unit comes in the 86" sofa (shown) as a two-seater or as a single chair. Modular styling is accented by polished chrome base and exposed frame. Antique brass finish is also offered. Carolina Seating, High Point, N.C. CIRCLE 225 ON READER SERVICE CARD

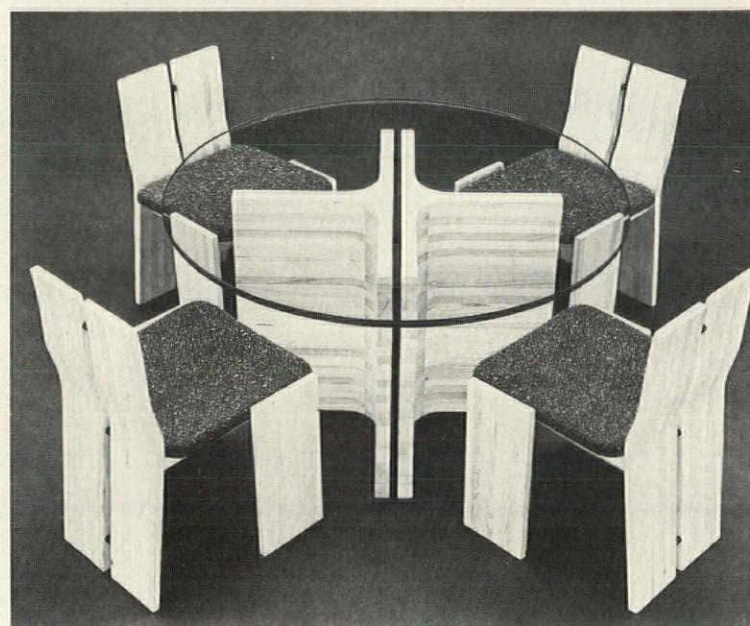


Classically styled contemporary chair, "Phoenix" features a cantilevered base of chromed, mirror-polished tubular steel. The comfortable side or dining chair is contoured to the back. Constructed of foam cushioning over plywood, the chair comes in a wide variety of upholstery fabrics or suedes and leathers. Stendig, New York City. CIRCLE 227 ON READER SERVICE CARD

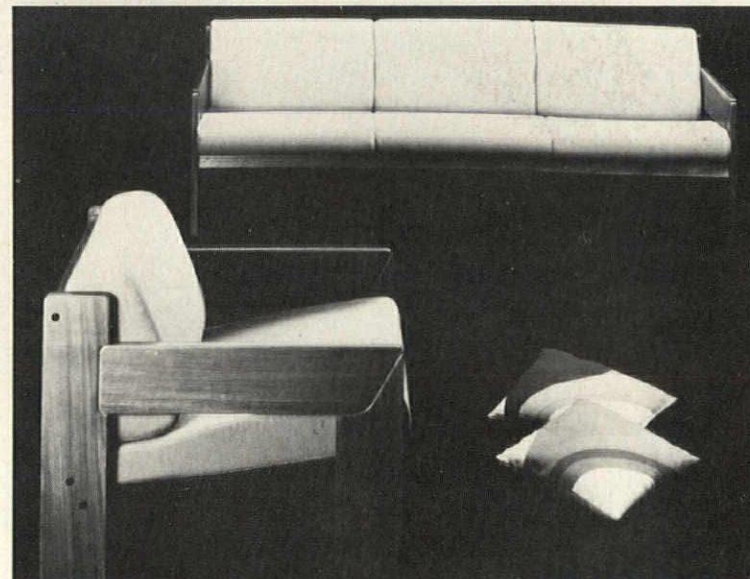
Unusual seating group is constructed of solid pale blond magnolia wood. The knock-down contemporary furniture, imported from Brazil, features foam cushions upholstered in a wide choice of fabrics. The furniture itself is available in several stained finishes including some bold colors. Mobilinea, New York City. CIRCLE 228 ON READER SERVICE CARD



Contemporary chaise lounge chair "Red and Blue" designed by Dutch architect Thomas Rietveld, is made of solid beechwood. The chair, part of the "Masters Collection," features polychrome aniline stains and lacquers with a clear polyurethane finish. Atelier, New York City. CIRCLE 224 ON READER SERVICE CARD



Natural wood dining ensemble from the "Legno" collection is constructed of 1" pine strips. The contemporary grouping consists of high-backed chairs with upholstered seats and a table with a double-T shaped base. The table can take a 55" round glass top or a rectangular one. An aniline red-dyed finish is also offered. Thonet, York, Pa. CIRCLE 226 ON READER SERVICE CARD



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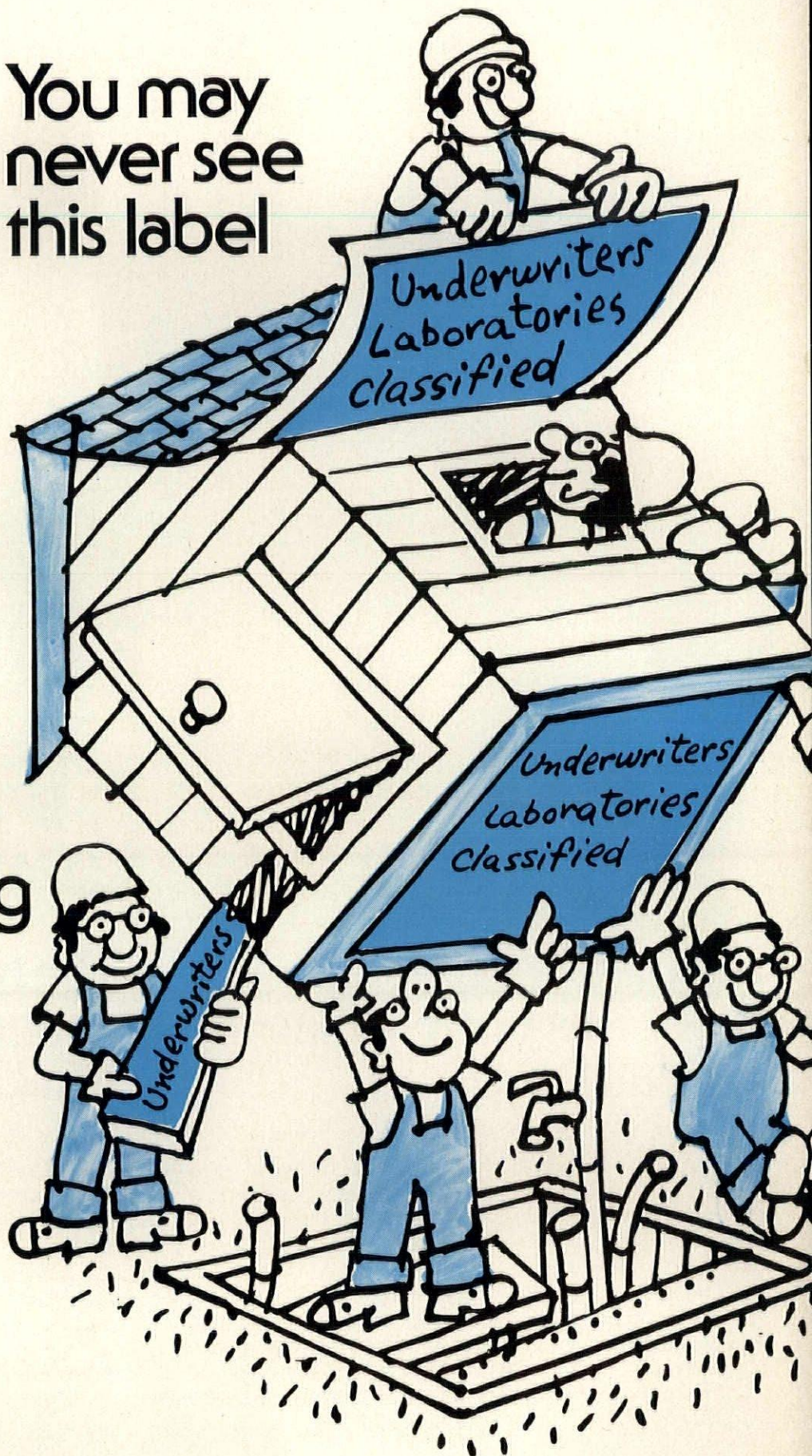
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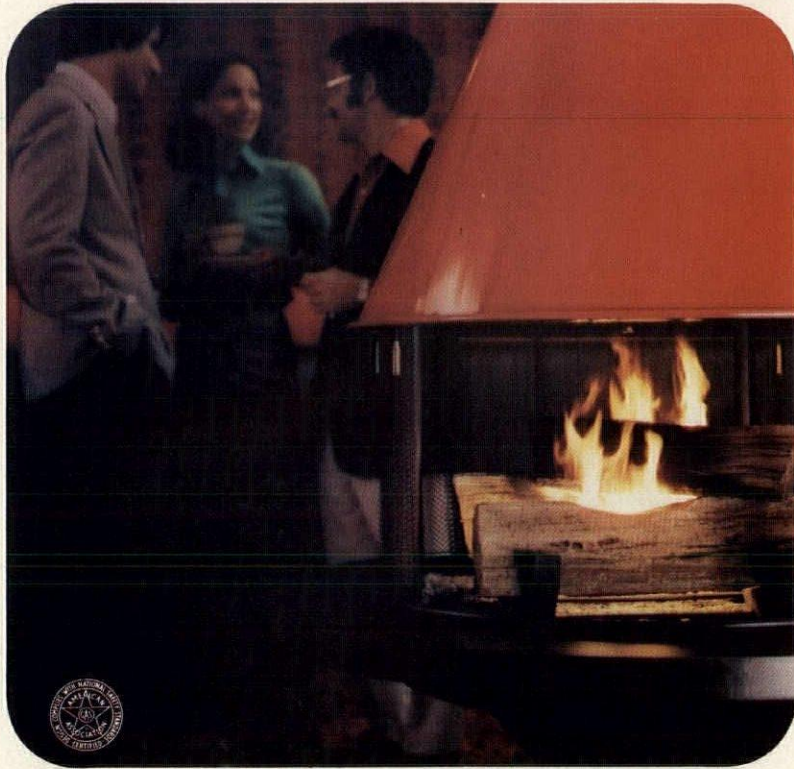
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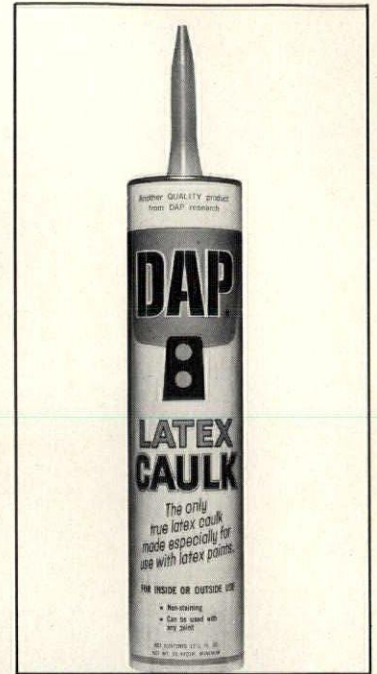
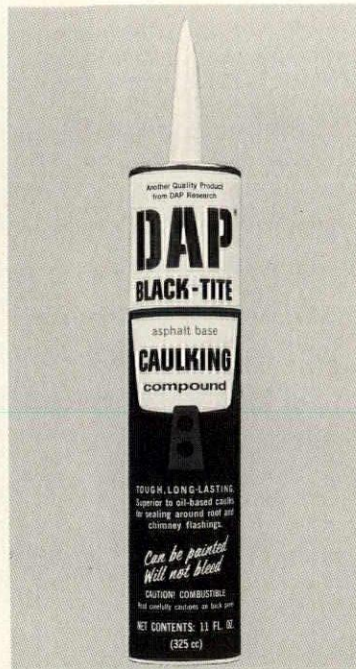
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## PRODUCTS/COATINGS, ADHESIVES



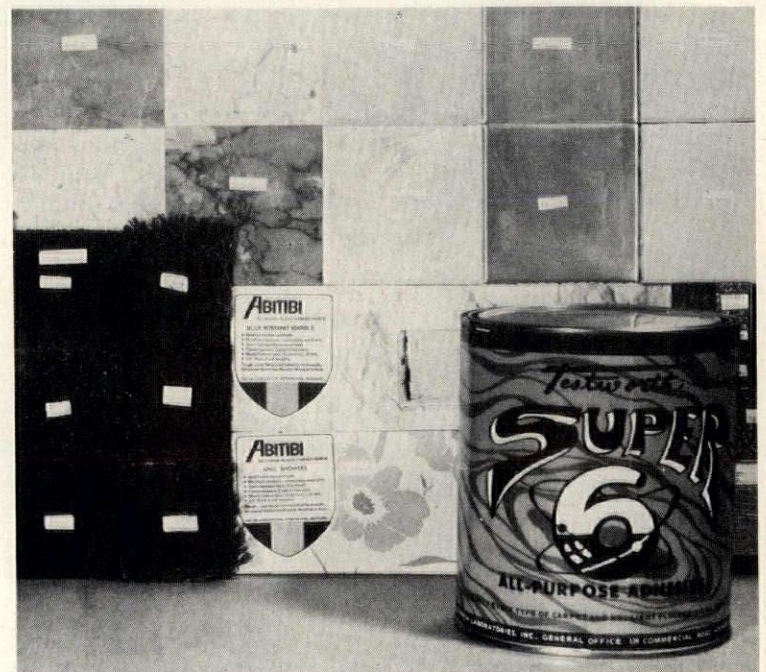
**Heavy-duty Black-Tite caulk (left)** is an asphalt-based substance that provides a waterproof, weatherproof, airtight seal around flashings, skylights and chimneys and stops minor roof leaks. Latex caulk (right) is geared for lighter work such as filling gaps in siding, construction joints and sealing doors and windows. Both are easy to apply with a caulking gun and adhere to most materials. DAP, Dayton, Ohio. CIRCLE 235 ON READER SERVICE CARD

**Foil tape**, suitable for use with fiber glass air handling systems, is available in a kit that contains three 2"x30 yd. rolls. Tape meets U.L. fire hazard requirements, has an adhesion of 100 oz. per inch width and a tensile strength of 25 lbs. per inch width. Arno, Michigan City, Ind.

CIRCLE 236 ON READER SERVICE CARD

**All-purpose adhesive**, "Super 6," for interior applications, is nonflammable, nontoxic and freeze- and thaw-stable. Suitable for vertical or horizontal installation on practically any surface, it forms a resilient bond that gains strength with age. Testworth, Addison, Ill.

CIRCLE 237 ON READER SERVICE CARD





When a job calls for beautiful, textured doors with better durability than wood . . .

Next to the three prefinished embossed hardboard door facings in the Legacy Series from Masonite Corporation, any other door facing is out of its depth.

No flat surface door with a mere grain finish has the deep-textured feeling of Legacy or its deep-rooted durability.

Legacy comes closer to nature than competitively priced doors. The texture is embossed into the substrate before the durable finish is applied. It won't scratch off. The total effect mirrors that of an actual wooden planked surface, each plank with

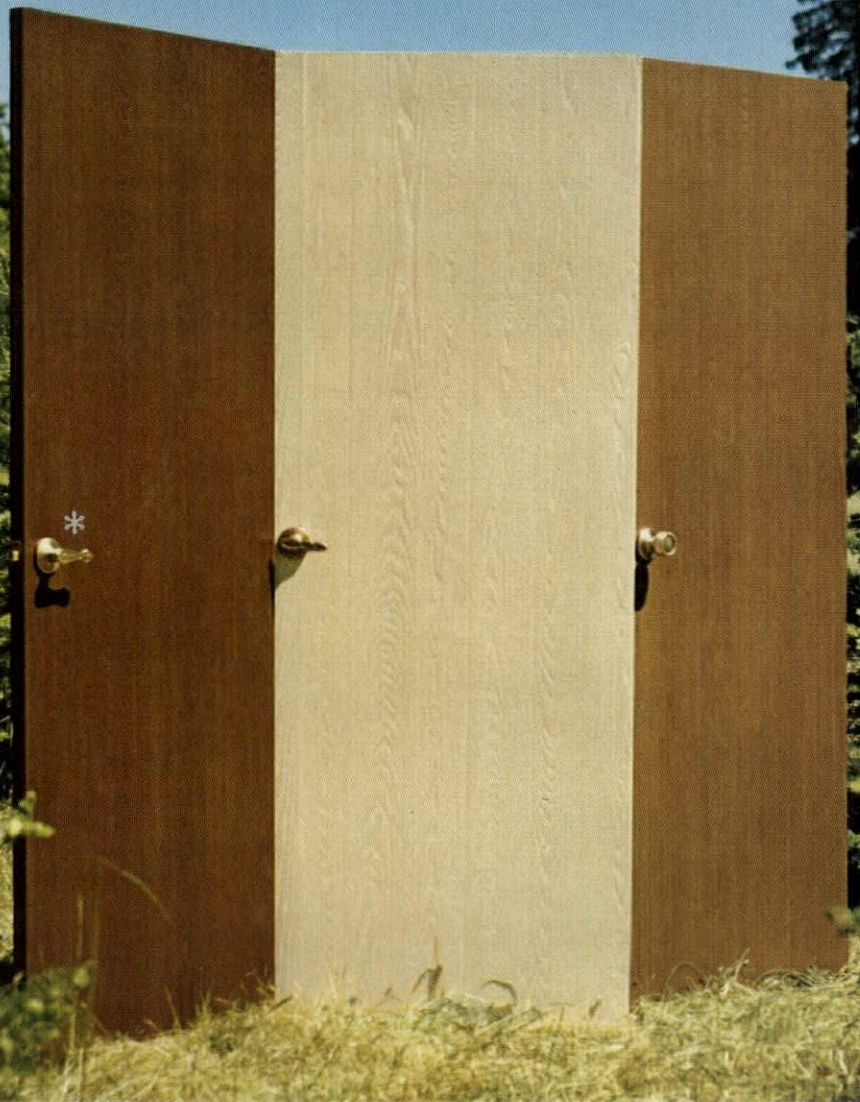
its own personality.

Mar-resistant Legacy won't split, splinter, crack or check. It can be easily repaired on site in event of damage. Legacy's high dimensional stability and great structural strength make it suitable for use with both solid and hollow core doors.

And the price is right.

Want the names of some quality door manufacturers currently using Legacy? Write Masonite Corporation, 29 North Wacker Drive, Chicago, Illinois 60606.

Legacy and Masonite are trademarks of Masonite Corporation.



Legacy series of embossed hardboard door facings: Walnut tone, New White and Oak tone.

\*Locksets by Kwikset®.

**...Legacy™  
stands alone.**



The closer you get  
the better Legacy looks.

**Tap-N-Drain** **Rug-N-Vent**

**A NEW APPROACH TO SPACE SAVING PLANNING**

CONNECTS APPLIANCES FAST  
STOPS INSTALLATION DAMAGE

COLORS AVAILABLE  
HARVEST GOLD  
WHITE  
AVOCADO

A more SALABLE - QUALITY appearance for Utility, Family Rooms, Kitchens - Conceals service lines - dryer venting.  
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**Tap-N-Drain** by **SKILCRAFT** **Rug-N-Vent**

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CIRCLE 64 ON READER SERVICE CARD

**The whiteprinter you can lean on.**

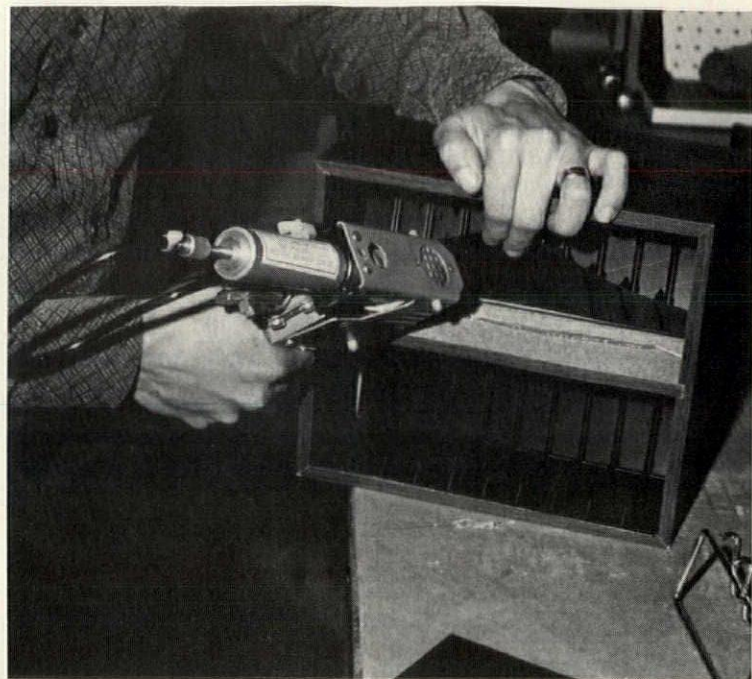
Set up our tabletop whiteprinter where you need it . . . it'll make your check prints hour after hour, all day long. Made to take it, service is minimal, performance is proven. A meaningful full year warranty makes this the whiteprinter you can depend on.

Your initial cost for a Blu-Ray is modest. Or you can lease it. Your copy cost can be as low as 1 1/2 cents per square foot. Speeds are variable. Throats to 47 inches wide. Send for brochure describing all 3 models. Blu-Ray, Incorporated, 236 Westbrook Road, Essex, Connecticut 06426. Telephone (203) 767-0141.

**BLU-RAY**



CIRCLE 124 ON READER SERVICE CARD



Hot melt adhesive system for product assembly, "Jet Melt," consists of a lightweight hand-held, self-contained, patented "Polygun" and instant setting adhesives in cartridges. Adhesives come in a wide range of bonding capabilities for almost any type of material. Easy-to-operate system requires no heat reservoirs or network of heat hoses—only lightweight electrical and air lines. 3M, St. Paul, Minn. CIRCLE 238 ON READER SERVICE CARD

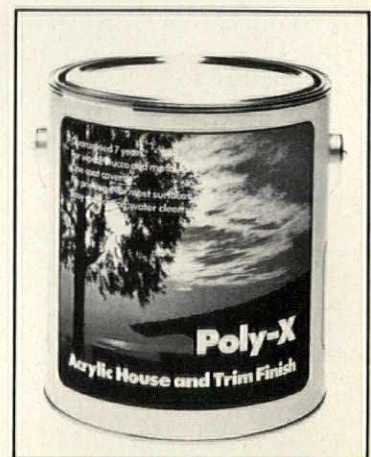


Acrylic concrete sealer forms a rugged, long-lasting protective film that provides weather-, stain- and dustproofing. "HIAC" may be applied to horizontal or vertical surfaces. It is resistant to oil, grease, most industrial chemicals and many acids. W.R. Meadows, Elgin, Ill. CIRCLE 239 ON READER SERVICE CARD

Water-base epoxy-latex coating is non-polluting, as well as nontoxic and nonflammable. The substance contains no volatile solvents and emits no odors. Developed as a wall paint, it has been adapted to a non-skid, waterproof flooring. Coatings for Industry, Philadelphia, Pa. CIRCLE 240 ON READER SERVICE CARD



"Handi-patch" glass-fibered compound is for patching gutters, troughs and most roofings and flashings. The substance, which eliminates the need for reinforcing membranes, can be used in cold weather and on wet surfaces. Gibson-Homans, Cleveland, Ohio. CIRCLE 241 ON READER SERVICE CARD



Acrylic house and trim finish is an exterior coating with a low sheen. Designed for maximum protection and long-life, it can be applied over wood, stucco or metal. Finish, with a seven year guaranty, comes in eight stock colors and over 1,000 custom blends. Pabco, Emeryville, Calif. CIRCLE 242 ON READER SERVICE CARD

Some water heaters  
are deluxe,  
some are  
budget.

## Briggs is both.

The new Briggs BeautyGlas R-GRT-5C series of residential gas water heaters strikes the ideal balance of features and price.

Deluxe quality features... up to 15% higher BTU input than previous model... glass-lined tanks and extruded magnesium anodes for corrosion-resistance... automatic main gas burner pressure regulators and energy cutoffs for top performance, safety... high density glass fiber insulation for top efficiency... and more.

For less cost than you'd expect. In 20, 30, 40 and 50 gallon regular models. In 30 and 40 gallon stubby sizes. In natural and LP gas models. The new Briggs BeautyGlas R-GRT-5C water heaters. Consider them for their quality. Choose them for their price.

A beautiful addition to Briggs' complete line: both gas and electric water heaters for home and commercial use.

*What a  
beautiful  
idea!*



**Briggs**

5200 West Kennedy Boulevard  
P. O. Box 22622, Tampa, Florida 33622

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a Jim Walter company



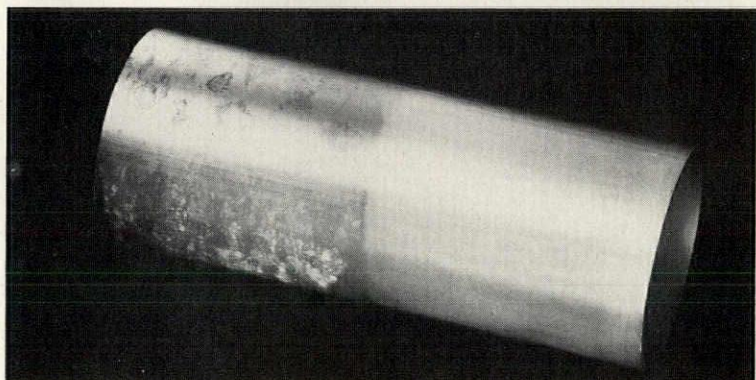


Silicone sealant, which can be extended up to 600% in construction joints, is designed to withstand extreme building movement. The one-part material cures to form a low modulus silicone rubber. The permanently flexible sealant is suitable for use on any material and is unaffected by weather or environment. Dow-Corning, Midland, Mich.

CIRCLE 243 ON READER SERVICE CARD

A wash-on sealer for anodized aluminum replaces lacquers and clear coatings. Sealer can be applied during production or in the field by wiping, brushing, rolling, dipping or spraying it on. Resistant to weathering, the substance will never chip, peel or flake. Coricone, Wheeling, Ill.

CIRCLE 244 ON READER SERVICE CARD



Ready-mixed sealer, for waterproofing porous masonry walls, carries a five-year guaranty. "Drylok," an alkali- and mildew-resistant coating containing synthetic rubber and Portland cement, can be used indoors or out. Available in four colors, it can be set on uncured cement or damp surfaces. United Gilsonite, Scranton, Pa. CIRCLE 246 ON READER SERVICE CARD

# Heyco nylon bushings...

**all-around protection  
for wire and  
cable openings.**

Use them to protect non-metallic sheathed cables, communication and utility lines during and after installation in metal studding and joists. Keeps cable insulation from being skinned, chafed or cut. Adaptable to round, elongated, oval, angular and slotted holes.

Free samples on request.

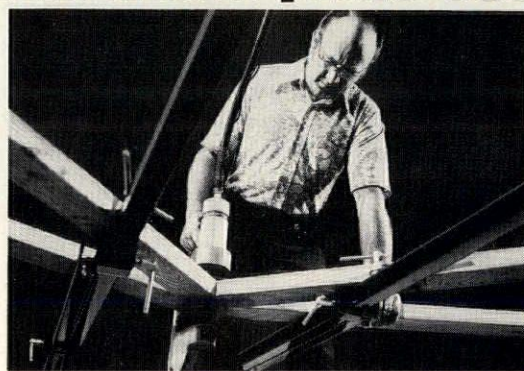
**HEYMAN MANUFACTURING COMPANY**

NORTH MICHIGAN AVENUE, KENILWORTH, N.J. 07033  
TELEPHONE: (201) 245-2345 TWX: 710-996-5986



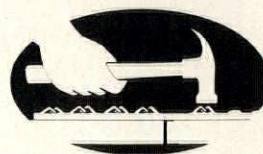
CIRCLE 126 ON READER SERVICE CARD

## low investment truss system with a low plate cost!



**CLIP COST UNDER \$1.00 PER TRUSS**

New, heavy duty Klincher® presses up to 256 Truss Clip Series III nails in one squeeze. Light enough to be hand held, the Klincher® uses only 120 volt current. Klincher® complete with T-K-5 Power Unit and 40' Klincher® Jig just \$1,499 or leases for as little as \$54 per month. For more information write:

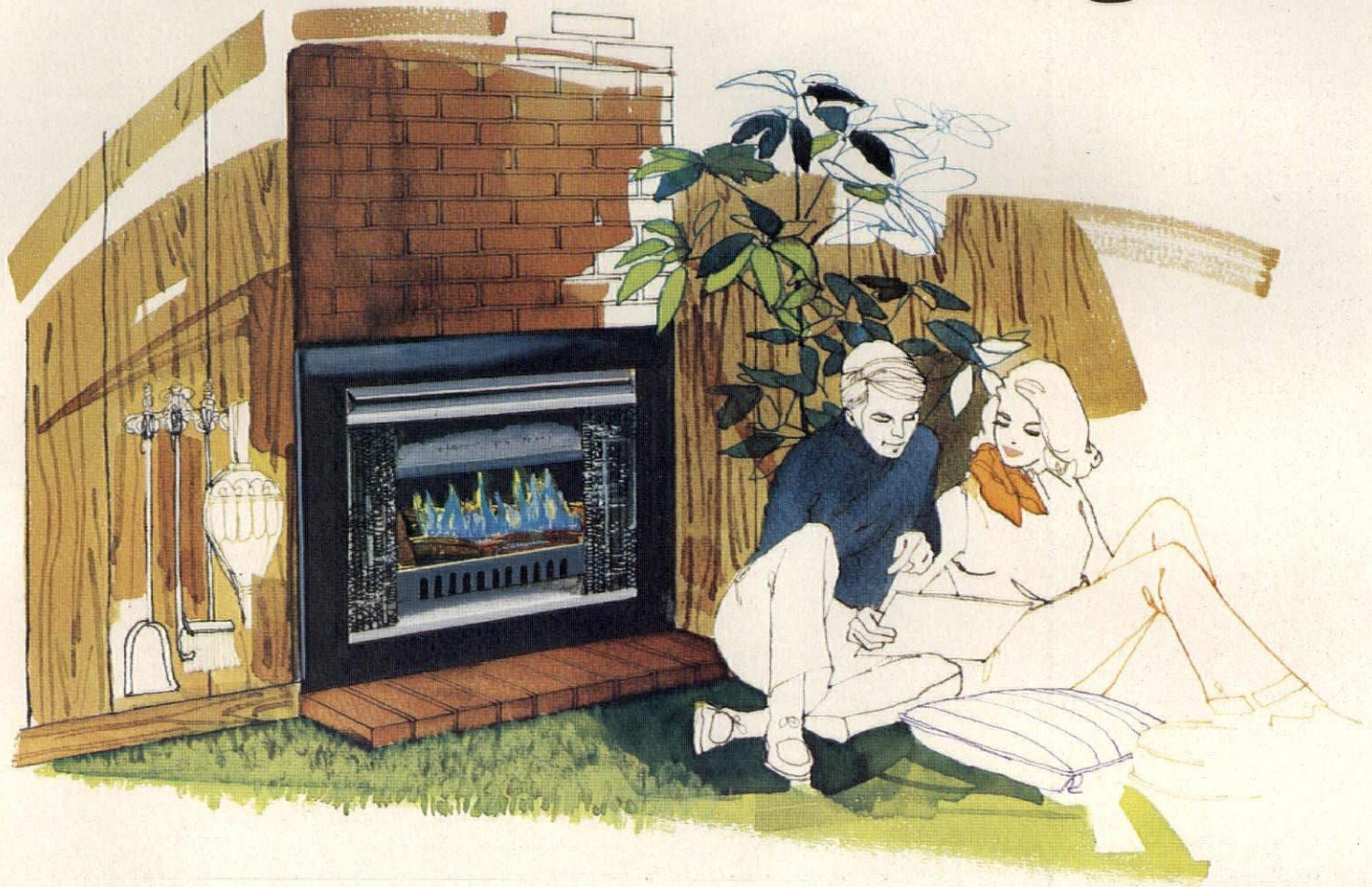


**THE PANEL CLIP CO.**

P.O. Box 423, K Farmington, Mich. 48024 / Phone 313 / 474-0433

CIRCLE 65 ON READER SERVICE CARD

# a nice warm feeling

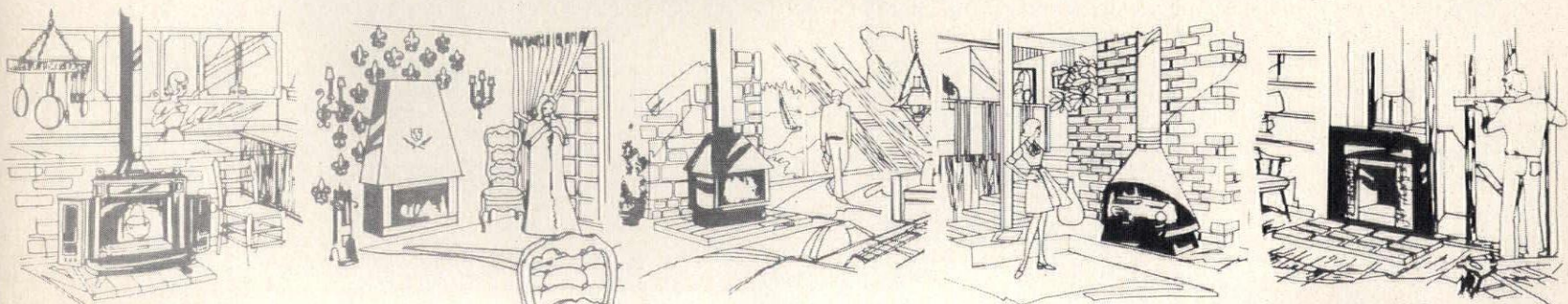


A PREWAY CUSTOM GAS BUILT-IN FIREPLACE gives you the warmth and charm of a wood-burning fireplace, with all the convenience and cleanliness of gas. The compact unit requires a recess depth of less than 15". The Custom Gas can be installed on a wood floor . . . or even next to combustibles. Easy-access panel for convenient valve installation and maintenance.

Packaged complete with a realistic two-log burner molded from long-lasting refractory material, manual control and pressure regulator. For LP or Natural Gas. AGA Certified. Uses standard 5" Type B vent. Your Preway distributor can tell you all about the complete line of built-in and free-standing fireplaces. Call him. Or write us.

**PREWAY**  
*a nice warm feeling*

WISCONSIN RAPIDS, WI 54494



CIRCLE 127 ON READER SERVICE CARD

H&H NOVEMBER 1973 127

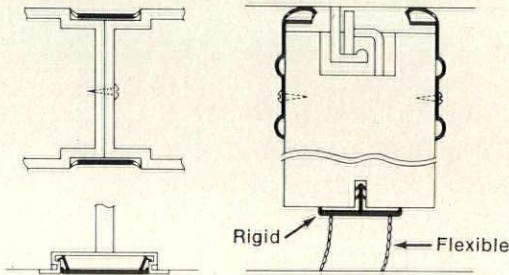


**Liquid rubber compound** is designed for waterproofing and roofing membrane systems. The two-component substance can be used in a variety of weather conditions in temperatures from zero to 200° F. It forms a flexible, seamless liquid membrane that can be easily applied cold by trowel, squeegee or roller to metal, concrete or masonry surfaces. Optimum cure is reached in a few hours. Polysar, Akron, Ohio. CIRCLE 245 ON READER SERVICE CARD



**Exterior acrylic latex stain** protects shingles, shakes, siding, panels, fencing and outdoor furniture. "SPRED," available in nine ready-mixed colors and 27 tint tones, can be converted to semi-transparent by mixing equal parts with water. Fast-drying durable stain can be applied by spray, roller or brush to wood or with proper priming to ferrous and galvanized metal and aluminum. Glidden, Cleveland, Ohio. CIRCLE 247 ON READER SERVICE CARD

## Plastic profile extrusions can help sell your interior building products.



That's because they offer advantages such as attractive appearance, long life, color permanence, design flexibility and excellent insulating properties. All of which adds value and sales appeal to your products.

Top sweeps, floor seals, hinges, gaskets, feature strips, glazing members, baseboards and floor and ceiling channels are just a few of their many applications. For details on how custom-designed plastic profile extrusions can help you sell your interior building products write Crane Plastics, 2141 Fairwood Ave., Columbus, Ohio 43216. Or call (614) 443-4891.



**CranePlastics**

CIRCLE 128 ON READER SERVICE CARD

## FOR THE EXPERIENCED CHIEF OPERATING OFFICER LOOKING FOR ANOTHER MOUNTAIN TO CLIMB.

Maybe you've peaked out in your present position. Maybe the challenge isn't there any more. Or perhaps you don't have the autonomy to carry your company where it *could* go.

If so, and if you have broad experience with a major homebuilding firm and the ability to lead and motivate a top flight, experienced team of housing executives, we'd like to talk to you.

The president of our Florida homebuilding corporation (\$25 million in 1973) is moving to greater responsibilities with our parent company (strong, successful and listed on the NYSE), and we need someone who can smoothly pick up the reins and lead us to even greater successes.

We offer excellent compensation plus generous benefit and incentive programs. Most importantly, we offer an opportunity to stretch and grow and set your own horizons.

Interested? Send your resume to Box 15166-H, Tampa, FL. 33614 (We'll keep it confidential.) It might be the best decision you've ever made.

Equal Opportunity Employer





# "We close 250 mortgages a month in one office alone. So we appreciate MGIC speed."

Jerry Clark is executive vice president and general manager of Monarch Mortgage Company, a subsidiary of Hallcraft Homes, Inc. in Phoenix, one of the southwest's largest builders. Here Mr. Clark tells how Monarch and Hallcraft work with MGIC:

"Our big volume makes MGIC's speed especially important. In our Phoenix office alone we close more than 250 mortgages every month, an increasingly large percentage of which is now conventional.

"MGIC has really helped us open up new markets. Because of their size, they have skilled, helpful reps on the spot where others don't.

We're building from Phoenix to Los Angeles, and up to Colorado, and there's always an MGIC-approved lender close, to handle our needs.

"We have a very fine relationship with MGIC. They really take very good care of us."

Hallcraft Homes, founded in 1946, has an annual volume exceeding \$100 million—more than 4000 starts yearly at prices ranging from \$17,000 to \$50,000. We take good care of them...and we'll do the same for you. Visit the nearest MGIC-approved lender and talk it over. Or dial toll-free 800-558-9900; in Wisconsin 800-242-9275.

HH-11

## Money Protection.

### MGIC

Please send me your brochure on high-ratio mortgage financing.

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Organization \_\_\_\_\_

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City, State, Zip \_\_\_\_\_

Mortgage Guaranty Insurance Corporation, MGIC Plaza, Milwaukee, WI 53201

# The home protector

## ACRYLIC LATEX CAULK

Give your homes outstanding protection from water and weather. Use latex caulks made with Rhoplex® acrylic binders for glazing and filling cracks around bathtubs, in shower stalls and a variety of exterior locations. Seven years of exposure testing has proved caulks made with Rhoplex acrylics have better weatherability than butyl, polyvinyl acetate, and oil caulks.

Being water-based, the caulks apply easily. Can be tooled with fingers moistened with water. After drying, the acrylic vehicle becomes highly water-resistant. Caulk can be painted the same day.

Write for a list of caulk manufacturers who use Rhoplex acrylic vehicles.

**ROHM  
AND  
HAAS**   
PHILADELPHIA, PA. 19105

CIRCLE 130 ON READER SERVICE CARD

### LITERATURE

**Swimming pool sidewalls** of pressure-treated lumber are described. The full-color brochure discusses installation and benefits and includes a simplified, step-by-step text and photographic description of a pool installation. Other photos show actual pools where treated-wood sidewalls were used. Koppers, Pittsburgh, Pa.

CIRCLE 317 ON READER SERVICE CARD

**Plywood uses, fasteners, framing and building systems** are defined using text and illustrations. Listing is alphabetical for quick reference. Charts complement the text in this 54-page, binder-hole-punched booklet. American Plywood Assn., Tacoma, Wash.

CIRCLE 318 ON READER SERVICE CARD

**Contour-shaped glass window panes** are shown in three black and white photographs of actual installations and are described in brief text on a single page. Installation is discussed. Vexocave, Morrison, Colo.

CIRCLE 313 ON READER SERVICE CARD

**Bright and matte glaze ceramic wall tile** is shown. Attributes and benefits are described. Full-color reproductions of available colors plus short descriptions of bathroom accessories are included. Specifications are listed. U.S. Ceramic Tile, Canton, Ohio.

CIRCLE 314 ON READER SERVICE CARD

**Scenics, murals and panel designs** for wall use are displayed in a black and white folder. James Seeman Studios, Garden City Park, N.Y.

CIRCLE 315 ON READER SERVICE CARD

**Swimming pool heater** is described in a fact sheet. Features and specifications, plus a close-up illustration of the unit, are included. Edwards Engineering, Pompton Plains, N.J.

CIRCLE 316 ON READER SERVICE CARD

**Single-glazed reflective glasses** are the subject of a 12-page performance data booklet. Product descriptions, spandrel and structural recommendations and maintenance sections accompany charts. PPG Industries, Pittsburgh, Pa.

CIRCLE 301 ON READER SERVICE CARD

**Oil-fired furnace catalog** is illustrated with photographs, cutaways and diagrams. Charts and text detail various furnace models. Thermo-Products, North Judson, Ind.

CIRCLE 302 ON READER SERVICE CARD

**Prestressed, precast concrete decks** are shown in photographs of actual applications and cross-section diagrams. Versatility and economy of their use in conjunction with other precast components and traditional methods of construction are featured. Binder-hole-punched for ease of filing. Flexicore, Dayton, Ohio.

CIRCLE 303 ON READER SERVICE CARD

**Vinyl-clad PVC molding** is shown on color pages introducing three new products. The three moldings featured—each on a separate sheet—are briefly discussed and illustrated. Masonite, Chicago.

CIRCLE 304 ON READER SERVICE CARD

**Low-voltage redwood garden lights** are shown in photographs and described in text. Specifications are listed, and an order form is included. Sylvan Designs, Canoga Park, Calif.

CIRCLE 305 ON READER SERVICE CARD

**Rigid vinyl and its use** as a low-maintenance building material are discussed in a 16-page bulletin. Topics covered include physical properties, flammability, limitations and specific products made of rigid vinyl. Cross-section diagrams, charts and photographs complement the text. B.F. Goodrich Chemical Co., Cleveland, Ohio.

CIRCLE 306 ON READER SERVICE CARD

**Plywood for use in floor systems** is featured in a binder-hole-punched booklet. Subflooring, underlayment, combined subfloor/underlayment and glued floor systems are illustrated. Charts are included. American Plywood Assn., Tacoma, Wash.

CIRCLE 307 ON READER SERVICE CARD

**Certified home ventilating products** directory lists HVI certified ratings for ventilating performance and quietness of 490 models of range hoods and exhaust fans made by 13 manufacturers, two retail licensees and a manufacturer licensee. Home Ventilating Institute, Chicago.

CIRCLE 308 ON READER SERVICE CARD

**Concrete admixtures** and their performance data are discussed. Charts and graphs relate test results. Photos show construction in which specific admixtures were utilized. Master Builders, Cleveland, Ohio.

CIRCLE 309 ON READER SERVICE CARD

**Cellular glass insulation** descriptions include physical properties, application data and specifications. The 20-page brochure also contains diagrams, charts and photographs concerning applications such as roofs, plazas, parking decks. Pittsburgh Corning, Pittsburgh, Pa.

CIRCLE 310 ON READER SERVICE CARD

**Wood doors** are displayed in a full-color brochure accompanied by a price list. Custom door information and standard door specifications are included. International Wood Products, San Diego, Calif.

CIRCLE 311 ON READER SERVICE CARD

**Cedar shakes and shingles** are discussed and shown in color photographs. Actual applications are shown including residential, educational and business structures. J.H. Baxter, San Mateo, Calif.

CIRCLE 312 ON READER SERVICE CARD