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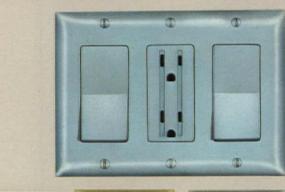
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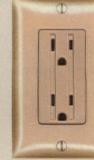
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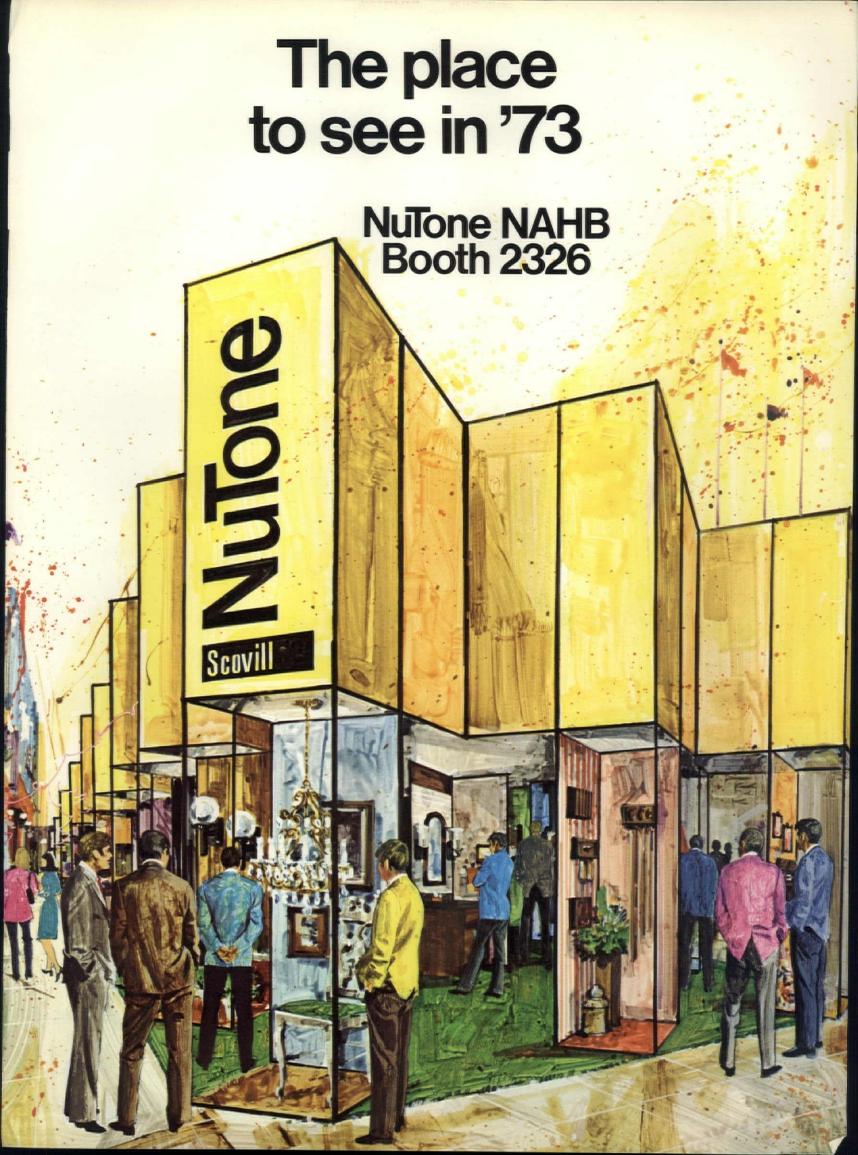




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NEWS/ELECTION

The President would like to use his mandate to slash housing subsidies

There's no mandate for housing tucked away in the historic landslide of Nixon votes that swept the country on election day.

In fact, housing programs and legislation are certain to be buffeted severely during the two more years of divided government guaranteed by the voters when they split their tickets to make sure that the Democrats would be back in control of both houses of Congress.

This balance of power that is almost identical to what prevailed during the past two years all but guarantees that a drastic move toward wide housing reform just won't happen, even though powerful administration officials are saying that major changes are a must.

At the Department of Housing and Urban Development, about the only certainty is that George Romney won't be there for the housing industry to kick around any more.

Cutbacks. If President Nixon's first housing decision is to name Romney's successor, his second is likely to be cutting back on housing subsidies and grants as part of his commitment to pushing total government spending back to \$250 billion.

In an interview published in the Washington Star-News after the election, the President reemphasized his determination to shut off new programs that cost money.

The reforms in such areas as housing, education and health care "must be reforms within our budget limitation," he said. On reorganization and special revenue-sharing (or block grants), he pointed out that Congress had given him no action. He is determined, he also said, "to accomplish as much as I can of that reorganization through executive action."

At another point the President said that HUD is "too fat, too bloated. They came in and, they did some good things," but in those programs that aren't cut, "we are going to find ways to do them with less people."

At least one housing lobbyist says \$1 billion could be cut from the housing budget if President Nixon wanted to.

At the office of Sen. William Proxmire, ranking Democrat on the banking committee and

chairman of the appropriation subcommittee that approves the HUD budget, staffers say that if President Nixon could find as much as \$500 million to cut from HUD's budget-now running about \$4.5 billion a year-"it would be phenomenal." Proxmire, a vigorous opponent of government waste and the only Democratic senator to advocate giving the President authority to cut programs to reach the \$250 billion total, is already preparing to take a much bigger role as a critic of the housing programs.

Hearings on spending. As chairman of the Joint Economic Committee until January, when Patman takes over, Proxmire, on the day after election, was trying to arrange December hearings on housing subsidies with such witnesses as Elmer Staats, the congressional watchdog who heads the General Accounting Office, and with Secretary Romney.

Proxmire would like to question Staats on the future of housing and community development programs which Romney, in his late-October speech to the Mortgage Bankers Assn., described as "\$100 billion mistakes" which "we can no longer afford."

Romney's proposals. Romney, in this semi-swan song, suggested several "long-range" solutions to the housing problem, including as the first on his list "the termination of a direct federal role in housing." That would

... But Congress seems to be settling into same old housing-as-usual stance

Congressional leaders will begin the new year searching for a new consensus to enable the House and Senate to deal with housing problems.

For decades housing legislation was demonstrably one of the great successes of the New Deal and postwar eras. The programs made it possible for middle and working-class voters to buy homes in the suburbs with everlower down payments and everlonger mortgages guaranteed by the federal government. This brought new business and profits to the banks, the savings and loan associations and the home builders, and it brought the blessings of the electorate to the congressmen and senators who swept the legislation through Congress.

And all this with little cost to the taxpayer.

But with the rise of the subsidy programs (800,000 starts in the last two years) and the scandals, housing programs have suddenly become controversial, expensive and politically dangerous, especially to House members.

Same old team. George Gross, counsel to the lower chamber's housing committee, spells it out this way: "Virtually every congressional district is affected one way or another by subsidized housing issues, particularly the often bitterly divisive issue of site location ... played out

against a background of a wide range of program abuses which are spotlighted by the public press. Frankly, many members of Congress were relieved not to have had to vote on their continuation . . . "

No one knows for sure what happens next. The same housing leaders are back. Senator John Sparkman (D., Ala.) won a whopping victory, thanks to the help of George Wallace, who gave his endorsement. Rep. Wright Patman (D., Tex.) came in with no opposition, and Rep. William A. Barrett (D., Pa.) chairman of the housing subcommittee, won handily. The make-up of the committees will shift some, but not enough to be significant.

Same old feud. The warfare between Patman and Barrett will continue, with Patman using his considerable powers to wield even more influence over housing legislation than he has in the past. Gross refers to this and other divisions in the House committee as a "lack of unity" among "senior members" of the banking committee. House leaders-including Speaker Carl Albert and the rules committee members-will continue to keep legislation from going to the House floor to avoid "a blood bath," as Gross calls it.

One major fall-out from the TO PAGE 9

mean, he said, ending subsidy programs, spinning off FHA as a private agency, and arranging housing allowances and income subsidies for the poor.

Assuming all this can't be done—and it can't—Romney suggested that as an alternative the Federal government turn the entire housing program package over to the states—including the staffs of the FHA and HUD local and regional offices, and make block grants to the states with no strings attached. Romney listed other variations, including "partial decentralization" of housing programs to the states.

Romney also conceded:

"We can't just wash out the section 235 and 236 programs overnight.... We will certainly need several years for the transition if 235 and 236 are to be wound down at all."

Trial balloon. Some industry experts reported that Romney had cleared these suggestions with the White House, and they implied he was floating a balloon to indicate which way the Nixon Administration wind was blowing.

"Absolutely not," said one of Romney's closest associates.

Regardless of this, the Romney "alternatives" are clearly in line with the revenue-sharing, more-power-to-the-states philosophy that President Nixon endorses.

One reason for the go-slow approach is the political reverberations still ringing from the crashing last-minute collapse of the 1972 omnibus housing bill.

Nearly every interest group heaved a silent sigh of relief (some not so silent) over a bill that had so many controversial features that they—and the Democratic leaders of the House—much preferred to see it die before the legislators would find themselves having to take a public stand on it.

Prosperity. The fall-back position still holds: Just by continuing housing programs and housing subsidies as they were, housing starts are expected to reach 1.9 million in 1973. That's boom-level by comparison with any year except 1972, which is finally expected to chalk up the all-time record of 2.2 or 2.3 million starts. —Don Loomis McGraw-Hill World News Washington **NORRIS INDUSTRIES**, a new force in building products brings you ideas in **decorative faucets**



Ideas in decorative faucets from Artistic



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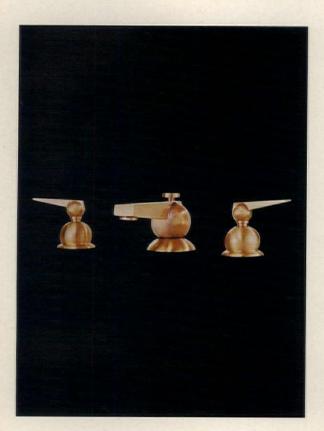


Aquarius – for the age in which we live

The age of Aquarius is all about us now...or so say the astrologers. In 1972 and in years to come we also see the age of gracious living brought within the reach of every householder in America. An important part of gracious living is including bathroom fixtures like the AQUARIUS lavatory set in the appointments of the home or apartment. Smooth, flowing lines emerge with a true contemporary feeling in this attractive bathroom fixture.

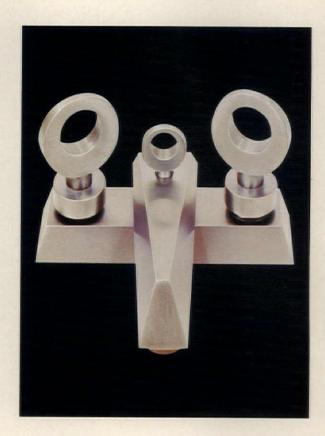
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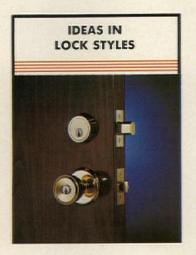
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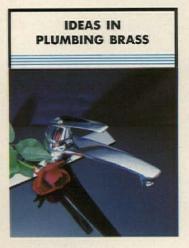
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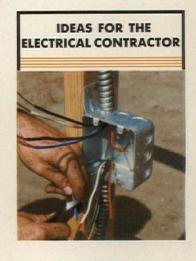
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NEWS/ELECTION

Winner and still champ in old Alabam-Senator John Sparkman at 72

John Sparkman met the challenge of the red-headed whiz-kid Winton Blount in their second voting showdown—and at 72 the senator won hands down.

Sparkman polled about 60% of the vote as a Democrat despite a record-breaking landslide for President Nixon, who took 80% of the popular vote in Alabama.

Blount, 51, had the active backing of the President, who put everything but himself into Alabama to support his former Postmaster General.

Sparkman had the active backing of George Wallace, Alabama's disabled veteran of the political wars.

In their first duel twenty years before, Sparkman and Blount had been fronting for somebody else—Sparkman as Adlai Stevenson's vice presidential running mate and Blount as the Alabama champion of the Eisenhower forces. The result was the same. Sparkman triumphed easily in Alabama.



Congratulations come by telephone to Sen. John Sparkman at his election-night headquarters in Alabama. Senator's daughter, Mrs. Tazwell Shepard, and wife are with him.

the specter of Wisconsin's William Proxmire effectively whipped Alabama's and much of the nation's financial community into line behind the chairman of the Senate's powerful Banking, Housing and Urban Affairs Committee. In a Democratic Congress Proxmire would have stepped into a defeated Sparkman's shoes.

The Sparkman-Blount contest started mildly enough, but as the Republican's challenge faltered, the tempo was increased to the point where both major candidates lost their tempers before the television cameras. Old pro's technique. Both major candidates saw their mistake immediately, but it was the old pro, Sparkman, who turned the miscue to his own advantage. Speaking slowly and deliberately, with just the right touch of sadness in his voice, Sparkman presented himself as the aggrieved party.

Had some all-wise political observer but seen it, it was Sparkman all the way. His opponent carried such handicaps as slow mail deliveries, the hostility of organized labor and personal wealth as typified by his air-conditioned horse barns. Meanwhile, the veteran of 36 years in Congress was opening for Alabama voters his briefcase full of IOUs from them. Television spots and newspaper ads hammered home this theme:

"Whoever you are, wherever you live, you are benefiting from Sparkman legislation."

-WILLIAM MAHONEY McGraw-Hill World News, Montgomery

Money men's role. This time

New Congress seems to settle back into old housing-as-usual stance ... continued

FROM PAGE 4

1972 housing bomb is a demand by some members that housing legislation be taken away from the Senate Banking and Currency Committee entirely. They would hand it to a new and separate committee on housing and urban development. There's also talk of splitting the housing subcommittee up. These agitations will gain some support from the general movement toward congressional reform, and from the fact that-while the party balance shifted only slightly in House and Senate-all told, the 93rd Congress will have 100 new members. But the best guess is that the committee structure will remain as is.

Same old issues. Gross points out that the controversial issues of 1972 will remain the same in 1973," and with minor changes in committee membership, "these issues should be resolved in the same way."

Gross comes to this conclusion: "I expect only minor extension of programs before June 30 of next year (when the extensions expire), then I expect a period of one to two years of protracted consideration of new programs and approaches, particularly with respect to the housing subsidy programs."

And same lobbyists. The National Association of Home Builders has launched its own counter-offensive in behalf of the subsidy programs.

Just after election the NAHB published a 160-page report, "Federal Housing Subsidies: Their Nature and Effectiveness, and What We Should Do about Them," by Anthony Downs of

Preston Martin resigns as chief of Bank Board

Chairman Preston Martin of the Federal Home Loan Bank Board became the first high-ranking member of the Nixon team to leave his post after the election [NEWS, Sept.].

He announced his resignation to the 7,000 bankers gathered for the 80th annual convention of the U.S. Savings & Loan League in Miami just one day after Wright Patman, chairman of the House Banking and Currency Committee, repeated his charge that "overly ambitious administrative grabs" by the Board were making sensitive issues in the S&L industry "more volatile." mendations the home builders don't agree with. For instance, it said that the biggest single cause of housing problems is poverty, and a good way of tackling that directly would be through income maintenance programs. But Downs concluded that Congression't about to adopt any

the Real Estate Research Corp.

of Chicago. That report had sev-

eral conclusions and recom-

Congress isn't about to adopt any such thing. The present subsidy programs—which he sees as

Opposition. Patman opposes the conversion of mutual savings institutions to capital stock status and variable interest rate mortgages, two reforms that Martin had pushed.

Martin denied that his resignation had anything to do with policy differences. His reasons were "personal and familial," he said, adding, "It's time to get back into private industry."

Martin denied rumors that he would accept an executive position with Kaufman & Broad, the big Los Angeles-based homebuilder. K&B would only admit that they had talked to him. good programs—should be continued, he said, to produce 400,-000 homes a year for the poor.

Same old bill. The home builders will hang in there for yet another omnibus housing bill. So will their supporters in Congress because, as one knowledgeable source put it: "The housing programs have not been able to fly by themselves. If a revamped urban renewal program came up for a vote all by itself, it would get murdered."

President Nixon's proposed new Department of Housing and Urban Development will definitely be tried again, as will his move for consolidating urban renewal and other community development programs into a block-grant program.

Sen. William Proxmire (D., Wis.) sees "a good chance for dramatic changes in housing" and hopes that the housing bill will be split up into separate parts.

The bottleneck on housing is the House, and the expectation is that the Senate won't be allowed to vote on housing this time around until it gets before it a bill already passed by the House. —D.L.

Big builders see the 'underhoused' Northeast as the place to sell 'em

The push that began when half a dozen of the nation's largest builders moved into the New York area [NEWS, Nov. '71] is now spreading to the Boston, Philadelphia and Washington, D.C., suburbs.

Kaufman & Broad of Los Angeles, the nation's largest publicly held homebuilder, and Hoffman-Rosner of Hoffman Estates, Ill., a large Chicago builder, both think the Northeast needs the sort of large-scale single-family building operations they can provide.

Kaufman & Broad has established a New England division to build single-family homes in Massachusetts, Connecticut and Rhode Island, and Hoffman-Rosner will concentrate first on the New York/Philadelphia corridor, eventually expanding to Boston and Washington.

And Centex Corp. of Dallas plans to begin building high-rise condominiums in the Washington suburb of Alexandria, Va. in March 1973. The company is already building a similar project in Palisades Park, N.J., across the river from New York City.

Void. Eugene S. Rosenfeld, president of K&B, explained his company's decision to move into New England: "Our research has pinpointed New England as a market with a large void in \$20,000 to \$30,000 homes in desirable residential areas around city centers," he said. "We believe this market has been overlooked too long."

A Hoffman-Rosner official agreed. "You can't believe how underhoused the East is," he said. "There has always been a kind of resistance out there to the larger builders, and the smaller builders just haven't been doing the job."

Boston suburbs. Kaufman & Broad's first New England project will be to build 524 twoand three-bedroom homes in Stoughton, Mass., a Boston suburb. The company also has options on sites for 2,300 homes in other Boston suburbs, and it expects to expand into Hartford, Conn. and Providence, R.I. beginning next year.

K&B is already building in California, Illinois, Michigan, New Jersey and New York, and in Canada, France and Germany. (More than 2,500 families visited K&B's first German community, located in Wehrheim, ten miles north of Frankfurt, during its opening week. They bought 73 of the one- and two-family homes priced from \$45,000 to



K&B's Rosenfeld Eastward ho!

\$70,000, for a total of \$4.4 million in sales.)

The company believes that the New England division has a sales potential of \$20 million in its second full year of operation and foresees a strong continuing demand over the next several years.

Rosenfeld cited the present population of nearly ten million in Connecticut, Massachusetts and Rhode Island-the states where the division will operate. He also noted a low vacancy level and projections that the rate of household formations will increase during the 1970s as the basis for this forecast. He predicted that housing starts for the three states will be approximately 100,000 in 1972, up 20% from 1971, with the entire gain coming in the single-family home area. The company projects a similar increase in 1973.

New York area. K&B has already built a number of successful projects in central and southern New Jersey and on Long Island, N.Y. Recently it also took over development of Levitt's Cambridge Park project in Evesham Township, N.J., a Philadelphia suburb.

Showcase. Hoffman-Rosner has been building single-family homes in the \$20,000 to \$40,000 range in the Chicago suburbs. It will build the same type of homes in the Northeast in 1973, but it is not yet ready to disclose the sites.

A spokesman explained that the company plans to begin with several smaller projects, using these as a showcase.

Washington condos. The Centex project in Alexandria, Va., will consist of four high-rise condominiums containing one-, two- and three-bedroom units priced from \$30,000 to \$60,000. The Washington Metro Rapid Transit System has bought a portion of the site to build a subway station and parking area.

In addition to the Washington and New Jersey projects, the company has condominium developments under way in the Miami, St. Petersburg, San Francisco and Chicago areas.

Conservationists score in California, Colorado; voters uphold property tax

California conservationists won the hard-fought battle over proposition 20, the Coastal Protection Initiative, when voters approved the plan that will regulate building along California's 1,072 miles of coastline in a zone that extends 1,000 yards inland from mean high tide.

The housing industry, oil companies, public utilities and some labor unions had mounted a\$1-million ad campaign against the measure. They charged that it benefited only those who own beach-front homes and that it would cut the coastal cities in two, creating jurisdictional problems and making intelligent planning impossible.

Commissions. Proposition 20 sets up a 12-member California Coastal Zone Commission, plus six regional commissions, which will draw up a coastal conservation plan to be submitted to the state legislature in 1976. In the interim the state and regional commissions will have veto power over all new developments.

Builder reaction. "It's a shame that the public must pay higher prices, not for better planning and product but because of additional cost borne by a developer because of the additional time spent working on a project through additional governmental bureaucracy," said Bill Deane, president of Deane & Deane of Half Moon Bay, Calif. Much of the company's land holdings lie within the permit area, where Deane is currently building 176 single-family homes, a golf course and a 400room hotel.

Raymond L. Watson, executive vice president of the Irvine Co. of Newport Beach, echoed Deane's fear that the new rules would mean delays and higher costs, but added:

"Advocates of the proposition have assured us that our worst fears about its impact would not be realized. They have told us thatit was designed to encourage responsible land-use planning, not to obstruct it."

Irvine is planning a 10,000acre resort along 3½ miles of coast between Newport Beach and Laguna Beach.

Approval. Eli Broad, chairman of Kaufman & Broad of Los Angeles, pointed to the ugliness of the oil facilities and some of the other things that had been built along California's coast and said that the new rule is "probably a step in the right direction."

Olympics. In Colorado, voters turned down bond issues that would have provided funds for the 1976 Winter Olympic Games. The anti-Olympic forces had feared that the games would set off excessive land development and building of recreational homes that would damage the environment. Major developers surveyed denied that the games would have had a significant impact on building. Few new projects had been planned in anticipation of them, they said.

Property tax. In California, Michigan, Colorado and Oregon, voters defeated various proposals to abolish or restrict the use of property taxes to finance schools and other facilities.

The California proposals would have clamped tight ceilings on property taxes and raised corporate income taxes and various sales and excise taxes instead. It was beaten by nearly 2 to 1, as were the Colorado and Oregon proposals. The Michigan proposition was defeated by 58% of the voters.

The vote in favor of property taxes flies in the face of court rulings that financing schools with such taxes is unconstitutional. The issue is now pending before the Supreme Court.

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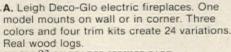
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Talk to us. Or to one of the fine firms who help move our goods out to you from ten plants and four warehouses. Leigh Products, Incorporated, Coopersville, Michigan 49404. 616/837-8141.



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B. Leigh adjustable linen closet shelves arrive ready to install, complete with hardware. Do it in minutes with a screwdriver. Won't sag, buckle or warp. CIRCLE 94 ON READER SERVICE CARD

C. Leigh Glass Wall Thermo-Base® diffusers blanket window walls or sliding glass doors with warm air in winter, cool air in summer. Eliminate drafts.

CIRCLE 95 ON READER SERVICE CARD

D. Ives hydraulic power closers for interior doors. Rugged steel construction. Unit is sealed—needs no adjustment. CIRCLE 96 ON READER SERVICE CARD

E. Ives door knockers for apartment doors, guest rooms. With number plate, card holder. Also available with one-way viewer. Hand polished solid brass. CIRCLE 97 ON READER SERVICE CARD

F. Leigh has a line of mail boxes that lock with a key. Exclusive scroll-type hinge shuts out weather. The style and quality found in higher priced models. CIRCLE 98 ON READER SERVICE CARD **G.** Leigh colonial mailboxes of Cycolac[®] construction. Sturdy overlapping aluminum lid. Bronze eagle accent. Can really dress up the front of your units. CIRCLE 99 ON READER SERVICE CARD

H. Leigh duct-free range hoods are pre-wired for easy installation. Four sizes, four colors. Totally enclosed lighting. CIRCLE 100 ON READER SERVICE CARD

I. New Leigh decorator shutters are rustproof aluminum. Soft matte finish. Won't warp, crack or rot. In Early American, Heritage and Classic designs. CIRCLE 101 ON READER SERVICE CARD

J. Leigh Turbo-Flo turbine powered humidifier runs on air from furnace blower. Low cost. Installs quickly. Needs no wiring or electrical hookup. Big water reservoir can't rust. CIRCLE 102 ON READER SERVICE CARD

K. Leigh undereaves and attic ventilators in natural or white enameled aluminum, or galvanized steel. Easy, quick installation. Meet F.H.A. requirements. CIRCLE 103 ON READER SERVICE CARD

L. Rutt Custom Kitchens, made by Leigh's Rutt-Williams Division. Every item is handcrafted of fine wood. Mortise and tenon construction throughout. Wide variety of styles.

CIRCLE 104 ON READER SERVICE CARD

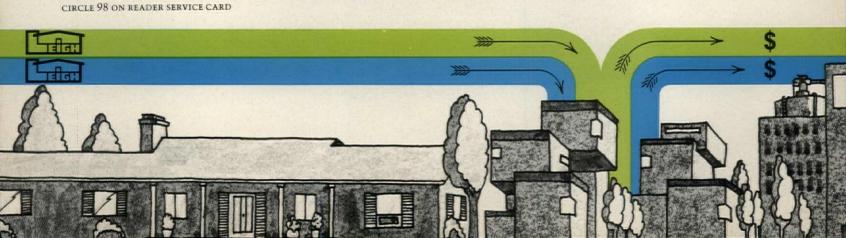
M. Leigh power roof ventilators. Giant 9bladed fan keeps air moving fast. Leigh patented design. Thermostat control. 144-sq. in ventilator fits over single rafter space. Meets F.H.A. requirements. 1000 CFM capacity.

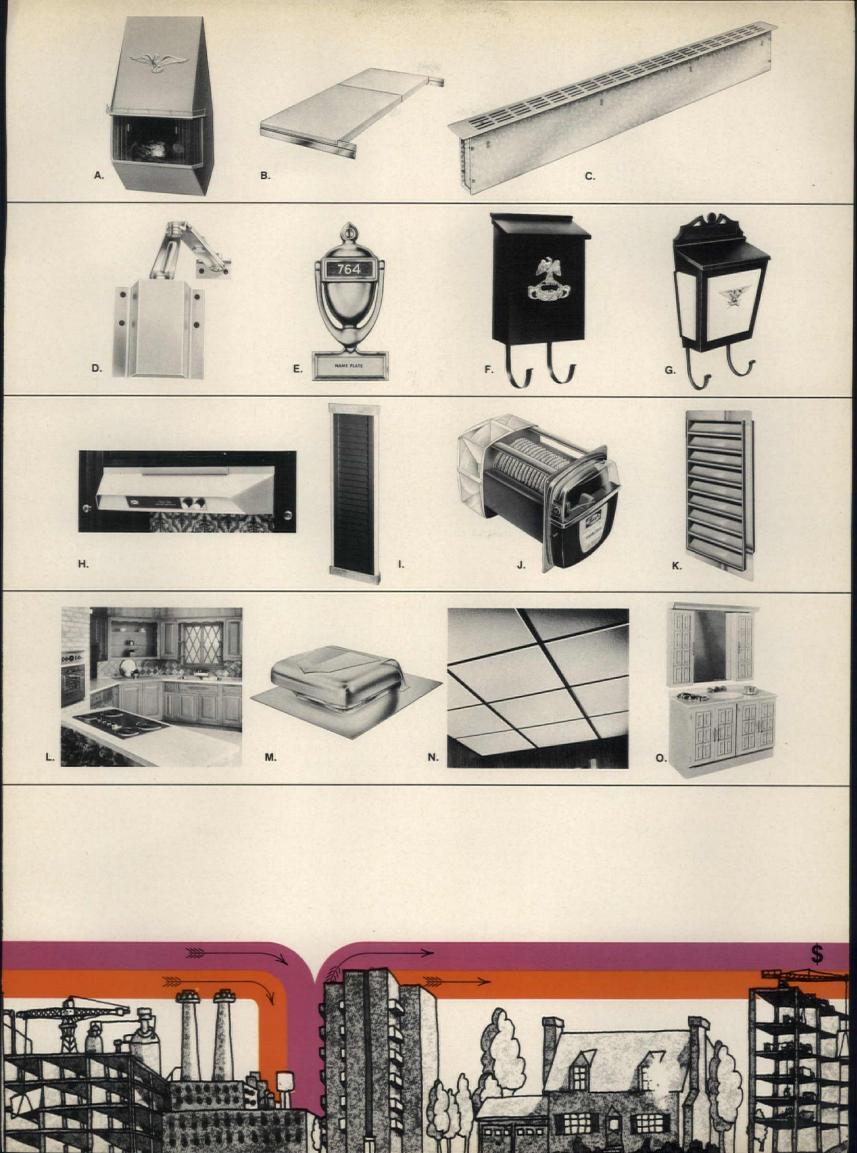
CIRCLE 105 ON READER SERVICE CARD

N. Leigh KLIP-LOCK suspended ceiling grid systems in baked-on white vinyl, electrogalvanized and wood grained steel. For homes, offices and stores. Interlocking tabs cut installation time and eliminate need for splice plates and connectors. Competitively priced and designed for those who want the best. CIRCLE 106 ON READER SERVICE CARD

O. Williams Vanities by Leigh's Rutt-Williams Division. Complete, top-quality bathrooms at modest cost. Everything cabinets, tops, medicine cabinets, mirrors, and lighting—arrives together, ready to install!

circle 107 on reader service card







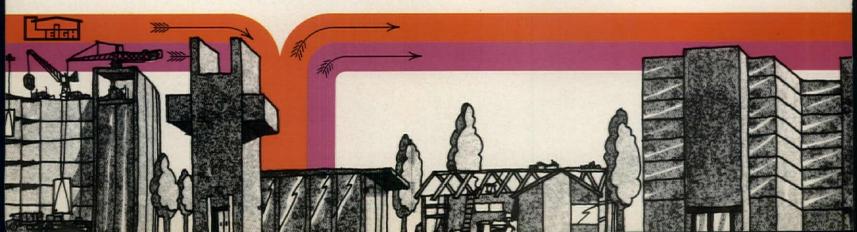
The complete closet... helps the builder save and sell!

Leigh closet doors and shelves can put you ahead in the put-and-take game. They add good looks, livability and value to your project... assure that you'll take out more than you put in.

See your distributor. Or write or call Leigh Products Inc., Coopersville, Michigan 49404. 616/837-8141. Leigh Full-Vu Doors give you beauty that sells ... simplicity that saves you money ... and balanced suspension system that eliminates call-backs.

Leigh doors save you money from start to finish. The initial cost is less than wood. They're pre-finished in white . . . instant sales appeal as is—or as a base for colors of your choice.

The doors are formed in one piece from heavy gauge steel. Panels and louvers can't loosen or fall out. Installation is fast and easy.



The Exclusive Balanced Suspension System assures smooth operation even in out-of-square openings. The doors never jump the track, and they can't sag, bind or stick. They're quiet, with built-in sound-deadening material.

Nine distinctive styles to choose from, in 6'8", 7'6" and 8'0" heights. In standard widths from 1'6" to 8'0".

CIRCLE 108 ON READER SERVICE CARD

Leigh adjustable steel closet shelves cut your on-site labor costs 75%! Leigh eliminates the costly cutting, fitting and finishing of wooden shelves.

And Leigh's efficient production, large volume sales and effective distribution services give you further savings by providing high quality at lowest costs.

Leigh shelves are pre-finished. They come to you complete with hardware, ready to install in minutes with only a screwdriver.

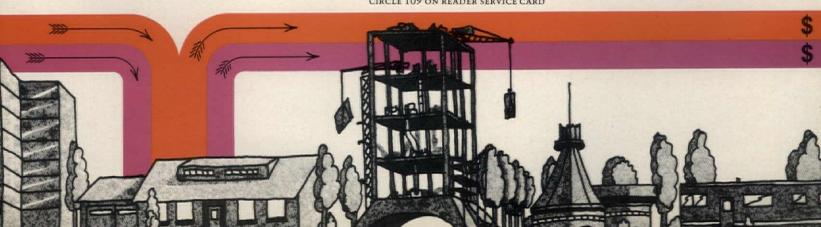
They won't sag or warp.

Pre-finished in elegant white baked-on enamel. Protected with a scuff coat that keeps them new-looking for years.

Available with or without rods.

Leigh also makes adjustable linen closet shelves and a complete assortment of shelf mounting accessories.

CIRCLE 109 ON READER SERVICE CARD









Will fine cabinetry pay out? Leigh's Rutt-Williams Division can help you decide.

Helping sell homes, apartments and townhouses in almost any price range is a job you can assign to Williams bathrooms. They're elegant. And efficient.

Mt. Vernon, shown, is one of Williams' many in-stock models.

Good news: A Williams bathroom is a complete; top-quality package at modest cost. Cabinets, tops, medicine cabinets and mirrors, and lighting arrive all together, ready to install. Cultured marble tops are available in white and three colors with integral bowls.

Or buy only those pieces that you find turn your prospects into customers. All promise to add beauty, sales appeal, *value* far beyond their cost!

To help you decide what to put in to take out more, send for the full-color Williams catalog: Rutt-Williams, Division of Leigh Products, Inc., 1536 Grant Street, Elkhart, Indiana 46514. Telephone 219/264-0631. Or contact your distributor of fine stock cabinets.

CIRCLE 110 ON READER SERVICE CARD



Now comes the challenge: dare you upgrade your kitchens with *custom* cabinetry?

The careful crafting of fine woods has got to cost you more than out-of-stock look-a-likes. Some builders of better homes have tried Rutt...and smile all the way to the bank.

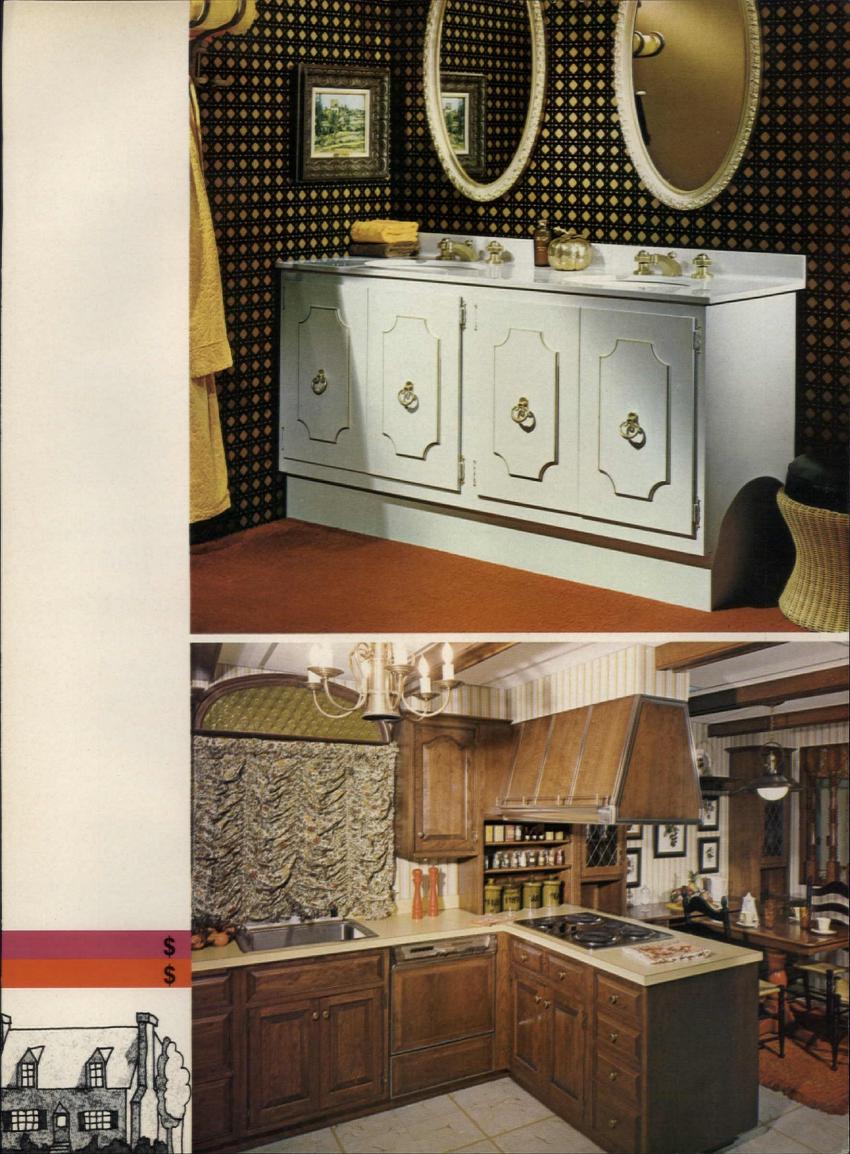
Rutt kitchens combine beauty and practicality to an unmatched degree... and women can tell from across the room. We're building a new plant to keep up with the demand... and more than a third of our new business is in new construction.

The Georgetown kitchen at right is handcrafted of selected cherrywood. Fussy hand-detailing. Mortise and tenon construction. Blind dovetailed drawers on metal slides. Antique English Brass hardware finish. The china deck cabinets have real leaded glass doors. Even our Gourmet hood panel inserts are cherry.

For answers to your challenging questions—or a catalog showing the complete range of styles write Rutt-Williams Division, Leigh Products, Inc., Goodville, Pennsylvania 17528. 215/445-2271.

CIRCLE 111 ON READER SERVICE CARD







Over 90 years of builders' hardware experience has gone into lves new, different door chime.

It's the first non-electric door chime with a decorator panel!

Inside decor of room or entranceway can be matched or complimented by papering or painting the panel recessed in the chime case.

Viewer with sliding shutter assures privacy, permits identification of caller, while melodious, two-tone chime affords ideal resonance and volume.

Outside, distinctively styled satin black push-bar frames the name and number cards, and is encased in a polished brass housing of traditional lves quality.

Here's distinctive new smartness and convenience to appeal to your apartment, condominium or townhouse tenants.

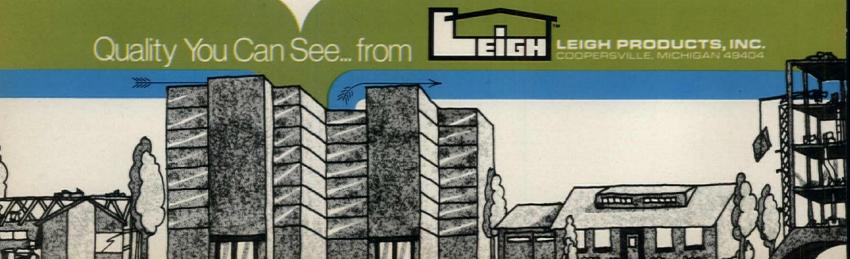
Low in price, low in installation cost, lves No. 790 chime requires no wiring, can be mounted in minutes.

Leigh's lves Division has designed and made superior hardware for almost 100 years. Builders rely on lves products for fast installation and outstanding quality. They can be specified for a wide range of projects and budgets. They add sales appeal . . . offering you the chance to take out more than you put in your project!

Ives Division of Leigh Products, Inc., New Haven, Connecticut 06508. 203/772-0310.

Write for the complete lves Catalog or call your distributor today. CIRCLE 112 ON READER SERVICE CARD

Above: Typical lves fine hardware: house numbers, chain door guards, letter box plates, one-way viewers, door knocker-viewers.



NEWS/FINANCE Commercial banks signal the mortgage market: You can bank on us this time

Don't count out commercial banks as a source of mortgage credit next year.

The myth dies hard that all bankers are graduates of the flinty Lionel Barrymore school of banking and that they run out on mortgage lending whenever credit tightens—as could happen in 1973.

There will always be some truth to that enduring tale, for the Federal Reserve operates through the banking system when it wants to pinch down inflation and the growth in the economy. The Fed has always found housing especially handy to squeeze.

But even if residential construction debt in bank portfolios dips next year, the decline is almost certain to be far more modest than in the 1966 and 1969-70 squeezes. Further, it could mask a more enduring if more slowly emerging trend for banks to increase their participation in the housing market.

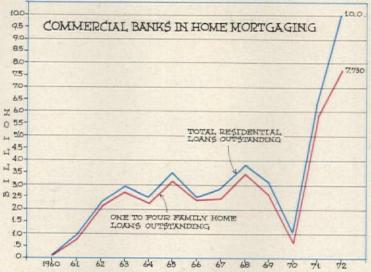
Onward and upward. Bankers' rivals endorse this assessment. Says an S&L industry official:

"Banks, I'm sorry to say, will be a more substantial factor. So their volume dips next year they won't close their mortgage departments, as a fair number did in 1966 and 1969-70."

Bankers agree. "In the past there was a tendency to turn the faucet off," admits Raymond O'Keefe, executive vice president of the Chase Manhattan in New York, "but now commercial banks are more closely wedded to real estate."

Clarke Stayman, senior vice president to the First National of Chicago and chairman of the American Bankers Association's real estate division, predicts that the banks' share of total real estate debt—which rose from 13.9% in 1960 to 16.5% in 1971—will keep on moving up slowly over this decade.

A politic approach. The banks' attachment to mortgages traces to several motives. Perhaps none is stronger than the perception that it would be politically dangerous to get out of step with the housing production goals of the 1968 housing act. When tight money did cause banks to cut back on mortgaging in 1969, Stayman recalls, the biggest bankers were called to Washington to have the public policy ex-



Commercial bank mortgage totals include construction loans. Figures do not include housing credit extended by REITs sponsored or mortgage companies owned by the banks. Data through 1971 are from the Federal Reserve; the data for 1972 are estimated.

plained to them.

But banks are now finding that social purpose and profit mix well, particularly in states that permit suburban branching— California and New York, for example. It is worthwhile to woo deposits and service income that affluent suburbanites are apt to bestow upon an institution that extends them a mortgage. The banks are also beginning to relish the deposit accounts of real estate developers.

Fringe profits. Philip Barrett, executive vice president of Citizens and Southern National in Atlanta, believes banks will soon be fighting to go deeper into the mortgage business on the premise that C&S has embraced: Income from interest on loans is going to decline, so fee income from services must increase.

Says Barrett: "A home purchase is the tallest financing transaction the average man ever makes. It is foolish for a commercial bank not to be involved, for a mortgage means you have a customer coming in each month for at least twelve years."

Once this customer begins to regard the bank as his own, he can be sold many services.

Risk of trouble. One new bank practice poses some threat. Liability management is daring modernization of technique from the banks' viewpoint, but it is one reason why the immediate outlook for bank support of mortgage finance is not unclouded.

Liability management was developed by the free-wheeling First National City Bank of New York. It means that a bank searches out borrowable funds no matter how high the cost, so long as the return the bank itself can get on the money remains higher. Traditionally, banks had relied on deposits.

The catch to liability management is that the banks must roll over increasingly costly shortterm liabilities when their lending is at longer and longer terms-mortgages, for instance. What would happen, asks Leonard Santow of Lehman Bros., the New York investment house, if Washington decided to prevent banks from getting these borrowable funds? Or if blue-chip corporations suddenly demanded to use their credit lines?

Mortgage dangers. Federal Reserve officials are blandly sure no

When the mosquito is mightier than the bulldozer

San Diego has come up with a new wrinkle: a mosquito moratorium.

The county's public health director, Dr. J.B. Askew, halted all building in three areas because the discharge of sewer effluent had caused excessive plant growth, rendering mosquito control impossible.

The board of supervisors was still trying, several days after the moratorium, to find out how Askew imposed it without the board's knowledge. It shut down construction in the Alpine, Santee and Lakeside areas east and northeast of San Diego. such contingency will arise in a form that threatens the banking structure. But the Fed is quite complacent about the possibility that a liquidity squeeze might be felt by banks on a scale that forces them to cut back their high volume of housing loans.

Some Washington officials wonder whether banks might not then pass up their commitments to make loans to the real estate investment trusts, which banks in increasing numbers are sponsoring. But O'Keefe of Chase, which has a REIT, insists that such credit obligations can't be palmed off: "'The REIT's trustees wouldn't permit that kind of turnover, nor would we wantit. We have to be purer than Caesar's wife."

The Coast's loss. California's bankers are, for somewhat different reasons, going to be tougher.

These bankers share the local concern about overbuilding. They are also bedeviled by a new political hazard, the concern among Californians for environmental quality. This has already added an environmental impact test to qualifications for building permits, and it may bar new construction within 1,000 yards of any river or the ocean.

John Vander Zee, vice president of the United Bank of California in Los Angeles, goes so far as to predict that the nation's housing starts will slump next year by almost half a million units—to 1.7 million—largely on the strength of cutbacks in California. These cutbacks, he acknowledges, will have to be made at the discretion of the banks. "Builders are like sheep," he says. "They follow one another."

And the nation's gain. One side effect of California's overdeveloped market may benefit the rest of the country, according to R. Gene Conatser, vice president of Bank of America in San Francisco.

California mortgage men have for years gone out of state for money—money they no longer need. So, while state law at the moment would deter it, Conatser is sure that later in the 1970s California may become an exporter of mortgage money.

> —Stan Wilson McGraw-Hill World News, Washington

NEWS/MARKETING

Developer tries a new way of selling vacation condominiums: by the month

The buyer may purchase his unit only for the time he wants to live in it, but he receives a deed and title, with all rights to resell and transfer ownership as he chooses.

At the same time he enjoys the advantages of renting: no large investment, no maintenance and repair, minimal expenditure for furnishings.

The builder expands his market from that small minority who can afford \$39,900 to \$140,-000 for a second home to the considerably larger group who can afford \$4,000 to \$26,000.*

Eleven owners. The plan was developed by the Innisfree Corp. of San Francisco for its Brockway Springs development at Lake Tahoe. The company may resell a single unit as many as 11 times if all the buyers elect to take the minimum one-month share.

Innisfree charges a premium for its trouble, however. The least expensive unit, an 840-sq.ft. one-bedroom townhouse that accommodates four, sells for \$51,900 to \$57,000. Under the time-sharing ownership plan, the company charges \$71,000 for the same unit.

The plan. Time-sharing ownership has been tried in this country before, but the Innisfree plan, which was copied from a technique that has been used successfully in France, offers a novel approach.

The buyer receives a grant deed stating that he has a oneeleventh undivided interest in a particular unit and an undivided percentage interest in the common areas of the project. The seller takes back a note secured with a deed of trust for the unpaid balance.

In addition, the buyer and Innisfree sign a separate agreement, which is recorded along with the deed, establishing the buyer's right to use and enjoy the unit for a certain period, his right to use the common-area facilities, and spelling out the maintenance to be provided, who is responsible for damage and other such details.

Differences. Other time-sharing plans are generally based on cross-deeding. This is less advantageous to the buyer because he is responsible for the whole unit even though he may own *plus management fees and operating expenses.



New idea in condominiums: Brockway Springs, on the shores of Lake Tahoe, allows buyers to purchase a vacation condominium for only the time they may want to use it.

just a quarter share. For example, he may be held liable for payments that another buyer may miss. There is also the disadvantage of having to negotiate with co-buyers to set up schedules for the use of the unit.

David C. Irmer, president of Innisfree, says that his plan also has advantages over owning a vacation condominium outright and renting it part of the time.

"On the national average, someone who rents out his own vacation condominium for eight months of the year has 35 different families in it," he says. "And since they are renters with no equity interest, the chances are that they do not take as good care of the property as a timesharing owner."

Still, Irmer plans to register with the SEC the 100 units he will build next year so that the company can handle rentals for any buyer who might want to rent his unit for all or part of his ownership period.

Project. The 37-acre Brockway project is being built on the site of the old Brockway Springs re-

sort hotel, which was famous for its hot springs. The community extends along 2,700 feet of lakefront, and all units have views of the lake and direct access to it.

The first phase of the project was built over a year ago by Wabash Consolidated, a subsidiary of Warner Consolidated of Cincinnati. Ohio. After about ten of the first 78 units were sold, Wabash entered into a marketing and sales contract with Innisfree that called for the companies to joint venture the balance of the land and the remaining units. These include 500 more condominiums and a 100-room hotel that will have a restaurant, bar and discotheque for the use of both condominium owners and hotel guests.

The company plans to build a little village at Brockway Springs complete with general store, beauty shop, barber shop and other stores. It is also planning a multi-purpose recreation building and a new boat dock. A tennis club has been built.

Cost. In dollars and cents, a 1,680-sq.-ft. three-bedroom, 2¹/₂-

For couples-free night in a mobile home

On the theory that if they try it they'll like it, a California developer is offering couples a novel free sample: a chance to try out the mobile-home life-style.

Rancho California, a residential community 58 miles north of San Diego, invites couples to spend two days and one night in a mobile home in its all-adult park.

"We give our Super Sample

guests a friendly welcome and tour of our park and then we leave them alone," says George W. Kingswood, manager of marketing communications. "We're confident they'll be thrilled with the comfort and convenience of this new life-style and so impressed with Rancho California's clean air, blue skies and beautiful country they'll want to return." bath townhouse for eight people would cost \$93,500 if a buyer purchased it outright. But if he bought it for two weeks in February and two in September, for example, his total purchase price would be \$8,000. Thus for \$2,559, an amount many families would spend on a summer vacation, a buyer could make a 25% down payment (\$2,000) plus pay for furniture (\$459) and closing costs (approximately \$100) and actually own oneeleventh of a condominium.

The \$6,000 balance would be financed over ten years at 10%, for monthly payments of approximately \$79.00, and operational costs for such items as insurance, utilities, maintenance, repairs, furniture replacement, management and property taxes would come to approximately \$510 a year, or \$42.50 a month. Thus the total monthly cost to the buyer would be about \$121.50.

Operation. The units are kept vacant for two weeks every six months for major maintenance, including complete cleaning, painting, replacing of furniture and checking appliances. There is a 24-hour period between each occupancy for cleaning the unit and checking the inventory.

Thus, when an owner arrives at his unit it is clean and ready for use. There are linens on the bed and one extra change of linen in the room. Additional services—such as daily maid service, laundry, bartenders and caterers—are available at an additional cost.

Future plans. Irmer envisages a future when people may buy a month in Brockway Springs, another in Acapulco, Mex., and perhaps one in Maui, Hawaii. The company is already negotiating for sites in these places and also in Flagstaff, Ariz. and Aspen, Colo. Irmer also foresees trading of units between owners in various locations.

At the same time, Innisfree's parent company, Hyatt Corp., is interested in buying resort hotels in various parts of the world and converting them into condominiums that can be set up as time-sharing investments, with the managers handling both rentals and hotel operation. —IENNESS KEENE

McGraw-Hill World News, San Francisco



the world needs now

PRICE PFISTER Manufacturers of Plumbing Brass • Pacolma, Calif. 91331 • Subsidiary of Norris Industries

100

Andersen adds a finishing touch. New Perma-Shield Shutters



Now you can offer decorative shutters built to the same standards as Andersen Perma-Shield Windows and Gliding Doors.

Those standards being beauty, quality and durability.

These new shutters are natural partners of all windows and doors in the Perma-Shield line, so you can offer a complete, low maintenance, Perma-Shield package. But they match up just as well with almost any windows and doors. In either case, they add the selling points of beauty and low-maintenance to a home or any other building.

Even close up, Andersen Perma-Shield Shutters look like traditional wood shutters. Vacuum forming gives sharp details at the corners, and reproduces natural pine grain appearance on every panel and louver.

They are $1\frac{1}{8}$ " thick with wide stiles, rails and center bars, giving both raised panel and louver styles a heavy reveal like real wood shutters.

But they have all the durability of Perma-Shield — the vinyl shell doesn't need painting, won't crack, chip or peel. Needs no maintenance. Korad[®] acrylic film on black units will not fade or bleach.

Rigid construction.



The toxic treated wood sub-frame means rigidity with lightness. Corners are mortised and tenoned and pinned. The center rail of the frame is glued to a rigid, one-piece vinyl shell. The vinyl shell is formed around the edge of the frame—this wrap-around

adds rigidity, locks the shell securely in place, and gives the look of a complete wood shutter.

Easy to install.

Andersen Perma-Shield Shutters fit varying exterior wall materials. A special mounting bracket is available for mounting on brick. A facemounting package is also available for mounting the shutters to stone, brick, or other materials.

> Visit us at NAHB. Booth 2410. See all the new Andersen products.

The shutters are held back against the wall by unique mounting hardware. All hardware is factory fitted, and made of zinc-plated steel with wrinkle-paint finish. Optional colonial-style shutter dogs add a touch of authenticity.



A beautiful match for almost any window or door.

With two styles—panel and louver; two colors—black and white; two widths—14" and 18"; and ten heights from 2'10" to 6'8", Perma-Shield Shutters offer a wide enough choice of size and style to look right, *be* right, with almost any window or door.

And they carry the Andersen name — always a good selling point.

For further information, talk to your Andersen dealer or distributor, or mail the coupon.



Mail to: Andersen Corporation, Bayport, Minnesota 55003 Please send information, including size tables, on Perma-Shield Shutters.

Name	
Address	
City	Zip
State	
Andersen Win	ndowalls PPORT, MINNESOTA 55003

NEWS/MARKETING

Whither California? It's sprung a leak, and now it's spilling over into Nevada

For two decades it showed the way to the high, wide and handsome life.

For California was the promised land come true. It drew migrants from the world around, and it became the most populous of the 50 states without half trying.

Then its people began taking a harder look, and of a sudden California was paradise lost.

Today its former faithful are finding all the old problems they wanted to escape—plus some they hadn't even thought about: high taxes, overcrowding, freeways, smog, unemployment, riots, racial troubles, earthquakes.

New utopia. The search is on for a new utopia, and some people think it's next door.

Enough, in fact, so that Nevada is experiencing a housing boom unparalleled in its history. The 1970 census showed that the state's housing units had increased by 172,558—a whopping 69%—since 1960.

Blue sky and clean air remain the rule in Nevada. The smog and freeways have not yet invaded, and builder and buyer alike can still enjoy something of the relaxed outdoor life. The state's 110,000 square miles make it the eighth largest, and the result is that there is room to grow. The brooding landscape so forbidding to the state's early explorers has actually taken on an aura of mystery and romance. and part of Nevada's present-day attraction stems from this suggestion of something different.

And the boom goes on. For the first six months of 1972, construction is up 62.6% over 1971, itself a record year.

The census also shows a population of 488,738, a ten-year increase of 203,460. And 143,733 of this was due to migration. Government officials and builders agree that 90% of the influx is from California, and one state official, who has examined everything from automobile registrations to land sales, believes the ratio is even higher.

Housing market. In percentage terms Las Vegas is the nation's fastest growing metropolitan area, with a population increase of 115.2% in the last decade.

And it is still growing. The 1970 census showed a popula-

tion of 280,000; in 1971 it was 295,000; today it is estimated at well over 300,000.

This is reflected in building permits, which rose from 4,935 in 1970 to 7,919 in 1971 and an estimated 8,346 in 1972. Demand for new houses is beginning to be satisfied, however, and only 7,600 permits are predicted for 1973.

North to stability. Observers in Carson City, the state capital, say that the boom in the north-DONALD DONDERO



The open desert is scene of Howard Homes condominium project northwest of Reno.

Mortgaging's J. Maxwell Pringle dies

J. Maxwell Pringle, widely regarded as the dean of New York City's mortgage brokerage fraternity in the 1960s, died in retirement at his home in Walnut Creek, Calif., on Oct. 26. He was 76.

Mr. Pringle was a pioneer in developing the private secondary market in FHA loans. He recognized in 1935 that the big eastern financial institutions would "buy" mortgages eastern anywhere else in the country.

From this concept was born a national mortgage market that was to become perhaps the housing industry's one most important facility in funneling large amounts of money from remote investors to builders in areas where capital was scarce.

His career. Mr. Pringle worked first through the mortgage department of a Wall Street investment house, Stern, Lauer & Co., but he founded Pringle-Hurd Inc. as a full-fledged mortgage brokerage in 1952. It became J. Maxwell Pringle & Co. in 1956 and it was placing \$150 million a year in mortgages when he sold out to Associated Mortgage Companies of Washington, D. C., in 1963.

It was in the mid-1960s that almost total blindness overtook Mr. Pringle, forcing a sharp curtailment of his business activities. Yet he remained a cheerful and familiar figure at mortgage conventions, appearing with his wife Anne and maintaining an intense interest in both the mortgage and bond markets. He retired as president of the Pringle company in 1965 and later moved to California.

And his legacy. Mr. Pringle's status as a pillar of the secondary market was widely recognized, but his role in the development of the instrument that is now described as the mortgage security was not nearly so well known.

In conjunction with the mortgage banking house of Weaver Bros. in Baltimore, Mr. Pringle developed one of the first securities ever backed up by—and sold in place of—the bulky FHA and VA loans themselves.

It was not until the mid-1960s that Metropolitan Life's collateral trust indenture appeared, and not until 1970 that the Government National Mortgage Assn. began to market passthrough securities and bonds in volume. These instruments have often been described as the most important developments in the mortgage market in half a century. They were all patterned in large part on the Pringle-Weaver mortgage security of the 1950s. -E. W. R.

ern part of the state, which some refer to as the New England of Nevada, is more important in the long term. They say that the glitter and glamor of southern Nevada attract a more transient population: People may go there to work on a seasonal or shortterm basis.

The more conservative north, they believe, holds stronger attractions for those who come to stay—and for builders. The buyers are mostly retired or semi-retired persons who are not deterred by the lack of job opportunities in a state where gambling and tourism are the largest industries.

The biggest boom area is Lake Tahoe, at an altitude of 6,625 feet, astride the California border, despite a plethora of building restrictions and moratoriums [News, March].

That boom is now spilling over into the valleys to the east. Carson City is a good example. Since 1970 the population has grown by almost a third, to 19,500, and the demand for housing has grown with it. In all of 1971, 15 permits were issued for multifamily homes totaling 163 units. In the first nine months of this year 14 permits were issued for a total of 149 units, and city authorities predict that new apartments will top 200.

Speculation. The story is the same in the Reno-Sparks area, which has an estimated population of 120,000. In 1969 only 437 new units were built. In 1970 the figures rose to 1,055 and in 1971 2,013. In the first nine months of 1972, 1,233 were built, and all were sold before completion.

The First American Title Co. of Nevada reported last month thatit had just surveyed 796 new single-family houses in Reno-Sparks and found only 2% vacant. Apartment vacancies ran to only 1.8 percent, although 39% of 553 new townhouses remained unsold. There were virtually no vacancies in new single-family and townhouse units in Carson City, with only .02% of the multiples empty.

In the wealthy southwest section of Reno, in fact, one developer is building \$70,000 to \$80,-000 homes on speculation—and he is selling them all before completion. —GUY SHIPLER McGraw-Hill World News Carson City

Miami-Carey. First choice for the final touches.



When you build you pay "attention to detail." When you install Miami-Carey products you add the "final touch" - style to speed the sale. Our 50 year reputation for quality keeps your customer sold.



A range of range hoods Whether you build apartwenter, condominums or single dwellings Miami-Carey has the range hood you need. Vented or ductless - in the style, size, capacity or color you specify - we have it in our great new line.

A reflection of quality

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We don't have to tell you about GAF's existing roofing, flooring and siding products. Judging from the way you've accepted them, we know they've done a good job.

That's why we think you'll be pleased to hear that GAF is now in the vinyl siding business.

The name of our vinyl siding is Vanguard[™]. And that means leader.

Unlike non-vinyl sidings, Vanguard keeps its good looks all by itself.

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What's more, Vanguard's lightweight panels are much quicker and easier to install than most other types of siding. They can be cut and worked with ordinary tools. Special nailing flanges and preformed nailing slots help you put it up quickly and neatly. And, of course, there's no on-site painting or finishing for you either.

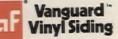
Finally this great new siding comes

with GAF's 20 year warranty against manufacturing defects.

Vanguard Vinyl from GAF. We think you'll be glad to have us on your side.

For further details, call your GAF Building Products distributor or write: GAF Corporation,

Building Products Division, Dept. HH, 140 West 51 St., New York, New York . 10020



NEWS/MARKETING

Houston builders find a route to instant millions-the water bond issue

Northwest Harris County utility district no. 1 outside of Houston, Tex., recently voted a \$4.5 million bond issue to provide water, sewage and drainage facilities.

There would be nothing unusual in this except that the district is a 600-acre parcel of raw land about to be developed by Marvin eggett Inc. of Houston, and the \$4.5 million was voted by four people who had temporarily moved onto the tract in mobile homes.

A similar \$4.5 million bond issue was voted by the Cypress-Klein utility district. Again there were only four voters who had moved into the district temporarily. One was Chris R. Ploog, who was elected president. Ploog and Hansen H. Steel, a director of the district, are employees of Wimbledon Venture, which is developing the 367-acre tract. Wimbledon is a joint venture of McCrory-Hallbeck Development Co. and Domain Development of Houston.

This sort of thing happens all the time in the Houston area. It's perfectly legal.

Pay-later plan. The future homebuyers of the district and, eventually, the taxpayers of whichever nearby city annexes it are saddled with the cost of providing water, sewers and drainage—plus the interest on the bonds.

The developer doesn't have to pay a cent. The bond money covers such district organizational costs as engineers' fees, attorneys' fees, even the first three years' debt service on the bonds.

"It's a very fine arrangement," says one builder. "It gives us a form of financing that frees us from tying up large sums in utilities, so we can get down to providing first-class homes at an average of 10% to 15% less than they'dpay for comparable homes in other cities."

Complaints. Not everyone is enthusiastic. The Texas Water Commission thinks these districts should have to account to someone and file audits on how they spend their money.

And the *Houston Post*, one of the state's largest morning papers, ran a series of exposés charging developers with widespread abuses and pointing to loopholes in the laws which can



Notice of directors' meeting for the Harris County utilities district was found in a vacant pasture by Jim Simmons of Houston, who was searching for scrap tin. Texas law requires that such notices be displayed prominently "at a place convenient to the public."

allow a few people to get rich at the expense of taxpayers.

Flood control. The laws, which date from the early 1900s, were originally intended for flood control and irrigation. They make it possible for the state legislature, a majority of resident landowners or the owners of the majority value of a piece of land to form a water district. Such districts are empowered to tax, incur debt, take property by eminent domain, contract, sue and be sued.

Then, in the mid-1950s, developers found they were a convenient tool for financing water supply, sewage disposal, refuse collection and even fire protection.

Houston's advantage. Today Harris County, which encompasses the Houston metropolitan area, has more than 140 active water districts, many of them formed in the last ten years. There are another 40 in the legal works and more on the drawing boards.

Although the laws under which these districts are created apply to the whole state, two thirds of the districts are in the Houston area. The reasons vary, but, in the main, other cities are simply less friendly to the concept than Houston is, and many, such as Dallas, are already hemmed in by suburban municipalities.

Critics. Even in Houston it is getting harder to play the water district game. Leonel Castillo, the new reform controller, has opposed Mayor Louie Welch on annexation of three such districts because they would add \$6 million to the \$32 million in bonded indebtedness the city has already picked up from other such annexations.

And the Texas Water Commission is drafting some rules to regulate the districts.

Several candidates in last

Levitt's \$4.2 million modular caper

ITT took a \$4.2-millionwrite-off on preproduction costs applicable to ITT Levitt & Sons' modular plant in Battle Creek, Mich., Howard S. Geneen, ITT's chairman and president, revealed in announcing the company's third-quarter results. (ITT reported record income of \$111.9 million on sales of \$2 billion, up 11% from third quarter 1971.

Geneen also admitted that there had been a 65% drop in net income from the operations of which ITT must divest itself to settle federal antitrust suits [NEWS, Sept. '71]. These operations are Levitt & Sons, Avis Rent-a-Car, Canteen Corp., and Grinnell Corporation's fire protection division.

The company does not report its subsidiaries' results separately, but Geneen did announce higher earnings for Avis and Canteen Corp. Thus it appears likely that Levitt was responsible for a substantial portion of the 65% decline. Sale of a 23.3% interest in Avis in the second quarter and lower earnings for the Grinnell subsidiary also contributed.

New REIT handbook

The National Association of Real Estate Trusts has published the 1972-1973 NAREIT Handbook of Member Trusts, with data on 125 trusts with combined assets of \$7 billion.

Copies (\$40) are available from Robert Burr, executive director of NAREIT, 1101 17th St. N.W., Washington, D.C. 20036. spring's primary election ran on platforms that included reform of water districts. But so far, at least, no one has come out for abolishing the system altogether.

"To say that water districts per se are bad and should be abandoned would be the height of foolishness," says David W. Tees of the University of Texas, who has been studying governmental districts for a special report to the governor. "State control should be tightened so that water districts cannot be formed so easily, and they can be abolished easier."

Proponents. There are some who view the system as a means to promote urban growth.

"It has worked here in Houston, so it's possible it could work elsewhere," says John T. Mitchell, a partner in the architectural - engineering - planning firm of McPherson-Mitchell & Moore.

"Such cities as San Antonio are looking at it as a means of solving some of their urban development problems," adds Frank Van Court, an attorney with Vinson, Elkins, Searls & Smith, the law firm with the largest water district practice in Houston.

But Tees is dubious about the system's prospects for success elsewhere:

"Houston had exactly the right set of combinations to make it flourish: water that is easy to find, a booming economy with people moving in every day and a city administration friendly to the district," he says.

Protest. In the meantime, the Houston Post, which had suspended its exposé during the primary campaign, has again begun printing stories with such headlines as "Two voters approve Bay Ridge bonds," and "Most water districts fail to audit expenses."

And if past experience is any guide, the advertising pages in its Sunday real estate section will drop from an average of 50 or 60 to a low of nine or ten as developers switch their ads to other papers to register their ire. They admit that the stories are for the most part correct, but complain that "they don't go far enough, and make it look like we're a bunch of crooks."

—Bob Lee McGraw-Hill News, Houston



Two solid steel reinforcing rings.

1" extra long solid brass deadbolt with heavy duty %" steel rod insert.

Kwikset's new 680 series cylinder deadlocks are distinguished by the very latest techniques in engineering, metallurgy and modern manufacturing methods. The result is a complete line of single and double cylinder extra security deadlocks that offer even greater protection than previous models. Now, every internal part in a 680-series deadlock is either solid steel or solid brass. Now, there are two heavyduty steel reinforcing rings to resist pulling or prying cylinder from door. Now, the heavier steel cylinder guard is tapered and revolves Rugged all-steel cylinder guard.

with any attempt to twist off with a pipe wrench or similar tool. Now, every 680 model features an exclusive massive double-size, (3% "x11/4"), heavy-gauge strike with four 11/2" staggered screws for maximum holding power to protect against kick-ins or break-downs. Now, the Kwikset 680-series meets all new building codes and is unsurpassed in the industry in value and security.

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For everything from consider

Whether you're building apartments, condominiums or single family homes, don't make a decision until you've checked out Sears Contract lines.

These are appliances, designed with the Builder in mind—but the brand names are the ones many, many of your prospects buy at retail, with their own dollars. You know they've got quality.

And you can get them all from one single source, delivered to your schedule. Take a look: Certified N.K.C.A. kitchen cabinets, an elegant example at the right prices from the long line offered by Sears.

Under-the-counter 1972 Kenmore Compactor. It compresses a week'sworth of trash and waste (for an average family of four) into 1/4th of its original volume and packs it in a polylined pick-up bag.

Kenmore Disposer makes quick, quiet work of food waste.

Kenmore Dishwasher has a porcelain finish liner for long wear. Kenmore gas or electric ranges feature generous-sized ovens, no-drip cook tops, plus handy outlets for coffee maker, toaster, etc.

Vented or ventless hoods fit every Kenmore range.

Coldspot Refrigerator-Freezer is another 1972 Builder's line. Your choice of manual, automatic defrost or all-frostless operation. And you won't believe the value!

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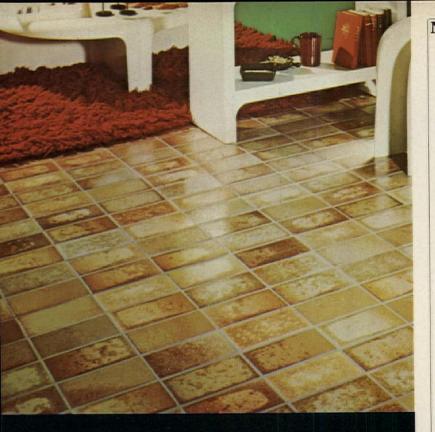
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NEWS/FINANCE

Mobiles drag stock average down

Mobile shares fell hard again despite a Kissinger market that raised prices on the big exchanges and buoyed most housing issues.

HOUSE & HOME's index of 25 housing industry stocks dipped to 527.64, from 529.22, in the month ended Nov. 1. The four other sections of the list managed gains, but the mobiles declined to 1,380 from 1,492.

One substitution was made. Commodore was factored into the mobiles' list to replace Guerdon, whose stock stopped trading when City Investing took over the company. The substitution did not affect the averages.

The index equates share values of January 1965 with 100. Issues on the index are overprinted in the lists.

Here's the 25-issue trace.



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

Nov	.'71 Oc	t.'72	N	ov.'7	2
Builders	557	45	0	45	1
Land develop.	551	36	57	37	0
Mortgage cos.	862	1.28	39	1,31	8
Mobile homes	1,285	1.00		1,38	
	and the second				
S&Ls	202	23	34	24	T
	N	lov. 1		hng.	
		Bid/		rev.	
Company	(Close	M	lonth	
BUILDING					
Alodex		45%	-	5%	
AVCO Community [Devel ^h	31/8	-	1/2	
American Housing	ystems.	51/4		- 1%	
American Urban Co	rp	51/4		3/4	
Bramalea Cons. (Ca	In.)	33/4		11/8	
Building Systems In		3%		11/8	
Capital Divers. (Can		.56	-		
 Centex Corp.^c 		261/2		1%	
Cheezem Dev. Corr	.*	51/2		7/8	
Christiana Cos.b		474	1	1/8	
Cons. Bidg. (Can.)		2.25	-	.10	
Dev. Corp. Amer.b		40%		49% V4	
Dev. Int. Corp		3/4		74 1/4	
Edwards Indus		41/2		74	
First Builders Banco		41/2		3%	
First Hartford Corp.		4 y4 7/8	. *	78	
First Nat. Rity.b		111/8	1	11/8	
FPA Corpb		51/2		1/4	
Frouge Corp. General Builders ^b		23/8		1/8	
Gil Development		5%		1.2	
all Development		70		*******	

	Nov.1	Chng. Prev.
Company	Bid/ Close	Month
Hallcraft Homes ⁴	61/2	- 136
Hoffman Rosner Corp	634	- 1/4
Homewood Corp Hunt Building Corp	19 10½	- 2 - 1½
Kaufman & Broad	381/2	+ 1/2
Key Co. ^b	6%	+ 13%
Leadership Housing (Includes Behring Corp.) Leisure Technology ^b Lennar Corp. ^b McCarthy Co. ^{bd} McKeon Const. ^b McKeon Const. ^b	6¾	- 11
Leisure Technology ^b	143%	- 16
Lennar Corp. ^b	18¼ 5%	- 3/4 + 3/8
McKeon Const. ^b	6%	- 134
	131/4	- 1/4
National Environment (Sproul Homes)	17/8	- 7/8
B Nelson Corn	101/4	- 1%
New America Ind Oriole Homes Corp. ^b Prel. Corp. ^b Presidential Realty ^b	6¾ 31	+ 3/4 + 2
Prel. Corp. ^b	10%	- 1/4
Presidential Realty b	12%	+ 11/4
Presley Development [®] Pute Home Corn [®]	131/8	- 3/4 + 3/8
Presidential Healty Presiey Development ^b Pulte Home Corp. ^b Robino-Ladd Co. ^b	13%	+ 1/8
•Ryan Homes ^b Ryland Group ^d	28% 45½	+ 1% + 31/2
Shapell Industries ^e	22	- 5%
Shelter Corp. of America	7%	- 34
Standard Pacific ^b . Universal House & Devel. ^b	4 31/8	- 1/8 - 5/0
•U.S. Financial	24	- 41/2
•U.S. Home Corp. ^c	27% 10%	- 156 + 7/8
Jim Walter	2834	+ 1
Washington Homes	7%	- 1/8
Del. E. Webb ^c Western Orbis ^b	8% 2%	+ 1
Westchester Corp.	10%	+ 3%
SAVINGS & LOAN ASS	INS.	
American Fin	19%	+ 3
Calif. Fin. ^c Citizens S&L Assn	7% 33%	- 36
Empire Fin.h	14	- 1/2
•Far West Fin.*	11%	+ 1% + 1%
Fin. Corp. of Santa Barb. ^b •Fin. Fed. ^c	31 27%	+ 21/2
First Charter Fin. ^e First Lincoln Fin.	341/4	+ 7/2
First Lincoln Fin. First S&L Shares ^b	5% 26%	- 34
First Surety	5	+ %
First West Fin	27/8	+ 3/4
Gilbraltar Fin. ^c	291/2	+ 1%
•Great West Fin. ^c Hawthorne Fin.	14%	+ 1/8
•Imperial Corp.º Trans-Coast Inv	173/4	+ 1/8 - 1/8
Trans World Fin. ^c	151/4	+ 3/4
Union Fin. ^b United Fin. Cal. ^c	1234	+ 3%
Wesco Fin. ^e	14 17½	+ 13%
MORTGAGING		
Charter Co.»		- 21/2
CMI Investment Corp. ^b		+ 51/2
Colwell ^c Cont Illinois Rity ^c	19% 21%	- 23%
Cont. Illinois Rity.c Excel Investment ^b	28	+ 3%
Fed Nat. Mtg. Assn. ^e Financial Resources Gp	21% 3%	+ 3 + 1/4
(Globe Mortoace)		
First Mtg Ins Co	28	+ 3
Lomas & Net. Fin. ^e MGIC Inv. Corp. ^e Midwestern Fin. ^b Mtg. Associates	78%	+ 21/2
Midwestern Fin.b	16%	- 41/4
Mtg. Associates Palomar Fin ^b	211/2 83/4	+ 1½ - %
Palomar Fin. ^b So. Cal. Mort. & Loan Corp.	111/2	+ 13/4
UPI Corp. ^b (United Imp. & Inv.)	23/4	+ 1/4
MORTGAGE INV. TRU	PTS	
Alison Mtg.b	2934	+ 3%
Alison Mtg. ^b American Century ^b	241/2	- 1/8
Arlen Property Invest. Atico Mtg. ^c Baird & Warner	15½ 22%	+ 3/4 + 3/8
Baird & Warner	20%	+ 3%
BankAmerica Bltv	283	+ 1/8
Bernett Mtg. Tr. Beneficial Standard Mfg. ^b Cameron Brown	28%	+ 1%
Cameron Brown	31	
Capital Mortgage SBI Chase Manhattan ^e Ci Mortgage group ^e Citizens Mtg ^b Citizens & So. Rity. ^e Citizens & So. Rity. ^e Cieve. Trust Rity. Investors.	61%	+ 11/8 + 3
CI Mortgage group ^c	25	+ 1%
Citizens Mtg. ^b	15%	+ 1/2 + 21/2
Cleve, Trust Rity, Investors.	21%	+ 1/8
Colwell Mig. I fust."	2378	
Conn. General ^c -Cont. Mg. Investors ^e Cousins Mg. & Eq. Inv. ^c Diversified Mg. Inv. ^c Equitable Life ^c Fidelico Growth Inv. ^b Fidelity Mg. ^b First Memohis Realty	1234	+ 1/4 - 5/8
Cousins Mtg. & Eq. Inv.º	. 26%	+ 1
Diversified Mtg. Inv.c.	28%	+ 1/8
Fidelco Growth Inv. ^b	39	+ 31/4
Fidelity Mtg. ^b	. 331/4	+ 21/2
First Memphis Realty First Memphis Realty First Mtg. Investors ^c First of Denver ^b First Pennsylvania ^c	20%	+ 1
First of Denver ^b	211/2	+ 3%
First Pennsylvania	26%	+ 11/8
Franklin Realty ^b Fraser Mtg.	2234	+ 134
Fraser Mtg. Galbreath Mtg. Great Amer. Mtg. Inv.º	28%	+ 1/4
Great Amer. Mtg. Inv.º Guardian Mtg.	343/4	+ 4%
Guardian Mtg. ^b Gulf Mtg. & Rity. ^b Hamilton Inv	19%	$\begin{array}{r} + & \frac{1}{16} \\ - & \frac{1}{16} \\ + & \frac{1}{16} \\$
Hamilton Inv	. 17%	+ 1/2

	Nov.1	Chng.	I
Company	Bid/ Close	Prev. Month	
Heitman Mtg. Investors *	145%	+ 1	
Hubbard R. E. Investments ^c Larwin Mtg. ^b	21 30	- 1/8 + 2	
Lincoln Mtg.	93%	+ 1/8	
Mass Mutual Mtg. & Realty ^c Median Mtg. Investors	29½ 13¼	+ 3½ + %	
Mony Mtg. Inv.º Mortgage Trust of Amer.º	13½ 23%	+ 1/8 + 1	L
National Mortgage Fund	141/8	+ 1/4	L
North Amer. Mtg. Inv.º Northwestern Mutual Life Mtg.	33¾	+ 31/8	
& Rity. ^c PNB Mtg. & Rity. Investors ^b	247/8	- 1/8	
PNB Mtg. & Rity. Investors ^b Palomar Mtg. Inv. ^b	24% 16%	+ 3/4 + 11/8	
Penn, R. E. Inv, Tr.bd	12	- 1/2	
Property Capital ^b	27¼ 13½	+ 23/4 - 7/8	
Realty Income Tr.b Republic Mtg.b.	1834	+ 1/4	
B. F. Saul, R.E.I.T. Security Mtg. Investors ^b	23¾ 14¾	- 1/8 + 11/8	
Stadium Realty Tr.	9 25½	- 3/4 + 7/8	
State Mutual ŚBI ^b Sutro Mtg. ^b	18¾	+ 11/4	
Unionamerica Mfg. & Eq. ^b U.S. Realty Inv. ^b	26% 15½	+ 23% + 1/8	
Wachovia Realty Inc. ^c Wells Fargo Mfg. ^c	33	+ 1	
	24%	+ 3%	
LAND DEVELOPERS		St. 12 33	
All-State Properties American Land	.04 -	021/4	
•AMREP Corp.º Arvida Corp.	17 11 3 %	+ 21/8 + 11/8	
Atlantic Imp Canaveral Int.	5		
Canaveral Int. Cavanagh Communities ^c	27/8 61/8	- 3/4 - 3/8	
Crawford Corp.	5		
Deltona Corp. ^b Disc. Inc.	21 31/8	- 11/2 + 1/4	
Fairfield Communities	2%		
•Gen. Development ^e Getty Financial Corp	13½ 6¼	- 1/8	
(formerly Don the Beach-	214		
eHolly Corp. ⁵	13/2		
Horizon Corp.	14%	- 61/8	
Landmark Land Co. ^b	31/8		
Land Resources	21/4	- 7/8	
Major Realty	7% 20%	- 1/8 + 5/8	
McCulloch Oil ^b Southern Rity. & Util. ^b	51/2	- 1/2	
MOBILE HOMES & MOI	DULES	and the second	
Champion Home Bldrs. ^b Commodore Corp. ^b Conchement ^b	14% 8%	- 21/4 - 3/4	
Concretifico	13%	- 36	
Pe Rose Industries ^b Fleetwood ^c	51% 28¾	- 11/8	
Golden West Mobile Homes ^b	111/8	- 11/8	
Moamco Corp. ^b (formerly Mobil Americana)	113%		
Mobile Home Ind. ^b	16%	- 11/2	
Monarch Ind. •Redman Ind. ^e Republic Housing Corp.	235%	- 7/8	
Republic Housing Corp	8¾ 6	- 2 - 1	
Rex-Noreco®	441/4	- 31/2	
•Skyline ^c Town & Country Mobile ^h Triangle Mobile	6% 31/4	+ 1/8 - 3/8	
Zimmer Homes ^b	71/8		
	11/2	- 36	
ASM Ind. (Formerly AABCO)	7/8	- 36	
Brigadier Ind Environmental Communities	4%	- 78 + 1/4	
Hodgson House	51/4	- 7/2	1
Liberty Homes			
Lindal Cedar Homes	61/8 71/2	- 11/2 - 31/2	
Lindal Cedar Homes	61/8 71/2 21/4	- 1½ - 3½ + ¼	
Lindal Cedar Homes Modular Dynamics Modular Housing Systems Nationwide Homes ^b	6% 7½ 2¼ 5 10½	$- 1\frac{1}{2}$ $- 3\frac{1}{2}$ $+ \frac{1}{4}$ $- 1\frac{1}{4}$ $+ \frac{1}{2}$	
Lindal Cedar Homes Modular Dynamics Modular Housing Systems Nationwide Homes ^b Shelter Resources ^b	61% 71/2 21/4 5 101/2 131/4	$\begin{array}{r} -11/2 \\ -31/2 \\ +1/4 \\ -11/4 \\ +1/2 \\ -1/2 \\ -1/2 \\ \end{array}$	
wurning right where is a second second	61% 71/2 21/4 5 101/2 131/4 .25 11%	$\begin{array}{rrrr} - 11/2 \\ - 31/2 \\ + 1/4 \\ - 11/4 \\ + 1/2 \\ - 1/2 \\ + .03 \\ - 3/6 \end{array}$	
Swift Industries	11/8	- 11/2 - 31/2 + 1/4 + 1/4 + 1/2 - 1/2 + .03 - 3/6	
Swift Industries DIVERSIFIED COMPANI Amer. Cvanamid ^c	11/8 ES 3334	- 16 - 16	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^e Amer. Standard (Mm (usep)	1% ES 33% 11%	- 316 - 316 + ¹ / ₂	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^e Amer. Standard (Mm (usep)	1% ES 33% 11%	- 316 - 316 + ¹ / ₂	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^c Amer. Standard (Mm Lusch)	1% ES 33% 11%	- 316 - 316 + ¹ / ₂	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^c Amer. Standard (Mm Lusch)	1% ES 33% 11%	- 316 - 316 + ¹ / ₂	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^c Amer. Slandard (Wm. Lyon) Arien Realty & Develop. ^c AVCO Corp. ^c Bethlehem Steel ^c Boise Cascade ^c DA Financial (Larwin) ^c	1% ES 33% 11% 13% 15% 25% 11% 21%	- 36 - 36 + 1/2 + 56 + 31/6 + 21/4	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^c (Wm. Lyon) Arien Realty & Develop. ^c AVCO Corp. ^c Bethlehem Steel ^c Boise Cascade ^c CMA Financial (Larwin) ^c	1% ES 33% 11% 13% 15% 25% 11% 21%	- 36 - 36 + 1/2 + 56 + 31/6 + 21/4	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^c (Wm. Lyon) Arien Realty & Develop. ^c AVCO Corp. ^c Bethlehem Steel ^c Boise Cascade ^c CMA Financial (Larwin) ^c	1% ES 33% 11% 13% 15% 25% 11% 21%	- 36 - 36 + 1/2 + 56 + 31/6 + 21/4	
Swift Industries DIVERSIFIED COMPANI Amer. Cyanamid ^e Amer. Standard (Wm. Lyon) Arten Reatly & Develop. ^c AVCO Corp. ^c Bethelehem Steel ^e Boise Cascade ^e CNA Financial (Lawin) ^e Castle & Cooke ^e (Oceanic Prop.) CBS (Klingbeii) ^e Champion Int. Corp. ^c (U.S. Plywood-Champion)	1% ES 33% 11% 13% 15% 25% 11% 21% 17% 50%	- 36 - 36 + 36 + 36 + 36 + 21 + 216 - 216 - 136	
Swift Industries. DIVERSIFIED COMPANI Amer. Cyanamid ^c Amer. Standard (Wm. Lyon) Arlen Realty & Develop. ^c Arlen Realty & Develop. ^c AVCO Corp. ^c Bothiehem Steel ^e Bothe Cascade ^c CNA Financial (Larwin) ^c Castle & Cooke ^c (Oceanic Prop.) CBS (Klingbeil) ^c Champion Int. Corp. ^c (U.S. Plywood-Champion) Christiana Sacurities	1% ES 33% 11% 13% 15% 25% 11% 21% 17% 50% 20%	- 36 - 36 + 1/2 + 56 + 31/6 + 21/4	
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Company	Nov.1 Bid/ Close	Chng. Prev. Month
Frank Paxton Corp. (Builder Assistance Corp.)	14¾	+ 11⁄4
Fruehauf Corp. ^c	331/8	- 11/8
Fugua Corn c	19% 40%	+ 21/8 + 1/2
Georgia Pacific ^e Glasrock Products ^b	81/8	- 1
Great Southwest Corp Gulf Oil (Gulf Reston) ^e	1%	+ 1/8 - 1/4
INA Corp. (M. J. Brock) ^c Inland Steel (Scholz) ^c	481/2	+ 51%
Inland Steel (Scholz) ^c International Basic Econ	32% 5%	+ 25%
International Paper ^c	371/2	+ 23/4
Internat. Tel. & Tel. ^c (Levitt) Investors Funding ^b	54%	+ 5%
Killearn Properties ^b	12	- 2
Leroy Corp. ^c	7 201/s	- 3/4 + 1/4
Monogram Industries	11% 64%	- 21/4
(Jos. Meyerhoff Org.) National Homes	10%	- 2%
Occidental Petroleum ^e (Occ. Pet. Land & Dev.) Pacific Coast Prop. ^b Perini Corp. ^b Philip Morris ^e	13%	
Pacific Coast Prop. ^b	21/8	- 1/4 + 1/8
Philip Morris® Prosher Corp. Rouse Co.	104%	+ 3%
Prosher Corp.	31/2 251/4	+ % - 31/8
Santa Anita Consol (Robt. H. Grant Corp.)	23%4	- 11/2
Sayre & Fisher [®] Shareholders Capital Corp.	21/8 13/4	- 1/8
(Shareholders R.E. Group) Temple Industries	22	- 1%
Tishman Realty ^c	2134	+ 13/4
UGI Corp.º	3% 18%	+ 5% + 1/9
Uris Bldg. ^c	141/2	- 1
Tishman Realty ^c Tishman Realty ^c Titan Group Inc. UGI Corp. ^c Uris Bidg. ^c Weil-McLain ^c Westinghouse ^c (Cord Bidg. Rop.)	16% 43%	+ 3/0 + 3/4
Weyerhauser ^c	511/2	+ 21/2
(Weyer. Real Est. Co.) Whittaker (Vector Corp.) ^c	7	- 56
Wickes Corp. ^e	23%	- 11/8
Alpha Portland Cement ^e Armstrong Cork ^e	17	+ 11/2
Automated Building Comp ^b	32 10	- 23/4 + 11/8
Berven Carpets ^b	18	+ 5%
Bird & Son Black & Decker ^c	28½ 106¾	- 1¾ + 6¾
Carrier Corp. ^e	26	+ 21/4
Certain-teed ^e	21%	+ 21/4 + 1/8 + 1/4
Crane [®] Deere [®] Dexter [®]	18¼ 42	+ 11/2
Dexter ^e	22%	+ 2%
	54% 901/4	+ 1/2 + 11/4
Emerson Electric ^o Emhart Corp. ^o	29% 30%	+ 1/8 - 3/4
requeis"	251/8	+ 5%
Flintkote ^c GAF Corp. ^c	211/4	+ 7/8
General Electric ^e General Motors ^e	761/8	+ 9% - 1%
Gerber®	26%	- 21/4
Goodrich ^e	27% 68%	+ 3/8
Hercules	66	+ 11/4
Int. Harvester ^e	37%	+ 7/8
Kaiser Aluminum ^e	16%	- 1% - 2%
Kaiser Aluminum® Keene Corp.® Kirsch®	9 36¾	+ 1/4
aigh Producte ^b	181/4	- 11/4 - 51/4 - 1/8 + 63/4 - 23/8 + 31/2 - 1/4
Magic Chefer	221/4 591/4	- 1/8
Masonite Corp.	64%	- 23/8
Maytag ^c Modern Maid ^b	40¼ 8¼	+ 31/2
Nodern Maid" National Gypsum" Norris Industries"	17%	+ 34
Amark Ind C	43 11%	- 73/4
Omark Ind.º Otis Elevatorº	3934	- 34
Dis Elevator ^e Dverhead Door ^b Dwens Corning Fibrgl. ^e Potlatch Forests ^e PPG Industires ^e	19½ 45%	+ 11/4
Potlatch Forests ^c	45%	+ 3/4
PPG Industires ^c	39%	+ 2%
Reynolds Metals ^e Rockwell Mfg. ^e Rohm & Haas ^e	16 33¾	+ 1%
Rohm & Haas [°] Ronson [°]	82½ 7	$\begin{array}{rrrr} -& 734 \\ +& 34 \\ -& 34 \\ +& 134 \\ -& 176 \\ +& 34 \\ +& 276 \\ +& 136 \\ +& 934 \\ +& 934 \\ +& 56 \\ +& 134 \\ +& 3 \\ +& 216 \end{array}$
Roper Corp. ^c	281/4	+ 134
Roper Corp.º St. Regis Paperº Scovill Mfg.º	40% 27½	+ 3 + 21/4
Scovill Mig. Sherwin Williams®	521/2	T 274
Skil Corp.º	46¾ 46¼	+ 138 + 456 + 34
Tappan ^c	46% 201/2	- 7/8
	21%	¥ 1
U.S. Gypsum ^c U.S. Steel ^c	24% 28½	- 3/4 - 7/8
Wallace Murray ^c	18%	+ 3/4
Wallace Murray ^c Welbilt Corp. ^c Whirlpool Corp. ^c	21/8 38	- 1/8 + 31/8
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a-stock newly added to tab		Contraction of the second second
a-stock newly added to tat ASE. c-closing price NYSE date quoted. g-closing pric price PCSE. •-Computed in	d-not	t traded or



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NEWS/MOBILE HOMES

Nader's men tag mobile homes as fire traps and the industry cries 'foul'

Mobile homes are now coming under attack as fire traps from a new wave of critics who insist that the units are far more hazardous to live in than conventional homes.

The industry denies the charges vehemently, but signs indicate that there will be more criticism before there is less.

A Ralph Nader task force has visited a dozen mobile-home factories, responding, it says, to "hundreds of complaints." It is scheduling for release by spring or summer a report on how unsafe mobile homes are to live in and what should be done about them.

The presidentially appointed National Commission on Fire Prevention, at work since 1968, will make its own recommendations for reducing mobile-home fire risks when it publishes a paper on fire prevention in June.

'Unfit.' The fire-trap charge has most recently been made by Ralf Hotchkiss, director of Nader's Center for Concerned Engineering, in testimony on mobile homes at a Chicago hearing held by the fire prevention commission.

Hotchkiss, after citing examples of hazardous design and flammable materials used in many mobile homes, made several recommendations for improvements to alleviate some of the particular ignition and escape problems. But, he contended that "even if these changes were made, mobile homes would still be fire traps unfit for human habitation."

Danger of death. Hotchkiss says the principal problem with mobile homes is that they burn quickly. While there is no more likelihood of fire starting in a mobile than in a conventional home, he argues, the occupants of the mobile are more likely to be killed. He testified:

"It is rarely more than a few minutes from the time a mobilehome fire starts until there is no hope of escaping alive."

Hotchkiss said that basic design deficiencies appear to be present in all mobile homes, regardless of their quality level. He cited these examples as fire hazards:

• Appliances are so close to the mobile's aluminum skin that the skin reflects any heat from the appliance and thus raises the danger of ignition.

• Open hallways allow fire an unrestricted path.

• Density of furniture makes more fuel available per-squarefoot.

• Flammable paneling of "kindling thickness" on all interior walls burns readily.

• Wiring practice and design spark a "high number of fatal electrical fires."

• Doors and windows are poorly designed for quick egress.

Safety steps. A good start on basic design change, Hotchkiss claimed, would be to require



New president of Mortgage Bankers Assn. is Everett Mattson/*right*/, senior vice president vice president of Lomas & Nettleton Co., Houston, taking gavel here from the outgoing president, Philip Jackson of Birmingham, at the MBA's convention in San Francisco.

Mortgage men at peak of prosperity

The mortgage bankers staged their biggest and most successful convention last month and passed word quietly that they had just had their biggest and most successful year.

Their trade group, the Mortgage Bankers Assn., drew a record 5,600 members and wives to San Francisco. Their leaders imparted the agreeable intelligence that the profession had closed \$18 billion in loans in 1971, a startling increase of 38.5% over the previous peak year of 1970, and that even bigger things were to come.

Servicing volume had soared to \$92 billion in '71 and sailed beyond \$100 billion as the MBA convened. Its ebullient spokesmen were already talking about \$200 billion goals.

A walk on eggs. The key to this rampant prosperity was the FHA, the government agency that insures mortgages and thus renders them marketable. Nobody knew this better than the MBA members, and their appreciation of this circumstance inhibited all discussion of the convention's one volatile issue:

What to do with the troubled FHA itself, a housing-scandal

casualty often described these days as a kind of textbook case in government corruption?

The MBA kid-gloved that one. Its governors voted a resolution urging the government to set up "an independent federal agency" to handle FHA's insurance, but they were careful to add that this implied no abandonment of high-risk mortgages in the inner cities. The resolution did not even make clear whether such mortgages should be handled outside a new, sanitized FHA.

The unmentionable. Virtually every officer and official at the meeting voiced concern verging on panic at any suggestion that the FHA's role might be seriously curtailed or that mortgage-subsidy programs might be cut back. Secretary Romney struck near terror into the hearts of thousands when he suggested that Congress might like to consider whether to set up a completely private FHA and take the government entirely out of housing (see pp. 4-9).

The FHA, wayward though it might be, was still the mortgage men's darling in San Francisco. From panel and podium they defended it to a man. —E.W.R. plasterboard on interior walls and firestops between the wallstuds. But he said he had scant hope for self-correction on the part of the industry because the most the industry has done so far is to "participate in the development of a weak standard [by the American National Standards Institute] . . . and even this standard is too often ignored."

The leading promoter of mobile-home standards in Congress has been Rep. Louis Frey Jr., whose solidly Republican district in Florida includes Orlando and Cape Kennedy. Last May, he proposed a National Mobile Home Safety Act in a speech in which he spelled out the lack of standards.

Lack of standards. Only about half the states have adopted the standards developed by the institute and five of the top ten manufacturing states have no standard whatsoever, Frey told the House. He cited insurance company reports that the average mobile home fire loss was \$1,529 in 1971 compared to \$350 for a conventional home, and that insurance rates on a \$6,000 mobile are comparable to those on a \$40,000 house.

Frey says only a federal standard will solve the problem, and Hotchkiss says some mobile home producers have told him they want a national standard.

Rebuttal. The Mobile Home Manufacturers Assn. has submitted testimony to the commission charging major inaccuracies and slanting of facts by Rep. Frey and the Nader group.

For instance, the association cited data showing that the "incidence of fire was almost twice as great for conventional homes as for mobile homes."

The Trailer Coach Assn., another industry group, quotes a publication of the National Fire Prevention Assn. showing that the loss per-mobile-home-fire (\$955) "was slightly below the average for all dwelling types," and that the "incidence of fires in one- and two-family homes in 1969 was about the same as in mobile homes."

Frankly, we thought the (Nader) center could do better," said Larry Davenport of the MHMA. He described the Hotchkiss testimony as "totally lacking in scholarship" and said parts of it were "laughable." Clog-free, corrosion resistant and non-contaminating, copper quietly does its job for the life of the building, needing less maintenance than other materials. It's the dependable one.

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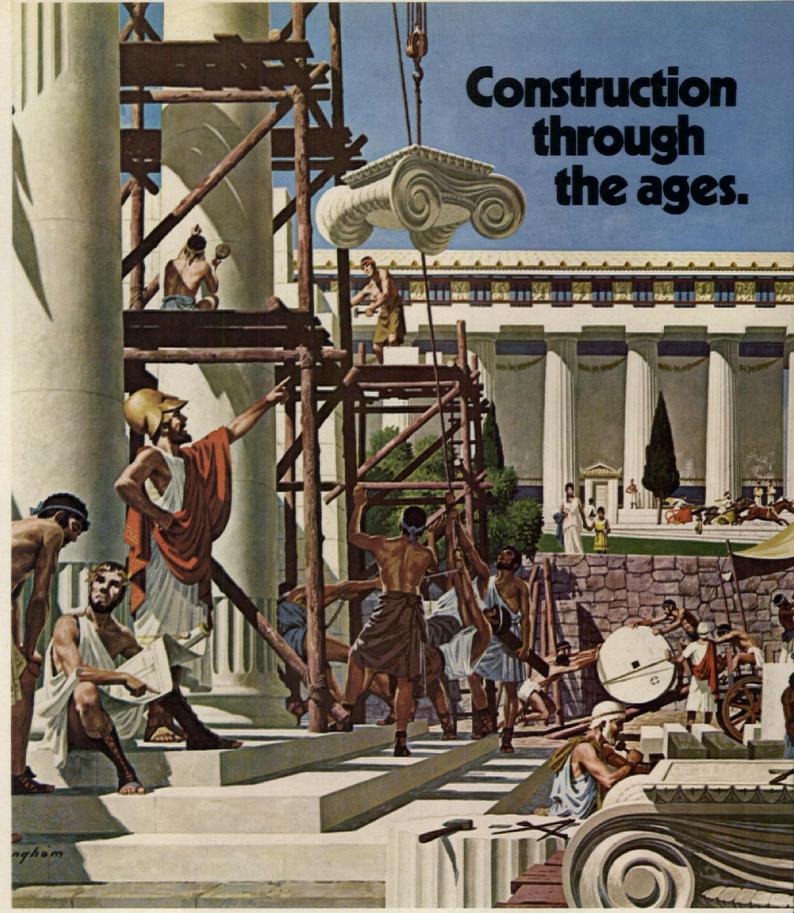


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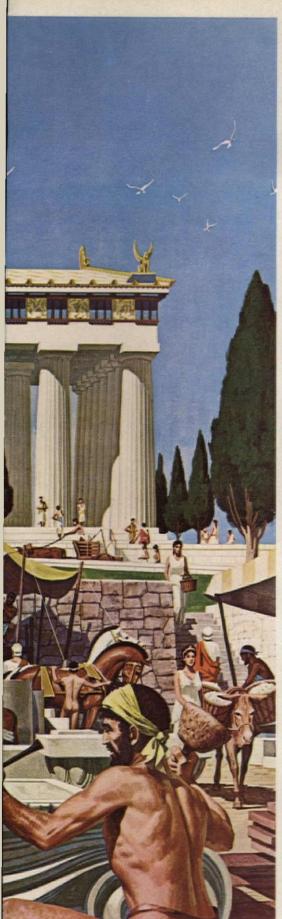


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The Anatolean Plateau of Turkey — ca. 6200 B.C. A neolithic shrine at Catal Huyuk.



Tura, Egypt – ca. 2650 B.C. Stone-quarrying for the "Step Pyramid" of Zoser.



The Island of Crete — ca. 1550 B.C. The rebuilding of the Palace of Minos at Knossos.



The Acropolis, Athens, Greece – 409 B.C. Construction is resumed on the Erechtheum.



Sancta Sophia, Istanbul, Turkey-ca. 535 A.D. The classic Byzantine church nears completion.





The Ise Forest, Japan — A.D. 689. The first rebuilding of the Naiku (Inner Shrine) at Ise.



Yucatan, Mexico-ca. A.D. 987. The House of Turtles in the Mayan City of Uxmal nears completion.



Chaco Canyon, New Mexico, U.S.A. – ca. A.D. 1067. The building of Pueblo Bonito.



Cambodia – ca. A.D. 1200. The construction of the Bayon in the Khmer city of Angkor Thom.



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See all KitchenAid products, including the new trash compactor, at our Booth 3227 in Houston. Or ask your KitchenAid distributor about his builder plan. KitchenAid Division, Dept. 2DS-12, The Hobart Manufacturing Company, Troy, Ohio 45373.





OVER 900,000* PEOPLE HAVE SEEN THIS HOME. AND YOU CAN SEE IT IN HOUSTON! AND WHILE YOU'RE AT IT. YOU CAN LEARN ABOUT THE MANY BENEFITS OF BECOMING A SCHOLZ BUILDER.

The "New Generation" Home, latest addition to the famed Scholz Design Collection of luxury homes, and cover story feature house in the October 1972 issue of *House Beautiful* magazine, will be open for your inspection at the NAHB Show in Houston.

This exciting home, designed to provide the right environment for the contemporary family of the 70's, is attracting thousands of visitors to Scholz builder's developments in thirteen market areas of the country where it is being shown.

Visit the Scholz booth, #3515, at the show and learn more about the total merchandising program that is convincing custom builders throughout the country to become Scholz builder-dealers. Find out how 25 years and 30,000 homes worth of experience can help you build and sell more homes with less labor in less time and help you increase the return on your investment.

If you can't make it to the show-send in the coupon and we'll be glad to send you some information on the Scholz Builder Program. (And we'll also tell you where to see the "New Generation" Home in your area.)

*Over 900,000 people have seen the Scholz "New Generation" dream home in the October 1972 issue of *House Beautiful* magazine.

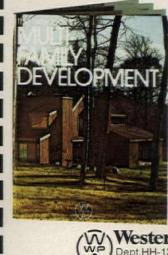
Scholz Homes P.O. Box 3355 Toledo, Ohio 43607	Tell me how to make more. Send free information on the Scholz Builder Program.
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COMPANY NAME	



What multi-family developments are "making it"?

CIRCLE 47 ON READER SERVICE CARD

Zip



Our new Idea Booklet graphically details some of the most outstanding developments in the country. It includes descriptions of an all-wood condominium development constructed entirely of modular units. A PUD in the Midwest with a "close to nature" look. An in-town high density rental unit. And more. Each development is unique. Yet they all have two things in common they're successful and they use Western Wood. Why Western Wood? It's versatile. Readily available. Your subs know how to work with it. It helps you meet construction schedules. And it has excellent customer appeal.

Our new 8-page, 4-color booklet includes many examples of manufactured and site-built housing developments that are "making it." Send the coupon for your free copy.

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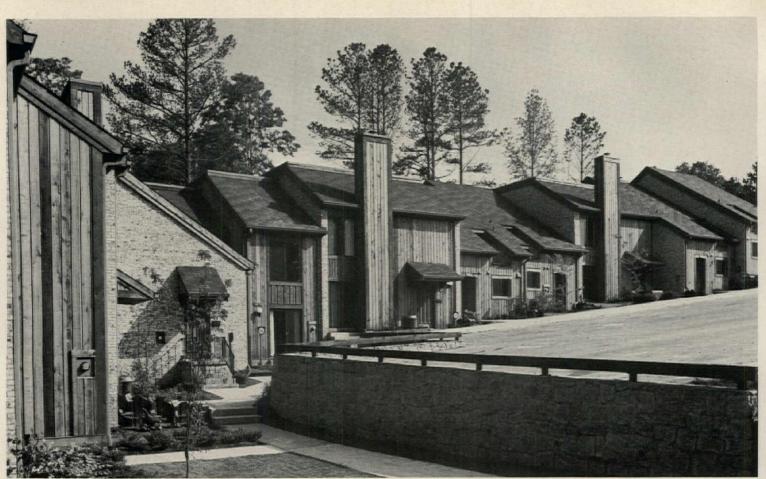
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Western Wood Products Association Dept.HH-1272, Yeon Building, Portland, Oregon 97204 One of a series presented by members of the American Wood Council.

NEWS/MARKETING



This condominium project was built to test a market

And the test turned out positive.

Crow, Pope & Land, which is building the project outside of Atlanta, wanted to find out how big and how solid a market there was for higher-priced condominiums. The company has seven other condominium projects in the Atlanta area, but all are well below the \$35,000 to \$60,000 range.

So the 17 units shown here were built in Cumberland, a new community being developed by Crow, Pope & Carter (friends but not relations). They sold quickly, and Crow, Pope & Land is now building 80 additional units that represent the balance of the project.

Three townhouse models are available: a two-bedroom unit with one full and two half-baths, a three-bedroom unit with twoand-a-half baths, and a four-bedroom unit with two-and-a-half baths. Houses can be built on slabs, or with full basements at \$4,000 premium. Prices start at \$32,500 and go up to \$49,900, but premium lakefront sites and interior extras can boost the topof-the-range to about \$60,000. Buyers thus far have averaged 42 years in age, and include both former renters and former homeowners.

DECK LIVING DIN LIVING	DECK DECK PAM DECK LIVING DECK	DECK DECK

Rear patios (left) are separated by brick walls. Front entrances (right) are spaced to give feeling of privacy.

Instead of just a kitchen, build in some peace of mind.



Frigidaire built-in appliances offer the features that mean sales appeal for you and convenience for your buyers. But they have something else just as important to offer you and your buyers. Peace of mind.

That's because they're backed by a 54 year reputation for dependability, plus the Frigidaire 5-Year Nationwide Protection Plan, like the one that covers the dishwasher shown above: 1-year Warranty for repair of any defect in the entire Dish-

washer, plus 4-year Protection Plan (parts only) for furnishing replacement for any defective or malfunctioning part in the Motor, Pump, and other parts of the Water Circulating System. And it's backed by General Motors.

Another nice thing about Frigidaire built-in appliances, they're available from Frigidaire Builder-Distributors. These men are not factory reps, but local independent businessmen like yourself. They can offer on-site coordination, along with a full range of building materials. And, since they live and work in your community, they can give your order direct, personalized attention and continue to do so until

installation is completed.

That should be enough to make any home buyer's and any builder's mind rest easy.

Every refrigerator is not a Frigidaire. Every Frigidaire is not a refrigerator. NAHB Show Booth 3516



Nine Paslode ways to drive fast and save money

These tools are part of Paslode's full line, which also includes border-wire clippers, stapling pliers and hammers, and automated framing, sheathing and pallet-making systems. There's a Paslode man or authorized distributor's man near you to help you select the fasteners and tools and systems that are right for your needs.

Call him today, or write for more information.



Canada at the NAHB show... blueprint to better building ideas

SPECIFICATIONS

Back up your blueprints with better building products from Canada! Canada's building products industry offers sophisticated products and systems manufactured to the most exacting standards from the finest materials.

Innovative design and careful workmanship have made Canada a world leader in new home building products and ideas. The product range

Canadian participants at NAHB:

- Canadian Wood Council: wood products dimension lumber panels, shakes, etc;
- Fitzpatrick Stair Limited: circular and straight stairways
- Gazelle Wall Systems Ltd.: modular and custom-made prefabricated wall systems
- Hambro Structural Systems Limited: composite floor systems

Litoid Canada: decorative architectural paneling is extensive — from pre-engineered modular housing to pre-finished door packages, from sweeping staircases to exciting, new building components, from modular and custommade wall systems to effective, economical water treatment systems. Combine Canadian quality and reliability with competitive prices and prompt delivery...and you've got a perfect blueprint for building better homes.

> Pollution Control Systems International Limited: automatic water sewage treatment systems

- Sauder Industries Limited: pre-finished interior flush doors, upland hemlock jambs, stops and casing
- Universal Sections Limited: building systems aluminum siding and soffit, polystyrene concrete forms and modular housing



For more information on these companies and their products visit the:

Canadian Exhibit in the Astrohall Booth 2224, The NAHB show Houston, Texas January 7 to 11, 1973

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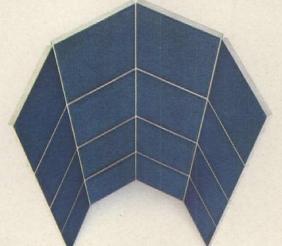


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News! American systems for every

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This is Redi-Set[®] Systems 100, our famous pregrouted glazed tile sheets. Homeowners love the flexible, stain- and mildew-resistant



Redi-Set grout. It's waterproof, wipes clean, and won't crack—even when the building settles. Use Systems 100 in the luxury baths in your condominiums, apartments, custom and semi-custom housing, and for remodeling jobs. It comes in sheets of up to 16 tiles. of the tub enclosures found in apartments, townhouses, industrialized housing, tract homes, and low-cost FHA housing. Installed in under an hour over almost any backup, this eight-sheet beauty is self-trimmed. Most grouting and most cuts are eliminated. Extension packages are available to extend tile to the ceiling.

The matching Redi-Set tile wainscot.

Almost anywhere you use System 310, you can add even more sales appeal with Redi-Set System 350, the matching pregrouted wall sheets. It's quick and easy to build in. Or offer it as a trade-up option. Sheets are 2' by 2', and contain up to 36 tiles.



Anywhere there's a standardsize tub in a standard recess there's where you use Redi-Set System 310 pregrouted tub surround. It's designed to fit most

Olean ceramic tile kind of bath.



Redi-Set shower systems.

Redi-Set Systems 300 shower surrounds are sized to fit the four most popular receptor sizes. These units can be installed directly over properly sealed drywall. 72" high, there are extension packages available to extend the tile to the ceiling.

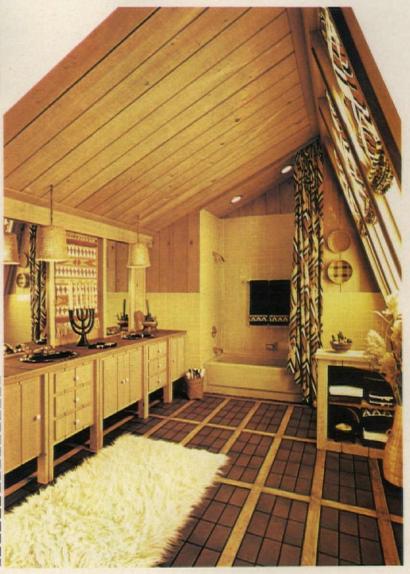
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So give your prospects what they want

a bathroom with the beauty and recognized low maintenance of ceramic tile; plus a new grout joint which is waterproof, stain- and mildew-resistant, and won't crack out. That's what they get with American Olean Redi-Set systems.

Redi-Set pregrouted ceramic tile. It's the natural thing to use.



NEWS/TECHNOLOGY

Slab-on-grade lets you build on rocky and soggy soils-at less cost

The new slab-on-grade (S-O-G) copes with the problem of uneven soil movement which cracks conventionally footed foundations and footed slabs because the footers move too. Pilings don't move, but they are costly.

The old solution for spongy or plastic soil was a floating slab, with grade beams around the perimeter and through the center, which were reinforced by literally tons of rebars.

The new S-O-G solution uses the same grade beams to form a floating slab, but it prestresses and post-tensions the slab, making it stronger with less steel and costs 5%-25% less.

In Louisiana and Texas, where most of the action in proprietary prestressed, post-tensioned slabs is concentrated, three company names stand out:

• Pre-Stress Concrete Inc. (PSCI), Galena Park, Tex., near Houston, acquired the rights in 47 states to a slab patented by William F. Kelly. (He retains the rights to his system for Louisiana.) It was first introduced to Texas five or six years ago in the San Antonio area, which has some of the most expansive soils in the state.

Last year PSCI supplied strands for an estimated 7,000 slabs for single-family homes plus multifamily and commercial slabs.

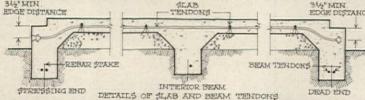
• Prescon Corporation, Corpus Christi, Tex., developed and patented a second system. It is most actively installed by a Dallas area firm, Post-Tensioned Systems Inc. (PSI) of Grand Prairie, which was formed in March 1971.

Its first year PSI supplied tendons for some 7,000 slabs (3,000 single family, 4,000 multifamily) and will have a second-year volume of about 8,000 (50% multifamily, 40% single family and 10% warehouse slabs and tilt-up walls).

• Atlas Prestressing Corp., Denver, recently entered the S-O-G field. The firm, a spokesman said, is "the country's largest supplier of post-tensioned strand for commercial buildings". Within the past six months, Atlas installed more than 750,000' of strand for S-O-G construction in Texas and the Denver area.

Walter Snowden of Snowden







Ready-to-pour S-O-G includes prestressed tendons, forms around the perimeter and trenches dug to shape grade beams. At bottom tendons are post-tensioned.

& Meyer Inc., Austin, a soils/foundation/structural consulting firm, attributes the growth of S-O-G systems to a big breakthrough in soils analysis and slab design: being able to precisely predict the potential expansion of various soils.

"Prestressed, post-tensioned slabs on grade do not do everything the prestress people say they will, or even all that some builders think they do, but this is a good system. For the same soil conditions, most of the time prestressed, post-tensioned slabs will be slightly less expensive. The worse the condition, the more the builder is likely to save."

Snowden speaks from wide experience: "We have completed in excess of 22 million sq.ft. of slab in the past four years without a failure for one properly installed."

Here are the positive things

builders say about S-O-G:

• "A project of 208 garden apartments in southwest Houston which uses 100,000 sq. ft. of slab simply could not have been built on its present site using a conventional slab," says Tom Benson Jr., head of multifamily construction for Westchester Development Co.

"In this area the soil is extremely expansive 'Beaumont gumbo'," says Benson. It develops wide cracks in dry weather and swells and heaves when wet. The conventionally reinforced slab engineered for this site would have cost \$1.30 per sq.ft. The S-O-G designed for this soil condition—Class 8, the most heavily reinforced—is costing \$1.05. The \$25,000 saving meant the difference between using and not using the site, says Benson.

• Charles E. Hughes, a construction superintendent for Zachry Properties Division of H.B. Zachry Company, San Antonio, says S-O-G has proved very economical for a steeply sloping hill of nearly solid rock.

"Using S-O-G saves in trenching through rock, and it eliminates a lot of concrete required for building deep beams through fill to natural grade. If I get a building with a small fall from one end to the other, I have to pay up to \$1,000 for a deep beam on the bottom side. I save that by going to cable because I float the slab on fill."

• Danny Cate, construction analyst for the NPC Construction Division of Nash Phillips Copus of Austin, is convinced S-O-G is considerably more economical for rock and problem soils.

"We have done comparative studies, and we find we get our best costs when using S-O-G on rock. On some lots we used to spend \$1.35-\$1.50 per sq. ft. getting an FHA slab put in. With S-O-G, unless it is an extremely bad situation, we get it for \$1.15 to \$1.20 per sq. ft. This has enabled us to use some sites which otherwise we couldn't have considered economically feasible."

• James L. Lougee, production services manager for Raldon Corporation, Dallas, which is building large fourplex subdivisions plus single-family construction, is using S-O-G exclusively. In one and a half years his firm has built around 1,500 units. He estimates a modest 4e-to-5e-per-sq.-ft. saving since soil problems on his sites are not severe. "We would use S-O-G even where the cost is the same because we think it's a better slab," he says.

Texas builders attribute these disadvantages to S-O-G:

Tom Benson Jr.: "Even though S-O-G is widely used in Texas, there are few competent installers. When more people start using this, I think costs will come down."

James L. Lougee: "S-O-G requires more field supervision."

Danny Cate: "For a while our people did the stressing, but we had failures caused by not working to spec. After we started using a man who distributes, installs and stresses cable, we had no further problems."

—LORRAINE SMITH McGraw-Hill News, Dallas



"Why did we use Gardencourt cabinets in the world's largest condominium?

Because it's the <u>one</u> cabinet with everything we wanted." ^{Hy Pawlow, Vice President} Dunbar Builders Corporation, Chicago, Illinois

"The prospective condominium buyer is actually in the market for a quality home. What he *doesn't* want are all the little maintenance chores associated with conventional housing. For our kitchens, that makes Gardencourt the ideal cabinet. It looks just great. Yet it's about as maintenance-free as any cabinet I know of. It's ideal from the builder's viewpoint, too. It's priced right."

Gardencourt. We made it with convenience and care-free living in mind. All the components are covered with a tough but beautiful vinyl with pecan-grain finish.

We add a triple layer of clear vinyl on door and shelf edges for real protection where it's needed most. Inside, there's a light and airy buff vinyl. So clean-up is as simple as a damp cloth, inside and out.

Rugged polystyrene drawers have rounded

corners for easy cleaning. Door hinges are selfclosing and easily reversible left or right on the job. For decorating versatility, we finish Gardencourt off with a handsome accent bar in Avocado, Flame or Black.

The result is a stylishly-beautiful cabinet that needs almost no maintenance, and looks great in any kitchen. And in your business, great looking kitchens are pretty important.

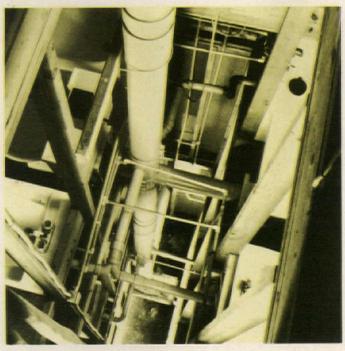
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St. Louis gets the single-stack PVC spirit



This new 13-story apartment building in downtown St. Louis' Laclede redevelopment area is a plumbing industry landmark. It uses a Genova single-stack PVC drainwaste-vent system — the first high-rise building in the U.S., outside of Philadelphia, to utilize this cost-saving concept. A HUD Operation Breakthrough project, the building is part of a 13-building complex that uses Genova single-stack PVC systems throughout. It's the wave of the future, and St. Louis has caught the spirit.



The people who get it done

Plants in Davison, Michigan 48423; Malvern, Arkansas 72104; Faribault, Minnesota 55021, and Lancaster, Pennsylvania / Branch warehouses in major cities.

THE MORTGAGE SCENE



A walk down the wilder side of loan packages—how builder can make two profits out of apartments, or, having your cake and eating it too

It isn't just the amount of money in the mortgage market that is fueling this year's housing boom.

A part of it is the increase in the number of market factors—and the innovation in lending patterns that competition has produced.

This is particularly marked in the apartment sector.

Not too long ago there were only two factors in the conventional apartment loan market: the life insurance companies and the local savings and loan associations.

Today there are at least five factors. The new entries include the eastern savings banks (as nationallenders) and the real estate investment trusts. Furthermore, the S&Ls are now acquiring apartment loans out-ofstate. And there are even a few mortgage bankers who will commit on and close apartment or commercial loans for their own account, warehousing the loan for resale to another investor at a more favorable time. In addition, nearly all these lenders are under the pressure of heavy cash flows crying out to be invested.

This new competition has had no pronounced effect so far on interest rates. Indeed, our projection is that mortgage rates will move up at least ½ % by mid-1973.

The two-profit package. There has been real competition in what can be called creative risk-taking, however. Lending packages are being tailored with much more sophistication to builders' tax needs and merchandising patterns.

Here's one example, and it is the closest thing yet devised for giving a builder his cake and letting him eat it too.

When condominiums began to boom, some developers discovered that a good way to cash out of a rental building that had used up its tax shelter was to convert it to condominiums. With the right kind of project the return from conversion was significantly higher than from resale or refinancing.

The next step was to design a new apartment for eventual conversion. And the lenders now have developed the financing package for it.

It's a standard conventional mortgage, with standard interest rates, for 30 years, with a ten-year lock-in.

But it carries the right to convert the building to a condominium after the fourth year. For this privilege the lender is entitled to a pre-set percentage (typically 10% to 15%) of the conversion profit.

If the lender in this package is an S&L,

savings bank or mortgage banker, the builder has a commitment for end financing on his condominium sales.

If the lender is a life company or an REIT, it agrees to make partial releases as the builder sells condominium units. In effect, the end loan on his apartments becomes the blanket standby loan for his condominiums.

Thus in one package the builder has all the financing he needs for two deals, apartment and condominium. He's completely free to exercise the condominium option or not, any time between the fourth and thirtieth year. And he pays no advance premium for this flexibility.

If the market and his choice of site and design are right four or five years from now, he stands to recover his original investment twice—once in the years of maximum depreciation, once on the sale of the units. It makes a wonderful package for syndication.

Another bonus. The bounties of innovative lending don't end there. It's possible to make this same kind of deal with a minimum of equity. An extra wrinkle on the convertible loan is the convertible second mortgage.

In this, the borrower is committed to pay interest for only the first six years at, typically, $1\frac{1}{2}$ % above the first mortgage rate. If the project is converted within this period, there is of course no problem. The loan will be discharged.

But if he decides to continue holding the

EXOTIC LOAN PACKAGES

1. Apartment-condo option

 Start as apartment 75% first mortgage

10% to 15% (loan coverage, not rate) second mortgage (interest only first six years)

- After four years, builder has option to convert to condominiums. First mortgage converts to end financing for sales or blanket to standby loan.
- If no conversion, second mortgage may convert to land sale and 50-yr, leaseback.
- 2. Three-layer 100% loans
 - 75% first mortgage
 - Land sale leaseback
- Secondary financing to close equity gap. Constant on secondary financing is 16% to 17% or lender may become half-owner.
 Package may also be split three ways among lenders.
- 100% condominium conversion loans
 Covers satisfaction of mortgage (or puchase of building) remodeling, carrying costs during changeover, joint venture with lender. Lender takes 20% of profit and normal rate.
- 4. 100% land loan
- Rates 2% to 3% above prevailing rate 5. 85% condominium construction loans Rates 2% above prevailing rate (4% above prime)

project as a rental property, he has two options. He can extend the second mortgage for a period of years at the same interest rate but with, of course, some amortization of principal. Or he can convert to land sale and 50-year leaseback, at a rental rate equal to the interest rate.

For this privilege the lender receives a participation—typically, 15%-25% of any increase in gross rents.

Finally, in this package, the lender does not underwrite the prospects of successful conversion. He is satisfied if the deal meets his standards for an apartment loan. Of course, it takes a special kind of apartment, and often a special sales approach, to market condominiums, particularly conversions, successfully. But that is the builder's lookout.

The no-equity deals. There are other innovative loan packages which make it possible to develop land or to build condominiums without a cent of equity—and without giving up any of the eventual profit. These are straight deals, but high priced.

One hundred percent land development loans are available at rates 2% to 3% above the prevailing land loan rate.

Condominium construction loans are available for 85% of value, which is essentially 100% of cost. The rate is usually 4% above prime, or 2% above the rate for standard construction loans.

These loans are usually limited to 40 units at a time. But if completed units are selling successfully, financing is continuously available for 40 units ahead of sales.

Obviously, lenders will not make loans on such liberal terms indiscriminately. They want a builder with some track record and a market that looks strong. They want better-than-average feasibility studies.

Still another example:

Assuming, again, that you have a good record and a good location, it's possible now to convert an existing apartment to condominiums without putting up any equity. These are joint ventures with old-line lenders, such as life insurance companies. The lender supplies all the funds to discharge the mortgage (or to acquire the building from another owner) plus the costs of remodeling and of carrying idle units during the changeover—in return for 20% of the profit plus his normal interest rate.

These are merely a few of the possible examples. In today's apartment market if a builder has a new concept, there is a very good chance he can find a loan package to match it.

HENRY LYNGOS, VICE PRESIDENT, ADVANCE MORTGAGE CORP., DETROIT, MICH.

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Our variety. On these two pages, we could only show you some of our lines. We have others. They're all in the low and middle price range and cover every styling requirement. Which means we can fill all of your kitchen and bathroom cabinet needs. We can give you what your customers want. When they want it. And when you buy a variety of lines from one manufacturer, you save on inventory space and costs.

Our value. Very simply, we think you'll find that all of our cabinets offer you the highest quality and styling at the best value.

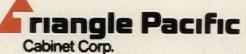
Our size. As of November, 1972, Triangle Pacific had four manufacturing plants and eight regional warehouses. In December, we acquired the Dixie Cabinet Company, allowing us to even better serve the Southeast out of two plants in Tennessee and a warehouse in Fort Lauderdale. Our ever-increasing size and flexibility enable us to service builders of single and multi-family communities, as well as distributors or remodelers. No matter what their size.

Our sales force. Every Triangle Pacific salesman considers it his job to make your job easier. And to help you make more money selling our cabinets.

Our philosophy of growth. Every year, for the last three years, Triangle Pacific has added at least one new manufacturing facility. And our goal is to eventually have a plant within 500 miles of every major marketing area in the United States. But we're not growing just to grow. We're growing to be able to serve our customers more quickly and more economically. And it's working. Three years ago, we were selling cabinets in ten states. Last year, in thirty. This year, in all fifty.

Our distributors. Just as we're the fastest growing cabinet company in the United States, they're the fastest growing distributors in the United States. In short, they're making more money selling Triangle Pacific. You can, too. Call Bob Meltzer, President or Joe Nussbaum, V. P. Sales and Marketing and talk it over.





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In Houston, we'll be in Booth #3030. Come and see for yourself why our business is growing as fast as it is and what that can mean to your business.









THE PLANNING SCENE



"Imaginative planning is the stuff salable housing is made of . . . Even small units can be extremely desirable if the design lets rooms borrow space from each other"

Primarily because of high land costs, the trend today is toward houses of minimum size. While this reduced size usually meets functional and practical needs of a family, it seldom satisfies the psychological need for space—expecially for spatial variety. This is especially true of condominiums where units are small and close together and, for the most part, are expensive when costs are figured on a square-foot basis.

Many buyers of such units are moving from much larger homes to gain advantages like low maintenance, security and flexibility in living style. But this doesn't mean they will buy for those reasons alone. They also want a substitute for the larger space they are leaving. And that substitute can be psychological rather than actual space.

One way to achieve this is through the borrow system whereby space is simply exchanged between one or more rooms to suggest a feeling of more space.

This idea is not new; for years it has been known as open-planning. But somehow open-planning doesn't always work to its best advantage in small builder-housing. What often happens is that after model units are constructed, they look a little small to the builder. So to produce an illusion of space, he resorts to tricks such as insisting that his decorator place mirrors the full length of one wall.

Using the borrow-system, we can illustrate how psychological space is possible without decorating tricks.

A familiar example of borrowed-space occurs at the junction of living and dining rooms (*Figure A*). This planning approach allows both areas to be somewhat small, yet seem larger since they share one common open end. Why not adapt this concept for other areas?

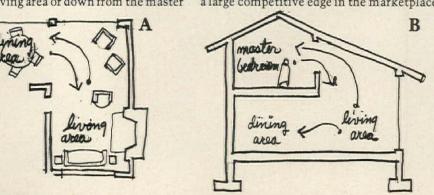
One way is to borrow space vertically rather than horizontally (*Figure B*). Here the interrelationship of the master bedroom to the living area permits one to either look up from the living area or down from the master bedroom and, additionally, through to the outdoors and the dining room.

Another approach is to borrow from nearby outside spaces, employing decks or terraces to increase the feeling of interior spaciousness (*Figure C*). Again, while this is not a new idea, the full potential of the indoor-outdoor relationship often is not realized since this approach involves an outside wall. It is extremely important that the wall be as transparent as possible. In other words, full height and width of glass—or as much as is practical—should be employed.

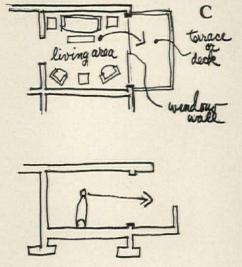
A third method of expanding a small space psychologically is through the dual orientation of a room. This works well for a small back bedroom where ajog in the exterior wall is possible *(Figure D)*. Thus one can look in both directions as well as have a light source from each side, thereby widening the room on both ends.

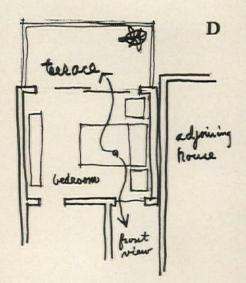
A more far-out way to create a feeling of space is to use an entry or stairs to divide two rooms *(Figure E).* If the stairs are a seethrough design (open risers, etc.) they function much the same as a window, providing a view through them from one room to another. Also, when the stairs are descended, both rooms are experienced simultaneously, thereby creating a dual expansion of space from the stairs themselves. This could be termed a three-way-borrow.

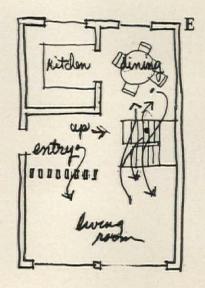
Thus one can begin to see the numerous opportunities that exist for an imaginative architect/planner to create psychological space through the borrow-system. Couple this approach with interior design treatments such as use of eye-expanding colors and materials, properly-scaled furniture and simplicity of window and/or door arrangements, and you can build far more total space (both physical and psychological) than might have been thought possible. And it will cost little, if any, more than a conventional plan. In addition, the interesting design effects created by psychological space will provide a large competitive edge in the marketplace.



ROBERT W. HAYES, AIA, PLANNING CONSULTANT, SAN FRANCISCO, CALIF.







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When we invented the Temptrol single-handle, pressure-balanced shower, we gave you a system that could really help you sell houses. Because you could tell your customers that pressure-balancing would keep them comfortable in the shower, and prevent scalds and chills, as no other system could. The good-looking contemporary design didn't hurt, either. Now we've come out with new lav and sink trim that will help you do the same kind of selling job. It's just as low on maintenance, and just as pretty as anything we've ever made. Instead of washers, which wear out, it's got ceramic,



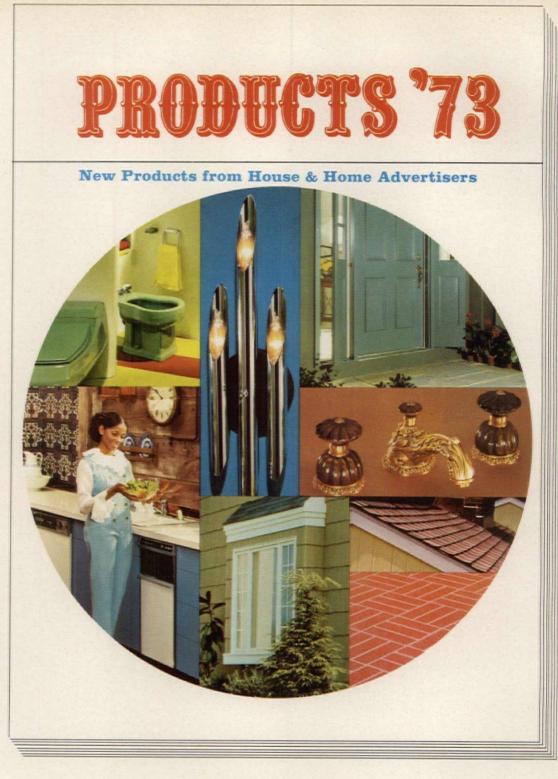


which is ageless. We've already tested it through more than a million cycles, and it's just as good as new. Tell that to your customers. Tell the husband he won't have to worry about high repair costs. Show the wife how the finger-tip action of the handle prevents spotting and staining. The whole family will appreciate the smooth movement of the lever handle for positive, accurate selection of temperature and flow. Temptrol shower system. And now, Temptrol lav and sink trim. Together, they're a package that will help you sell houses as no other systems can.

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a timesaving guide to the 1973 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 '73 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 1973. 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 '73 will be by booth sequence enabling you to move quickly and efficiently through the aisles pinpointing 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 '73 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 '73 to see for yourself just what the participating exhibitors are displaying as their best, their newest, their most exciting. Every copy of Products '73, 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 '73, House & Home, 1221 Avenue of the Americas, New York, New York 10020. Your copy will be mailed immediately on publication in December.

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CIRCLE 91 ON READER SERVICE CARD

Designed for "operation breakthrough" guidelines for industrial housing.

and a second of

NEBRASKA

THE MODULAR SCENE



"Don't blame all modular manufacturers' problems on pie-in-the-sky predictions. . . Most failures were caused by not understanding industry ABCs"

We can all profit from the failures in the modular housing industry IF—if we properly analyze the real causes involved and not arrive at hasty, erroneous conclusions.

Due to excessive publicity given to the Stirling Homex bankruptcy, the industry is being characterized by the image of acres of modules with no place to go. This may be true of this one company whose chronicle in arecent issue of *Business Week* reads more like a Harold Robbins' novel. But I assure you it is not typical of the industry.

Any active modular housing plant must have finished inventory outside just as automobiles are seen in storage at their assembly plants. The excess of one company in this regard was not an industry-wide symptom, but was more likely an artificial condition created by the demands of Wall St.

We now also read about the other abuses of this same company—such as expensive airplanes, limousines and fancy offices. However, these were the very embellishments that impressed bank loan-officers, Wall St. analysts and government officials.

Suffice to state at this time that the major problems at Stirling Homex were *not* the obvious overproduction or lack of marketing. They go deeper and are much more involved than this oversimplification. Hard as it may be, I suggest that we should not get hung up on this one *untypical* company, but instead go on toward a solution of the *real* problems of the industry.

In analyzing over a dozen industry failures, one major factor is clearly evident in 85% of the cases: *Production volume was well* below expectations, and production costs were above expectations.

The essential ingredient. To be a valid concept the modular housing unit must first have economic feasibility out the factory door. Admittedly there are other necessary elements in a completely successful operation—marketing, transportation and sitework, for example. All are important and deserve adequate attention. But these problems, important as they are, become superfluous if the module is not cost-effective when it leaves the plant. And with the problem companies, most financial projections failed in the factory.

But while major cost overruns have been in the factory, the cause is *not* primarily production efficiency, but mainly design and material choices which created production problems. Frivolous design concepts, sometimes just-to-be-different and made without adequate consideration for manufacturing feasibility, have been widespread in the industry.

Major mistakes in design are not easily forgiven. Plant layout and expensive equipment rigidly oriented to such a product quickly develop negative value. Production volume is limited, but must continue due to prior commitments while overhead remains an excessive burden.

Satisfactory prompt corrections in production frequently are impossible since the defects are locked-in to prior decisions in design, materials and manufacturing. Turning around a modular operation in this condition can mean almost starting again from scratch.

Overhead on a per-unit basis creates the largest excesses over cost projections as production remains below expectations. A reasonable amount of direct labor inefficiency can be absorbed, but when an overhead geared to a 1,000-unit annual production has to be absorbed by only 400 units, the extra cost is intolerable.

Elementary requirements. Many companies have learned their lessons the hard way. Primarily because of inexperience, they ignored certain basics. To wit:

• The design process cannot be an independent function. It must be an integral part of the total operation. The use of outside architects who do not fully understand production, shipping and site-erection can only lead to future problems.

• An economically sound modular housing operation cannot be a custom-job shop that produces the designs of others for specific projects. To be efficient, a mass-production facility must have controlled repetition in volume.

• Flash Gordon designs should be avoided. These include vertical modules, steep pitched roofs, hinged and push-out sections. All look great on paper, but are a nightmare in the factory and at the site. • Exotic new materials of a revolutionary nature which are untried and unproven should be bypassed. New materials and concepts, specifically oriented to modular housing, will come in time—but on an evolutionary basis.

• Production processes should be kept simple. Avoid wet operations requiring drying time. Simplify mechanical installation into sub-assemblies by careful design of these areas. Keep mechanicals out of floor systems.

• Prototypes should be produced and constructed before moving ahead with a factory and equipment. Each phase of the production and erection processes should be carefully time-studied in the prototype stage with design and material changes being made as necessary.

Sound concept. The basic reasoning that made the modular housing industry necessary still is valid. Every builder is more aware today than ever before of not only the cost and inefficiency of labor, but also the lack of quality.

We can all learn and profit from the mistakes of others if we properly analyze causeand-effect. Modular failures will continue; but they all can have indirect benefits.

JOSEPH C. GRASSO, EXECUTIVE VICE PRESIDENT, MODULAR HOUSING SYSTEMS INC., NORTHUMBERLAND, PA.

It's a fact—even your latest model home is full of old ideas, or variations of old ideas. But here's a new idea. The Tappan Trash

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competitive edge? Use a little high pressure salesmanship-the Tappan Trash Compactor. You'll hardly have to say a word. 🕷 For information and the name of your Tappan distributor, write Tappan, Dept. B 2612, Tappan Park, Mansfield, Ohio 44901.

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CIRCLE 71 ON READER SERVICE CARD

THE MERCHANDISING SCENE



"Decorated models can do a double-pronged marketing job . . . All that's needed are a few off-beat touches - and maybe some personal help from your decorator"

After the model home or apartment complex has been decorated and furnished, there's a temptation for the builder to sit back, wait for his advertising to break and hope he'll be flooded with an endless stream of traffic.

Advertising is, of course, your most important promotional tool; but it can't always firm sagging sales after a grand opening.

One promotional vehicle that is often overlooked is the model interiors. You've waited all those months for your designer to complete them. Why should they become a passive part of your marketing effort?

In other words, your decorator helps to merchandise your basic product—shelter. Why not merchandise her basic product the decorating?

The principal objective is to get broad exposure for the interior environment. Focusing on the inside of a house in a newspaper ad is not enough unless your interior designer has been able to create something truly newsworthy.

Since word-of-mouth is still the most powerful form of advertising, I suggest a promotion that involves both your models and your interior designer.

The most effective promotion actually is not very promotional. It is nothing more than making certain your models offer decorating tips, design ideas, creative accessories—decorating suggestions that visitor-prospects can glean from your model units.

This responsibility is yours. If I were the builder I would sit down with my decorator and go over point-by-point the newsworthy or innovative features in the models.

For example, an interesting, provocative dining-room set can be created by using two church pews, sawn in half and placed around an old oak table. It's the kind you find in off-the-beaten-path hotels and restaurants.



lex Consider what this accomplishes. First, s a rarely do you see this type of dining room a set. So the prospect remembers it; your of model sticks in his mind. But more important, the idea is one that he can duplicate

tant, the idea is one that he can duplicate with little effort and little money (not to mention the fun he'll have looking for these old relics). But since you cannot always rely on word-

of-mouth advertising, some subtle promotion may be needed to stimulate it. Here is where you, the builder, should start thinking like a public relations man.

One approach that works rather well is to announce that your interior designer will



make a weekend appearance at your model complex to offer free decorating tips.

While this might have a strong show-biz ring to it, you may be surprised at the crowd it can draw. In addition to the traffic generated, the builder and the decorator often get unusually candid comments and reactions to their product.

For best results, schedule the appearance from 1:00 to 4:00 p.m. on a Sunday. If your salesman has a hot prospect on the verge of buying, the decorator might help close the deal by taking the prospect on a personal tour of a model and explaining firsthand her design philosophies and objectives while fielding his questions.

Judicious use of publicity is another way to gain greater exposure for your modelhome interiors, and thus create additional interest in your project.

CAROLE EICHEN, CAROLE EICHEN INTERIORS, FULLERTON, CALIF.

A newspaper interview (either in the real estate or home furnishing section), with the decorator discussing the newest trends in furniture and interior design as show-cased at your development, has a certain amount of editorial appeal. An overt commercial pitch for your project should be avoided. If you have a truly good story, either you or your public relations man can make the initial approach.

Good photography is another vehicle for getting your model-home interiors in front of potential prospects. Newspapers and magazines will often accept a photograph of a novel piece of furniture cleverly used in a model. A pinball machine adjacent to an old player piano in a game room is usually good editorial fare for a local Sunday supplement.

In selecting photographs for submission, be sure each tells a mini-story in itself. Following are four examples that might be suitable for local or national publications.

Photo A. Sewing is enjoying a popularity revival, hence this little girl's sewing center with peg-board backing has appeal for the do-it-yourselfer. In color or black and white, the story comes across.

Photo B. A larger sewing room for mother can be easily and inexpensively reproduced by dad and the kids. The cutting table and storage shelves are built into the space normally reserved for a closet.

Photo C. Who isn't playing chess these days? The checkerboard flooring in this youngster's rumpus room caters to junior hoofers or budding Bobby Fischers. The room, a throwback to the Henry Aldrich soda fountain era of the 1940s was specifically designed to capture the nostalgic era.

Photo D. This turn-of-the-century nursery has Victorian accents and an antique crib rescued from a second hand store.



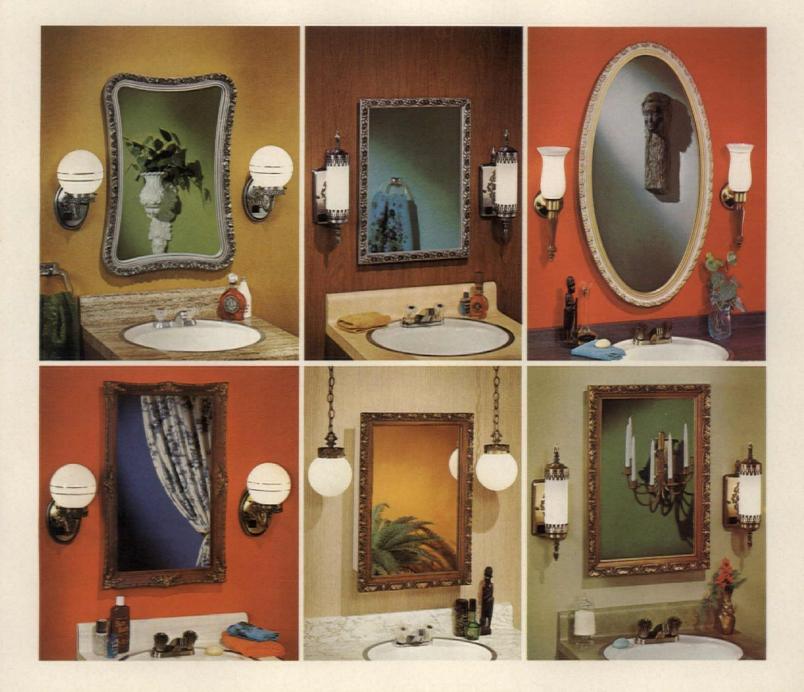
LAWSON

All-American The sales power of the bath is hardly a new discovery. (Fact is, Cabinets and Light Fixtures

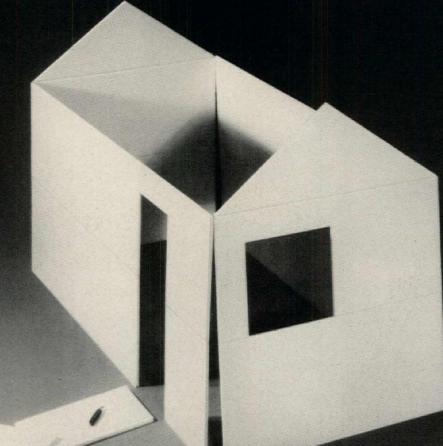
Lawson pioneered the "bath extraordinaire" years ago with some Bathroom of the first true decorator cabinets and mirrors.) Today, with you tougher than ever, Lawson continues to lead in bath products that give you that sales edge. The elegant new wood framed Lawson mirror-cabinets below,

with their classic matching light fixtures, are supreme examples of this leadership. For sparkling new literature on cabinets, light fixtures and bathroom accessories, visit us in Booth 3133 at the NAHB Show in Houston. Or, if you prefer, write or phone the cabinet company builders know best: The F. H. Lawson Company, 800 Evans Street, Cincinnati, Ohio 45204; phone 513/251-2400.

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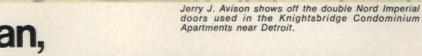
The "house of cards" is just our way of showing you that STYROFOAM*TG brand plastic foam insulation is rigid, so it can do the sheathing job. And because it's so lightweight, it can do the job in less time. But more importantly, STYROFOAM TG is high performance insulation, covering all of the outside of the frame ... all the wood areas that go unprotected in conventional sheathing-batt insulation systems. STYROFOAM TG insulates 100% of the sidewall area, other than door and window openings; no other insulation material can make this claim. And at the same time, STYROFOAM TG takes the place of conventional sheathing; no other insulation material can make this claim. Savings? Of course. Better performance? You bet! Of course, in actual use STYRO-FOAM TG is not a structural sheathing; it needs the normal stud frame with corner bracing. But can you imagine any other insulation being able to stand up for a picture like this? And can you think of any other insulating material that can do the job of both sheathing and insulation? That's the point we're trying to make

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We'll make our point even stronger at the NAHB Show in Houston. Stop at our booth and see STYROFOAM TG work; see how STYROFOAM TG stands alone as sheathing and high performance insulation.



From Michigan, An inside story on Nord entry doors.

Builder Jerry J. Avison is one of the three copartners of the Lone Pine Apartments Company. His 68-unit Knightsbridge Condominium Apartments spread out over 16 lush acres in West Bloomfield Township. And to add to the luxury look of each interior, Jerry decided to use Nord carved entry doors inside.

Reasons: Price, Quality, Craftsmanship.

Explains Jerry, "Because the doors are lo-cated on the library, just off the living room, a quality, distinguished-looking door was needed. It had to be decorative and give a massive impression, as well as provide a warm reception for company." Nord's Imperial filled the bill. And Jerry found its quality craftsmanship helped sell these \$59,900 condominiums.

The Nord Philosophy.

As an independent builder, Jerry's free to be an innovator. And the same holds true of Nord. The Nord family's philosophy combines

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Opens the door...turns on the light...closes the door...locks up tight!

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Project director: Central California corporation needs manager struction, financing, and marketing of single family and conapartment developments. Send resume and salary history to P.O. BOX 376, LODI, CALIFORNIA 95240.

Single family project manager: wanted immediately for high quality community building program. Must be strong in single family construction. Will manage tendents-no traveling. Career position with great opportunity for advancement. Send resume HOMES CORPORATION, 2551 IMPERIAL Sunset Point Road, Clearwater, Florida 33515. A division of U.S. Home Corporation.

Director of marketing: wanted immediately for rapidly growing community builder currently grossing 24 million in a wide

range of single and multifamily communities around Clearwater, Florida. Extensive experience in all phases of merchandising essential. No traveling or selling. This new staff person will develop and coordinate all merchandising activities including advertising, sales displays, and printed sales tools by the advertising agencies. This is a career opportunity with unlimited opportunity for growth and advancement. Mail complete resume to Executive Vice President, IMPERIAL HOMES CORPORATION, 2551 Sunset Point Road, Clearwater, Florida 33515-A div. of U.S. Home

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We weren't ready for you yet. For a quarter of a century, Zenith has been the leading supplier of metal bath products to the largest and finest retailers in America. Until we could offer the building industry that same top quality and service, we held back. But now we're ready: Impressive New Product Line Quality cabinets

that complement the elegance of any new home. We're showing you two, but we've got 48 others. Plus a brand new catalog to give you all the details. Unusual Delivery Policy 2 new plants and an extensive warehouse system with locations in many key cities to insure on-time delivery. Order it and forget it. It'll be there, probably early. Sharpest Prices Absolutely the best prices in America for quality medicine cabinets.

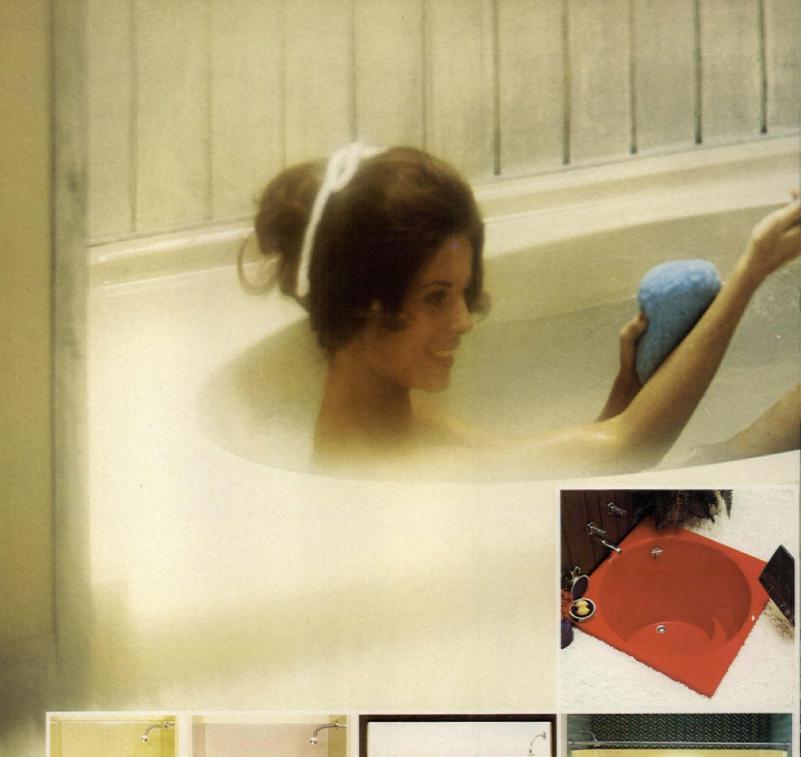
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New Building Division Set up specifically for the building industry. 65% more sales represent-

Jim Aruffo—Our new president, the leader of our dynamic, new, ''make things happen'' management team. Now that you know us, call or write for our new catalog. And see us at the NAHB Show, January

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METAL PRODI







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32" One-Piece Shower

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48" and 60" Deluxe One-Piece Shower 40" square Oriental Soaking Bath 60" Stretch-Out Tub and Surround

For complete freedom of choice in fiberglass: Designer Line Three new tubs now give you a broader line than ever. With a choice of nine tub and shower models in 13 sizes, including





72" Oval Pool with end outlet 72 x 54" Gothic Pool, for two above-floor installation. Covers every kind of bathing technique from 84" stretch-out to square oriental soaking tub. A complete choice of showers from remodeling units to a 60" wide luxury model with a built-in seat.

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84" Oval Pool with center outlet

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You make it your business to care — through every stage of engineering, manufacturing and distribution, up to and long after the builder turns over the keys.

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Not just the way they're built but the way they're packaged — for secure shipment through a nationwide system of distribution points, to your building site.

And what happens *after* your buyer or tenant moves in, has always mattered to us. That's why we installed the Cool Line — a toll-free, day-or-night customer information number. So she'll call us, instead of you.

That's why Whirlpool Warranty Central Service pays the costs to honor our warranty obligations. (It's our responsibility, not yours.) And that's why we maintain a network of authorized Tech-Care Service centers in all 50 states — to make sure quality service is always available.

All things considered, there are *lots* of good reasons besides consumer acceptance of our brand name to plan Whirlpool appliances into your next project. So give your Whirlpool Distributor a call. You'll be doing business with someone who knows the builder business, who speaks your language, who does a lot more than write orders.



LETTERS

Modular housing

H&H: Compliments on a superb October issue telling both sides of the modular housing story—its failures and its successes. It was a fine example of objective reporting, especially when contrasted with recent lopsided reports that have appeared in the Wall Street Journal, Barrons, etc.

> RICHARD L. BULLOCK, executive vice president National Association of Building Manufacturers

H&H: Your analysis, the "Two Faces of Modular Housing", [Oct.] contains many incisive observations that were long overdue. It also makes a few statements that do not tally with the facts in evidence. Having had a modest role in the early stages of Operation Breakthrough (in Northeastern Ohio), I consider it a matter of public interest to set the record straight.

It is correct, as you state, that HUD promised to stimulate production at the rate of about \$20,000,000. The fallacy lies in the promise, not the fulfillment. Operation Breakthrough clearly laid out three phases of action: 1) preparation of prototype sites, 2) production subsidies, and 3) market aggregation. There was nothing wrong with this phasing. But when it came to implementing the program, HUD committed some spectacular errors that in the end killed the entire program. For example:

• In demanding prototype development sites in selected locations, HUD expected local authorities to furnish these exhibit areas free and pay for all site improvements; no funding was provided for this and, as a result, the most important locations in the nation—including Ohio—said "thanks but no thanks". As to the ten selected locations, weird assignments were made by HUD: California manufacturers exhibited in Wilmington, Del., while an Ohio producer was assigned to sites in Georgia and California.

• As to production subsidies paid, one portion duplicated normal development costs a manufacturer would have paid anyway; another portion supported—quite heavily new component systems that went way beyond reasonable cost limits and lifted basic unit cost levels out of reach of most moderate-income buyers for whom the program was originally designed. Moreover, some of the more sensible component systems were already, at that time, in various stages of experimentation.

• The highly publicized market aggregation never got off the ground,

and no funding was anticipated for it at any time. Thus, the most important phase in the development and promotion of a new product designed for mass production and facing reluctant reception was left dangling in mid-air—which clearly accounts for your emphasis on the comparison between production and installation.

Quite obviously—as I vainly pointed out at that time—the whole concept was poorly conceived and badly misdirected. Wall Street apparently did not recognize these fallacies and went hook, line and sinker for HUD's glittering promises, ignoring the habitual losses on starterruns and expecting huge, early profits out of pamphlets and news releases rather than proven marketing processes.

It is sad, indeed, to visualize how narrowly HUD missed the boat. Instead of gunning for the prototypesite concept, it could have utilized readily available scattered sites in its over 2,000 urban renewal projects most of them with all site improvements in place. A one-page directive from Secretary Romney could have made sites available in hundreds of communities, probably at a writedown. Furthermore, if HUD would, at least, have developed a plan for local public entities and regional organizations to institute some form of land banking for modular housing, potential demand would have been created before production started.

It would be frivolous to say "Better luck next time". After and beyond the modular concept, there may not be a next time—except dehydration, maybe???

JOHN H. HAAS, housing consultant Cleveland, Ohio

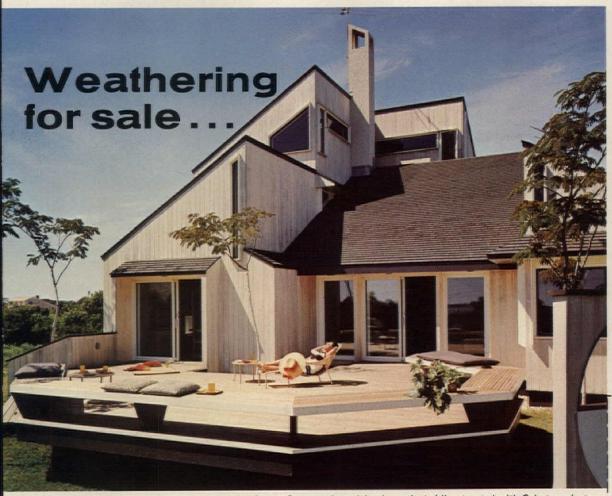
Impact zoning

H&H: I found your August article on impact zoning to be one of the most informative articles in quite some time, and you can be assured that land-use planning will be a key factor in land development as soon as the federal land-use agency is organized.

Must reading for all who desire to prepare themselves for impact zoning is an excellent, in-depth book entitled *Design with Nature*, by Ian L. McHarg, The Natural History Press, 1969, both in hard- and softbound. This volume deals mainly with the natural determinants of impact zoning which is the single most important factor in this zoning philosophy.

> T. A. JACOBI, landscape architect The Architects Collaborative Cambridge, Mass.

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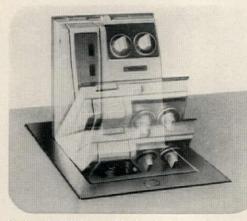
Because wood and stains are made for each other ... stains bring out the best in wood, blend naturally, beautifully into the setting. For the home shown here, the architects specified Cabot's Bleaching Oil to attain the weathered "driftwood" look ... an effect heretofore found only in seacoast areas af-

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Professional Two-Way Mixing Action Bowl and beater are powered by separate drives. Bowl rotates one way, beater the other way for smoother, more complete beating and mixing.

Beater Clutch and Arm Release Automatic Timer Button stops beater while bowl continues to rotate. Also releases arm to adjust to one of three positions.

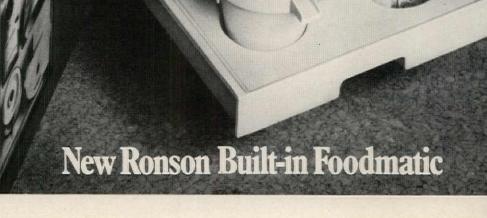
Sets the Foodmatic for automatic use. Also can be set for manual use.

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New Ronson Built-in Foodmatic

...the one appliance that does the work of dozens, does it better and in less space. It mixes, blends, slices, shreds, grinds meat, grates, sharpens knives, grinds coffee, juices oranges, crushes ice... it even cooks!

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Salad Slicer-Shredder Comes with three types of discs.



Meat Grinder Three grinding discs store in handy compartment.



Wide-Base Blender Takes whole fruits and vegetables. Even crushes ice.



Two Custom-Molded Trays Contoured to hold all attachments.

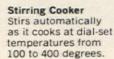


Ice Crusher Dial settings for ice from chunks to shavings.



Coffee Mill Grinds beans for drip, percolator or vacuum coffee makers.







Mount Organizer Holds beaters, turntable, blender key on cabinet door.



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Portable On-Counter Model Uses same attachments and has same operating features as Built-in Foodmatic. Storage trays can be mounted in kitchen cabinet.

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first Tupressions-

On Mediterranean styled homes or those with a Colonial influence, new sectional handle sets by Weiser enhance the entrance with their rugged beauty. Stately sentinels of security, they'll be noticed and admired each time friends come to call. Whether used on a single carved door or in pairs on double door installations, Weiser sectional handle sets in El Cid or Heritage styling leave an impression of rugged security and matchless quality.

For a fresh approach in your hardware appointments — for entranceways that leave a lasting impression, specify sectional handle sets by Weiser.

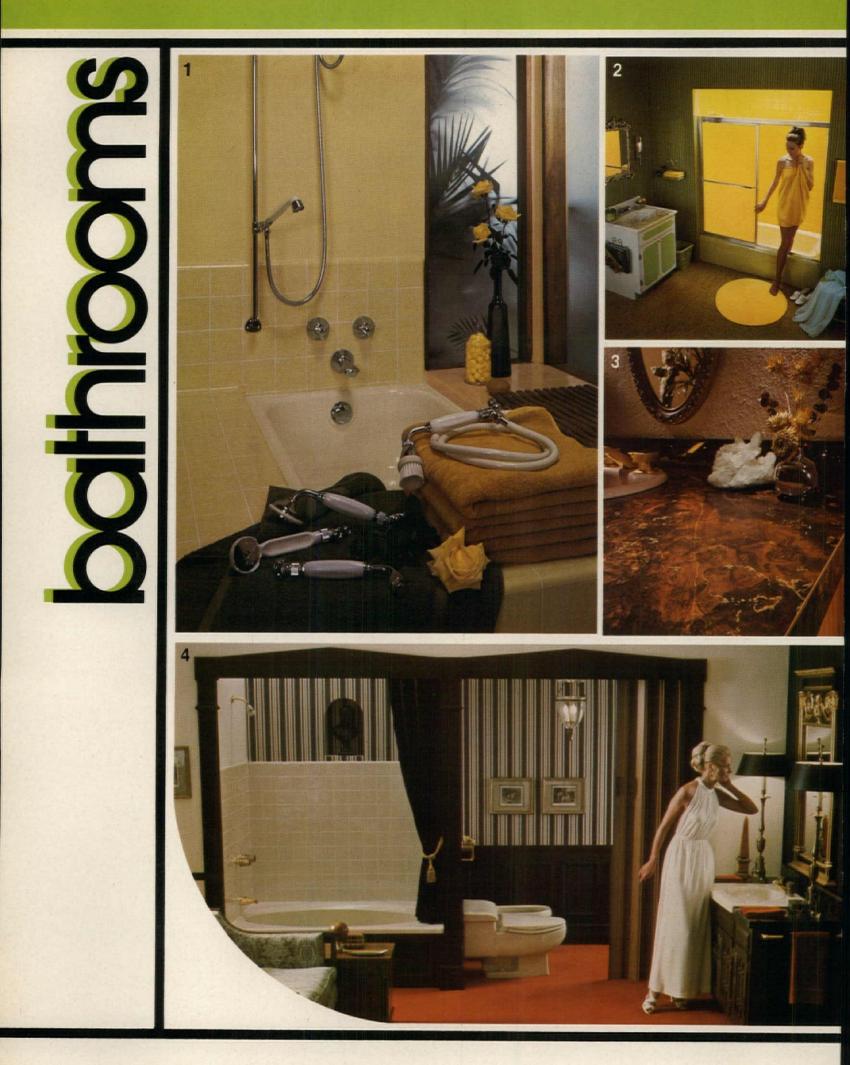
WEISER COMPANY SOUTH GATE, CALIFORNIA

ANOTHER NORRIS INDUSTRIES BUILDING PRODUCT CIRCLE 86 ON READER SERVICE CARD

products 1973

It's show time again—time for HOUSE & HOME's annual product preview to present the wide range of building and decorative products developed for today's housing. They run the gamut from bathroom accessories to structural materials, from kitchen cabinets to heavy equipment. And most will be on display in Houston as builders and manufacturers gather at the NAHB show. Also included in the issue are many interior accent items-not being featured at the Astrohallthat can be turned into marketing plus-factors for model homes and apartments. Many products shown are brand new; others are up-dated, revised, revamped versions of industry favorites. This year a number of manufacturers have stopped trying to revolutionize the housing world and have concentrated their efforts on improving existing products. Strong demands by builders and consumers alike have spearheaded this approach. Zeroing in on the ecological emphasis of the day, manufacturers have focused on environmental and safety features. The trend is toward low-maintenance, easeof-installation and durability. Warm earthtones, crisp outdoor colors and rough textures reflect a growing interest in nature. Both interior and exterior products are being designed with this in mind. In all, 181 products are presented for inspection. An in-depth look follows on the next 18 pages and picks up again on page 128. For easy reference categories are indexed at right.

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1. Personal shower with interchangeable hand spray attachments is a versatile bathroom fixture. Shown are a bidet attachment with a chrome finished aerator head, two standard sprays and a brush unit. Compact attachments are easy to store. Alsons, Somerset, Mich. Circle 200 on reader service card.

2. Rigid tub enclosure features frost, amber or avocado styrene panels in a cracked-ice pattern and an anodized aluminum frame. Doors with easy-grip handles slide easily in lubricated vinyl channels. A special T-lock design prevents accidental dislodgemdnt of doors. Kinkead, U.S. Gypsum, Chicago. Circle 201 on reader service card.

3. Laminated plastic pattern, "Fire Agate" is a simulated sleek brown marble highlighted with orange undertones. It is designed specifically for vanity tops to coordinate with the popular browns, blacks and oranges of contemporary linens. Formica, Cincinnati. Circle 202 on reader service card.

4. Elegant "Ultra" fixtures in creamy bone are featured in a traditional custom bathroom. The 30"x20" "Ultra-lavatory" is equipped with an "Ultra-font" fitting that provides an up, then down, arc flow of water. A special "Luminar-flow" design prevents water from splashing and spraying. The "Luxor" toilet includes "Vent-Away", a device that removes odors through the wastepipes as the unit is flushed. A matching "Margate" bidet is also shown. The 42"-wide "Ultra-bath" features a large, luxurious bathing oval and "Heritage" fittings. American Standard, New Brunswick, N.J. Circle 203 on reader service card

5. Wall-mounted toilet has siphon-jet flushing action for fast, quiet efficiency. The "Florentine" features a cycolac ABS water reservoir with a tapered, low silhouette design. The vitreous china bowl is finished in acid-resistant ceramic glaze. Borg-Warner, Mansfield, Ohio. *Circle 204 on reader service card*.

6. Medicine cabinets and coordinated incandescent lights make a complete decorative ensemble for the lavatory area. Light fixtures are available in combinations of pewter or brass with walnut finish and a wide variety of globes and shades. Wall-mounted side-lights and single and double swags are offered. Cabinet is framed in walnut with gold accents. Surface-mounted unit has a swing door and a plate or float glass mirror. F. H. Lawson, Cincinnati. *Circle 205 on reader service card*.

7. Vanity tops with integral bowls are made of silicone and polyester and closely simulate the look of marble. Center, double and offset oval bowl tops are offered in six marbleized colors. The tough, hard surface is impervious to sprays, medicines and other chemicals. Bradley, Menomee Falls, Wis. Circle 206 on reader service card.

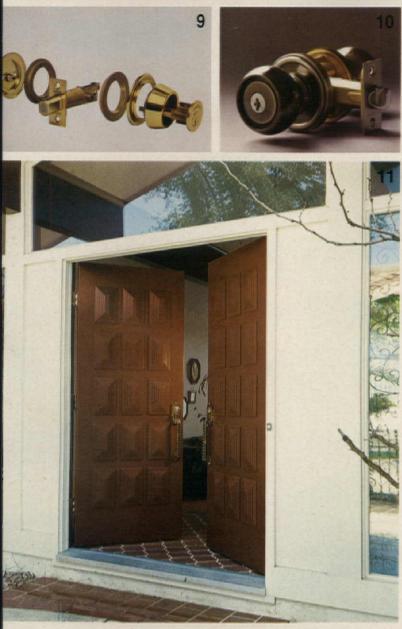
8. Side-lighted cabinet door is framed in a walnut finish with a gold-edged, linen-textured inner frame. Pre-wired lights are easily attached to the cabinet body. Plate or float glass mirror is electroplated, copperbacked and guaranteed for five years against silver spoilage. Miami-Carey, Monroe, Ohio. Circle 207 on reader service card.

9. Molded fiber glass "Uni-shower" is 48" wide. The compact one-piece unit is treated with an exclusive fire-retardant process. The curved decorative shower has an integral seat, molded-in soap and utility shelf and a built-in towel-rack safety-handle. Universal-Rundel, New Castle, Pa. Circle 208 on reader service card.

(For more on bathrooms turn to page 128.)







1. Foam-core steel door has a

thermal-break edge that eliminates temperature convection between interior and exterior steel skins. Prehung doors with decorative moldings are available with or without door lights. Ever-Strait, Pease, Fairfield, Ohio. Circle 209 on reader service card.

2. & 3. Stile and rail doors, made of clear vertical-grain Douglas fir, are available in a full range of carved and panel designs. "Navajo," (2), a 1¾"-thick door, blends well with Mediterranean and contemporary Western styling. "Carthage," (3), is an elegant deep-carved, eight-panel door inspired by ancient craftsmanship. Nord, Everett, Wash. *Circle 210 on reader service card.*

4. Door veneers, carved of high-density urethane, feature original designs such as "Sunburst" shown. Weather-resistant units feature sandwich construction with a solid wood door as the core. Simulating fine hardwoods, doors are available in four hand-rubbed shades. Entol, Miami, Fla. Circle 211 on reader service card.

5. Wood patio door has a thermal barrier sill constructed of aluminum and wood and a dense woven-pile weatherstrip with a center plastic fin that seals out drafts. Doors feature a white factory-applied finish on all exterior surfaces and a natural wood tone inside. Tempered insulating glass is set in a welded vinyl gasket. Cardaco, Scovill, Dubuque, Iowa. Circle 212 on reader service card.

6. Sliding patio door has a rigid built-in thermal break that helps eliminate condensation. The patented "Climate Guard" manufacturing process provides a solid plastic insulating barrier integrated between the exterior and interior frame sections. Door features a special security lock with a supplemental slide bolt that locks unit at a 5" open position. Reynolds Metal, Richmond, Va. Circle 213 on reader service card.

7. Decorative lockset offers the security of a deadbolt and the ornamental design of a grip-handle unit. The lock is available in three styles: the "Normandy" and "Seville" shown and the "Bedford". Inside knob can be selected from several styles. Schlage Lock, San Francisco. Circle 214 on reader service card.

8. Vinyl-finished prehung door is

available in four woodgrain patterns. A vinyl-wrapped split jamb adjusts to walls from 4½" to 5%" thick. Three hinges provide extra stability. Doors, available with hollow or solid cores, have sealed color-matched edges for a finished look. Georgia-Pacific, Portland, Ore. *Circle 215 on reader service card.*

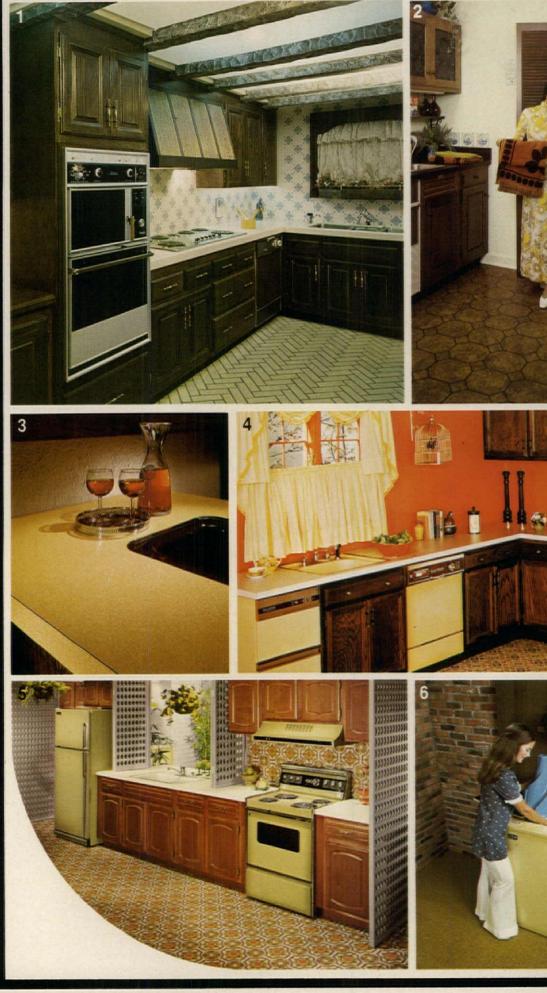
9. Cylinder deadlock offers triple security. Unit features a 1" extra-long solid brass deadbolt with a %" steel rod insert, two solid steel reinforcing rings and an all-steel cylinder guard. The easy-to-install device has a massic heavy-gauge strike with four staggered screws for maximum holding power. Available in antique and etched finishes. Kwikset, Anaheim, Calif. Circle 216 on reader service card.

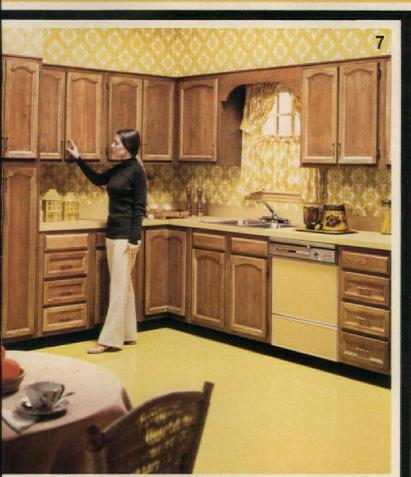
10. Decorative keylock has a five-pin tumbler cylinder deadlatch and a locking pushbutton. Preset screws provide fast, easy installation. The "Galaxy", available in a choice of seven finishes including the antique silver shown, features a snap-on inside rosette and a panic-proof inside knob. Weslock, Los Angeles. Circle 217 on reader service card.

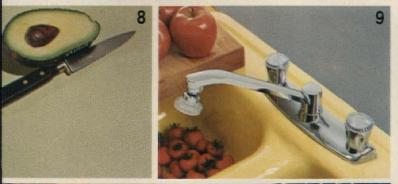
11. Designer door with Mayan influence has rows of tiered dimensional panels. Shown in a double door entranceway, unit is styled to blend with Southwestern and Mediterranean decors. Door is supplied prehung and primed to be painted as desired. Weatherproof steel-constructed door has a redesigned astragal that provides trouble-free opening and closing. Therma-Thru, Toledo, Ohio. Circle 218 on reader service card.

(For more on doors turn to page 152.)











1. Designer range hood provides a custom look for a country kitchen. Removable panels of bark-like bronze, hammered copper or iron, black glass or prime-coated steel offer decorative flexibility. Available in standard lengths of 36", 42" and 48", the hood comes in wall-mount and island models. Unit is equipped with a built-in light. Trade Wind, Thermador, Los Angeles. Circle 219 on reader service card.

2. Compact laundry units can be easily converted from portable to permanent appliances. Units are equipped with casters and operate on standard 115V current. Dryer has a detachable window-venting system with five feet of flexible hosing. The washer features a permanent-press cycle, two speed washing and a magic-mix lint filter. Whirlpool, Benton Harbor, Mich. *Circle 220 on reader service card*.

3. Plastic laminate for counter-top use is inspired by ancient wedge-shaped Sumarian writings. "Harvest Gold Scroll", designed to blend with today's appliances, adds a tailored, dimensional effect to kitchen decor. Formica, Cincinnati. Circle 221 on reader service card.

4. Double decker range has an automatic self-cleaning lower oven. Removable interior panels in the eye-level oven can be placed in the lower unit during self-clean cycle. Range features a roast guide that can calculate the cooking time of any roast automatically when an indicator dial is set to the type and weight of meat and the degree of doneness desired. Front-mounted, tilted control panel is easy to reach and read. Caloric, Topton, Pa. Circle 222 on reader service card.

5. Deluxe range hood is a

nonventing, recirculating model with an easy-to-replace charcoal filter. Engineered for use with any self-contained cooktop or range, the hood features square front design to cover more area over the cooking surface. Unit is equipped with two high-speed blowers, a removable grease filter, pushbutton controls and an enclosed incandescent light. Hotpoint, Louisville, Ky. Circle 223 on reader service card.

6. Home-laundry equipment is updated for convenience and style. The washer is equipped with a special "Hand-wash Agitator" that slips over the regular agitator during delicate cycles. An "Accessory drying shelf" fits onto the inside of the dryer door and projects into the drum providing no-tumble drying. Both units feature one-piece front panels and large lettering in the control area. The backguard is of charcoal-brown brushed aluminum and chrome. Westinghouse, Pittsburgh, Pa. Circle 224 on reader service card.

7. Pecan wood cabinets are styled with grooved panels and a graceful arch design. "Shenandoah" is accented with brass-finished hardware. Wall-mounted cabinets have adjustable shelves. Base cabinets have hardwood frames and self-closing drawers. All door hinges are spring-loaded and self-closing. IXL Furniture, Elizabeth, N.C. *Circle 225 on reader service card.*

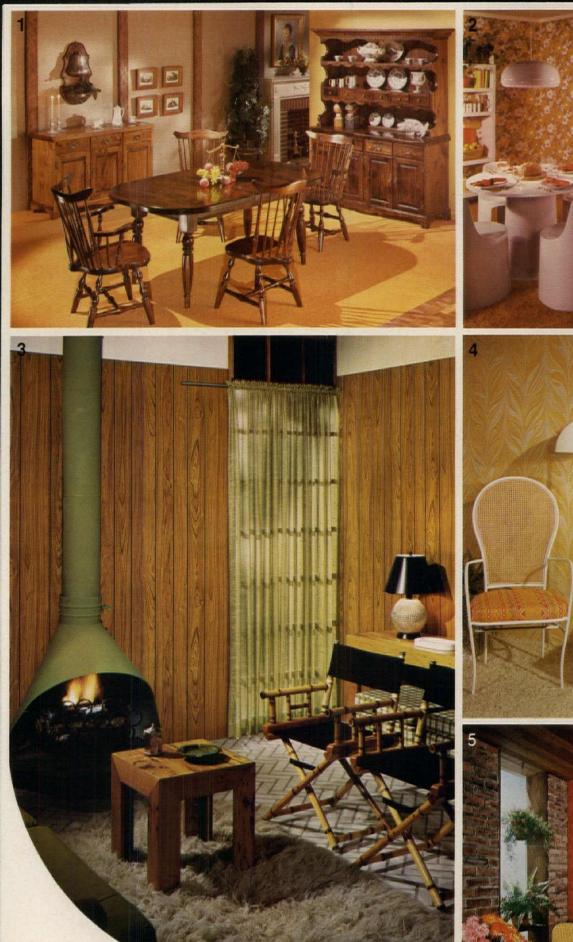
8. Plastic laminate pattern, "Sliced Avocado", is a solid bright yellow. Suitable for countertop and bar surfaces, the material has a heavily-textured grain finish. Ralph Wilson Plastics, Temple, Tex. *Circle 226 on reader service card*.

9. High-spout faucet has long slim lines and an extra-flat-to-the-sink escutcheon. A special "Swivel-spray-flo" aerator allows the water stream to reach all corners of the sink and aerates or sprays at the turn of the skirt. Unit is available in two handle-sets. Harcraft, Torrance, Calif. Circle 227 on reader service card.

10. Pecan-finished cabinets designed for use in any style kitchen, feature solid hardwood frames. The "Edgemont Series" is available in modular sizes 12" to 48" wide. Wall cabinets range from 12" to 30" high. Base cabinets are a uniform 341/2' from the floor. Self-closing doors and one-piece molded plastic drawers are standard. Cabinets with low-maintenance interior and exterior finishes are available with many options such as two-way access and lazy-Susan corner units. Long-Bell, Portland, Ore. Circle 228 on reader service card.

(For more on kitchens turn to page 132.)







1. Decorative polyure thane beams used in a batten-like application, add a rustic look to an early American dining area. The lightweight reproductions of hand-hewn wood beams are easy to install with adhesive or grid clips. Available in dark walnut, medium mahogany or light oak finish, the beams have bold grains and knots to increase the authentic look. Ure thane Fabricators, Camden, N.J. *Circle 229 on reader service card.*

2. Bold-patterned wallcoverings are

scrubbable, strippable and scuff-resistant vinyl. The 24"-wide, pre-trimmed material resists fading, spotting and staining. A contemporary wet-look floral print, "Arcadia", shown in a dining room, is coordinated with "Cordage", a modern stripe, used on walls and cabinets in the kitchen. Imperial Wallcoverings, Collins & Aikman, Cleveland, Ohio. Circle 230 on reader service card.

3. Pre-finished hardboard paneling, "Oriental Print" adds warmth to a casual living area. The "Wal-lite" pattern is reproduced from photographs of real grained-wood. Panels are protected by an extra-thick plastic coating that resists peeling, chipping, scratching, cracking, denting or discoloring. Panels can be applied to solid backings, studs or furring. Matching moldings are available. U.S. Gypsum, Chicago. Circle 231 on reader service card.

4. Decorative paneling, "Antiqua", is an abstract, contemporary design. The ¹/₈"-thick, 4'x8' hardboard panels have a plastic satin-finish that resists heat and moisture. Pattern comes in gold, coral, blue and white. Marlite, Dover, Ohio. *Circle 232 on reader service card*.

5. Classical pattern paneling, "Ancient Accent" is offered in bright, lively, contemporary colors such as the warm Corsican red shown. Paneling is vinyl, thermal-fused onto a substrate of three-ply plywood. Color-keyed for perfect match, panels are washable and stain-resistant. Hearin Products, Portland, Ore. *Circle 238 on reader service card*.

6. Glazed ceramic tiles for wall application capture the glow and spirit of the Caribbean. The line has a bright crackle glaze and is available in eight vivid colors: Aruba red, sunset orange, ebony black, Panama yellow, Jamaica green, Montego blue, surf white and sunrise orange. The 3"x67%" tiles have color-coordinated grouts. American Olean, Lansdale, Pa. *Circle 234 on reader service card.*

7. Geometric wallcovering of small circles in gradations of vivid colors can add height or width to any wall. The gravure-printed design, "Merion", is part of the "London Style 3" collection of wallcoverings. The pattern is offered in two different colorways. The paper-backed vinyl is washable, scrubbable, resistant to dirt, grease and stains and will not shrink, stretch or tear. ICI America, Wilmington, Del. Circle 235 on reader service card.

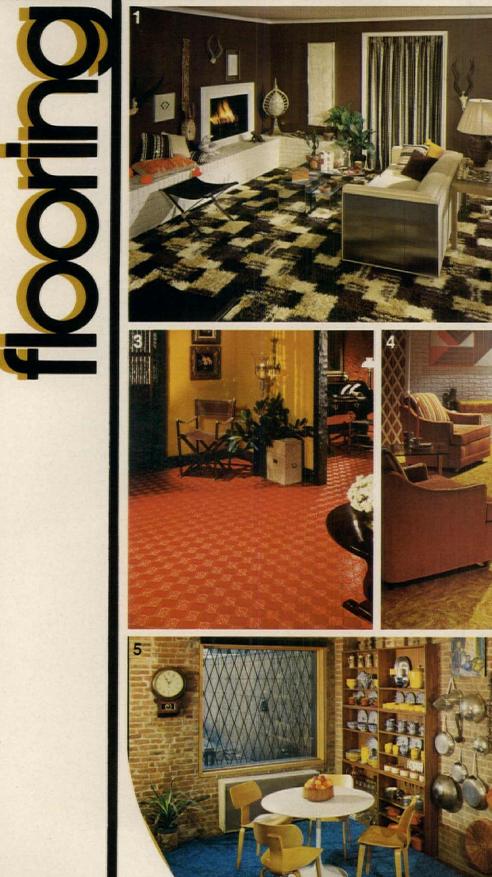
8. Oriental-inspired pattern,

"Imari", is available as a wallcovering, a fabric and a rug. The design is Adrianna Scalamandre Bitter's interpretation of two Imari presentation dishes brought from Japan. The fabric is a lightly glazed chintz. The hand-tufted, octagonal, all-wool rug can be custom ordered in any colorations. Scalamandre, Long Island City, N.Y. Circle 236 on reader service card.

9. Vinyl wallcovering, inspired by recent interest in China, "Dynasty Dragon" is alive with color. Designed by Brenda Falco as part of the "Collection Five" group, the bold, flowing pattern is available in five colorways including the Chinese red, steel grey and white mylar shown. Classic Wallcoverings Connoisseur, New York City. Circle 379 on reader service card.

10. Supergraphics in wood are achieved by using variations of panel color and installation techniques. Three shades of "Early Spring" paneling and lipstick-red paint electrify the family room shown. Horizontally installed light fawn and dark bruin are in contrast to the vertically applied otter, a medium-toned panel. All of the pre-finished plywood panels have surfaces of pecan hardwood. U.S. Plywood, Champion International, New York City. *Circle 380 on reader service card*.

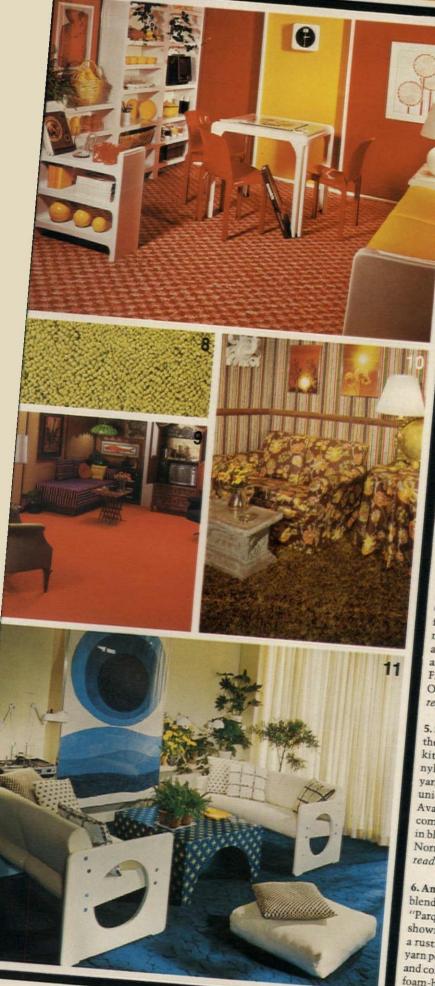
(For more on interiors turn to page 196.)











1. Earth-toned shag in a

contemporary patchwork pattern dominates a den/guestroom. The striking multicolor, "Scandrya", tufted of Allied Chemical nylon, is part of the "Showcase Collection" Available in three different color combinations including natural, shown, the printed, 12' wide carpet has a double jute backing. Arcadia Mills, Chamblee, Ga. Circle 237 on reader service card.

2. Three-color cut and loop shag in earth tones of brown, black and white is in sharp contrast to the clear, metallic look of the chrome and glass dining furniture pictured. "Good Fortune" is tufted of continuous filament nylon. The deeply embossed pile floorcovering is offered in 13 color combinations. Trend Mills, Champion International, New York City. Circle 238 on reader service card.

3. Mediterranean-inspired vinyl, "Bella Vista", is a classic tile-pattern reminiscent of floors in old Spanish villas. The "Shinyl Vinyl" no-wax flooring has a "White Shield" asbestos backing that permits installation on grade level. The "Cushionflor Supreme" pattern, available in 9' and 12' widths, is offered in six colors including the cardinal red shown. Congoleum, Kearny, N.J. Circle 239 on reader service card.

4. An abstract pattern of swirling colors highlights "Autumn Winds", a hard-twist, heat-set nylon shag. Carpet offers excellent wear, and the freeform flowing design helps to mask traffic and soil paths. Fabric is available in 12' widths and features an exclusive "Polyloc" backing. Five color combinations are offered. Ozite, Libertyville, Ill. Circle 240 on reader service card.

5. Short-shag, "Sun King", brightens the eat-in corner of a country kitchen. Tufted of 100% Du Pont nylon, the carpet has different size yarns intermingled throughout for a unique textured appearance. Available in 13 two- and three-color combinations, the carpet is shown in blue, star sapphire. Lees Carpet, Norristown, Pa. Circle 241 on reader service card.

6. Antistatic carpet is a 45/55 blend of Herculon[®] and nylon.

"Parqweave", a tight-pile fabric shown in shades of green, enlivens a rustic kitchen. Three-ply Olefin yarn permits great tone variation and color versatility. The foam-backed textured floorcovering

is available in ten different colo combinations. Executive Carpe Mills, Dalton, Ga. Circle 242 or reader service card.

7. Geometric print in brilliant re and white accents a contempora. game corner. "Our choice", tufte Enkaloft continuous filament nylon, has a Wilton-type, flat-we appearance. The polychromatic dyed carpet is available in seven color combinations in 12' widths. Both jute and high density foam backings are offered. Howard Carpets, New York City. Circle 24 on reader service card.

8. Rough plush "Spring Garden" is offered in 19 nature-inspired colors including the greentone shown. The 3/4" cut-pile carpet is tufted of 100% DuPont heat-set nylon. Magee Carpets, New York City. Circle 244 on reader service card.

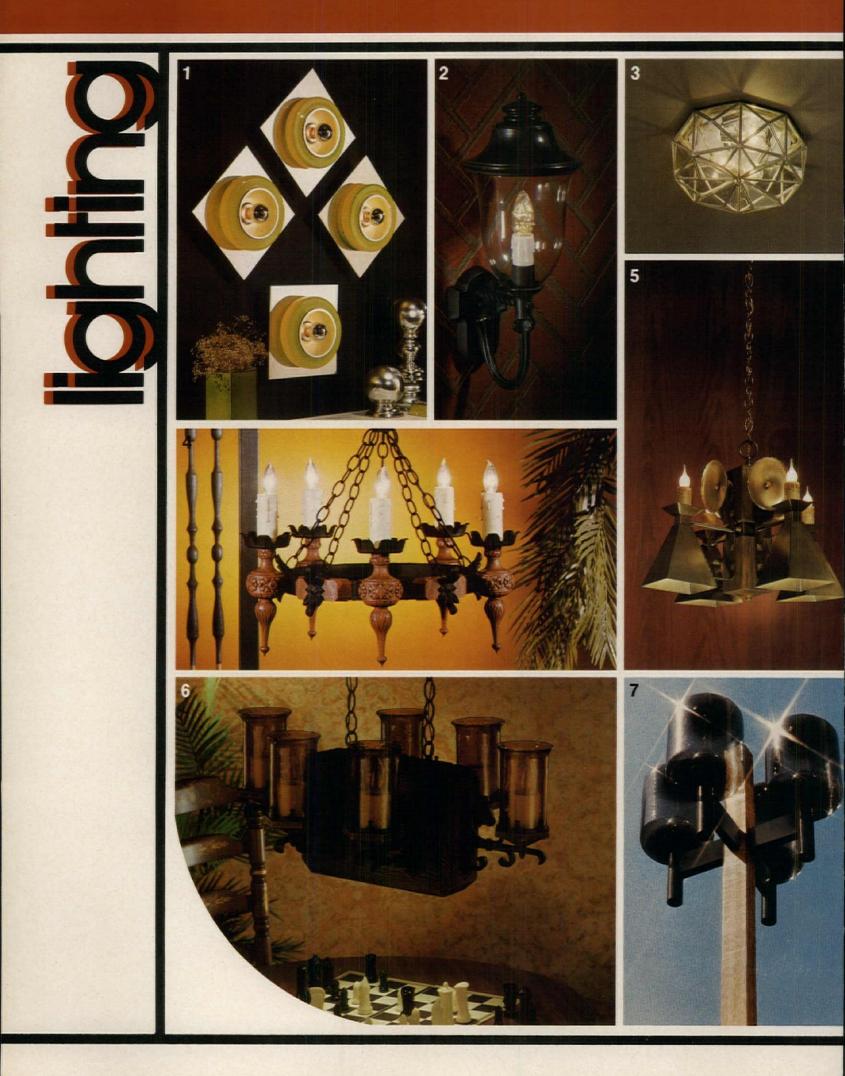
9. Pure wool, textured-plush

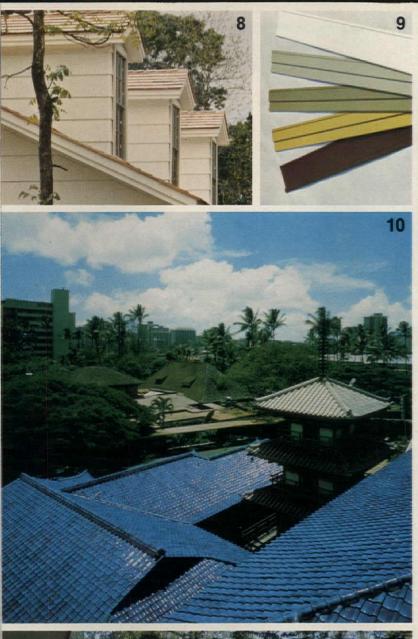
"Franklin Square" is a luxurious, moderately priced, pile carpet. Retailing for about \$10.95 a sq. yd., the floorcovering is available in 20 rich shades including the "Cherry Red" shown. Carpet comes in 12" and 15' widths with a double jute backing. Philadelphia Carpet, Cartersville, Ga. Circle 245 on reader service card.

10. Six-color shag in deep autumn shades, "Kaleidoscope", is part of the "Debut 73" collection. The textured-nylon floor covering is available in 15 colorations. Bigelow-Sanford, New York City. Circle 246 on reader service card.

11. Carved-pattern cut-pile carpet in an electric blue enlivens a contemporary living room. "South Hampton", designed to withstand the wear and tear of every day use, is tufted of Eastman Kodel polyester. Carpet is available in 16 colors in 12' and 15' widths. Barwick Mills, Chamblee, Ga. Circle 381 on reader service card.

(For more on flooring turn to page 172.)









1. Wall or ceiling lamp with contemporary styling has a chromed-metal base and colored light diffuser. A grouping of four individual lamps is shown. Three are angle-mounted, and one is set straight. Diffuser is available in red, green or white. Fixtures have 100 watt silver-capped bulbs. Thomas Industries, Louisville, Ky. Circle 247 on reader service card.

2. Traditional lantern is constructed of solid cast

aluminum and glass. Part of the "Sheraton Series", the wall-mounted fixture is 22½" long, 9" wide and extends 10½" from the wall. A tough antique-like finish makes the lantern suitable for both indoor and outdoor use. American Lantern, Newport, Ark. Circle 248 on reader service card.

3. Ceiling light fixture creates glittering patterns as it reflects off surrounding surfaces. Light seems to jump out of the clear glass panels and crisscrossing metal work in the handcrafted fixture. Available in five sizes, the multi-faceted fixture permits continuity of lighting design throughout a space. Lightolier, Jersey City, N.J. Circle 249 on reader service card.

4. Mediterranean-styled lighting

is available in chandelier or wall-sconce versions. A five-light chandelier is 21" in diameter and an eight-light unit measures 27". Wall-sconce can be ordered in one- or three-candle configurations. Wilshire, El Segundo, Calif. Circle 250 on reader service card.

5. Rustic looking chandelier combines primitive materials and modern styling. Four candelabra lights are set atop squared cones of antique brass. Cones also contain concealed downlights for extra table illumination. A three-way switch on the wood center column controls both downlights and candlelights. Progress, Philadelphia, Pa. Circle 251 on reader service card.

6. Massive Mediterranean light,

part of the "Castille Series", has a fine weathered-oak finish. Cast-metal scroll arms support amber glass cylinders that contain wax-drip candelabra lights. A downlight, concealed in the center of the fixture, is controlled by a separate three-way switch. Nutone, Scovill, Cincinnati. *Circle 252 on reader service card*.

7. Outdoor luminare series,

"Group Sculptura", features acrylic spheres, cylinders and cubes. Fixtures come in clear bronze, opal white and clear gray finishes. Lights are available up to 100 watt mercury vapor and 150 watt incandescent. Aluminum and wood pole assemblies are in a choice of finishes that blend with the natural surroundings. Spaulding, Cincinnati. Circle 253 on reader service card.

8. Pre-primed hardboard siding

is available in plain or channel-grooved panels in 4" widths and 8' or 9' lengths. The factory priming eliminates the need for on-site processing and also gives protection during shipping and construction. Temple Industries, Diboll, Tex. *Circle 254 on reader service card.*

9. Wood-like aluminum siding, "Rustic-cut", looks like rough-sawn lumber. Siding will not crack, chip, peel or blister under normal wear and usage. Material is available in fresh earthy colors that blend with the landscape. A 4"-wide lap-siding for horizontal application or a board- and-batten panel style for vertical use are offered. Both types have interlocking edges and nail holes. Crown Aluminum, Pittsburgh, Pa. Circle 255 on reader service card.

10. Glazed roofing tiles imported from Japan are available in a traditional oriental style or a tapered-S tile. Five colors offered are blue, brown, dark green, orange and olive green. San Valle Tile Kilns, Los Angeles. *Circle* 256 on reader service card.

11. Structural siding panels have a uniform prime-coat of white latex paint. Ideal for tudor or board-and-batten style exteriors, the extra rigid, weatherproof insulation board panels are available in 4'x8', 10' or 12'. Panels are ½" thick. Homasote, West Trenton, N.J. Circle 257 on reader service card.

(For more on exteriors turn to page 192.)









1. Freestanding wood-burning unit, "Imperial Carousel", has a spinning column of flame. Air-flow rate and direction are controlled by an adjustable door in the glass-enclosed base and baffles in the hood. Fireplace is available with hoods finished in ten different porcelain colors or matte black. Malm Fireplaces, Santa Rosa, Calif. Circle 258 on reader service card.

2. Gas-log fireplace functions as a heater as well as a decorative element. The wall-mounted unit has a 35,000 BTUH heating capacity. Hood is offered in jet black, burnt orange and white. Temco, Nashville, Tenn. Circle 259 on reader service card.

3. "Chalet", a fireplace with a suspended conical hood, comes in 41" to 72" diameters. Heavy-gauge steel unit includes a fire-screen. Ember Box, Oklahoma City, Okla. *Circle 260 on reader service card*.

4. Modular facing system also includes hearth units measured to fit most prefabricated fireboxes. A hardwood mantel is optional. Unit is offered in antique brick, cast quarry stone and hand-hewn brick. Ready-Built, Baltimore, Md. *Circle 261 on reader service card.*

5. Built-in gas fireplace is

designed so that framing can be completed prior to unit installation. Firebox recesses into a wall cavity 30¼" wide with a minimum depth of 13". Self-trimming fireplace surround can be covered with any non-combustible material. Heatilator, Mt. Pleasant, Iowa. *Circle 262 on reader service card.*

6. Electric fireplaces of lightweight fiber glass simulate colonial brick or gray fieldstone. The model shown has a lift-up mantel that converts the fireplace into a home bar. An ice-bucket, deep bottle storage, two sliding Formica shelves and a work surface are featured. Cavrok, Vernon, Conn. Circle 263 on reader service card.

7. Wallmounted electric unit has a decorative hood available in charcoal, avocado or off-white. An electric heater is concealed above the log-set and operates independently of it. Superior, Fullerton, Calif. Circle 264 on reader service card.

8. Modular seating group,

"Tufto", consists of four units, a square seat, an armless back-center, a high arm and a low arm. Components can be arranged in countless ways to suit space and taste. Seat, with a urethane foam filling, has a steel frame encased in Dacron. Ebonized wood bases are made in lengths to accommodate one, two, three or four units. A choice of fabric, vinyl or leather upholstery is available. Harvey Probber, Fall River, Mass. Circle 265 on reader service card.

9. Circular table with a smoked glass top is 43½" in diameter. Part of the "Elan-Group Eleven", the table has a base that consists of sculptured polished aluminum legs and brushed aluminum rails. Table has walnut or oak top. Jens Risom, New York City. Circle 266 on reader service card.

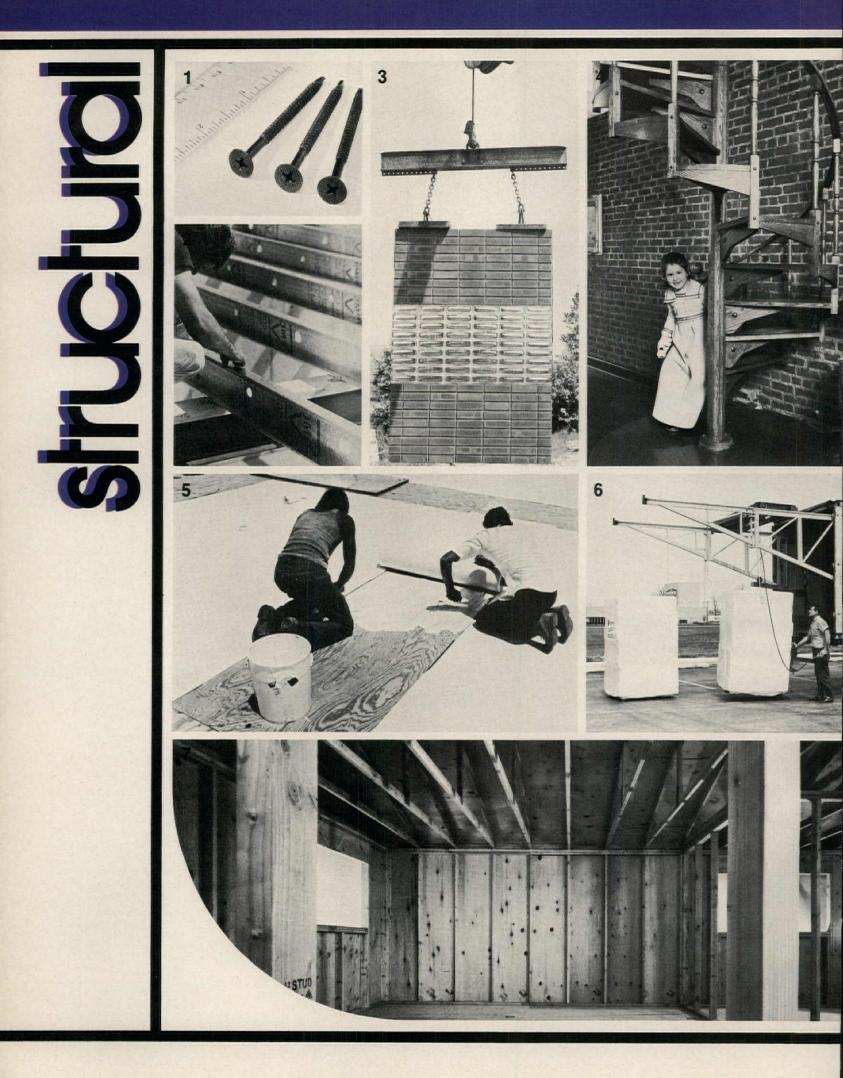
10. "Joe" seat, fashioned after the famous baseball glove, is a two-seater sofa designed by the Italian team of DeBas, D'urbino and Lomazzi. The foam-filled piece is upholstered in tan glove-leather or blue-jean denim. Stendig, New York City. Circle 267 on reader service card.

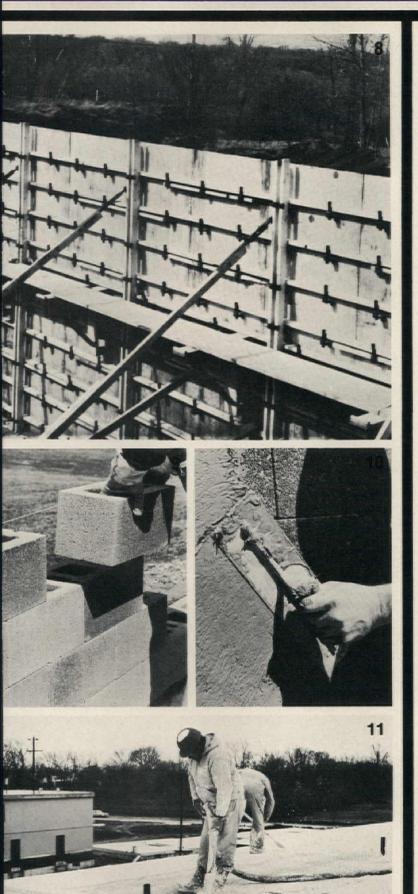
11. Striking contemporary chair of molded fiber glass is designed by Eero Aarnio. Part of the "American Contemporary Collection", the "Bird Chair", available in eight bright colors, is 46" wide, 42" deep and 33" tall. Thonet, New York City. Circle 268 on reader service card.

12. Lounge seating group,

"Bonanza", is designed by Afra and Tobia Scarba for C & B Italia. Units have internal steel reinforcement, a high-density black polyurethane outer skin and polyure thane foam cushioning. Shell is covered in Dacron fiber-fill draped with upholstered material which is inserted into a plastic edge detail and tied into place. Furniture is available in one-, two- and three-seat units upholstered in a wide range of fabrics, vinvls or leathers. Atelier International, New York City. Circle 269 on reader service card.

(For more on fireplaces turn to page 200; for furniture, page 130.)





1. Self-drilling wallboard fasteners feature a patented drill twist point which allows them to easily penetrate 16-gauge metal studding. Available in 2¼ " to 3" lengths "Panel-Kwick II" screws are specifically designed for installing the many layers of drywall in fire-retardant wall systems. Deep cross-hatched head surfaces are designed to hold all types of spackling. USM, Shelton, Conn. *Circle 270 on reader service card*.

2. Steel floor joist system for oneand two-story buildings is designed for easy handling and quick installation. Floor-joist sections are nominal 2"x7¼" and may be ordered to precise thickness and length. The Joistee® system of one-piece construction minimizes waste. Prepunched joists are 14-, 16or 18-gauge special steel coated on both sides for corrosion resistance. Necessary accessories are included with the package. Teledyne Metal Forming, Elkhart, Ind. Circle 271 on reader service card.

3. Glass blocks and brick are combined in an architectural panel using mortar as the only bonding agent. Solid glass blocks are shown in an assembled panel available fron Royer Masonry Systems. "Vistabrik" glass blocks come in 5"x5", 8"x4" and 8"x8". Pittsburgh Corning, Pittsburgh, Pa. Circle 272 on reader service card.

4. Spiral stairs are hand-crafted of clear red oak or other hardwoods. Delivered ready-for-installation, the stairs can be ordered in any specified height in 4', $4\frac{1}{2}$ ' and 5' diameters. Stair-Pak Products, Union, N.J. Circle 273 on reader service card.

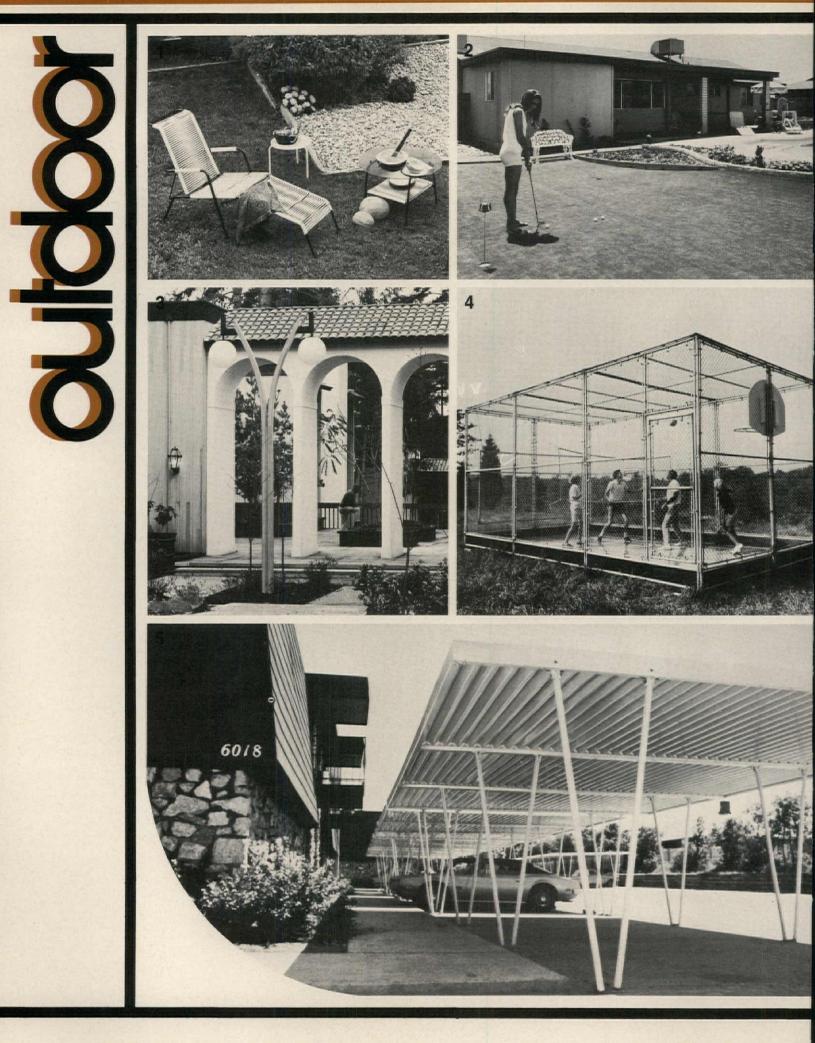
5. White roofing sheet is a high-performance, semi-elastomeric plastic, laminated to neoprene-bound asbestos felt. The cut-to-size, single-ply "Sim-Ply" roofing system chemically forms a watertight membrane. Celotex, Tampa, Fla. *Circle 274 on reader service card*.

6. Palletized packaging system for wood-fiber insulation permits on-site delivery regardless of weather and allows outdoor storage for six to eight months. The "600" pallets are unloaded automatically by the truck driver without assistance. Pallets are hermetically sealed to prevent excessive humidity or moisture absorption during storage. Thermtron Products, Fort Wayne, Ind. Circle 275 on reader service card. 7. Wood framing system uses plywood over lumber framing spaced on a 24" module. The system can be used for floors, walls and roofs in either single- or double-wall construction wherever codes accept 24" o.c. framing. Western Wood Products Assn., Portland, Ore. *Circle 276 on reader service card*.

8. Hardware system for building plywood concrete forms consists of three basic parts. Heart of the system is "Speed Bracket," a combination tie holder, waler bracket and break-back tool which allows the use of 2"x4". 3"x4" or 4"x4" walers with 3/4" or 5/8" plywood facing. A "Stiff-Back Bracket" permits setting of twin vertical walers and provides a method for attaching braces and scaffolding brackets. "Twist-Cone Tie" consists of plastic cones that are automatically removed or loosened when tie is broken back. Symons, Des Plaines, Ill. Circle 277 on reader service card.

9. Glass-fiber bonding material that eliminates the need for mortar in concrete-block construction. "BlocBond," available in 80-lb. bags, is a mixture of Portland cement, hydrated lime, a water-resistant agent and alkali-resistant glass fibers. Final two steps of a four-step application process are shown: (*left*) Block is dry-stacked; (*right*/A ¼s" coat of material is trowelled on interior and exterior wall surfaces. Owens/Corning, Toledo, Ohio. *Circle 278 on reader service card.*

10. Roof deck systems, familiar in non-residential construction, now can be used for wood-framed garden apartments. "Pyrofill" or "Thermofill" gypsum concrete slabs satisfy fire codes without above-deck firewall extensions and also allow drainage slopes to be formed. U.S. Gypsum, Chicago. *Circle 279 on reader service card*.





1. Casual furniture for outdoor living is comfortable and easy to maintain. "Aimes-Aire" series is constructed of resilient vinyl cord wrapped around enamel-finished tubular steel frames. Series, including seating pieces and glasstopped tables, is available in black frames with white cord, avocado frames and cords or white frames with yellow cords. Leisure Furniture Group, Cincinnati. *Circle 280 on reader service card*.

2. Synthetic turf, "Lawnscape", provides greenery where real grass can't or won't grow. The maintenance-free material, made of Chevron's second generation polypropylene fiber, "Polyloom II", can be used for decorative or hard-wear areas. "Lawnscape" is guaranteed for five years against fading or ultraviolet fiber degradation. Ozite, Libertyville, Ill. Circle 281 on reader service card.

3. Lighting standards for outdoor use provide attractive, efficient illumination for new home developments, multifamily complexes and recreation areas. Pressure-treated or curved-wood standards are available in heights from 12' to 40'. Graceful, uncomplicated forms, engineered for use with underground wiring, blend naturally into landscaped settings. Weyerhaeuser, Tacoma, Wash. Circle 282 on reader service card.

4. Compact enclosed sports court and specially designed equipment permit a wide variety of vigorous athletic activity in a minimum of space. Nine active games have been devised for the 12'x24'x10¹/₂" court. The weatherproof steel tube and link fence enclosure has an adjustable nylon rebound net. Sportatron, Old Lyme, Conn. Circle 283 on reader service card.

5. Multiple parking shelters, manufactured of aluminum, provide protection against the elements. The system consists of deep-section aluminum paneling combined with aluminum support beams that serve as fascias and concealed gutters. Panels interlock forming a water-tight roof. Shelters need little maintenance. Roof is supported by aluminum V-posts. Alcan, Warren, Ohio. Circle 284 on reader service card. 6. Modularized security system is designed to provide a variety of protective services to apartment dwellers. Individual modules provide fire and burglar alarms and intercom/door opening capabilities. The system can be installed in existing structures or new construction. Alarms are signaled to a main receiving console in an attended area of the building. Closed circuit TV hook-up is also possible. ADT, New York City. Circle 285 on reader service card.

7. Automatic garage door opener is easy to assemble and install. The "350-P" has an enclosed lighting fixture that turns on when door opens and operational safety features. Unit can handle all size residential doors. Frantz, Sterling, Ill. Circle 286 on reader service card.

8. Pushbutton switches with architectural styling have companion ground receptacles. The "Centura" line is available in nine colors: ivory, white, gray, beige, black, pink, yellow and brown. Different colors can be combined on one unit for interesting effects. Regular and illuminated switches include single-pole and three-way units rated at both 15 and 20 amps. Leviton, Brooklyn, N.Y. Circle 287 on reader service card.

9. Electronic garage door opener consists of a portable signal transmitter, a solid state UHF receiver and a motorized operating unit. The "Liftmaster Deluxe" features a built-in light that turns on as the door opens, and shuts off 1½ minutes later. Chamberlain, Elmhurst, Ill. *Circle 288 on reader service card.*

10. Electric raceway with a vinyl surface includes cover and base strips, end caps and corner pieces. The easy-to-install system can be fastened to walls mechanically or with adhesive. Raceway will not support combustion, is impervoius to mars and dents and can be painted to complement room decor. Johnsonite, Middlefield, Ohio. Circle 289 on reader service card.

the gentle art of HEAD HUNT

how to hire and keep the key executive

"HELP WANTED: Marketing managers, controllers, purchasing managers (heavy negotiating experience), regional/divisional managers, operating executives. Above all, operating executives, from project manager up."

The ad is hypothetical, but it could have been written by almost anyone in the housing industry, judging by the response of builders and executive search consultants contacted by HOUSE & HOME for this article. Certainly most of them find qualified top management people hard to find and seldom easy to keep, despite a wide range of salary and fringe incentives.

Indeed, the most striking fact that emerges is that dissatisfaction with material compensations is rarely the problem with unhappy executives in a generally prosperous industry. The major problems are: 1) failure to keep executives informed on where the company is going and where they can go within it; and 2) failure to give them really free rein in the areas in which nominally they have full authority and responsibility.

In the words of Malcolm Prine, president of Ryan Homes, Inc., of Pittsburgh, Pa., "The employment crisis in this country is a national one, and it won't improve in my lifetime. The major reason is that the homebuilding business has just come into respectability as a sophisticated business, and there's a short supply of the mid- and lowermanagement personnel who will be tomorrow's top management.

"And the situation is worsening because of today's expanding geographical penetration and hiring. Everybody's trying to go national, and they're drying up the supply."

How does a builder or developer tap what's left of this supply?

The new trend: Hire from outside the industry

The growing tendency towards giant, multimarket building companies is creating new demand for staff specialists in areas such as marketing and purchasing that were not so



important in the typical smaller homebuilding firms of a few years ago. Because there is a quantum leap from the concept of selling a house to that of marketing a product, many builders are reaching outside the industry to fill key marketing positions.

There are three reasons behind this:

One is that today's concepts of marketing and managing are still so new to housing that talent within the industry is relatively scarce.

Second, other industries have a long head start on these kinds of expertise, so there is a considerable pool of experience waiting to be piped into housing.

Finally, the housing industry is only beginning to attract the bright young MBAs who have the book-learning but will need some years to mature on the job.

Jack DeBoer, president of Jack P. DeBoer Associates, Wichita, Kans., for example, hires almost exclusively from outside the industry. His vice president of operations the number-two spot—is a CPA who has also worked in advertising and insurance.

Two other developers who frequently go outside the industry are George Deffet, president of Deffet Companies, Columbus, Ohio, and Lloyd E. Clarke, president of Alodex Corp., Memphis, Tenn. Deffet's top man for operations and construction management came from the truck-body business. Clarke's chief financial officer, a former controller for a heavy machinery corporation, was experienced in innovative financing and systems management.

Yet another builder got a financial vice president from the aerospace industry, a segment which, in its present depressed state, isripe for harvesting. And there is even a case of a former department store executive who "brought a raft of ideas" into the business, one builder says.

Winning him over and keeping him

Chances are the man you want for your company is reasonably happy—or at least so



Gerard Sans

he thinks—where he is. At least as far as the material aspects are concerned, he's almost sure to be adequately compensated. You will have ascertained his competence by the usual screening process. Now, how to persuade him he'll be even happier with you, and that he'll stay happier? There are several methods, but most have some potential pitfalls.

There are builders who swear by stock options, project participations and other more financially esoteric incentive plans that won't show up on the executive's tax return. For those companies which are not publicly held, project participation often works well. Here's the system used by one Rocky Mountain area builder:

Key employees are given a percentage of the income from a project, the percentage varying with each employee's level. In effect, the individual becomes a joint investor by buying in any time at the book value of his share. Since the aim of the plan is to keep the employee, participation is predicated on his staying for a stated time period, usually from three to eight years. If he leaves before this time he must sell his share back at book value.

A key advantage of this kind of scheme is that it affords the employee's personal taxes the same kind of tax shelters—e.g., doubledeclining depreciation—as it does the corporate entity. And the income possibilities of even one-half of one percent of a multimillion-dollar shopping center are not to be sneezed at.

But this system also has its critics who point out that the man with a piece of a particular project just has to spend extra time looking after it at the expense of his other responsiblities. Further, some projects are going to be big winners and some are going to bomb out, perhaps through no fault of the project manager. And finally, DeBoer points out the escalation factor: The man who skims off say, \$25,000 in one year is bound to look at it as a sort of base, and it's easy to get spoiled.



George Deffet

Stock options: Yes, but ...

As long as the stock is going up in value, options are a fine idea and are growing more popular. Some companies—Ryan Homes is one—report that even a recent substantial downturn in stock value has been no problem, since most executives purchased their stock well below its recent low point. And even those who didn't nevertheless see the setback as only a temporary snag in a longterm growth pattern.

Playing devil's advocate, recruiter Gerard Sans, owner of Barton-Sans, a New York City executive search firm, sees executives whose stock has suffered as ripe for plucking by another company. And he's plucked some of them.

"A lot of pipe dreams and hard work sometimes go up in smoke, and the man who has depended on financing his children's education from his stock holdings is going to be very bitter if it doesn't work out that way."

Still another problem with stock options, he says, can occur with diversified companies. If one division is turning in a nice profit and the others are not, it's obvious that the manager of the profitable division is going to get the short end. The same principle applies when one man in even a straight building company is making a profit for his boss, and the others are not. "When that happens, you're guaranteed a hitch in your operations," he says.

Tie it to the man, not the company

Sans feels the only bonus plan that has no disadvantages at all is one which is tied to the man's performance and is independent of how the company is doing. That means an adequate base salary plus a fixed percentage of costs saved by his own efforts. Since the line side of management tends to attract the entrepreneurial type of executive, Sans sees this as the most direct and fitting reward. And even though it's ordinary taxable income, Sans' experience is that it is more welcome than any participation or



Richard M. Ferry

stock option scheme.

One builder, Lloyd Clarke, offers an incentive plan which brings the wife into the action. A site supervisor, for instance, who completes the job on time gets free air-travel for himself and spouse to any point in the U.S. at vacation time. Or an on-schedule completion may mean a new outfit for the wife.

"You'd be surprised at how interested the wife becomes in how the job is progressing," he says.

One emphatic nay-sayer to the whole mish-mash of incentive plans is DeBoer, who has a top reputation for good construction management. He believes these incentives do more harm than good, hence he offers no incentive plans and no commissions at present. In effect, what he's telling his executives is, "Keep up with the rest of us, and when we reach our eventual goal, everyone will share." What his plans for sharing are, he won't reveal.

What about the idea that, since the construction supervisor is the man on the spot if the project bombs, he should be given an extra reward for the extra risk?

"There are many problems that are beyond a superintendent's control," he says. "We take him *off* the spot with a system of corporate controls that distribute the risk and minimize the chances of failure. In short, we take a corporate, rather than entrepreneurial, approach to the business.

"If a superintendent brings in a job ahead of time, we rarely give him a direct share of the savings as such, but he can be sure that his ability will be rewarded by salary increases and job advancement."

Most important: how you treat them

In most cases of executive dissatisfaction, the compensation and perquisites are not the problems at all. The real problem is that many builders, without realizing it, are simply unable or unwilling to let a key executive do his job. Consider the case history of one



Lloyd E. Clarke

recently—and happily—relocated project manager:

"But the picture the company had painted for me was afar cry from the job I found when I started to work. Would you believe I spent seven months in a beautiful office—reading *Playboy?*

"What happened was that while the company called me a project manager, they actually used me as a high-priced messenger-boy to carry out the orders of the operations manager.

"The builder was located out of the state, had recently picked up a lot of work in [a major metropolitan area] and was hiring high-priced talent on a strictly one-shot basis.

"My supervisor came in three or four times a week but knew nothing about conditions in this area, such as how to work with and around the union and code restrictions.

"When I complained to my superiors that I couldn't live like this, their reaction was, "What are you worried about, you get your check every two weeks!" Is it any wonder I quit?

"Now I'm with <u>Company</u> as manager of a \$140 million job, and I feel like a kid with a brand new toy. I swear I'm getting younger every day, even though I'm breaking my neck for the company.

"They've given me complete responsibility—and complete authority. If I get a job in one or two days early the money saved is shared with me. And that makes me want to go out and give 115%."

Companies such as that project manager's former employer are ripe for executive recruiters, Sans points out.

Here's another case from Sans' files that illustrates what can happen when *necessary* controls are not enforced by top manage-



Malcolm Prine

ment.

A construction superintendent had apparently been told by the project manager, his immediate superior, that when he, the project manager, moved up the line, the construction superintendent would get his job.

The alleged conversation—it was the superintendent who said it had taken place took place between the two men privately. Moreover the project manager had not consulted higher management and, in fact, had no authority to make the promise. Not long thereafter the project manager died, and Sans was called in to find a replacement.

Enter the construction superintendent and his claim for the vacant position. Sans felt that the man was a top-grade superintendent-virtually irreplaceable-but without qualifications for the higher post. It turned out that in order to keep this bitterly disappointed superintendent with the company, the search for a new project manager was immediately narrowed down to a handful of men the superintendent respected enough to be able to work with. The price of the man eventually hired was high-and had to be met largely with a variety of taxshelter fringes so as not to upset the company's salary levels. In short, a great deal of trouble could have been prevented had the project manager not overstepped his authority in the first place.

Moral: "A man can live with lies, he can live with inadequate compensation, but he cannot live with the loss of his ego," Sans says. "And that super had his ego pulled out from under him when a promise that never should have been made to him in the first place was not kept."

Get 'em young; move 'em up

Obviously, it's better for any number of reasons to promote from within rather than from outside. For one thing you know the individual and his working habits and where his strengths and weaknesses lie. And his loyalty to the company will almost always increase in direct proportion to his length of



Jack P. DeBoer

service.

The problem then becomes how to keep the promotion ladder open, and how to make sure the executive knows it's open.

This can be accomplished either formally or informally, or both. DeBoer, for example, has an extensive training program that includes classroom space, audio-visual equipment and a staff of instructors with education degrees. Alodex Corp. has a personnel executive whose primary duty is upgrading personnel.

Deffet is an advocate of the less structured approach. For example, he schedules frequent two-day sessions in which he and his top men get together at a motel for sessions that are a relaxed blend of sociability and business conferences. In this way a round of golf, a cocktail hour or a poker game are at the same time pleasant ends in themselves and idea and problem-solving sessions.

"You don't necessarily have to be friends, just friendly, to make these get-togethers both fun and helpful," Deffet says.

Transition: from supers to scholars

What could be a growing trend in the development of project managers in the future is the system used by Lloyd Clarke of Alodex Corp. He's going after graduates of such colleges as Florida State, Memphis State and Rice who have degrees in civil or architectural engineering, construction technology, or who have combined technical and management degrees.

Once hired, these men are named assistants to present site superintendents who have come up through the trades. Clarke says the system helps the supervisors even as it gives the young graduates the practical training they need.

—J. MICHAEL STIMSON

Headhunters: Should you use them?

Or are they con artists who will do anything for a fee—such as send you droves of interviewees who are patently unqualified for the job? What are their fees, and are they worth it? Will they find you a man, then promptly, because they now know a lot about your business, steal away another man?

We can't answer all of these questions because we didn't attempt an in-depth look at headhunters. But those we talked to claimed rigid ethical standards, and our talks with builders who have used them—some for several years—backed them up.

What will they cost you?

Figure 20% to 30% of your executive's yearly salary plus expenses—an item that could cost as much as \$20,000, but will probably average something less.

Although Gerard Sans, owner of Barton-Sans executive recruiting agency in New York City, tailors each contract individually, a typical fee is 1% of each \$1,000 of the employee's yearly gross up to a maximum of 25% for a salary of \$25,000 or above. But since the man you'll be seeking will almost surely command more than \$25,000, you can figure at the straight 25% of gross. Sans asks aretainer of \$1,000 a month for the first three months to be used for expenses and credited in the final charge. The fee covers all expenses except travel.

If the executive he finds brings his management team with him, Sans charges a flat 15% of the yearly gross of each team member, up to five members.

Korn-Ferry & Associates, which has offices in Los Angeles, Chicago, New York, Atlanta, Houston, San Francisco and overseas, considers itself primarily a management consultant; as such its fees are structured on a time-and-cost basis. At the outset the company gives an estimate of the time and cost that will be involved, usually it is 20% to 25% of the gross salary. Internally the company regards this as its budget and is reluctant to ask for more if the search proves more time-consuming than anticipated. In this situation the client is alerted and either the fee is renegotiated or the search ended.

What do you get for the money?

From some, Jerry Sans, for example, probably more than you bargained for. He's choosy, and before he takes on a client he subjects him and his company to the same scrutiny as the prospective employee gets.

On the other side, he does guarantee the man's employment for a year and will charge nothing if the man does not work out. Unlike some other companies, he screens out all but the one best man he can find.

What should you

look for in a recruiter?

If you're thinking of engaging an outside recruiter, a good move is to check with other

building firms. Although not every recruiter specializes in the housing industry, the better ones have at least one man who knows the industry thoroughly.

Here are some points to check:

Can he keep his mouth shut? Since a topflight recruiter inevitably is going to learn a good deal about your operation—Sans frequently finds himself sitting in on policy meetings—you want somebody who can keep secrets like a priest.

How does he operate? Where does he look for potential employees? The failures and the chronically disgruntled are easy to find; it takes hard work to locate a man who is successful and happy in his present employment. Yet this is the man you want.

How thoroughly does he check candidates for your position? The good recruiter can find out a lot about a candidate without tipping off the man's present employer. Since a good recruiter will screen many people for one job, it's very important that he not rock the boat for every employee he contacts. And if it becomes known you're pirating, it won't help your relations with your colleagues.

One attribute of a good recruiter that's a little hard to pin down is the kind of attitude he takes toward his client. Sans considers himself part of the company he's working for, to the degree that he sometimes offers a salary a few thousand dollars over the original specification if he sees that he can get an unusually good man.

How many other clients does he have? Somewhat paradoxically, a top man will have few active clients in proportion to his staff—typically a dozen or less. Since every \$40,000-and-up executive he places means a five-figure fee to him, he can make a very comfortable living on relatively few placements.

How well does he know the industry? Some of your questions might include a bit of industry jargon; if he really knows the industry he'll understand the buzz-words. If he obviously doesn't, he may not be the man you want.

Pirating: Will it happen to you?

One thing an ethical recruiter will not do is try to pirate from his own clients—for obvious reasons.

This leads to the question, how long after you've used him does he still consider you a client?

It depends, but both Richard M. Ferry, executive vice president of Korn-Ferry and Sans would say a minimum of a year and a half to two years, and longer if the recruiter has done a lot of business with you. After that, "Let's just say we wouldn't be reckless," Ferry says. "We'd let you know first that we were planning a raid on your company, but of course we wouldn't tell you who it was." Sans says he would never pirate a former client unless the relationship was broken for cause.

Subsidy housing; How good design can pay off

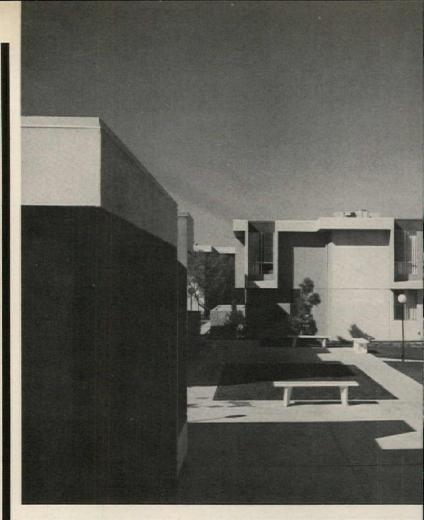
It pays off in two ways:

First, it generates a feeling of pride and identity in the project's residents, and that translates directly into lower maintenance costs.

Says architect Stephen G. Oppenheim, who designed the project shown at right: "Good design gives tenants a positive feeling—an attitude of 'I live in as good a place as anyone else'—and they're much less liable to resent the fact that they live in a subsidized project. Take away resentment and you also take away much of the urge to vandalize and destroy."

Second, it pays off in community relations. The resistance which too often arises at the first inkling of a subsidized project can be mitigated and sometimes eliminated if a developer can point to previous projects of high design standards.

The five subsidy projects on the pages that follow differ widely in size and type, but they share an excellence of design and planning that most conventional projects could well emulate.

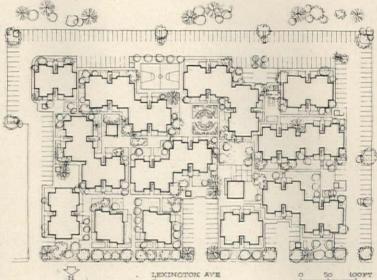




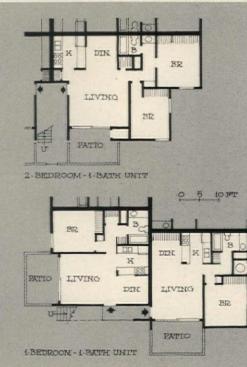
El Cajon, Calif.: High-density apartments that avoid the curse of sameness



Site plan shows how the clustering of three different building types creates a variety of open space. Parking areas accommodate 230 cars. Of the total area, 27% is built up, 53% is paved and 20% is in greenbelts.









S-BEDROOM - 2-BATH UNIT

Three basic floor plans—for one-, two- and three-bedroom apartments—make up the three types of buildings. The 623-sq.-ft. one-bedroom unitrents for \$100 a month, the 863-sq.-ft. two-bedroom for \$125 and the 1,036-sq.-ft. three-bedroom for \$138. At left is a typical kitchen.

Despite a density of almost 40 units per acre, this FHA 236 project feels neither tightly squeezed nor monotonous.

The two-story buildings were designed to present a variety of facades and arranged in clusters to create a changing pattern of open spaces.

There are three building types—each with four units on the first floor and four on the second. Type A buildings contain one-bedroom apartments; Type B buildings have two-bedroom apartments and Type C have three-bedroom units.

All apartments have outside entrances and private patios or balconies—features that, the architect notes, have given the tenants "a sense of individuality and pride in their housing." Community facilities include a laundry building that's large enough for neighbors to socialize in while they use the washers and dryers, 'a large gazebo, eight trash houses, playground equipment and an outdoor basketball court.

The 5.7-acre project, called Lexington Green, has 144 apartments. Designed by Stephen G. Oppenheim, it was built by Apartment Constructors Inc. and is owned by Jerald Katleman.

New Haven, Conn.

22 rental units on a difficult urban site

The site was a problem for two reasons: first, because it is only one acre; second, because it is oddly shaped—narrow on the street side and wide in the rear.

The solution, shown in the plans and isometrics at far right, was to use the front of the site for a small building *(lower photo)*, the rear for a large L-shaped building *(upper photo)* and the space between the two buildings for parking and play areas.

In the front building are 6 twobedroom apartments on the two upper levels and storage, laundry and meeting rooms, plus covered parking for six cars, on the lower level. The L-shaped building contains 4 one-bedroom units /*C* and D in drawings/ at the corner of the L and 12 four-bedroom units (A and B)—each with three bedrooms on the second floor and one on the third.

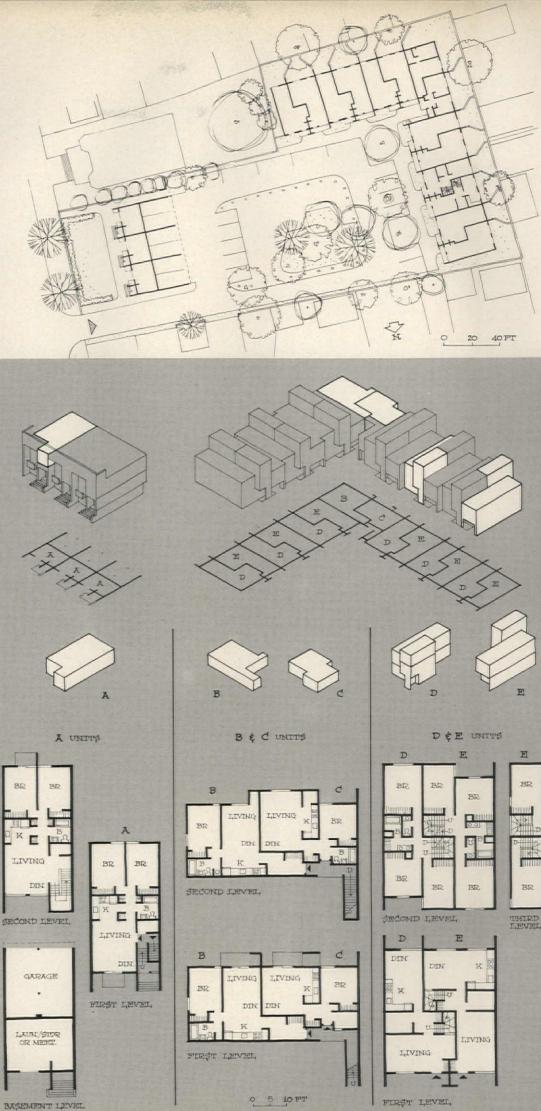
The FHA 236 project was designed by Louis Sauer Associates and built by Kapetan Inc. for a non-profit sponsor, Temple Beth Israel of New Haven. Rentals range from \$102 to \$155.





Townhouse units (*above*) are located at rear of site. In the foreground is a play area and parking. The parking ratio is 1:1. The photo below at left shows the front of the site from the street.

Project plan (upper right) was designed for an oddly-shaped sitenarrow in front, wide at rear. Below, the isometric and floor plans are keyed to different apartment types—A, B, C, D and E.



Amherst, Mass.:

Buildings that merge into the meadow and woodland of a sloping site

There are two hundred units for moderate-income university staffers on the 21-acre site.

The two-story buildings are concentrated in open meadows or among trees to maintain the site's rural character. Since the slope averages 10%, each building site is graded as a small terrace to avoid major site re-working.

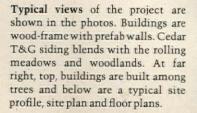
Two- and and three-bedroom units are grouped in duplex townhouses with two apartments per building. The project has 94 two-bedroom and 10 three-bedroom units. These multi-bedroom units have direct access to childrens' play areas and open space. And they are outside the main traffic loop.

There are also 96 one-bedroom apartments—four units per building.

The \$3.7 million FHA 236 project was the first phase of Amherst-area subsidized housing to aid moderate-income university staffers, affluent students and faculty. The market-area includes the University of Massachusetts, Amherst College and several other well-known institutions.

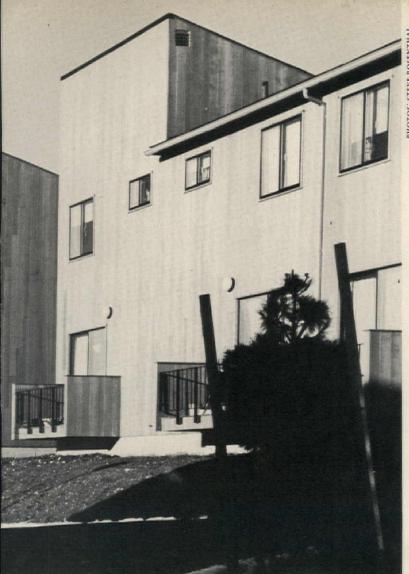
A second phase of 200 identical apartments had been scheduled for an adjacent 21-acre site, but the apartment mix is being redesigned because of the strong demand for three bedroom units.

Architect: John Olson of Stull Associates, Boston. Owners and developers: Interfaith of Amherst and Development Corporation of America, Boston.

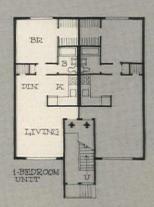


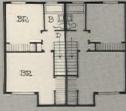












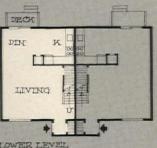
UPPER LEVEL



LOWER LEVEL 2.BEDROOM TOWNHOUSE

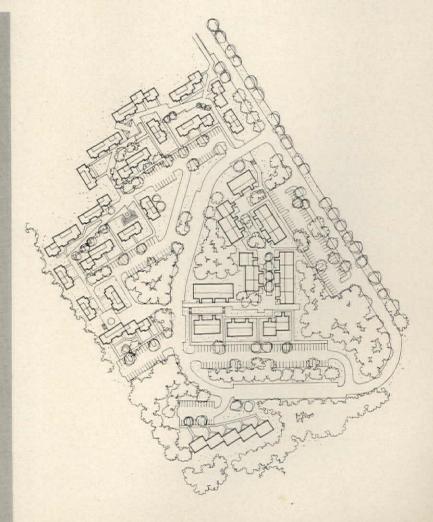


UPPER LEVEL

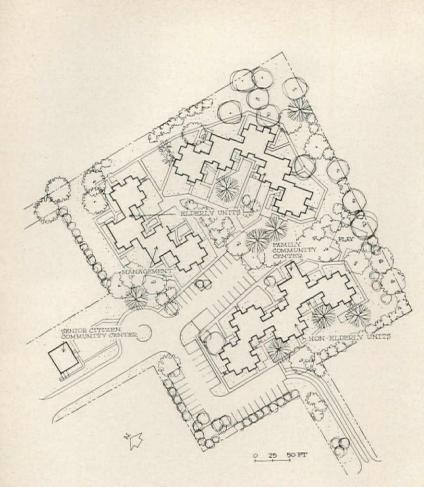


LOWER LEVEL. 3-BEDROOM TOWNHOUSE

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0 5 10 11

UPPER LEVEL 2-SEDECOM PUPLEX UNITS

LOWER LEVEL 2-BEDROOM DUPLEX UNITS Ramapo, N. Y .:

Suburban apartment buildings designed around two basic modules

The modules are a 12'x28' unit containing living and/or sleeping space and a 12'x16' utility core. As the floor plans at lower right show, four living-sleeping modules are grouped around each utility core *(shaded in plans)*. And this basic arrangement can be adapted to different combinations of apartments ranging in size from efficiencies to three bedrooms.

Despite its modular design, this 78-unit, HUD turnkey project was built conventionally by George Faist. But elsewhere in the same township, identical plans by the same architect, Micha Koeppel, were used for factory-built units turned out by Bon Aire Industries for a 122apartment turnkey project.

Builder Faist's 4.6-acre project includes both elderly tenants and families with children, but the two groups are separated from each other by a parking area and green space (site plan, left). There are 59 apartments for older people (39 efficiencies and 24 one-bedroom units) and 19 for younger families (2 one-bedroom, 16 three bedroom and 1 three-bedroom units).

"Originally our plans called for a 60-40 ratio of elderly to families," says architect Koeppel, "but local opposition was strong because of the burden on local schools. Finally, a 75-25 compromise was worked out based on regional data rather than just what the town was doing."

The \$1.7 million project is owned by the Town of Ramapo Housing Authority.









Small-scale buildings, grouped in three clusters, blend into the surrounding neighborhood of single-family homes. HUD ordered the builder to face the lower exterior portion of the family housing with brickwork so as to minimize damage from children.

Brookline, Mass .:

Two high-rises that meet the special needs of the elderly

Those needs are seemingly contradictory. On one hand, elderly tenants, often widowed and lonely, are eager for the opportunity to mix with their neighbors. On the other, they want privacy and quiet within their own apartments—a desire that can cause problems because some older people suffer from poor hearing and thus turn up their TV or radio volume.

Both needs are met in the two apartment towers shown here one 12 stories and the other nine. Social exchange was encouraged by providing 1) a common lobby, elevator shaft and mailbox area for both buildings; 2) community lounges on the first nine floors; and 3) a rooftop terrace, cafeteria and laundry room. Apartment-to-apartment noise was held to a minimum by using 8"-thick concrete walls between units.

Designed by Stephen Tise of Stull Associates, the towers were built by Sydney Construction Co. with precast and prestressed concrete components. The use of three different exterior wall panels made for a variety of textures and patterns.

Of the 214 apartments 25% are leased by the owner, C.W. Associates, to the local public housing authority—a requirement of the lender, the Massachusetts Housing Finance Agency. The rest rent at market rates.

The apartment mix and rent scale: 68 efficiencies, from \$55 for public housing tenants to \$163; 115 one-bedroom units, \$70 to \$244; 31 two-bedroom units, \$80 to \$269.



Single entry lobby, seen from the outside and inside in the first two photos at right, serves both high-rise buildings. At far right is one of the project's nine community lounges.

Î I WILLIAM STREET T T T I LOUNGE E A 3 1 E CENTRE STREET 0 15 30FT



2-BEDROOM UNIT 80 DIN K BR. B STUDIO/ В LIVING K BR EFFICIENCY UNIT 5 LOFT 0 LIVING B BR DIN K 1-BEDROOM UNIT

PHOTOS: GEORGE ZIMBERG





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circle 122 on reader service card

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products: bathrooms

1. Knock-down vanity can be easily assembled without using tools. Smoke-white, woodgrain unit with a gold deco strip is available in depths of 20" to 22" and in widths of 24", 30" and 36". Acrylic vanity tops are offered in gray-on-white, avocado and gold. Mouldings, Marion, Va. Circle 290 on reader service card.

2. Folding shower door with a panelhinge design permits wide-open access to a tub or a shower. Doors have shatterproof polystyrene panels and hinges and an anodized-aluminum frame. Hinges are available in a wide range of decorative accent colors. Enclosures are engineered to fit all standard tubs and showers including molded fiber glass units. Tub Master, Orlando, Fla. Circle 291 on reader service card. **3. Fiber glass tub**, "Helene," translates luxurious Greco-Roman styling into a functional contemporary bath fixture. The leakproof, stainproof 5'-round tub fits into any maximum 7'x7' setting. One-piece, molded unit is available in white, hot pink, orange, yellow, green and blue. Novaglas, Long Island City, N.Y. *Circle 292 on reader service card.*

4. Elegant "Tiffany" fittings have etched gold finish protected by a high-baked plastic coating. A single quarter turn of one of the crystaline acrylic handles brings the faucet from full-on to positive-off. Chicago Faucet, Des Plaines, Ill. *Circle 293 on reader service card*.

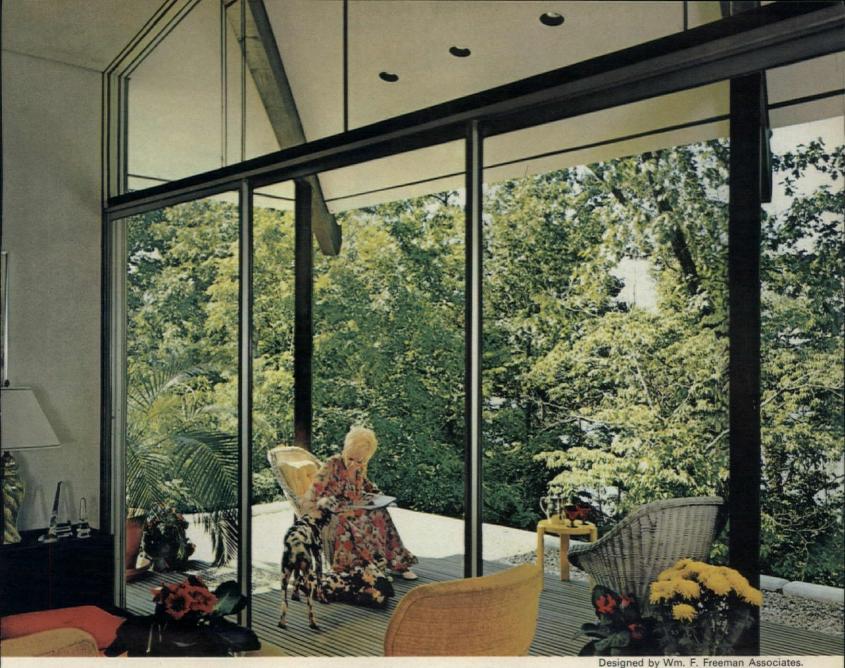
5. Single-control mixing valves for tubs and showers feature "Delex" pressure balance that protects against sudden water temperature changes due to pressure fluctuation. A built-in pushbutton diverter automatically returns to tub position when unit is turned off eliminating unexpected showers. All valves are equipped with adjustable high temperature stop to prevent scalding. Delta Faucet, Greensburg, Ind. *Circle 294 on reader service card*.

6. Luxury bathroom with a contemporary look features a full range of deluxe fixtures in elegant "Black". Center of attraction is the 5½ 'x7' bathing oval, "The Bath". At the far left is the sculptured "Rochelle" toilet and the "Caravelle" bidet. Also shown are the "Lady's Vanity" and the distinctive "Man's Lav". Faucets and fittings are "Al-

terna". Kohler, Kohler, Wis. Circle 295 on reader service card.

7. Brass fittings, "Decora", add a traditional touch to a bathing area. Floral decorations are applied to spouts, handles, corner plates and pop-up controls. Metal or genuine crystal handles are offered. Metal handles snap and lock in place eliminating the need for set screws. Eljer Plumbingware, Pittsburgh, Pa. *Circle 296 on reader service card*.

8. Hand shower, "ShowerAll", is available in three easy-to-install models. Shown are leg & faucet and wall-mounted spout versions. The other model is for shower fittings. Flexible chrome hose controls water direction. Jaclo, Brooklyn, N.Y. *Circle 377 on reader service card.*



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PPG: a Concern for the Future





products: furniture

1. Fully-stuffed multiple seating, "Mogul", is upholstered in genuine leather. Basic component of the collection, a single seating unit that can have one or two arms added, can be grouped in a multitude of arrangements. Complementary wedgeshaped tables can be placed between the seating units for the graceful curve effect shown. The frame is selected hardwood. Seat and back are filled with feather and down pockets on a deep, soft foam. Arms are Dacron-on-foam mounted on sprungsteel brackets. Tetrad, England, Arthur Gordon, New York City. Circle 297 on reader service card.

2. Luxurious leather sling chair is part of a contemporary group imported from Brazil. The Lafer "MP-Series" includes the lounge chair shown, a high-backed seating piece, a matching ottoman and a full 88"longsofa. Filling is one-piece molded urethane foam. The reasonably priced chair can be upholstered in white, chocolate, terra-cotta, avocado, black, bronze, or honey leather or maté suede. Square, low-to-theground base is a kiln-dried Jatoba hardwood with a rosewood finish. Brazil Industries, New York City. *Circle 298 on reader service card.*

3. Brightly lacquered dining set imported from Finland is available in white, black, red, blue, green or yellow. The casual contemporary group includes an extension table and four sleek straight-back chairs. Comfortable upholstered seats can be covered in fabrics or leathers. Iskun, Finland. *Circle 299 on reader service card*. 4. Maintenance-free furniture has frames with buffed aluminum finish and walnut inlay. The group shown includes alounge chair and matching ottoman, a full length sofa with six reversible foam cushions and a cocktail table with a glass top. Other casual living and dining pieces are also available. Frames are offered in natural or a selection of colorful finishes. A wide array of floral fabrics and wet-look vinyls is offered. Medallion, Miami, Fla. Circle 300 on reader service card.

5. Five-piece dining set of rattan and wicker is available in two heights: the continental 26" and the standard 29". Offered with 42"- or 48"-round Formica tops in a choice of 13 colors and patterns, the group comes in 18 frame finishes. Chairs with mem-

ory-swivels have cushions that can be upholstered in any of 185 fabrics. Vogue-Rattan, Lexington, Ky. Circle 301 on reader service card.

6. Rocking swivel chairs, designed by Frenchman Marc Held, are intended to relieve muscular strain due to motionlessness. Design is based on the theory that walking is less tiring than standing still. The collection includes a high-back model, a lounge chair and a matching ottoman. Pieces with latex foam inner fillings reston tub-like convex bases that are precisely balanced to avoid tipping over. Chair can be upholstered in a choice of fabrics or leathers. Molded polyester and fiber glass shell has a white lacquer finish. Knoll, New York City. Circle 302 on reader service card.

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products: kitchens

1. Flush-door cabinets provide a smooth unbroken look for a modern kitchen. The fruitwood-finished "Contemporary Series" has frames of 3/4"-thick selected northern hardwood. Wall-mounted cabinets are 12" deep and are available in one- and two-door models. The single-door units have adjustable shelves. Double-door versions feature a center support. Series has concealed antique-copper-finished hinges and magnetic door catches. Felt pads behind the drawers provide whisperquiet closing. The three-coat bakedon polymer exterior finish is highly resistant to scuffs and stains. Conner Forest, Wausau, Wis. Circle 310 on reader service card.

2. Single-door refrigerator, "Cold Spot 63121", packs a 12.4-cu.-ft. capacity into a compact 24"-wide, 561/2"-high cabinet. Formed-in-place insulation creates a solid wall construction that reduces thickness without losing insulating properties. Instructions on starting, adjustment, defrosting, cleaning, power, maintenance and service are permanently affixed on the horizontal surface above the butter compartment. Additional information on specific operations is placed throughout the unit. The model has two 21 qt. crisper drawers, adjustable shelves and a 55lb. capacity freezer. Refrigerator is available in white, avocado or gold with right- or left-hand door swing. Sears Roebuck, Chicago. Circle 311 on reader service card.

3. Contemporary cabinet line, "Overture", is a basic black and

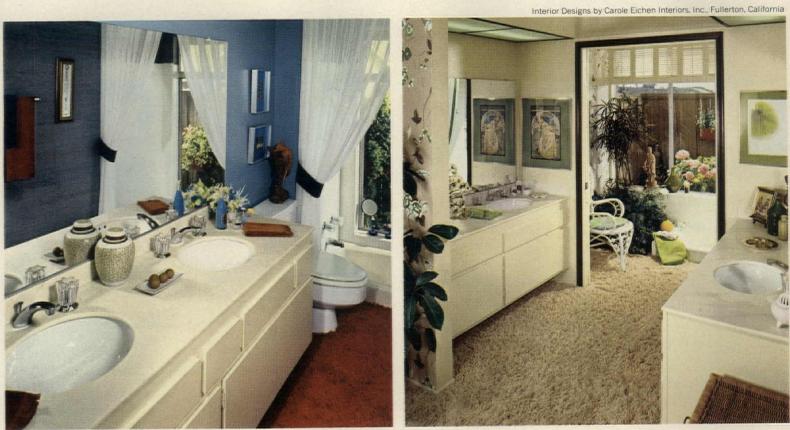
white design. Units have exposed face-frames with a three-coat ovenbaked black laquer finish and bakedon white polyester laminate door and drawer fronts. Line features semiconcealed, self-closing hinges and die-cast pulls with black finish. Wall-mounted cabinets in 9" to 30" heights are available with adjustable shelves. Interior surfaces are spraycoated for easy maintenance. Del-Mar, Atlanta, Ga. Circle 312 on reader service card.

4. Decorative range hoods are available in vented and recirculating models. Vented versions feature two solid-state blower fans that operate extremely quietly even at full speed. All units feature two control switches—one to regulate fan and one for the built-in incandescent light. Both models have fully washable grease and air filters. Recirculating units are equipped with special charcoal filters as well. Hoods are offered in mitered and unmitered styles in a wide range of baked-on colors and hammered or smooth metal finishes. Swanson, Owosso, Mich. *Circle 313 on reader service card.*

5. Built-in countertop dishwasher operates on waterline pressure. Only two connections are necessary: one to the hot water line and one to the drain. The powerful compact unit washes and dries a four-place setting in five minutes. The 21'-diameter, 12"-deep small-load unit requires no maintenance. Its only two moving parts rotate on DuPont Teflon bearings. Vulcan, St. Louis, Mo. Circle 378 on reader service card.

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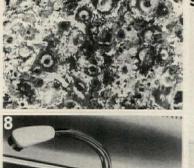
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products: kitchens

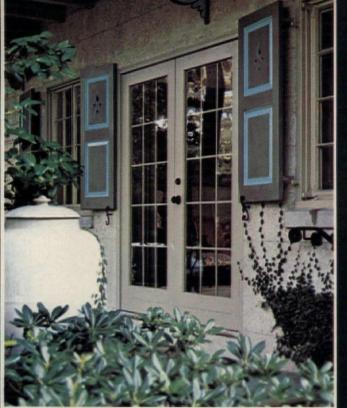
6. Compact bar, "Image", is equipped with a built-in 5 cu. ft. refrigerator and a 12-bottle wine rack. Available in wet or dry models, system features indirect lighting and glass display shelves backed with laced mirrors. Storage drawers and cabinets are also provided. Wet-bar units have stainless steel sink/faucet assemblies. CCM, Marblehead, Mass. Circle 314 on reader service card.

7. Decorative laminate for countertop application is available in sizes up to 5'x12' and in thicknesses of $\frac{1}{16}$ " and .032". Melamite pattern, "Tortoise Italia", is a rich brown mottled effect with bright gold highlights. Design is offered in a stonelike finish. Johns-Manville, Melamite Div. Lawrence, Mass. Circle 315 on reader service card.

← CIRCLE 134 ON READER SERVICE CARD

8. Faucet fittings feature single-lever control. The spout turns 360° at the base and the head tilts 45°. Encased in glass-reinforced Celanese Celcon plastic, the swivel head will not rust, spot or stain and is highly resistant to soaps, detergents and chemicals. Unit, with a chrome-plated excutcheon, fits any standard sink. American Standard, New Brunswick, N.J. *Circle 316 on reader service card.*

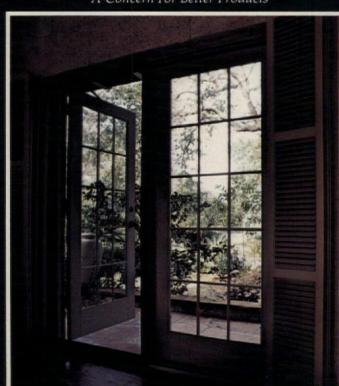
9. Front-loading dishwasher features rapid-advance, solid-state timer controls. Six pushbutton cycles are featured including regular, glass and pots-and-pans washes. Since different water temperatures can be used with some cycles, a total of 13 settings can be programmed into the unit. Tappan, Mansfield, Ohio. *Circle 317 on reader service card.*



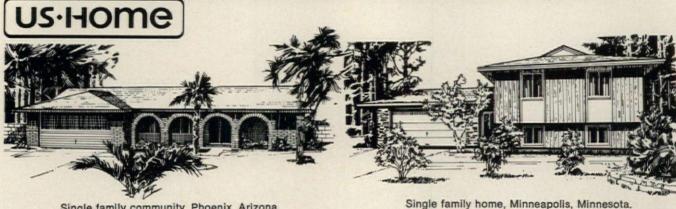
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The Wabash Tilt-Take Out Window is a pre-finished, double-hung unit made of only high-grade Western Pine for maximum beauty and insulating efficiency. It has a special Korad® wrapped hardboard sill which shields against weather, scratching, pitting, corrosion and never needs painting. Dri-Vac treatment gives protection against fungus, rot and insect damage. The exterior frame and sash are prefinished with a weather-proof coating. The special "tilt-take out" feature of this Wabash unit

The special "tilt-take out" feature of this Wabash unit permits effortless cleaning of outside glass areas by allowing the sash to be tilted inward. Rectangular grooves prevent accidental tilting. The unique 4-balance tilt mechanism is self-lubricating and is not affected by dust or dirt. This pre-finished Tilt-Take Out unit is completely factory

This pre-finished Tilt-Take Out unit is completely factory assembled and shipped ready-to-install in car loads or by Wabash truck. Removable colonial wood grids and regular or insulating glass are available.

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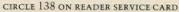
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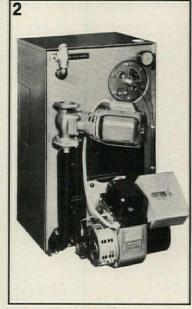
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138 H&H DECEMBER 1972

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3

products: heating/cooling

1. Electric heat-pump system offers automatic year-round heating and cooling comfort. The compact allelectric "Weathertron" unit is flameless-producing no fumes, smoke or soot. Only filtered air is circulated through ducts into every room. Indoor section takes up little usable space and can be installed in an attic crawl space or closet. Outdoor equipment is similar in appearance to central air conditioning with a top air-discharge that directs air and sound away from house and shrubs. General Electric, Louisville, Ky. Circle 303 on reader service card.

2. Cast iron boiler is suitable for hot water or steam heating. Specifically designed for oil firing, the unit is available in five sizes from 100,000 to 205,000 BTUH hot water to 260

to 725 sq. ft. steam. The compact 35"-high, 20"-wide unit is factory assembled. All controls are mounted on the front of boiler to permit close-to-wall installation. Weil-McLain, Michigan City, Ind. *Circle 304 on reader service card.*

3. Environmental control module provides gas heating/electric cooling in a single through-the-wall unit designed for outside-wall installation. The 16"x56" wall opening for intake and exhaust air can be concealed by architectural bricks or optional grille work. Factory-assembled units are available in three cooling and three heating capacities. A built-in powervent eliminates the need for chimney vent stacks. Mueller Climatrol, Milwaukee, Wis. Circle 305 on reader service card.

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CIRCLE 139 ON READER SERVICE CARD

All that room in the attic. Seldom used or cared for. In the summer extreme temperatures build-up in attics substantially reducing the effectiveness of cooling units as attic insulation is only a time deterrent, not a barrier to heat; during the winter moisture build-up freezes in attics resulting in damage to building materials.

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To see all these new products on display, visit our booth #3437 at the National Association of Home Builders Show or write for our free brochures.

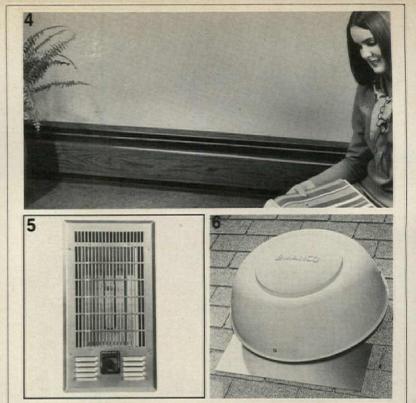


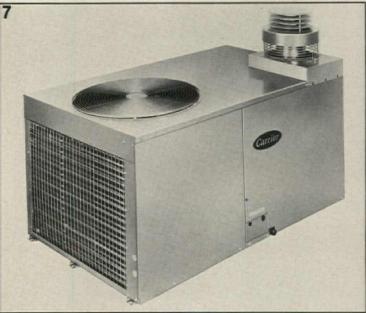
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ATTIC CONTROL

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products: heating/cooling

4. Electric baseboard heaters, finished in woodgrained vinyl, complement any decor. Matching accessories include thermostat and corner sections and receptacle outlets. Heaters are fully-assembled and wired with integral end terminals. Snap-off front panels are for easy cleaning. Floorlevel, Baltimore, Md. *Circle 306 on reader service card.*

5. Wall-insert electric heater for hard-to-heat areas has a built-in thermostat with low, medium and high settings. "Calrod" heating element provides instant controlled heat. Unit with chrome-plated, or brushed-aluminum grille can be installed either surface-mounted or recessed in standard stud openings. Raywall, Johnson City, Tenn. Circle 307 on reader service card. 6. Power ventilator with thermostatic controls extracts excess attic heat, keeps entire house cooler and reduces air conditioning costs. An exclusive laminar flow design increases ventilating capabilities. Unit with a weather-resistant ABS plastic hood, can be installed in vertical, horizontal or pitched positions. Lomanco, Minneapolis, Minn. *Circle* 308 on reader service card.

7. Gas heating/electric cooling units are for on-the-ground or rooftop installation. System is available in five cooling capacities from 2 to 4 tons and seven heating sizes from 56,000 to 150,000 BTUH. Weather- and corrosion-resistant cabinet is painted soft-green to blend with the landscaping. Carrier, Syracuse, N.Y. *Circle 309 on reader service card*.

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products: tools/equipment

9. Rough-terrain forklift features a hydrostatic transmission that eliminates clutches and gear shifting. Vehicle is available in 4,000, 5,000 and 6,000-lb.-capacity models at heights up to 28'. Two control pedals on the left-hand side provide variable transmission speeds and directional change in both forward and reverse. Right-side pedal controls engine speed independent of transmission, providing for retention of full power for all working operations. J.I. Case, Racine, Wis. Circle 326 on reader service card.

10. Radial arm saw, with a giant 20" cut-back capacity, offers fast, easy cutting for all wood materials. Features of the "3553" include an automatic brake and low voltage controls with a pushbutton switch. Unit has

a cutting depth of 6-15/16", a ripping capacity of 48³/4" and a master capacity to 23". Dewalt, Div. Black & Decker, Lancaster, Pa. Circle 327 on reader service card.

11. Lawn and garden tractors are available in four engine sizes: 8, 10, 12 and 14 hp, to meet any landscaping need. Units feature over 60 specialized attachments from mowers to golf-ball retrievers including: lawn-care equipment, gardening implements, spreader-seeder attachments, fogging and spraying devices, landscaping tools, maintenance aids and snow removal equipment. Shown is the 14 hp "Cub Cadet 149" with a maximum ground speed of 8 mph in forward, 4 mph in reverse. International Harvester, Chicago. Circle 328 on reader service card.

142 H&H DECEMBER 1972

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CIRCLE 143 ON READER SERVICE CARD

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It's official. The Alcoa® Alumiframe[®] building system has been given code approvals by the Building Officials and Code Administrators International, the International Congress of Building Officials and the Southern Building Code Congress. The Alumiframe system also meets FHA standards. For your convenience, here are the report numbers to check in your area: BOCA: Report 449. ICBO: Report 2574. SBCC: Report 7203. FHA: Bulletin 717.

The Alcoa Alumiframe building system is one answer to the highly fluctuating costs of conventional framing. It's economic residential framing that adds extra sales advantages to quality homes of any size, design or price range. The system offers: calendar year pricing, materials of uniform quality, on-site or factory fabrication options and flexibility for making on-site adjustments. For more information on the code-approved Alcoa Alumiframe system, write Aluminum Company of America. 1022-M Alcoa Building. Pittsburgh, Pa. 15219.

> The Alumiframe system is designed to accept all standard interior and exterior finishing materials. It is compatible with all Alcoa building products: siding, soffit and fascia, gutters and downspouts, railing and trim.

Change for the better with Alcoa Aluminum



Alumiframe components can't be harmed by termites, other destructive insects or rodents. And they don't rot. Alumiframe studs don't warp. Callbacks on dry wall applications are eliminated. There are no nails to pop and mar finished interiors.



Alumiframe construction requires no changes in building methods, tools or personnel.

Alumiframe members are lightweight -two men can easily carry three 40-footlong aluminum joists and position them for fast erection.

Alumiframe construction is dimensionally stable. There is no warping, swelling or shrinking, to cause doors and windows to stick.

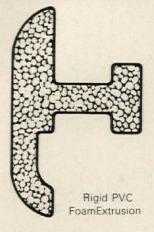


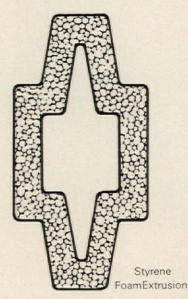
The Alumiframe system has BOCA, ICBO and SBCC approval, and meets FHA standards.

The Alumiframe system includes columns, splicefree beams and joists, plates, studs, tee studs, integral windows and all accessories.

The Alcoa Alumiframe system is available in the Continental U.S., Alaska and Hawaii.



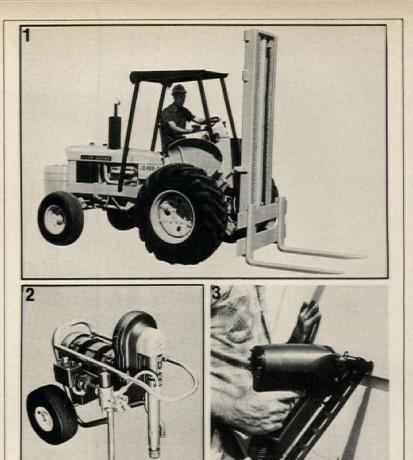




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products: tools/equipment

1. Forklift, powered by diesel or gasoline engine, features a hydraulically actuated reversing transmission and hydrostatic power steering. Lifting capacities of the "JD480-A" are 1,000 lbs. at 28' and 6,000 lbs. at 14'. Three available masts—14', 21' and 28' tilt 19° forward and 9° backward. Deere, Moline, Ill. Circle 318 on reader service card.

2. Electric airless pump is capable of feeding two independent sprayguns at pressures to 3,000 psi. Compact wheel-mounted "Hornet" has outlet ball valves which permit independent or simultaneous operation of the two spray-guns. Unit can pump directly from 5 gal. pails or be equipped to siphon from up to 55 gal. tanks. Binks, Franklin Park, Ill. Circle 319 on reader service card.

3. Automatic nailer features a tilted fastener-magazine that permits access to hard-to-reach places. The lightweight "SN-II" drives 6d-10d flat-head construction nails of 11-, 11½- and 13-gauge. Special safety-trip minimizes accidents. A snap-open guide-body provides for easy maintenance while eliminating most time losses from jamming. Senco, Cincinnati. *Circle 320 on reader service card.*

4. Compact loader is engineered for rough and soggy terrain. "Scatback 430" features articulated steering with four-way pivot and four-wheel hydrastatic drive with limited slip differential. Park/emergency brake and neutral safety starter are standard. Davis, Wichita, Kan. Circle 321 on reader service card.

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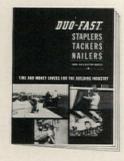
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SPECIAL! 4' x 4' x 6'6" high pre-wired sauna pre-fab with 110 volt "plug-in" heater. Floor, 2 benches, guard rail around heater, vision window, pre-wired light, and UL listed heater. Now only: \$375.00 to builders. Incredibly priced. Assembles in less than 30 minutes.

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CIRCLE 113 ON READER SERVICE CARD

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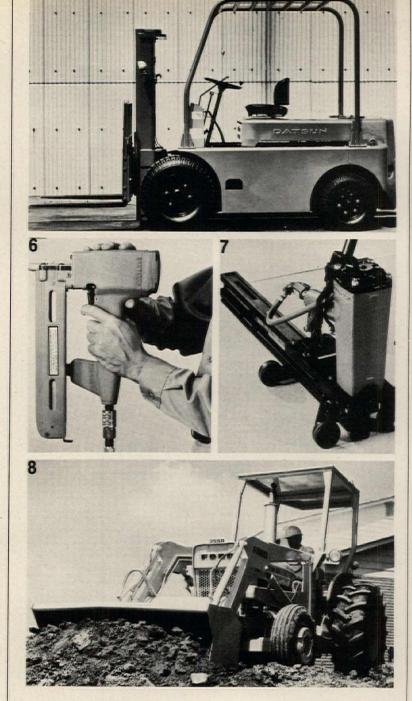
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products: tools/equipment

5. Pnuematic tire forklift truck has automatic transmission and power steering as standard equipment. Vehicle is available in 4,000-, 6,500- and 8,000-lb.-capacity models. Diesel engines are optional on all units. The two larger trucks feature heavy-duty channel masts for maximum strength. Datsun, Mayfield, Ky. Circle 322 on reader service card.

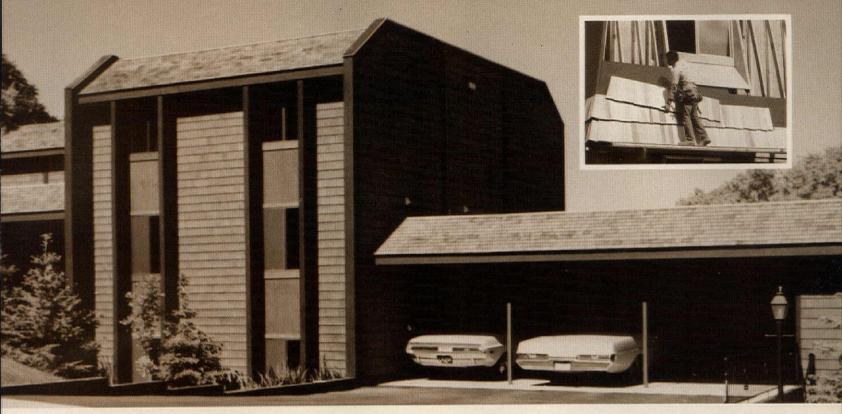
6. Pnuematic staplers and nailers feature quick cycling, simple valving and low air pressure operation. Tool, with narrow nose and good size overhang, has a low profile pistolgrip handle for easy maneuverability. Lightness of weight and superior balance minimize operator fatigue. A high capacity magazine is featured. Bostitch, East Greenwich, R.I. Circle 323 on reader service card.

7. Rolling staple nailer permits installation of particleboard and plywood subflooring without operator fatigue. "SP-182" is trigger-actuated from an upright or walking position via a four-position extension handle. Automatic or singleshot firing mechanism drives staples as unit is rolled on predetermined lines. Duo-Fast, Franklin Park, Ill. Circle 324 on reader service card.

8. Tractor, backhoe, loader unit is operated by a 50 hp dieselengine. The "3550" has an optional heavy-duty backhoe with a maximum digging depth of 15'4" and reach of 21'8". Standard loader with a height of 101/2' has a 3,050 lb. lift capacity. Vehicle is also available with a gasoline engine. Ford, Troy, Mich. Circle 325 on reader service card.

150 H&H DECEMBER 1972 CIRCLE 150 ON READER SERVICE CARD

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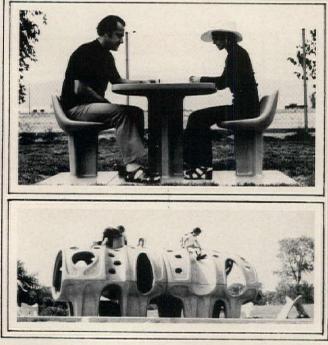


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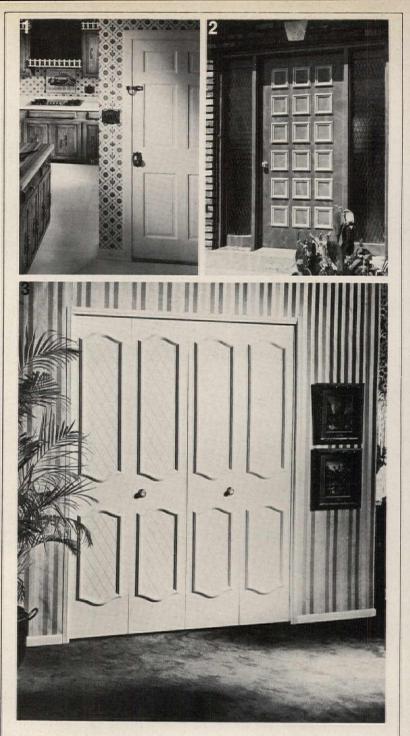


CIRCLE 114 ON READER SERVICE CARD



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products: doors/windows

1. Matching hardware, in an early New England design, allows a continuous decorating theme to be used throughout the home or apartment. Cabinetware, security guard, passage knobs, switchplates, towel rings and bar are part of the 37-item "Carriage House" collection. Matching bedroom and bath hardware is also included. A smilar set, "Monterey", features a Moorish or Mediterranean motif. Both collections are offered in two finishes—antique English or antique silver. Amerock, Rockford, Ill. *Circle 329 on reader service card*.

2. Steel entrance doors keep interiors frost-free without a storm door, even when exposed to -60° . The insulating quality is furnished by a polyurethane foam and honeycomb core. Self-adjusting vinyl door bottom

provides maximum sealing between door and sill. Frame is installed with "Perma-seal" vinyl weatherstripping to prevent leakage. "Perma-Door" comes in: Williamsburg blue, white, sun gold, slate black, olive green and colonial red. Perma-Door, Steelcraft, Cincinnati. *Circle 330 on reader service card*.

3. Bi-fold closet doors of high-impact polystyrene are fitted with virolawood stiffer braces at the back of each panel. Authentic woodgrain look is molded into panel faces. Although the low-lustre, off-white finish never needs painting, acrylic or latex paint may be used if color is desired. Panels come hinged together with hardware necessary for installation. M&M Products, Richmond, Ind. *Circle 335 on reader service card.*

12 NEW FEATURES EQUAL ONE GREAT ELECTRIC BASEBOARD

Snap-off cover, ribbed for extra strength

plus junction boxes at both ends

plus knockouts at ends, back, bottom

plus new baffle for cool top

plus cool-air slots for thermostat

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in building products

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A dramatic dimension in distinctive beauty and exceptional durability. Each shutter is a solid, one-piece unit . . . no glued or nailed sections to come loose. No reinforcement needed. New, exclusive mounting brackets permit quick, easy installation on all types of exterior surfaces.

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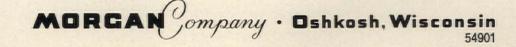
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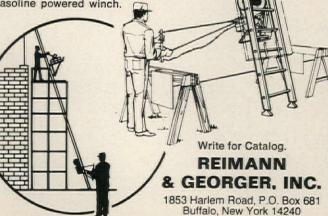
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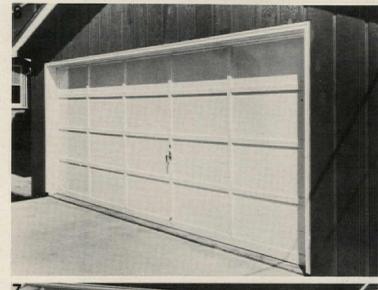
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products: doors/windows

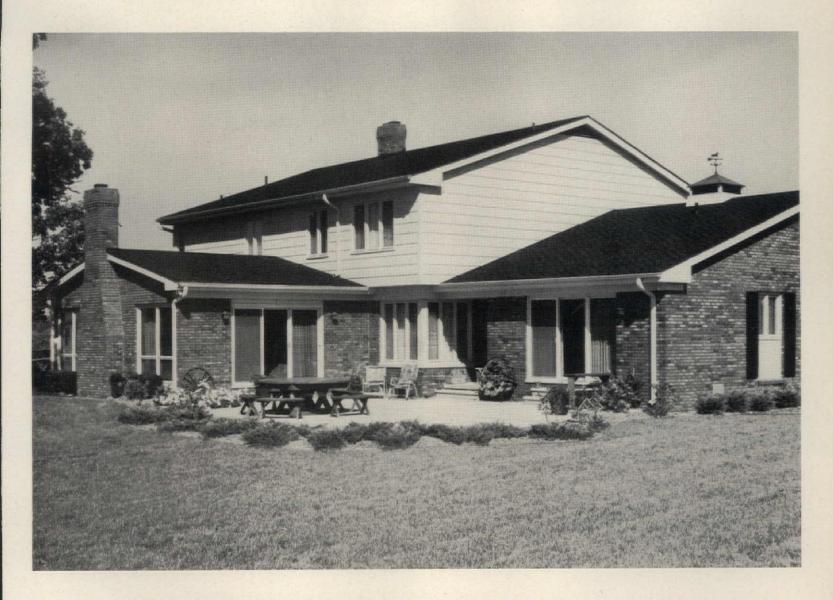
4. Pre-hung door, with a walnut finish, eliminates on-the-job painting or staining. Units include lauan door and jamb and casing. The latter can be installed over painted walls, using putty to cover nail holes. Morgan-Wightman Supply, St. Louis, Mo. *Circle 333 on reader service card*.

5. Solid rosewood entrance door is handcarved on both sides to provide a decorative accent both inside and out. "Westminster", shown, is available with matching side panels. Three other rosewood doors are offered in the "Elegant" line. Elegant Entries unLimited, Worcester, Mass. *Circle 334 on reader service card*.

6. Residential garage door combines wood paneling with exclusively designed aluminum rails. The latter eliminates warpage, grain-raise, splitting and dry rot. "Rebel", which features pre-drilled wood stiles and muntins, adjustable bottom rail and factory-installed astragal, comes in standard double and single widths in ranch and colonial styles. Raynor Manufacturing, Dixon, Ill. Circle 331 on reader service card.

7. Four-section garage door is a combination of lightweight translucent fiber glass and oven-tempered extruded aluminum. The nylon reinforced panels transmit up to 85% of available light. "Tuflite" doors come prefinished in pebble-like tan, green or white for either single-or doublewidth openings and in a full range of sizes. Units have galvanized steel hardware. Clopay, Cincinnati. *Circle 332 on reader service card*.

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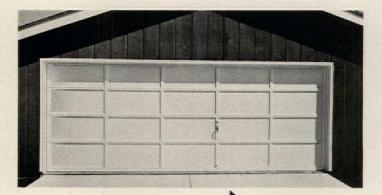
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158 H&H DECEMBER 1972

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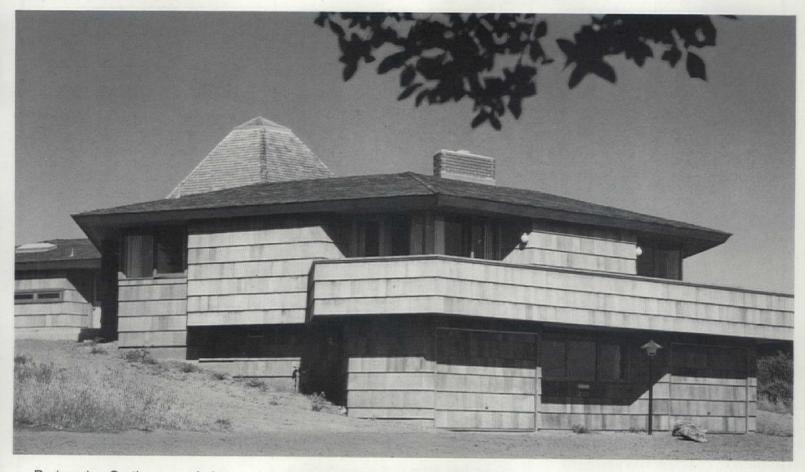


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See why Raynor calls it the "Rebel"?

CIRCLE 158 ON READER SERVICE CARD

Certigroove shakes have a lot of side advantages.

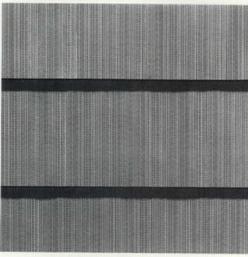


Red cedar Certigroove shakes actually cost less to buy and apply than other commonly used sidewall materials. Yet their value goes far beyond price.

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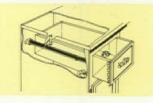
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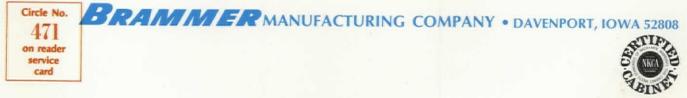
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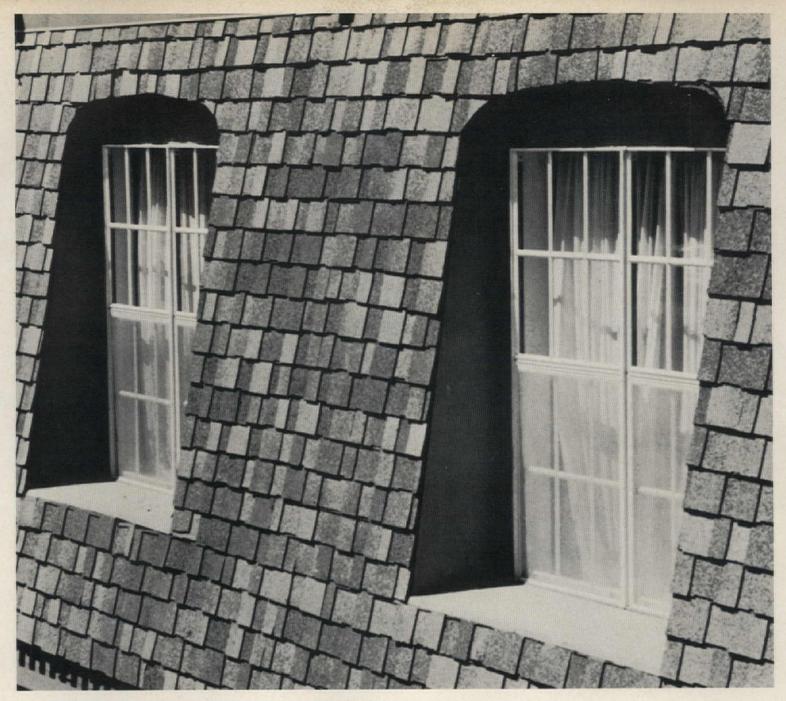
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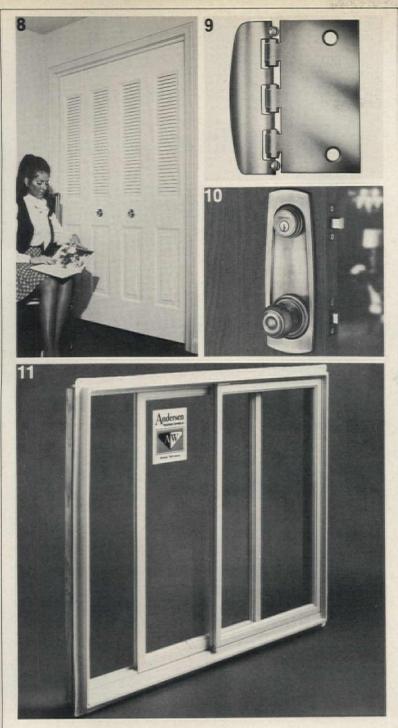
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products: doors/windows

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9. Pivoting hinge-lock provides added protection against burglaries. Designed for installation on a door jamb, "Pivot Lock" has a pivoting leaf that swings over and locks door into position. To unlock, the leaf pivots in the opposite position over door jamb. The secondary lock device is high-carbon steel with a polished brass finish. Ajax Hardware, City of Industry, Calif. Circle 337 on reader service card.

10. Lockset kit combines safety feature with decorator appeal. "Double Duty plus Beauty" comes in four combinations of auxiliary cylinder deadbolt, decorative escutcheon and passage or keylock knob sets. Complete installation instructions are included in the package. Dexter Lock, Grand Rapids, Mich. *Circle* 338 on reader service card.

11. Sliding window is designed for low-maintenance. Its rigid PVC cladding over preservative-treated wood sash and frame requires no painting and resists weathering and corrosion. Window comes in standard sizes. Andersen, Bayport, Minn. *Circle 339 on reader service card.*



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> Never you firet, Sally Homespun. Me and J-M Snap/Pak™insulation and Rampart™ fiber glass shingles will come to your rescue in that gripping melodrama, "Sally Saves the Day" at the NAHB Show in Houston.

Johns-Manville proudly presents "Sally Saves the Day," a gripping New melodrama of homebuilding in the old West.

Watch Sally and Tom do battle with Gouger and his odious sidekick, Black Bart, at the NAHB Show in Houston!

Witness incredible deeds of derring-do with the staple gun—a veritable insulation shoot-out!

Gasp as Bart fires flaming arrows into Sally's Class A roofs!

Sigh as Sally (with a little help from J-M building products) finally saves the day!

Filmed in wide screen 35mm panavision by award-winning cinematographer Jeri Sopanen, "Sally" is but one of many good things to see and do at J-M's exhibit—booth 2022.

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Who's invited? You are—if you like drama, action, excitement, pretty girls, good music, comedy, insulation, roofing, ceiling tiles and wall panels! (If you're a program chairman, you'll be especially interested in seeing "Sally Saves the Day" because J-M is going to make prints available for local homebuilder meetings. Write to Johns-Manville, Box 5705-RP, Denver, Colorado 80217.)

Booth 2022, N.A.H.B. Show.

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IT'S A MAINTENANCE SAVER.

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If you've got a building project, now or in the near future, that looks right for our new Elec-tri-Pac, you can get more information by contacting your nearest Day & Night distributor. Air Conditioning, Heating, Water Heating from the

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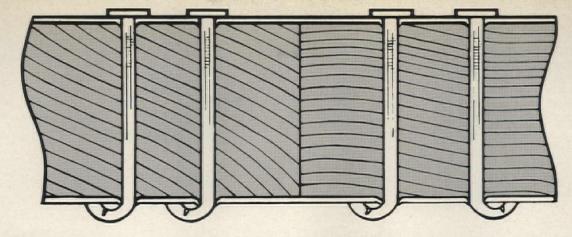


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166 H&H DECEMBER 1972

CIRCLE 166 ON READER SERVICE CARD

78°NIGHT ELEC-TRI-PAC



It's the only roof truss joint with rivet-like strength.



Even with the racking weight of a full-grown man on each side, this Fink truss joint won't give. It's fastened with Bostitch Clinch Nails – the heart of a unique truss system that combines the proven strength and durability of nail-on truss plates with the speed and low cost of simple, compact air guns.

With the Bostitch Clinch Nail System, there's no more flipping of trusses during assembly. *All joints are nailed from one side only*. So now you can make trusses in half the floor space normally needed.

Each Clinch Nail goes completely through both sides of each joint. "Clinching" action locks joints together, rivets the wood between two steel plates.

Two-ply Bostitch clinch plates insure precisely controlled clinching grip.

With the Clinch Nail System, you can handle almost any style truss up to 40-foot span and 7-in-12 pitch.

Everything you'll need including coil-fed nailers, compressor and hoses, truss plates, jigs, clamps and Clinch

Nails come with this new Bostitch truss package. For all the money and time-saving details, send for our *new* construction capabilities brochure. Write Bostitch, 503 Briggs Drive,

E. Greenwich, Rhode Island 02818.





CIRCLE 169 ON READER SERVICE CARD

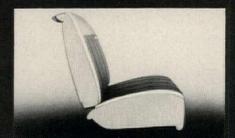
'73 Ford pickups start the better ideas coming all over again!



Behind seat is storage space not gas tank on most models.



Ford box cover looks and fits right, protects your cargo.



Full-foam seat over 5 in. deep is standard in every cab.



Heater is modern blend-air type; optional "air" is all built in.



Box sides are double-wall the full depth with no seams



Front disc brakes are standard on Ford pickups (except 4x4).



Roomiest Ford pickup cab ever offers unusual quiet, comfort.



Ford's famous Twin-I-Beam suspension...smooth, strong.

A better idea for safety: Buckleup.

FORD PICKUPS

FORD DIVISION (Ford)

Works like a truck/rides like a car.

Availability may be subject to Environmental Protection Agency certification.

From Gerber. Best <u>single</u> way to PUT MORE PIZOZZ IN YOUR Plumbing

Watch your customers' eyes light up when they see these handsome Gerber singles. A clever combination of bold and delicate lines lets you suit the styling of any home — modern or traditional.

But satisfied buyers aren't made by pizazz alone. It takes solid product quality.

Our new Easy-Mix[™] singles are ingeniously uncomplicated. Their patented lifetime control unit may be the simplest faucet valve ever designed. Smooth and effortless to the touch, it's engineered to stay that way.

These new singles are designed with the plumber and builder in mind: installation is quick, clean, tight. And sensible prices protect your profits.

Get the whole story on these new Super Singles. Gerber Plumbing Fixtures Corp., 4656 W. Touhy Ave., Chicago, III. 60646. The Super Singles – with the extra value that profits grow on



1-211



Outstanding STUDIO STAIRS assure "custom designed" appearance. Each stair is produced to individual job specifications for easy assembly.

the stair with a flair by AMERICAN PANEL PRODUCTS, INC. 1735 Holmes Rd., Ypsilanti, Ml. 48197

CIRCLE 117 ON READER SERVICE CARD



... for up to 15 people in Am-Finn's new "jumbo" Mark 810 Sauna.

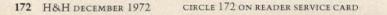
Giving you: > 80 square feet of floor space

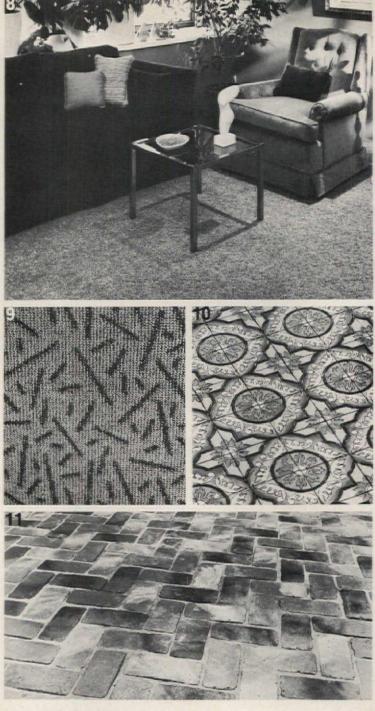
- interior walls, ceiling, floor and benches of beautiful kiln-dried redwood
- superior insulation of non-burning polyurethane
- vapor-proof interior light
- > pre-fabricated and pre-wired for easy installation

"Sitting room only" inside the Mark 810 Sauna means "standing room only" outside your rental office.

Call or write for more information about our complete line of original Finnish saunas today.

AM-FINN, INC. Haddon Ave. & Line Street • Camden, New Jersey 08103





products: flooring

8. Random-sheared Acrilan[®] carpet is tufted through two man-made backings. Multi-level "Nairobi" indoor-outdoor carpet, part of the "Wildlife" collection, is available in ten colors and in 12 ' and 15' widths. Retail price is approximately \$8.95 asq. yd. C. H. Masland & Sons. Circle 352 on reader service card.

9. Polyester contract carpet carries a five-year wear guaranty with normal usage. "Pick-up-Sticks", of Celanese Fortrel, comes in 12' and 15' widths and retails in most areas for under \$13 a sq. yd. Sweetwater Carpet, Ringgold, Ga. Circle 353 on reader service card.

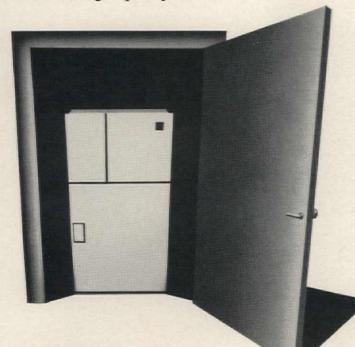
10. Sheet-vinyl floorcovering simulates a hand-painted ceramic tile design. "Sunglow", a member of the

"Regency" line of wax-free floorings, comes in three color combinations: blue, white and gold; green and gold; and gold and tan. Deep embossing in the tile design enhances the pattern's authentic look. Also added to the cushioned floorcovering line are five colors of "Marlstone", a brokenpebble design. GAF, New York City. *Circle 354 on reader service card*.

11. Polyester bricks provide the authenticlook of areal brick floor. Easy two-step installation process involves setting individually molded bricks in mastic mortar base, then squirting squeeze-bottled "Glue & Grout" between them. "Bricover Floor Brick" may also be used outdoors on a solid foundation. Plastronics, West Yarmouth, Mass. *Circle* 351 on reader service card.

Carrier changes apartment cooling inside and out.

Carrier's new split system equipment is tailored neatly to apartments. In both size and cooling capacity.



Inside, our 40VU fan coil unit stands out of the way in a closet. And quietly cools an apartment.

Comes in six sizes to match your apartment sizes. And now or later, you can slip in an electric heating coil. We made room for it. Upflow. Or downflow.

On larger models, a solid state circuit even controls the fan speed. Set it. And forget it. Outside, Carrier's new 38GS Compact condensing unit completes the system. 16" low on the roof. Or behind the bushes on the ground.

Its upflow air exhaust cuts down the sound. So does its unique computer-designed fan.

Like its inside companion, the 38GS comes in the sizes you need to handle tons of cooling in any apartment complex. Simply.

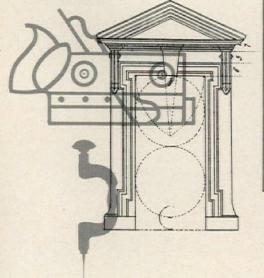
Know, too, that since the 38GS-40VU system carries our name, you'll get the kind of tenant recognition and dealer service that's made our name.

Have a Carrier Dealer quote your next garden apartment. Inside and out. He's in the Yellow Pages. Or write us. Carrier Air Conditioning Company, Syracuse, N.Y. 13201.

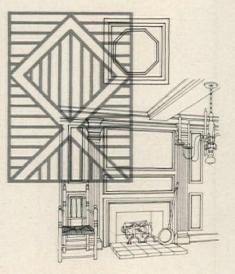


The first modern wood moulding reference book.

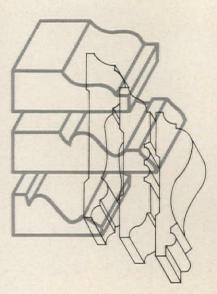
Informative, 24-page, full-color book explores the history of architectural moulding uses from early Greece to today. Includes emphasis on Colonial mouldings, the source of most current moulding patterns.



Detailed in the booklet are studies of contemporary moulding uses, plus existing classical American Colonial interiors showing how the same architectural effects can be duplicated with moulding patterns available today.



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a star is born

Briggs.

Yes, the Briggs plumbing fixture company known for 83 years. The new star, the new look — and newly expanded into the water heater business through the acquisition of the Republic Heater Company... They're all part of the new Briggs. But you'll recognize the classic Briggs quality right away.

See what it's all about at the upcoming NAHB Show in Houston, Booth #2218. Simply look for the new star.



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products: flooring

1. Underlayment for contract carpets combines properties for firm support and comfort. "Omalon Carpet Foundation System" is available in three grades of density and thickness. All grades come in 40-sq.yd. rolls, 6' wide and 60' long. Olin, Stamford, Conn. Circle 344 on reader service card. 2. Sculptured shag carpet comes in a wide range of solid colors. Face yarn is heat set staple nylon. Multidimensional "Carriage House", with a polypropylene primary backing, retails for approximately \$9.95 a sq. yd. Certain-teed Products, Valley Forge, Pa. Circle 345 on reader service card.

3. Red-oak flooring may be installed directly on concrete or plywood. Medium-brown in color, the tiles are 10%" sq., 5/16" thick. "BondWood" features a rough-textured face and low-maintenance, deep penetrating finish. Harris Manufacturing, Johnson City, Tenn. *Circle 346 on reader service card.*

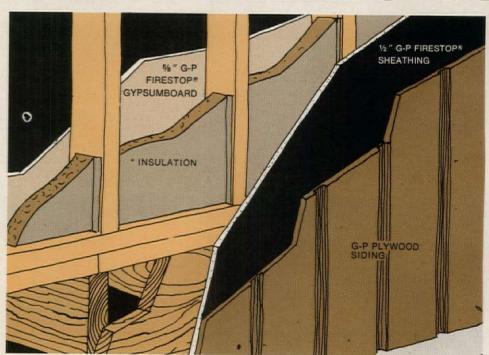
4. Ceramic tiles, in intermixed shades and colors, are easy to clean, won't burn and need no waxing. "Franciscan Terra Grande" comes in a wide range of colors in textured or smooth glaze. Tiles come 3"x6" and in four made-to-order sizes. Interpace, Los Angeles. Circle 350 on reader service card.

G-P has the answer sound control in

"Why does my fire control system in exterior walls cost so much?"



Fire control doesn't have to be expensive. Not when you use G-P's FIRESTOP*. It gives you a one-hour fire rating in exterior walls. 5/8" FIRESTOP* gypsumboard is applied over wood studs with insulation. And then on the outside wall, 1/2" FIRESTOP* sheathing is attached and covered with 3/8" (or 5/8") G-P plywood siding.



* INSULATION NOT REQUIRED TO MEET FIRE RATINGS



products: flooring

5. Low-maintenance vinyl floor features a delicately shaded, ruggedly embossed Mediterranean tile design. "Portifino" comes in five colors: gold, terra cotta, white, avocado and bronze. Available in 6' or 12' widths, the sheet-vinyl can be installed at grade level including on-grade concrete floors and in basement areas. Armstrong Cork, Lancaster, Pa. Circle 347 on reader service card.

6. Easy-to-install parquet tiles are backed with foam to increase soundcontrol, resiliency and moistureproofing. Hartco Wood Foam Tile® features "Park-K-Stik"— a system of factory-applied adhesive dots which eliminates need for mastic or rollers during installation. Instead, a chemically treated peel-away backing is removed, and tiles are pressed into place. Seven finishes are available. Tibbals Flooring, Oneida, Tenn. *Circle 348 on reader service card.*

7. Heat set nylon splush, "Gentle

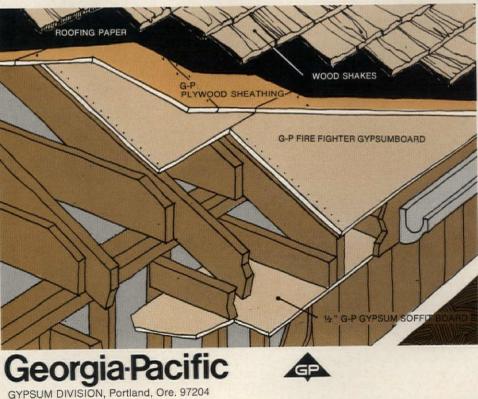
Touch", combines the best wear and appearance characteristics of a shag and a plush. Shown in "regency red", the fabric adds elegance to a contemporary styled dining area. The easy-to-maintain, tufted carpet retails for approximately \$8.95 a sq. yd. J.P. Stevens, New York City. *Circle 349 on reader service card.*

to economical fire and low-rise construction.

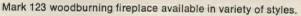
"Is there a fire control system that really works for roofs?"



Yes! G-P's new Fire Fighter gypsumboard gives you excellent fire protection for roof construction. It's ½" thick gypsumboard with a fire resistant core and special paper that is easily placed over the rafters. Solid plywood or strip sheathing is laid over it. Then put up a wood shake or any other kind of roof you want. And Fire Fighter gypsumboard will prevent flames from burning through the roof structure.









Mark 2028 gas fireplace combines the charm of wood with the convenience of pushbutton gas.



Dramatic wall-hung Mark 5880 gas fireplace.



Sophisticated free-standing woodburning fireplace, Mark 4606.

Heatilator fireplacing... the low-cost way to charm prospects

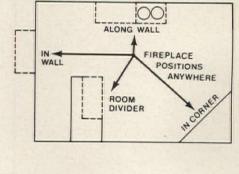
You've got profitable new reasons to include wood or gas fireplacing in your apartment plans—just as for single homes. Heatilator fireplacing simplified now makes it practical with...

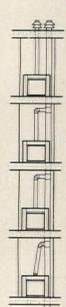
Factory-built components at surprisingly low initial cost apartment-engineered systems that are fully compatible with standard construction methods, reducing installation costs to the lowest ever. Place a Heatilator wood or gas fireplace anywhere, right on a wooden floor, against combustible wall materials—without using masonry. Woodburning models are complete systems, hearth to roof termination. Gas units use standard B-vent for both single and multi-level venting. And, all models offer unlimited decorative trim options—leave fireplace surround as is, paint as desired, or conceal with brick, marble, etc.

Charms renters into paying premium rent. Heatilator fireplacing not only gives you more competitive rental appeal, it is making renters glad to pay up to \$15 more per month—giving you more profit, more cash flow, more loan and sales value.

Long, dependable service. Mark 123 woodburning fireplaces feature a 20-year written warranty and smoke-free guarantee— U.L. listed! Heatilator gas fireplaces feature realistic Oak logs and flame, convenient pushbutton control—use natural or L.P. gas. A.G.A. design certified and tested.

See your Heatilator Distributor. Or, send for FREE Fireplace Idea Kit. Write Heatilator Fireplace, A Division of Vega Industries, Inc., 18122 W. Saunders St., Mt. Pleasant, Iowa 52641. (Also available in Canada.)





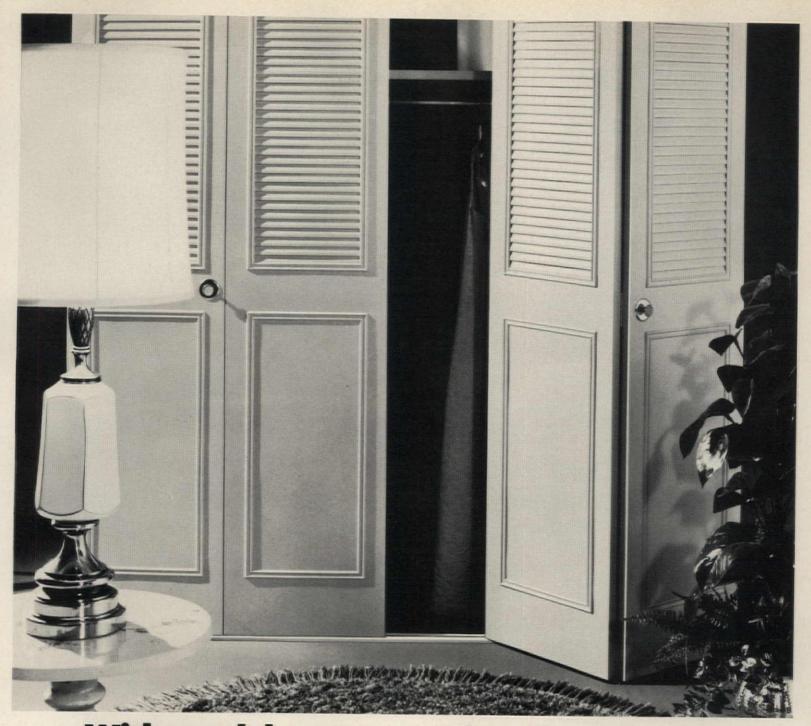
See Catalog in Sweet's Light Construction File



Multi-level venting for wood

or gas systems.

CIRCLE 178 ON READER SERVICE CARD



With steel doors as good as Float-Away, why pay the high price of wood?

Today the wooden closet door has about priced itself out of the market, in both homes and apartments.

Lumber prices have climbed. Wood doors are up drastically. More increases are on the way.

Now is a good time to take a hard look at what you're getting for your money-regardless of what kind of door you have used in the past. Compare Float-Away steel closet doors and shelves for initial price and cost of installation. Examine the unique new Floata-Plate finishing process, exclusive with Float-Away. Compare for appearance, quality and durability.

Float-Away is the best door you can buy-and today that buy looks better than ever.

Call or write for complete details. Float-Away, Dept. HH-12, 1123 Zonolite Rd., N.E., Atlanta, Georgia 30306, (404) 875-8021.

Space No. 2400, NAHB Exposition, Houston, Texas



Now even better with micro lam

Since its introduction just two years ago the TRUS JOIST I Series, or TJI MICRO=LAM is a superior wood product in that every piece is uniform Joist, has become the fastest selling new structural component in the United States. Millions of lineal feet have gone into floor systems for apartments, town houses, condominiums and single family dwellings. In commercial buildings and apartments alike, it has provided a superior roof system as well. Utilizing 2 x 3 or 2 x 4 flanges of top grade Machine Stress Rated structural lumber it has always outperformed solid sawn joists, but now the TJI is rapidly becoming available nationwide with flanges of MICRO = LAM lumber.

MICRO=LAM is a new TRUS JOIST development wherein sheets of veneer are fed into one end of a 90 foot traveling press in an exact lay-up pattern. Precise amounts of heat and pressure are applied and the veneers exit from the machine in the form of a MICRO=LAM board or billet 80 feet long, 24 inches wide and 11/2 inches thick. The billet is then cut to size for use as TJI flange material.

and of known strength. Any defects in the veneers are so widely scattered they do not affect the board itself. There are no problems with warp or shrinkage. MICRO=LAM is straight and it stays straight. It has excellent structural characteristics and an extensive testing program has shown it to be completely reliable. Major code groups and F.H.A. have approved MICRO=LAM flanges for the TJI Series joist as a direct substitute for the high quality structural lumber formerly utilized. The introduction of MICRO=LAM is probably one of the most significant

developments which have taken place in wood utilization in recent years. Because of its strength, versatility and availability in extremely long lengths it is destined to be used in many new applications of which the TJI flange is only the beginning.



I SERIES TRUS JOIST

*LIGHT WEIGHT, FAST ERECTING Builders report the TJI goes in place two to four times faster than solid sawn joists. Saves time. Saves money.

***LONG SPANS**

Up to 24 feet at 2 feet O.C. in floor systems, up to 40 feet at 2 feet on center in roof systems. Multiple spans to 60 feet. Available in depths from 10 inches to 24 inches.

#UNIFORM

Every joist is uniform and equal in strength to provide level floors which are far more rigid than those using solid sawn joists.

*** DRILL EASILY**

The plywood web drills easily and quickly to accommodate wiring, plumbing and even large ductwork. Often makes it possible to eliminate expensive hung ceilings.

*** PROBLEM FREE**

Will not cause cracked walls, sticking doors or windows because of shrinkage, a common failure of solid sawn lumber.

* ALWAYS AVAILABLE

Delivery within three weeks anywhere in the U.S., any time of year. Often sooner, if needed.

* REAL ECONOMY

In many areas the TJI will compete in price with 2 x 10's but the really big savings are in labor and faster construction.

*QUALITY

The TJI is precision engineered, manufactured to exact specifications in our own plants and absolutely guaranteed to carry the loads for which it is designed. It provides a floor or roof structure far superior to ordinary dimension lumber.



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Boise, Idaho 83702

CIRCLE 181 ON READER SERVICE CARD

A complete I Series file folder containing load tables, bearing details, design information, job photographs and other details was mailed to 30,000 firms this month. If you do not receive one and you are an architect, engineer, builder or developer just fill out and mail this coupon. We'll send your folder immediately.

NAME	
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	eveloper, how many residential or have planned for 1973?

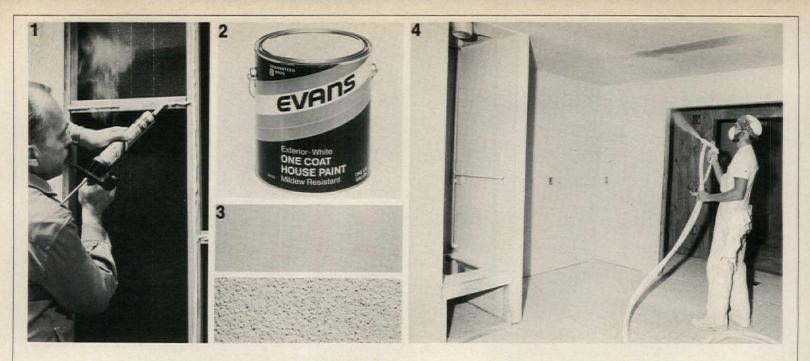


80 foot Micro-Lam billets as they exit from press.



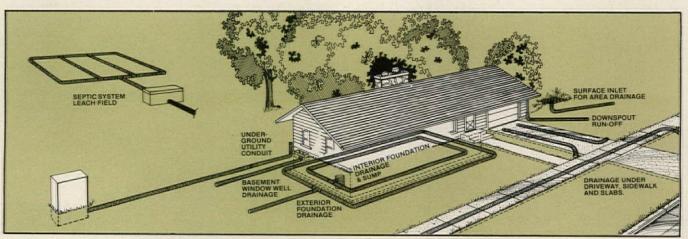
I Series joists go in place 2 to 4 times faster than 2 x 10's

ommodate even large duct work



products: coating/adhesives

1. Construction adhesive is nonflammable and non-toxic. "Big Stick" is suitable for use on paneling, polystyrene, urefoam, insulation board, acoustical tiles, fiber glass, most plastics, masonry, metals and wall boards. Weldwood, Champion International, Kalamazoo, Mich. *Circle 368 on reader service card.* 2. Patented latex house paint for exterior application "Busan® 11" has a preservative pigment that keeps finish clean and bright. Substance is guaranteed not to mildew, fade or chalk for eight years. It is fume-resistant, non-yellowing and inhibits rust. Evans Products, Roanoke, Va. *Circle 369 on reader service card.* 3. Acrylic latex "Ultra-hide" minimizes surface irregularities in concrete, plaster, exterior grade plywood and filled concrete block. The thick, flexible, mildew-proof material bridges small cracks and pinholes. It can be applied with an air spray or roller. Glidden, Cleveland, Ohio. *Circle 370 on reader service card.* 4. Heavy-duty latex coating is suitable for application by airless spray or roller to drywall, masonry, plaster or primed metal surfaces. A singlecoat of the substance covers irregularities and dry tape joints. Paint has a durable, washable, deep-flat finish. Luminall, Los Angeles. Circle 371 on reader service card.



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The "fin" part is a polypropylene barrier to stop leaks. Then we support it with Poly-Pile[®] on either side. So you have two things working for you.

But the names of the people who use it on their doors and windows will prove our point a lot faster than anything we can tell you here. Acorn. Alcoa. CE Building Products. Crestline. De Vac. Norandex. Reynolds. Rusco. Season All Industries. Weathershield. Write for a complete customer list and a sample of Fin-Seal.

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Now... 'built-in' fireplaces from Martin.

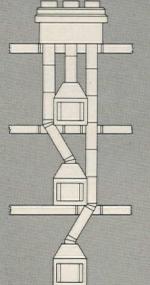
Because Martin Fireplaces are designed and engineered for ZERO CLEARANCE, they can be built in anywhere. On any floor. Against any wall, combustible or not!

Installation is quick and easy. After the unit and flue are assembled, there's nothing more to do but trim out the fireplace to suit individual tastes.

Since there's no need for a special foundation or masonry chimney, a Martin "Build-In-Anywhere" Fireplace can be installed for a great deal less than an ordinary masonry fireplace. Which makes a Martin Fireplace a great deal all around!

Discover for yourself the economy, convenience, comfort, and charm of a "Build-In-Anywhere" wood burning fireplace by Martin.

Martin offers a complete line of quality fireplaces, such as: Free-Standing, Built-In, and Wall-Hung in gas, electric, and wood burning models.



Multi-Story Installations

FEATURES:

- 1. Flush front design. . . no holes or air intakes
- 2. Tapered shape for minimum corner installation
- No special starter sections required as other manufactures. Simplifies stocking.
- Round 3 wall pipe with 30° offset elbows.
- Round contemporary or simulated brick roof-top terminations.
- Simple, fast installation requiring no foundation.
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- 8. UL listed. 9. Another builder "Profit Pro-
- duct" from Martin.

Patents Pending



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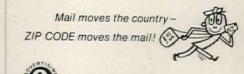
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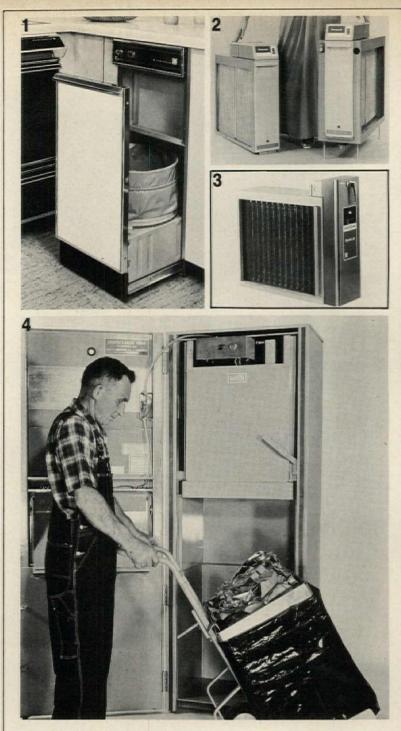
HERCULON[®]. A colorful, 24-page booklet detailing the performance, construction, installation, maintenance and specifications of carpets made with pile of HERCULON* olefin fiber. You'll find it in four volumes of the 1972 Sweet's Catalog . . . Architectural, Interior Design, Light Construction and Canadian files.

A special swatched binder in Sweet's Interior Design file features a cross section of carpet constructions in HERCULON. It's a first for Sweet's... the first full volume of carpet samples ever assembled by a fiber producer.

We are doing all this for one very simple reason. The more you know about carpets of HERCULON, the more likely you are to specify them.



CIRCLE 188 ON READER SERVICE CARD



products: environmental

1. Built-in trash compactor comes equipped with four different color decorator-door panels. An optional cutting board top is available for freestanding use. The "XTC 500" reduces a seven-day accumulation of garbage from a family of four to one 25 lb. or 35 lb. bag. Unit is 15" wide, 24" deep and 34%" high. Modern Maid, Chattanooga, Tenn. Circle 340 on reader service card.

2. Electronic air cleaners available in manual-or automatic-wash units are designed for installation directly into heating and cooling systems. Devices remove up to 95% of the dirt and 99% of the pollen from the air that passes through them. Both types come in 16"x25" and 20"x25" models. Honeywell, Minneapolis, Minn. *Circle 341 on reader service card.*

3. Electronic air cleaner with slimline design is suitable for installation into any type of forced-air furnace system. The unit is equipped with 1" duct flanges for tight connections. Solid state circuitry is used in the power pack. Electro-Air, Emerson, McKees Rock, Pa. *Circle 342 on reader service card.*

4. Hand-fed trash compactor is available with a chute attachment for multifamily housing. The heavyduty "St-1 Masher" has an "Adjusta-Pak" device that controls the weight and size of the finished trash package by signaling when predetermined limits have been reached. A deodorizer automatically discharges disinfectants into the chamber. Compackager, Washington, D.C. *Circle 343 on reader service card.*

The Caradco Sculptured Door



You get deep-carved panels fashioned from onepiece, wood-grained faces that can't split, check or shrink; a factory prime coat that welcomes paint or toned stain... that lets you suit the final finish to your fancy, be it avantgarde, traditional or in between. Result: it looks like more than it costs. And that's the beauty of it: it costs less than conventional panel doors.

We did even more with the door pictured. We

prefinished it with a smooth white factory coating, to bring out the full richness of the wood texture. It's easy to see why this *practical* eyeful has tremendous buyer appeal. For more facts on Caradco Sculptured Doors, please call us or write.

Caradco Window and Door Division



Main Plant, Dubuque, Iowa 52001 Eastern Assembly Plant, Hainesport, New Jersey Ohio Assembly Plant, Columbus, Ohio

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.

EASTMAN CENTRAL D UNITED STATES BRASS CORPORATION SUBSIDIARY OF HYDROMETALS, INC 901 TENTH STREET, PLANO, TEXAS 750 UNS

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We build our cabinets to be forgotten. First, we get them there as scheduled... individually cartoned to protect the "familyproof" 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.

Yes, we build cabinets you can install and forget. The way we figure it, you'll never forget us for it.

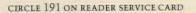
Check the Yellow Pages for the distributor nearest you. Or write, Kitchen Kompact, KK Plaza, Jeffersonville, Indiana , 47130.

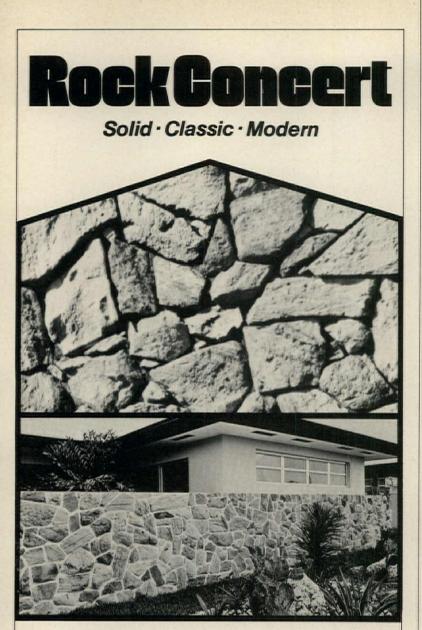










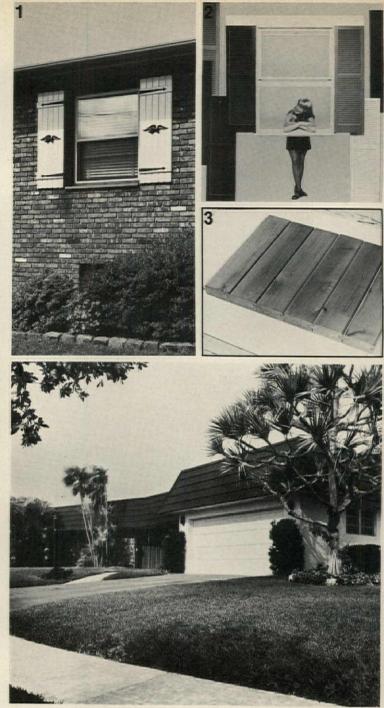


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products: exteriors

1. Aluminum shutters with a baked enamel finish retain a fresh painted look for years without special maintenance. Designed to add a colonial touch to the house, the sturdy weather-resistant "Cross Buck" shutters are available in a wide range of colors and sizes. Alcan Aluminum, Warren, Ohio. Circle 355 on reader service card.

2. Wood-like shutters are molded from ABS polymer and protected from weather by a Korad acrylic finish. Previously available in black and white only, X-act® shutters are now offered in raven green, cocoa brown, barn red, moss green and island sand. Shutters are 1¼" thick for a solid, heavy appearance. Home Comfort Products, Princeville, Ill. *Circle 356 on reader service card.* 3. Laminated decking of alder hardwood is available in a variety of semi-transparent stains. Faces are machine sanded but can be custom cross-sanded or wire brushed. Decking is end-matched so joints need not be made over support members. Weyerhaeuser, Tacoma, Wash. Circle 357 on reader service card.

4. Colorful lightweight roofing is manufactured from formed galvanized steel sheets coated with a bituminous emulsion, impregnated with colored ceramic chips and finished with a fungus resistant sealer. Made to simulate clay or ceramic tiles, the material is easy-to-install for fullroof or decorative mansard application. Automated Building Components. Miami, Fla. Circle 358 on reader service card.

All the help you can get in multi-family housing: The Kingsberry Man.

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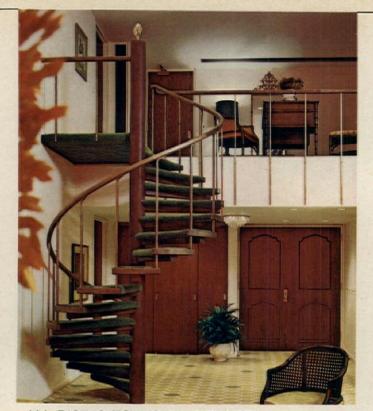
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- 1. Title of publication: HOUSE & HOME 2. Date of filing: October 1, 1972
- 3. Frequency of issue: Monthly

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 Names and addresses of publisher, editor, and managing editor.
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 Editor: John F. Goldsmith, 1221 Avenue of the Americas, New York, N.Y. 10020 Managing editor: Maxwell C. Huntoon, Jr., 1221 Avenue of the Americas, New York, N.Y. 10020

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7. The owner is McGraw-Hill, Inc., 1221 Avenue of the Americas, New York, New York 10020, Stockholders holding 1% or more of stock are: Donald C. McGraw, Elizabeth McGraw Webster, Donald C. McGraw, Jr. & Harold W. McGraw, Jr., Trustees under Indenture of Trust m/b James H. McGraw, Jr. & Harold W. McGraw, Jr., Trustees under Indenture of Trust m/b James H. McGraw, dated 1/14/21 as modified, Donald C. McGraw, Trustee under an Indenture of Trust m/b James H. McGraw, dated 7/1/37 as amended, Donald C. McGraw, individually, Donald C. McGraw & Catharine McGraw Rock, as Trustees of the Estate of Mildred W. McGraw, all of 1221 Avenue of the Americas, New York, New York 10020, Firer & Co. c/o First National Bank of Jersey City, 1 Exchange Place, Jersey City, New Jersey 07302, Harwood & Co. c/o State Street Bank and Trust Company, P.O. Box 5006, Boston, Mass. 02101, Perc & Company c/o Northwestern National Bank of Minneapolis, Minneapolis, Minnesota 55480, Pratt & Co. Co Co The Bank of New York, 110 Washington Street, New York, New York Co. c/o The Bank of New York, 110 Washington Street, New York, New York

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- 11. Extent and nature of circulation

	Issue During Preceding 12 Months	Issue Published Nearest to Filing Date
A. Total No. Copies Printed	111,202	110,678
B. Paid Circulation 1. Sales through dealers and carriers, street vendors and counter sales 2. Mail subscriptions	104,456	103,300
C. Total Paid Circulation	104,456	103,300
 D. Free Distribution by Mail, Carrier or Other Means Samples, Complimentary, and other free copies Copies distributed to news agents, but not sold 	5,653	6,579
E. Total Distribution	110,109	109,879
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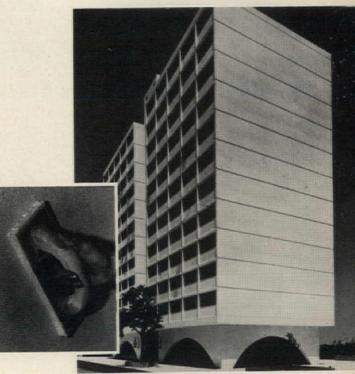
MODULAR HOUSING: Today's trend in modern housing-easily erected modules grouped according to specifications. These attractive units were permanently decorator-finished with cement-base THOROSEAL PLASTER MIX sprayed on with the versatile, dependable Thorogun, It sprays up to a 27" swath for fast, efficient applications. (Photo by R. M. Liselen)

Thoro System Products cover a wide range...finish and waterproof quickly and economically!

To keep up with today's varied construction needs, to help builders keep costs down, quality up, THORO SYSTEM has developed application tools for easy, economical use of THORO PRODUCTS. Thorogun is a specially designed spray gun for THOROSEAL PLASTER MIX and other spray-on products. It is a reliable, fast and efficient piece of equipment with simple operation.



BASEMENTS - EXTERIORS: Based on the time-tested, cement-base THOROSEAL formula, but with coarser aggregates, THOROSEAL FOUNDATION COATING is specifically designed to protect and keep water out of exterior, below-grade surfaces, as well as beautify abovegrade foundation areas. Easily applied with standard or special Thoro coarse fiber brush.



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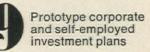
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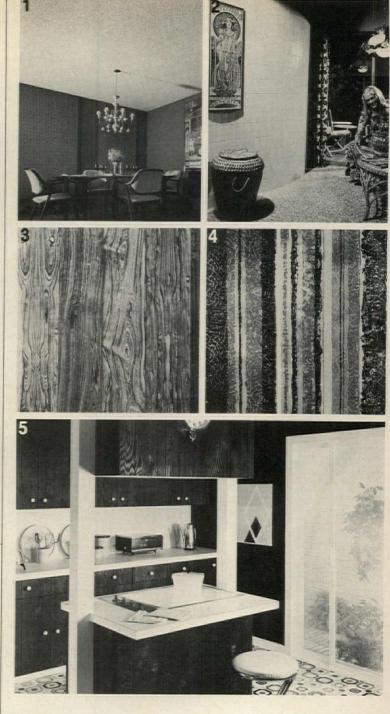
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products: interiors

1. Acoustical ceiling tiles carry UL Class I flame-spread rating, permitting commercial as well as residential use. "Hallmark" has a washable finish. T&G detailing provides a virtually monolithic appearance. Tiles are 12" square. Simpson Timber, Seattle, Wash. Circle 359 on reader service card.

2. Ceramic wall tiles, in 3"x6" modules, join the "Matte Glaze" line. Fourteen colors are available, including spicy mustard, blue mist, lime green, lemon yellow, fresh avocado, fern and hydrangea. Florida Tile, Lakeland, Fla. Circle 360 on reader service card.

3. Prefinished hardboard paneling, with a simulated mismatched rosewood appearance, features narrow

grooves, 8" o.c. Dentproof, marproof "Rosado" 4'x8' panels are easily maintained with a damp cloth. Masonite, Chicago. Circle 361 on reader service card.

4. Foil wallcovering acquires a threedimensional look through a diverse blend of stripes. "Tangent", in six colorways, is one of 15 "Facets on Foil" designs. James Seeman Studios, Garden City Park, N.Y. Circle 362 on reader service card.

5. Plywood paneling, designed to enhance kitchen decor, is faced in rough-textured, grained cedar. Russet-toned, 5/16"-thick "Smokehouse Cedar" comes 4'x8', 4'x9' and 4'x10'. Core and back ply are Western softwood. Evans, Portland, Ore. Circle 363 on reader service card.



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Glenn Knisely (left) and Robert Davis examine the Ajax Super Drawer.

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You paint it quicker, with less paint. You will paint it less often.

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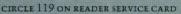
It Costs No More with Compotite®

Shower baths now come in many forms...a mosaic tiled stall, a sunken tiled tub, or a Hawaiian type with garden backwall. These better designs have one thing in common...they feature the beauty and versatility of ceramic tile.

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products: fireplaces

1. Gas-log fireplace set employs a jet burner to produce natural-looking flames with a minimum of contaminates. "Clean-Fire" comes 18", 24" or 30" with artificial oak or birch logs. It can be used with natural or LP gas. Clean-Fire Log, Belleville, Ill. *Circle* 364 on reader service card.

2. Built-in gas fireplace can be installed without masonry foundation. The unit uses standard 5" BW-type wall vent, needs 13" wall-depth and fits between standard stud spacing. Features include simulated-oak clay logs and ashes. Martin Stamping & Stove, Huntsville, Ala. Circle 365 on reader service card.

3. Prefab wood-burning fireplace, designed for 7'- to 8'-high rooms, installs without masonry foundation, framing or structural changes. Featuring triple-wall construction for total insulation, the unit has a 32" firebox opening and 49"-wide, 29"deep hearth. "Tudor" comes with matte black or pewter finished hood, stainless steel hearth and trim, and factory-installed firescreen. Majestic, Huntington, Ind. Circle 366 on reader service card.

4. Electric fireplace includes raised slate or brick hearth and flush firescreen. Series "4000" comes with flagstone (shown) or brick exterior. Optional accessories are electric log with or without heat, black or brass screen assembly and slate or Nevermar[®] mantels. Unit is 94" wide, 41" high, 24" deep. Mono-Line Industries, St. Joseph, Mich. Circle 367 on reader service card.

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KEEPS THE SAUCE FROM BURNING. The Burner-with-a-Brain* controls temperature automatically. Your food won't burn—and you save gas.

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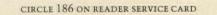


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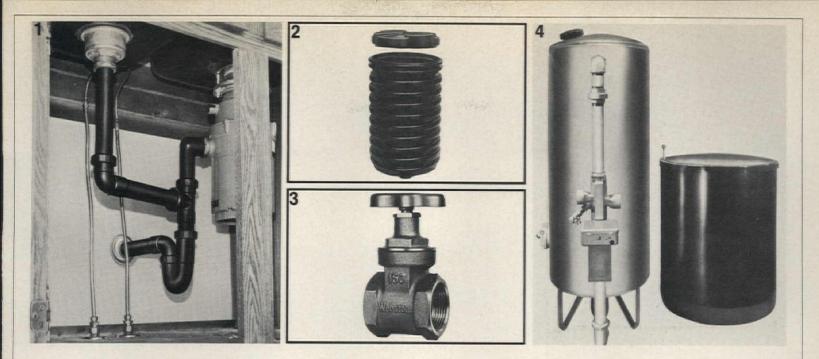
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products: plumbing/pipes

1. Three continuous-waste assemblies of ABS thermoplastic corrosionresistant material are easy-to-install in under-sink spaces. The lightweight units are for center- and endoutlet connections and are available in 1½ "x12", 16" and 21". Celanese Plastic, Hilliard, Ohio. *Circle 372 on reader service card*. 2. Easy-to-install sump has a corrugated design that locks into back-fill and concrete floor. The strong, lightweight molded-plastic unit is rotand rust-resistant and is not affected by acids, alkalis, freezing or thawing. Advanced Drainage Systems, Columbus, Ohio. Circle 373 on reader service card. **3. Full-flow bronze gate valve** has a patented Teflon stem seal. The valve offers tight sealing and carries a three-year warranty on stem seal. The unit, utilizes two washers—one Teflon and one special rubber—suitable for water up to 250° F. Webstone, Worcester, Mass. *Circle 374 on reader service card.*

4. Water conditioner consists of a steel mineral tank and a fiber glass or polyurethane brine tank. It is available in eight sizes. Positive-action brass control valve, mounted on mineral tank, does not depend on water pressure for activation. Sta-Rite Industries, Delavlan, Wis. *Circle 375 on reader service card.*



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Benchmark Steel Doors Bi-Folds and Entrance Systems

The big boys go with the leader!

Wood Bros. find U/R fiberglass bath rates A-1 in "public acceptance" test.

From a house-at-a-time start in 1950, brothers Bob and John Wood, Jr. of Denver have become housing giants in Colorado and the Southwest. The Woods attribute this outstanding growth to craftsmanship coupled with sound market research. Universal-Rundle

That's why they thoroughly pre-tested U/R's fiberglass one-piece tub-shower unit for prospective home-buyer reaction in a new development in Houston before making it a standard feature of their other communities. Report? "We found the U/R fiberglass bath was very well received and maintenance advantages in particular were readily recognized by our customers." Since then, Wood Bros. Homes, Inc. is installing U/R fiberglass units in its

new communities in Denver, Phoenix, Houston, Dallas, Oklahoma City, Tulsa and Albuquerque, and notes sizeable savings in installation time over tubs with tile surrounds.

Time saved cuts costs. So go with the leader and save. Look us up in Sweet's File 15.20/UN. And check the Yellow



Pages for your nearest U/R dealer or write Universal-Rundle Corp. New Castle, Pa. 16103.

Paint job, PF-L style.

PF-L[®] siding from U.S. Plywood. The minimum-maintenance exterior that can turn your buildings into best sellers. Because it's surfaced with Tedlar.[®] A polyvinyl fluoride film that's just about the most durable exterior finish ever developed.

PF-L comes clean with a simple hosing. Even really difficult staining agents, such as roofing tar, wipe off with soapy water, solvents or detergents.

Thanks to Tedlar, PF-L is unaffected by the usual weatherers like chemicals, soil, salt air, sandstorms, rain, hail and extreme temperature.

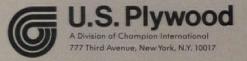
It has great color stability, too. And because PF-L is naturally resilient hardboard, it resists dents, gouges and other damage.

Another advantage of PF-L is that it's a money-saver to install. Finished walls can be put up in any weather, by ordinary workers, with conventional carpentry tools, either direct-to-stud or over sheathing.

PF-L is available in Lap or Board and

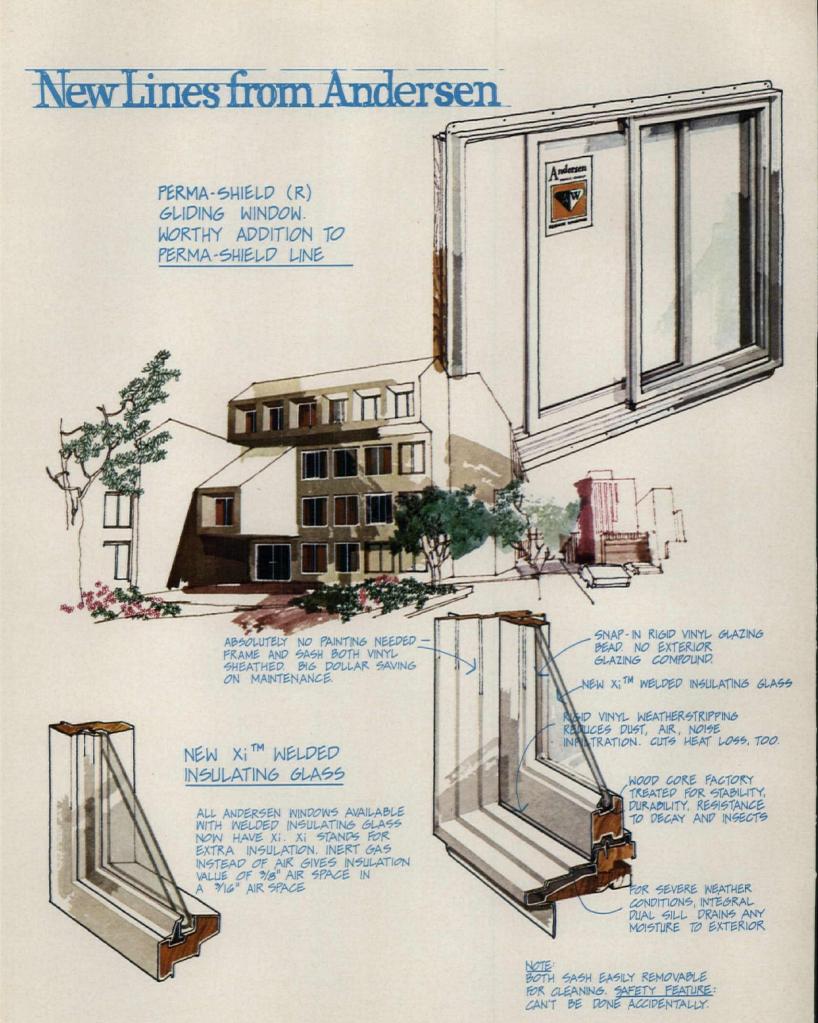
Batten. In Shell White, Granite Gray, Doeskin, Georgian Gold and Bayberry, with a full line of Tedlar surfaced accessories to match.

PF-L. A great way to build in minimum maintenance in multi-family and single-family dwellings. For more information, contact your local U.S. Plywood Branch Office.



CIRCLE 125 ON READER SERVICE CARD





PERMA - SHIELD SHUTTERS

PECORATIVE SHUTTERS BUILT TO ANDERSEN QUALITY STANDARDS. NO PAINTING. TREATED, FACTORY - PAINTED, WOOD FRAME MEANS STURPINESS WITH LIGHTNESS. VACUUM FORMED VINYL SHOWS WOOD GRAIN... HAS LOOK OF PAINTED WOOD.

GOOD RANGE :

STYES (PANEL AND LOUVER) COLORS (BLACK AND WHITE) WIDTHS (14" AND 18") HEIGHTS (35" TO 80") 2 122 10

COLONIAL - STYLE SHUTTER DOGS

OPTIONAL - NOT NECESSARY FOR HOLDING SHUTTERS OPEN. BUT NICE TOUCH OF AUTHENTICITY.

TERRATONE

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CAREFULLY SELECTED TONE THAT BLENDS WITH NATURAL MATERIALS, WOOD TONES, BRICK, STONE, ETC.

Visit us at NAHB. Booth 2410. See all the new Andersen products.

ARA- SHIELD ARE IN ADDITION TO: AMA- SHIELD (R) AND ALL WOOD CLOING DOORS AMA- SHIELD AND ALL WOOD GLIDING DOORS

INFORMATION IN SWEETS (8.16/AN)

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Andersen Windowalls

show'em a better way: raywall baseboard heating

For new construction or remodeling of homes, cottages, motels, apartments, institutions, and offices, Raywall baseboard heaters offer a better way. All models feature attractive straight line design, finned tube element and continuous capillary (fail-safe) thermal cutout.

Raywall baseboard heaters are easily installed. Standard sizes can be combined to fulfill any heating requirement, and all models may be controlled with inbuilt or wall thermostats. Thermostats and accessories are adaptable to wiring compartments at either end. Baseboard heaters BB Series

Baseboard heaters BB Series and BH Series are available in 11 lengths...from 2 feet to 12 feet. The FB Series heater is available in 8 lengths... from 2 feet to 10 feet.

Specify Raywall Baseboard Heaters—a better way to solve heating problems.



CIRCLE 128 ON READER SERVICE CARD

LITERATURE

Sliding hardware is described and illustrated in an eight-page, four-color pamphlet. Each product in the line including door, drawer, hospital, drapery and shelf hardware, is individually discussed. Applications are examined and pictured. Grant, West Nyack, N.Y.

CIRCLE 404 ON READER SERVICE CARD

Vinyl floors, in Orient-inspired patterns, are shown in ten full-color room settings. Paragraphs describing each design include hints for furniture and accessory selection to complete the look. GAF, New York City. CIRCLE 405 ON READER SERVICE CARD

Snow guards, pipe-and-baseplate systems to prevent mini-avalanches from toppling off pitched roofs, are cataloged. Roof strainers and hinged leader straps are also described. Specifications for all products are included. David Levow, South Hackensack, N.J.

CIRCLE 406 ON READER SERVICE CARD

Cold weather concreting is discussed in an 8½"x11" bulletin designed to be posted on jobsites. Workable temperatures for concrete and areas to be concreted are provided along with helpful suggestions on how to achieve the control needed. Also listed are minimum time periods needed by various types of concrete for protection against the cold. Master Builders, Cleveland, Ohio.

CIRCLE 407 ON READER SERVICE CARD

Multi-use grille system is described and illustrated in a four-page brochure. Typical applications of the solid-cast aluminum "Integrille" such as outdoor screening, space dividers and shelter walls—are shown. Detailed specifications on available sizes, physical properties and customizing possibilities are given. Playground Corporation of America, Long Island City, N.Y.

circle 408 on reader service card

Buyers manual is a complete guide to plants, products and services available from members of Western Wood Products Assn. The 44-page directory also lists the association's wholesaler associates and members of Western Red Cedar Lumber and Fir & Hemlock Door Assns. Other data: names and locations of WWPA's field service representatives, rail freight costs, dimensional data for lumber and grading classifications. Western Wood Prod., Portland, Ore. CIRCLE 409 ON READER SERVICE CARD

Steel wall studs, for use in light construction, are featured. Detailed in illustration and short text is the step-by-step installation of the nonload-bearing wall stud system. Advantages of its use are discussed. American Iron and Steel, New York City.

circle 410 on reader service card to page 214

ADVANTAGES OF LOCK-DECK® LAMINATED DECKING





EXCLUSIVE: Lock-Deck consists of 3 or more kiln-dried boards, offset to form tongue on one side and end, groove on the other, laminated with weatherproof glue. We invented it.



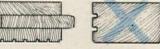


STRENGTH: Lock-Deck offers a range of E factors giving superior load-carrying values in spans to 20' or more in 5" thicknesses.

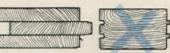




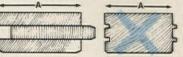
STABILITY: Each board in Lock-Deck is kilndried to 10-12% m.c. before lamination. This assures greater stability under all conditions.



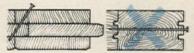
BEAUTY: One or both faces of Lock-Deck can be any desired grade, in a wide choice of species. Solid decking is limited in both grades and species.



ECONOMY: In-place, finished cost of Lock-Deck is often less than solid decking due to speed of erection, factory-finishing, absence of waste, better coverage.



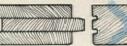
MORE COVERAGE: Offset tongue and groove on Lock-Deck gives more coverage per bd. ft. than machined solid decking.



LESS LABOR: Lock-Deck installs quicker, using ordinary nails. Solid decking requires spikes, special fasteners or splines.



LESS WASTE: Offset end match, absence of twisting and few unusable shorts keeps waste well below that of solid decking.



VERSATILITY: Lock-Deck forms excellent load bearing or curtain walls as well as floors and roofs.



DURABILITY: Unlike solid decking, knots or checks can go through only one ply in Lock-Deck. Weather-proof glue and exclusive process make bond stronger than the wood itself.



Richmond High Natatorium, Richmond, Indiana. Architects: R. W. Clinton & Assoc

Lock-Deck is wood made better than

nature could. Laminated of three or more

kiln-dried boards under great heat and pressure, Potlatch Lock-Deck is avail-

able in four thicknesses from 3" to 5", nominal 6" and 8" width (10" and 12" in some species on inquiry) and lengths

from 6' to 16', with 40' and longer avail-

able on special inquiry. Faces, in a

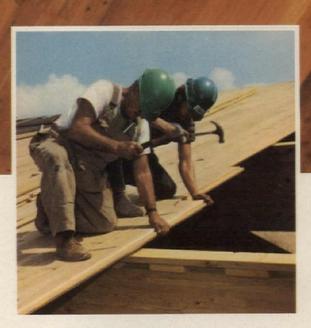
choice of grades and species, can be

We invented Lock-Deck® the unique laminated building material

smooth-surfaced, saw-textured or wirebrushed and factory-finished in Colorific acrylic penetrating stains.

This opens a whole new world of architecture and construction. Lock-Deck forms both structural and finished wall and roof surfaces in one imaginative application. It forms superior wood walls, finished on both sides. It forms both structural roof or floor and finished ceiling. It combines the unique warmth and beauty of wood with the superior strength and span capabilities of modern laminated members, and makes possible structural and aesthetic concepts not previously possible. Write for more information. Potlatch Forests, Inc., P.O. Box 3591, San Francisco 94119.





superior's e-z-set/e-z-trim... the only complete fireplace system.

looks more like the real thing than the real thing.

Now, from one source, you can buy Superior zero-clearance fireplace systems with the look and permanence of masonry. Seven E-Z-SET models are rugged as all outdoors ... 20 gauge aluminized steel firebox sides and throat ... 14 gauge steel bridge-type base ... 18 gauge galvanized steel jacket. Solid, strong, lifetime fireplaces that don't take forever to install anywhere. Pre-assembled E-Z-SET fireplace systems go in easily and quickly without the high cost and profit drain of skilled labor. Flue sections snap together quickly without twisting or turning, with only one inch clearance to combustibles required. Pre-punched nailing tabs insure fast, error-free installation.

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Your Superior fireplace consultant is ready to show you more real cost saving ideas about our line. For immediate information or demonstration, call the closest Superior plant collect... ask for Mr. Mason. Or, send the coupon if you have a few days.

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MODEL 036 See complete catalog in Sweets Light Construction File.

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exact size, and perfect trouble free installations. Four steel corner braces in each base cabinet insure

CIRCLE 145 ON READER SERVICE CARD

and the body to go with

the

that Arist-O-Kraft cabinets stay square and truedoors won't stick or buckle.

All surfaces are finished inside and out, and the

easy-to-clean, removable drawers are so strong you can even stand on them. For a tough beautiful finish that resists stains and scars, Arist-O-Kraft can't be surpassed. United Cabinet created the first complete

ultraviolet radiation sensitive curing line in the U. S. kitchen cabinet industry just so you could have more beauty and economy, and a tough finish, than was ever possi-

ble before. Arist-O-Kraft cabinets sell kitchens, and beautiful kitchens help you sell houses.

> Jasper, Ind. of 47546 Ph: 812-482-2



FROM PAGE 210

Hardwood flooring is pictured in 14 applications. Text and pattern diagrams supplement the photographs. Specifications and a color selection guide are included. Harris, Johnson City, Tenn.

circle 401 on reader service card

Entrance mats, constructed of carpet-covered aluminum rails, are shown in color photos of actual applications. Twelve illustrations of available patterns and colors are included. Mat safety, fire resistance, absorbency and cleaning are discussed. Back page is devoted to descriptions of other protective products: bumper corner and door guards, kick plates, push plates and wall liners. DecoGard, Cranford, N.J. CIRCLE 402 ON READER SERVICE CARD

Folding doors and room dividers are shown in color photographs. A guide for selection of color, texture and grain is divided into three categories of doors available: natural wood veneer, vinyl woodgrain, vinyl over steel and nylon/wood basketweave. Modernfold, New Castle, Ind. CIRCLE 403 ON READER SERVICE CARD

Bathroom planning is illustrated in abooklet which discusses how to put the space available to use practically and attractively. Full-color pamphlet shows a variety of floor plans and includes a scaled grid and removable self-adhesive cutouts of fixture models for convenient planning. A one-page section on kitchen sinks is included. To receive "Bathroom Planning Guide", send \$1 in check or money order to Borg-Warner, Plumbing Products Div., Mansfield, Ohio 44902.

Drapery hardware is shown in 140 basic window treatments. Useful for planning hardware of model homes, the five-ring vinyl-covered binder holds full-color, sturdy pages of specification figures, photos of actual applications, complete lists of all drapery hardware needed for windows shown, instructions for figuring finished draperies. Mounting locations for hardware are included. Send \$5 for "Window Treatment Planning Guide" to Kirsch Co., Dept. BW, Sturgis, Mich. 49091.

Planters and waste receptacles of molded fiber glass are featured in an index-tabbed brochure. The entire 40-piece line is illustrated. Drawings of each style and a description of the available colors and finishes are included. Construction features and specifications are also provided. An accompanying four-page folder describes the firm's line of indoor/outdoor fiber glass benches. Seventeen models including several storage benches with removable tops are discussed. American Beautification Products, Bristol, Ind.

CIRCLE 411 ON READER SERVICE CARD



Handy 4' x 8' G & K CEDAR CLOSET PANELS need no finishing . . . go on like wallboard!

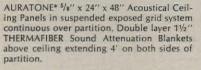


You just cut to size and nail or glue into place

Now it's easier than ever to add forest-fresh aroma and extra appeal of real cedar to the closets in your homes-with **G & K CEDAR CLOSET PANELS.** Made of compressed, large flakes of Tennessee Red Cedar, each panel fits snugly against its neighbor, without noticeable joint lines. Because G & K panels are so easy to install, need no finishing and have a textured pattern that conceals nailheads, you save, save, SAVE on installation costs! For full details, see your dealer or write:

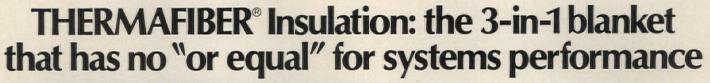


GILES & KENDALL, INC. P.O. Box 188 Huntsville, Alabama 35804



USG® Metal Stud Partition employs ½" SHEETROCK* FIRECODE* "C" Gypsum Panels; 2½" studs 24" o.c.; single layer panels each side, applied vertically and screwattached; 1½" THERMAFIBER Sound Attenuation Blankets one side; joints finished, perimeter caulked.

*Reg. U.S. Pat. Off.





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These photographs illustrate results of a recent 1-hour furnace fire test witnessed and certified by independent consulting engineers. Temperatures were controlled to follow the ASTM E-119 standard time-temperature curve. THERMAFIBER (left) and a glass fiber insulation (right) were tested in two identical partition panels for one hour. The result proved that THERMAFIBER adds an extra margin of fire safety to an assembly. Before you specify, evaluate THERMAFIBER Products for all types of construction on 3 important counts:

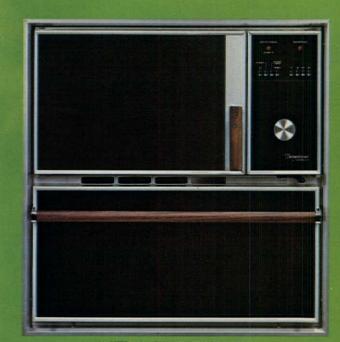
1. SOUND ATTENUATION. THERMAFIBER used as shown here achieved 45 to 48 STC ratings in single layer wall partitions, 45 to 49 STC ratings in ceilings. 2. THERMAL EFFICIENCY. THERMAFIBER Insulation is used by leading curtain wall manufacturers in such buildings as the 109-story Sears Tower in Chicago, Diamond Shamrock in Cleveland, Detroit Edison, and 154 Wisconsin Center, Milwaukee.

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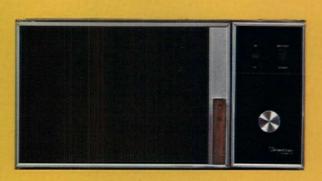
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(5) MTR 30 - BILT-IN COMBINATION MICROWAVE/ HOT FOOD SERVER/SELF-CLEANING OVEN - 240V° Available, January 1973

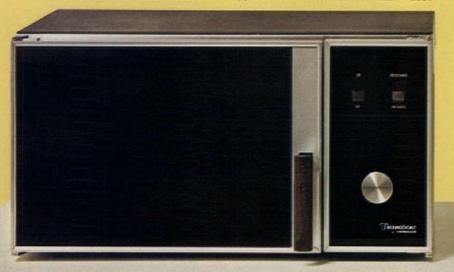
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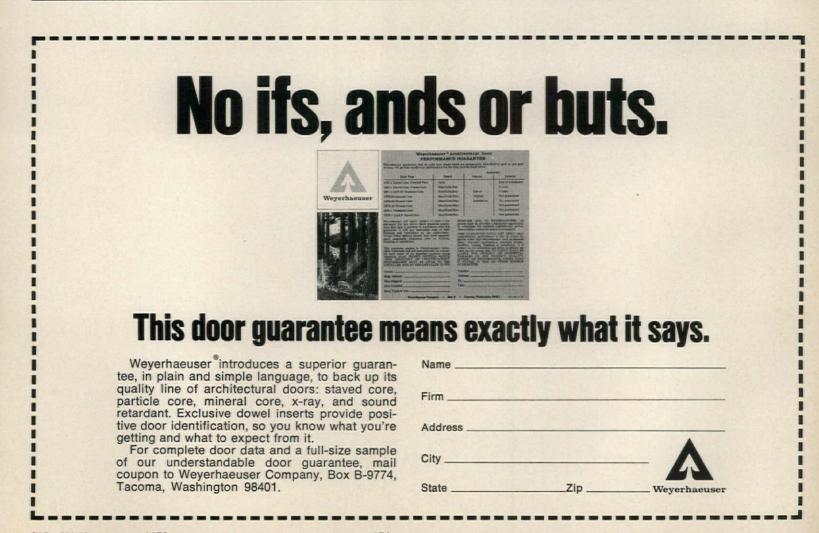
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CIRCLE 72 ON READER SERVICE CARD

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