

beautiful way to beat the profit squeeze:

"IC"group

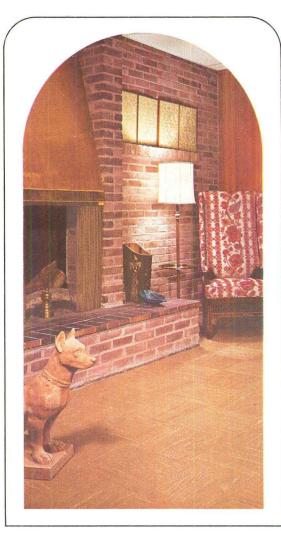
Azrock embossed vinyl asbestos floor tile



VC-902E Embossed Marble



VC-901E Embossed Travertine



VC-904E Embossed Pebble



VC-903E Embossed Wood

In the face of rising building costs, Azrock has perfected exclusive production techniques to keep flooring costs down, keep your profit up. At your service: VC Group — value champion in flooring. Four elegantly-styled embossed patterns at a price below "D" group asphalt tile! And more good news — 12 smooth-surface VC Group colors are available at an even lower price. All in 1/16" gauge, 9" x 9" size. Start putting more sales appeal (and profit) in your houses — with floors of VC Group by Azrock.

an original floor styling by **AZROCK**®

Nationally advertised in Better Homes and Gardens, House Beautiful, House and Garden and others. For free samples, write Azrock Floor Products, 521 Frost Building, San Antonio, Texas 78205.

NuTone Music-Intercom Systems Give You Better Performance with

SOLID STATE

For exquisite musical tone and superb intercom clarity, your clients will appreciate the fine performance of NuTone's SOLID STATE Music-Intercom Systems. No tubes to replace. No heat.



SOLID STATE #N-2561 MUSIC-INTERCOM



SOLID STATE #2067 MUSIC-INTERCOM

Nu one

SOLID STATE TAPE RECORDER

#2406



SOLID STATE #2071 STEREO MUSIC-INTERCOM



NuTone offers you many outstanding features not available in ordinary sets. NuTone is built better for trouble-free performance.. and to insure long, dependable life. SEE NEXT PAGE

NuTone Music-Intercom Systems Give You More for Your Money with

SOLID VALUE

NuTone Music-Intercom Systems Give You Trouble-free Quality at Prices that are

COMPETITIVE!

NUTONE'S FINE QUALITY COSTS NO MORE



Save valuable installation time! Screw-type terminals offer fast, more positive connections.



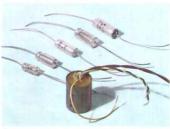
Servicing is easier, if needed. Everything's clearly spelled-out in symbols in a service-manual.



For greater reliability NuTone offers Printed Circuit Boards.
No errors or loose connections.

Some competitive brands try to copy NuTone's appearance but they can't match NuTone's engineering inside. You actually save money with NuTone because you avoid breakdowns and failures common in ordinary sets.

WRITE FOR FREE CATALOGS to NuTone, Inc., Dept. 3, Cincinnati, Ohio 45227



No hum with Mu-metal, shielded transformers, Aluminum, hermeticseal electrolytics for longer life.







No re-wiring necessary if you ever have to remove a "B" unit. It simply un-plugs; plugs back!



You avoid damaging effects of humidity with the glass printed circuit boards in our FM tuner.





NuTone Gives You A Music-Intercom System for Every Budget .. in a Line that Is

Nu one

MOST COMPLETE

See Previous Page

ITOR chard W. O'Neill

ANAGING EDITOR hn F. Goldsmith

ENIOR EDITORS enneth D. Campbell mes P. Gallagher axwell C. Huntoon Jr.

SSOCIATE EDITORS lwin W. Rochon Clarke Wells

SSISTANT EDITORS ichael Baybak ank Lalli nepher Walker

RT DEPARTMENT oward R. Berry, director orraine J. Clew, assistant arry W. Schiller, assistant

DITORIAL ASSISTANTS atricia Betz race P. Micciola ail B. Sclar

DNSULTING ECONOMIST eorge A. Christie

cGRAW-HILL WORLD NEWS hn Wilhelm, director; Jules Abend, omestic news editor; Karol Wasylshyn, foreign ews editor. Domestic News Bureaustlanta: Frances Ridgway, chief; Reginald Rhein. hicago: James Rubenstein, acting chief; erry Sharpe. Cleveland: rthur Zimmerman, chief. Dallas: arvin Reid, chief; Mary Lorraine Smith. etroit: James Wargo, acting chief; arianne Friedland. Houston: Robert Lee. os Angeles: Michael Murphy, chief;

arbara Lamb. Pittsburgh: Lou Gomolak, chief. an Francisco: Margaret Drossel, nief; Jenness Keene, William Arnold. eattle: Ray Bloomberg, chief. Washington: rthur Moore, chief; harles Gardner, newsdesk; hn Nicholson.

UBLISHER ugene E. Weyeneth

SSISTANT TO PUBLISHER ake Hughes

IRCULATION MANAGER enry G. Hardwick

DVERTISING SALES MANAGER ichard H. Freeman









McGraw-HILL

DUSE & HOME March 1967, Vol. 31, No. 3. Published onthly by McGraw-Hill Inc. Founder: James H. McGraw 860-1948). Subscription rates for individuals: U.S. and ssessions and Canada, \$6 per year; single copy, if availle, \$1; Latin America & Philippines, \$20; elsewhere, 155. Executive, Editorial, Circulation and Advertising fices: McGraw-Hill Building, 330 West 42 Street, New ork, N.Y. 10036. Telephone: 971-3333. Second class stage paid at Washington, D.C. and at additional mail-g offices. Published at 1500 Eckington Place, N.E., 20yright @ 1967 by McGraw-Hill Inc. All rights revived. The contents of this publication may not be reoduced either in whole or in part without consent of pyright owner. Officers of McGraw-Hill Publications: seph H. Allen, president; Bayard E. Sawyer, executive ce president; Robert F. Marshall, senior vice president; Robert F. Marshall, senior vice president; hn M. Holden, marketing; Huber M. Gemmill, circulann; Angelo R. Venezian, production; Robert Milelmy, controller. Corporation Officers: Donald C. CGraw, chairman of the board; Shelton Fisher, president; Leith Goodrich, Donald C. McGraw Jr., abert E. Slaughter, executive vice presidents; John Cooke, vice president and secretary; John L. Mcaw, treasurer. Member: Audit Bureau of Circulations d American Business Press, This issue of House & Home Jublished in national and separate editions noted or lowed for as follows: Western W1-W6B; Eastern E1-Milemy, Controller, North Michigan ver, Chicago, III. 60611.

House & Hom

A McGRAW-HILL PUBLICATION

VOL. 31 NO. 3

MARCH 1967

EDITORIAL

How to clear the roadblocks that stymie trade-in programs 76 Few builders can go it alone, but a team effort by the whole housing industry could make it easy to transfer equities from old houses to new ones

MARKETING

Condominium comes of age - but fast Here's why both builders and buyers have accepted the idea. Here, too, are the major pitfalls to avoid if you are considering a condominium project

DESIGN

Four projects designed for condominium ownership Some are resort projects, some for year-round occupancy. And they include both apartments and townhouses priced from \$20,000 to more than \$100,000

Architect's home is a showcase for his builder-clients "My product is salable ideas," says Henry D. Norris. That's what builders see as they go through his home—and what you'll see in this picture story

CONSTRUCTION

88 Are sectional houses finally on the road to bigger sales? It looks that way. Here's evidence from builders who have boosted their profits by selling factory-finished houses that are trucked to the site in halves

MANAGEMENT

This computer program can steer you toward better management 102 Consultron is a management consulting service in miniature. Here's a detailed look at how it works—and how it boosted profits for three builders

NEWS

At long last, Treasury calls for flexible FHA-VA interest rate Also: How the pros pick bargains in foreclosed apartments . . . Claimant of a world's record sells 1,000 houses in five hours—in Tunis . . . Builders climb aboard the mortgage-money train . . . Wall Street scents housing turnaround

DEPARTMENTS

Mortgage market quotations	14	New Products	113
Housing stock prices	16	New literature	142
Leaders	46	Reader Service card	131
Letters	49	Advertising index	150

Cover: Computers used by housing consultant William R. Smolkin at National American Bank, New Orleans. Photo by Frank Lotz Miller. Story p.102

NEXT MONTH

Landmark design by a top West Coast architect for New England buyers. New ways to build in storage . . . How a 26-year-old builder surprises competitors in a sticky market . . . New-house features that make old houses seem obsolete



Or forget it.

That's the beauty of redwood. Redwood can be painted any color you wish. It can be tinted with pigmented stains or bleached to a soft driftwood gray. Or it can be left untreated to weather naturally, displaying the full grain and texture of the heartwood. Whichever, redwood is *durable*, protected by

nature from the damages of decay, insects and weather. If you would like information on the grades, sizes, finishes or other beauties of redwood, please write.



CALIFORNIA REDWOOD ASSOCIATION • 617 Montgomery Street, San Francisco, California 94111

MEMBER MILLS: Willits Redwood Products Company • Arcata Redwood Company • Georgia-Pacific Corporation • Miller Redwood Company • The Pacific Lumber Company • Rockport Redwood Company • Simpson Timber Company • Union Lumber Company

At long last—Treasury urges Congress to allow loating interest rates for FHA and VA loans

HA's and VA's mortgage interest ceilings nould fluctuate more directly with cometing market rates, says the Treasury epartment.

Its recommendation, buried in a report Congress on federal credit programs, is ne of the most significant ideas for housng finance now under discussion among noney experts within the federal governnent.



VALL STREET'S HEIMANN New ideas for new housing

The Federal Reserve Board, the Council of Economic Advisers, and others are mullng over various ideas to prevent another xe from falling on the homebuilding inlustry when general economic conditions equire a tighter money policy.

"Housing," admits one Fed official, "got nit harder in 1966 than it should have."

Floating rate. The Treasury would let nterest rate ceilings on guaranteed and nsured loans fluctuate "on the basis of competitive market rates to the greatest extent possible."

The suggestion was made in the context of a Treasury plea to end direct-loan and ubsidized-interest rate programs as often as possible in order to improve the federal oudget balance.

The idea is in line with a proposal by John Heimann, Wall Street broker hired by HUD Secretary Robert Weaver to streamine the flow of capital into mortgages. Heimann, in a speech to an Urban Amerca meeting last month, called for a rate on FHA loans to be determined by a fornula based upon the overall cost of federal porrowing, or some similar measure.

Says President John Gilliland of the Mortgage Bankers Assn., "The Secretary's recommendation ends short of a completely free rate . . . [but] it does encourage us to carry on our fight for a free rate.'

And Rep. Richard Hanna (D., Calif.), House banking committee member, said, "It is now time for both the Administration and Congress to realize that FHA and VA rates must be flexible in order to adjust to market realities.'

Dissidents. But Housing Secretary Robert Weaver appears unwilling to go along with either Heimann or the Treasury. Last month he sent Congress a separate report urging retention of the present 6% ceiling on FHA house mortgages and the present method of letting the FHA Commissioner determine the interest rate on these loans. Weaver, however, called for lifting the ceiling on some FHA apartment loans, notably Sec. 207 and Sec. 213 coops, from a present 51/4% to 6%. The pegged ceiling has caused Sec. 207 loans to virtually vanish, and discounts of 10% and 12% were quoted in mid-January.

To provide buffers to the mortgage market, Weaver also called for continuing to let the Federal Reserve Board buy obligations of other government agencies such as FNMA and HLBB, a way of giving these agencies more funds in tight-money periods.

And Nathaniel Rogg, NAHB top staffer, countered Heimann's proposal by suggesting instead that FHA merely recognize mortgage discounts as a business expense and include them in the final mortgage. Earlier NAHB suggestions in this direction have come to naught, however.

Savings battle. The money thinkers in Washington feel that the competition for savings that was waged last year is one reason why homebuilding suffered so severely.

Two palliatives predominate in the experts' thinking: The thrift institutions are now issuing much the same sort of fixedterm savings certificates that commercial banks have been offering, and Congress has required the various federal regulatory agencies to consult before changing the rates the financial institutions can pay for

These two changes may keep the housing industry from getting into as much trouble as it did in 1966, top policy men feel. But as one housing economist observed, "This doesn't solve the whole problem."

Yet if progress has been made, it doesn't stop interested parties—including the Council of Economic Advisers—from proposing more sweeping changes that would realign the mortgage market. "Over time," says the CEA's annual report, "there should be scope for reducing the uneven impact of monetary policy through various modifications in these institutional arrangements.'

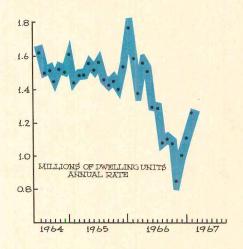
Long-range reform. Thus the Administration is again backing legislation that would give sweeping new powers to the mutual savings banks. Savings-and-loan leaders have their own package that would do much the same thing for the S&L's. Federal Reserve Governor J. L. Robertson goes even further—suggesting that s&L's and savings banks abandon their specialized function as mortgage lenders and become commercial banks.

Adopting any of these proposals will, of course, take time. All face considerable opposition—in most cases very strenuous —John Nicholson opposition.

WASHINGTON WIRE

Starts up 47%

Housing's sharp rebound is continuing. January marked the third consecutive month of resurgency in the industry's most volatile indicator, the seasonally adjusted annual rate of starts (graph). The January reading of 1,243,000 units carried the starts' rate up 47% from its postwar low of 848,000 units touched in October. January activity jumped sharply in the Northeast, rose moderately in the South and North Central, and declined slightly in the West (p. 18).



Vanishing guideposts

The Johnson Administration has dropped its 3.2% wage-increase guides and is resorting to persuasion to win labor and industry to a policy of wage restraint. The first major contract settlement of 1967 in housing may set a national pattern: 6% annual increases over three years for 34,000 Chicago carpenters.

More slum aid

Sen. Abraham Ribicoff (D., Conn.) ended two rounds of hearings on urban problems by demanding a \$50-billion drive against "the ghetto cancer." Despite creation of the Department of Housing & Urban Development last year, Ribicoff said city problems cannot be solved "with the outmoded, inefficient, directionless, and red-tape snarled programs of today."

Antique slums

But at the Smithsonian Institution, curators are considering building a genuine slum apartment as a relic of the past. "Premature," snapped Housing Sec. Robert Weaver. Instead, he suggested, middle-income children from the suburbs might take reverse field trips to big-city ghettos to observe the real thing.

Caution light in Congress

Congressional leaders are in no hurry to push two housing proposals by President Johnson. House hearings are not likely until April on a three-stage ban on housing bias. The LBJ plan calls for a voluntary end to housing bias in 1967, followed by a compulsory end for new housing in 1968 and in all housing in 1969.

Similar caution is expected to LBJ's plea for federal registration for all interstate land offerings. Developers last year called pending measures "more drastic than the problem warrants."



How the pros pick foreclosures: One of these ailing projects was a 'bargain,' one a dud

The two photos above illustrate the tough choices facing the small fraternity of housing professionals who specialize in picking up the pieces left behind by some of housing's unfortunate Humpty-Dumpties.

Broadway Terrace, the 12-story highrise at right, is located on the major cross-town thoroughfare in Columbus, Ohio, has frequent buses to downtown only minutes away, and is within blocks of several successful high-rise apartments. Yet when FHA called for bids on the foreclosed building last July, not a single person spoke up.

In contrast, Berkley Town House in the New York City borough of Queens (left) was sought by 24 bidders and the winner paid \$100,000 above FHA's minimum price of \$741,000 for the privilege of taking over an apartment which, like Broadway Terrace, had been foreclosed.

The two offerings are typical of merchandise in a quickening market in foreclosed units, offered by government agencies such as FHA and the Federal Savings & Loan Insurance Corp., by trustees for bankrupt owners, and by conventional lenders. The market is growing more active daily: FHA sold projects with 6,886 units last fiscal year and hopes to step this up to 11,000 units yearly in the next two years. In the past few months, potential buyers could choose from among 22 apartment projects offered by the trustee for a bankrupt southern California syndicator, 80 apartments, 23 one-family houses and a country club offered by the FSLIC near Chicago, or four apartment developments with 486 units in Hampton, Va.

A dozen or more individuals or investing groups can be counted upon to comb the lists of distressed apartments for bargains. But as in buying a used car, they are very cautious because nobody wants to pay good money to take over somebody else's problem child.

Why did he fail? Almost to a man, bargain-hunting pros interviewed House & Home want to know the prime reason the original owner and/or builder

failed. Often the seller of distressed property does not provide the answer, and it is up to the potential buyer to dig up the facts of the non-success story.

In the case of Broadway Terrace, the project carried the reputation of "a real sick one"-with dim recovery prospectsamong Columbus realty men. Built in 1961, it was Columbus' first high-rise cooperative. But sales of the units faltered (a fate which befalls many trailblazing coops) and the owner-developers tried renting. This too failed and FHA foreclosed on its \$3 million mortgage. Even under FHA management, occupancy never reached 40%. Then, when FHA offered the building, it set no minimum price but wanted all cash, and this deterred bidders.

In contrast, Berkley Town House was located in the nation's largest metropolitan area, an almost certain guarantee of wide interest. Built in 1960, it was never filled sufficiently to pay the \$991,000 mortgage. When FHA took over, it dropped rents to an average \$50.66 a room, enough to support a smaller \$700,000 mortgage. And the strong NYC rental market almost assures future success.

Each failure has a separate story; the bargain hunter must find it.

Management know-how. Second, the pros want to know the quality of management the apartments have had. If they can figure out what the old management was doing wrong, they figure they can use their ingenuity to correct it. Often a new manager is tempted to cut rents to fill his units, but the pros scoff at this approach.

"We're very happy to go into a neighborhood where there's competition-good comprehensive competition or careless owners that panic at anything," says Ray Salinas, of Property Management Co. in Santa Ana, Calif. and author of the book, Managing Apartments. "We go into these neighborhoods and raise our rents, getting the tenants by watching all the mistakes the other people are making. For example, in one neighborhood in Orange County, we found 18 different owners with 270



apartments in one block. That meant there were 18 different management policies and programs—one owner would accept children, another would not, another would take a little of each. We went in, put up a sign saying "Adults only", and raised rents \$5 higher than anyone else. The better people moved out of the other buildings into ours, and we've operated at 95% occupancy for three years now in a neighborhood that always had a 30% vacancy."

Similar examples of enterprising management turn up elsewhere. In San Diego Ben Snyder and Alex Matosian bought Belle View Apartments in April 1965 when 47% of its 300 units were vacant Since then they have built occupancy to 100% (with a waiting list) by: 1) furnishing more than one-third of their twobedroom units so rents could be raised to the FHA maximum; 2) grouping tenants within the project, so that one cluster of buildings contained senior adults, one married couples with children, and a third only students and childless couples; and 3) giving 24-hour maintenance service.

Hardly any of the bargain hunters interviewed considered turning their acquisitions over to professional management companies. "Smart speculators living or the property have a better chance of making it go," says Senior Vice President Arthur E. Neelley of California Federa s&L in Los Angeles, where s&Ls have acquired a number of ailing projects. "It takes a personal, long-range interest."

One variation on this is the experience of an eastern real estate man—he will not permit use of his name—who manages 18 projects spread from Arizona to Florida to Michigan from his home office. "We put our own resident manager in every project, almost always someone we have trained here and know is reliable," he says "and then we give him lots of autonomy." Once a month the investor boards a plane and visits four projects in two-day swings With jets, he says, "anyone can manage a string of apartments across the country.'

continued on p. 8



Architect – Raul Garduno Builder – R. A. Watt Co. Plumbing Contractor – Safeway Plumbing Co.

BUILT WITH THE BEST OF EVERYTHING...

including GSR drain, waste, and vent fittings!



NOTHING BUT THE BEST went into this award-winning, custom-built house in Southern California. Costly materials, modern accessories, and new building techniques were combined to fulfill its dramatic, contemporary design. In specifying plastic pipe with GSR fittings, the builders chose the most modern drain, waste, and vent system—and the most economical! Plastic DWV systems are best because they are impervious to practically all metal-pipe troubles. They are most economical because material cost is less than conventional materials and installation takes only one-half the time.

In custom homes or multiple housing, plastic pipe with GSR fittings forms the newest, most practical, most economical DWV ever developed. It complies with the specifications or standards of the FHA, BOCA, National Sanitation Foundation, International Association of Plumbing and Mechanical Officials, Southern Building Code Congress, and numerous state, county, and municipal agencies. Ask your plumbing contractor about plastic DWV—and GSR, the world's most complete line of plastic pipe fittings. R. & G. Sloane Mfg. Div., Atlantic Research Corp., 7606 N. Clybourn Ave., Sun Valley, Calif. 91352.





Location, location. The bargain hunters want their apartments in good apartment areas—which does not necessarily mean they have to be in downtown locations. "For example, apartments in far-out West San Fernando Valley [near Los Angeles] could be all right because there are people working there who find them convenient," says Cal Fed's Neelley.

In San Diego, Ben Snyder won't bid on apartments that aren't in a good residential neighborhood with good schools, shopping areas, and easy transportation access. Other bargain hunters agree these are important, although some, in cities with well-developed freeway systems, say public transportation is not all-important.

How they pay. Nearly every bargain hunter takes a long hard look at the tenants in a project. "See what kind of compatibility there is among tenants," advises Ray Salinas. "You may find a spinster next to a young swinger next to a middle-age tenant with four children. They eventually will get on each other's nerves."

"And check on paying habits. It's important whether tenants pay by the month, every two weeks, or irregularly."

They advise checking whether units are full only because rents have been cut. For instance, one project being offered has full occupancy but monthly income of only \$3,038—compared to a scheduled \$4,150 income when built. Experts know that rents generally can be raised only when a new tenant moves in—and then only if the market will support it. FhA tells both current and original rents in its prospectuses; some private sellers provide monthly income and expense statements too.

Spend some money. A bargain hunter will always find extra maintenance that must be done immediately and to a man the pros advise having the cash to make needed repairs—fast. "The situation may have been ignored for years—paint, carpets, draperies are no longer attractive," says Salinas. "But people are looking for a good clean apartment—and it's going to cost an investor dollars to meet that demand. More than anything else, the investor should check the condition of each apartment—he must insist on looking at every unit, not just a few."

So the investor who equates "bargain" with low cash down payment may be in for a rude jolt. If the seller wants \$100,000 as a down payment, another \$25,000 must be budgeted for miscellaneous closing costs and that much or more for deferred maintenance. The buyer with thin equity will invariably wind up in trouble, they say.

In line with this, the pros warn against committing more than 50% of true rental income to pay debt. "Out of every dollar that comes in, about 45% is needed for fixed operating expenses, but with good careful management this can be reduced as low as 35%," says Salinas.

"If a person's debt is high and his equity thin, then he's lucky to even own it. Under those conditions, the smartest manager in the world isn't going to be able to work miracles."



OBJECT OF SCRUTINY by out-of-town investor was Imperial Strand in San Diego.

How a pro sized up these apartments in one day

When FHA called for bids on Imperial Strand Apartments in San Diego in January, it asked a minimum \$1,260,000 and offered to take back a \$1,175,000 purchase money mortgage.

The ad started the bargain-hunting pros scrambling, and one flew into San Diego and in one day—his first in the city—decided to risk the minimum \$85,000 to buy the 160 units.

First he visited the project and found over 50% of tenants were wives of Navy carrier crewmen based in San Diego. "Would the carrier base ever be switched to San Francisco?" he wondered. But the management office would tell no more, since FHA personnel are told not to disclose any information not contained in its prospectus.

Next, the pro went to the project maintenance office and, from the chief maintenance man, learned:

- The payroll was \$695 weekly, or \$35,000 a year—far higher than the \$15,000 yearly he would have budgeted for a similar project.
- The project paid \$3,000 yearly for garbage pickup, which was not provided by the city.
- No lifeguards were hired to guard the project's two swimming pools. "Who's liable if someone drowns?" the bargain hunter wondered. Pool maintenance cost

\$95 monthly on a contract basis, he found.

• Janitorial supplies rap \$300 monthly

• Janitorial supplies ran \$300 monthly. "We're always buying," said the maintenance man.

He then went to the tax assessor's office, where he learned the annual tax bill of \$32,119 was based on a valuation of \$1,102,000. "I know assessors, and if the project is sold for the minimum \$1,260,000, the assessment will go up. A 10% increase in that tax bill is almost guaranteed."

Next, the pro made a call—he won't reveal where—and learned that the original buyer had folded because he ran out of money before he fully rented the units. The original mortgage was \$1,681,000, so the pro calculated that the \$500,000 reduction in mortgage amount, at 8% constant payments yearly, would give him a \$40,000 advantage over the original owner.

Next, he called on the Chamber of Commerce, said he was a real estate man representing a potential new industry, and inquired about economic conditions. "And how about housing conditions for my client's employes?" he asked and reaped a wealth of housing-market data.

By evening the bargain-hunter boarded a plane and flew home. His judgement: With some pruning of operating costs and tight management, the project was attractive enough to bid upon.

Public housers pick over foreclosures, too

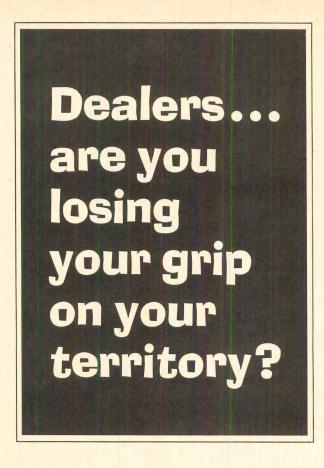


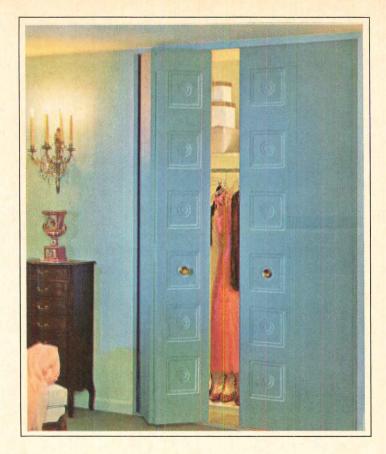
LUXURY HIGH-RISE, Windsor House, is center of row over planned sale for public housing.

Why aren't more foreclosed apartments sold to public housing agencies?

The questioners generally don't realize that public housers are avid lookers but infrequent buyers because they are just as choosy as private investors. Fha notifies local agencies of all foreclosures but has sold relatively few units this way. Broadway Terrace in Columbus (p. 6) was sold for low-rent elderly use.

Too, public housers' proposals sometime meet resistance, as in Toledo. In January the public housing agency announced plans to buy Windsor House, a luxury high-rise with 31 of 152 units stil unfinished. Facing eviction, residents protested. The agency then delayed closing to see if private buyers were interested.





Float-Away® dealers aren't. They're protected and their select territories are well defined.

IF YOU WANT TO HAVE YOUR OWN SALES TERRITORY with a high-quality product to distribute-team up with Float-Away. We're looking for aggressive, well-rated dealers capable of selling a specialty product - Float-Away Doors the best metal bifold door made. Builders across the country have found Float-Away closet systems to be a major contributor to more profits and more satisfied buyers. You will, too.

Float-Away doors have greater customer appeal-no other closet door even offers all the features Float-Away guarantees:

- ☐ 5 models in three grades Deluxe, Standard, and Budget.
- ☐ 5-year guarantee on Deluxe and Standard models, one-year -Budget model.
- ☐ Unlimited flexibility—they can fit all openings.
- ☐ Widest ranges of heights & widths in the industry to fit any job requirement.
- ☐ Unique method of handling, servicing and supplying.

For more important proven features found in Float-Away, write to us on your letterhead.

A few choice territories are available to agressive, wellrated dealers. Contact Float-Away.

FLOAT-AWAY SPECIAL BUDGET DOOR!

Field-tested for customer satisfaction. Meets the specifications of competitive doors... but costs less. Sales proven.

Interested? Need more details? Write or phone:

FLOAT-AWAY DOOR CO.

Dept. H-367, 1173 Zonolite Road, N.E. Atlanta, Georgia 30306, Tel. (404) 875-7986 LOS ANGELES AREA: Woodall Industries, Inc. 10423 Valley Blvd., El Monte, Calif. 91734, Tel. (213) 444-2561 San Francisco area: 2365 Lafayette St., Santa Clara, Calif., Tel. (408) 243-8008





BILINGUAL SIGN in Arabic and French directs visitors to first for-sale models in Tunis.



EAGER BUYERS line up at models before signing purchase orders on 1,000 houses. "The stories

about people in emerging nations not having cast are not true," says builder Alan Carnoy.

In Tunis, an American sells 1,000 houses in five hours

Builder Alan Carnoy, an indefatigable exporter of American-style home ownership, found his warmest reception yet when he opened models in Tunis in mid-January.

In just five hours and 20 minutes, he sold out a 1,000-house tract. That, the exuberant Carnoy claims, is a world record, and even those who recall the pell-mell sales pace of the post-war housing boom on Long Island say it has never happened.

Carnoy's Tunisian buyers, mainly white-collar workers, formally signed purchase orders and agreed to pay 10% down of prices ranging from \$7,850 to \$9,350 at contract closing. (In countries of French culture, American-style cash deposits cannot be used because returning money is an insult.) Six buyers will pay all-cash and many others will exceed the 10% down-payment. Three-fourths of the buyers bought Carnoy's largest model, a three-bedroom, 1,070-sq.-ft. house. Only 4%

bought the smallest.

But to reach that model opening, Carnoy had to spend two years working out financing and construction arrangements with the U.S. Agency for International Development (AID).

Why Tunis? Carnoy's choice of Tunis as a building site springs from a basic belief: "The creation of capital by people whose income is barely sufficient to pay for the necessities of life is an exclusive economic advantage of democracy."

A native of Poland who fled his home when the Russians occupied it in 1939, Carnoy demeans the Communist economic system. "There can be no home ownership in true Communist systems," he says. "The number of Communists is insignificant in all nations with popular home ownership."

To put his beliefs into action, Carnoy moved his homebuilding operations from suburban Westchester County outside New York City to Mexico City in 1956. There he built several home-ownership projects and wrote a book, *Democracia Si! A Way to Win the Cold War**, expounding his concept of home ownership as a distinctly American weapon against Communism.

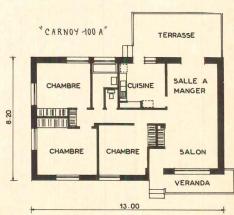
In 1964 he decided to test his principles in Africa and began exploring a project with AID, which led him to Tunisia's state secretary of public works and housing.

Unique agreement. Carnoy found Tunisians were interested in obtaining credits for housing. And the officials of this emerging nation, founded in 1956 after a long history as a French protectorate, wanted to attract foreign investors.

The talks quickly resulted in Carnoy setting up a new company—Maisons Tunisiennes Carnoy, capitalized with \$25,000 continued on p. 12

*Vantage Press, 120 W. 31st St., New York City 269 pp., \$3.50.





most popular model was Carnoy 100, so named because it contained 100 sq. meters of space. Three-fourths of buyers picked this house at \$9,350, carrying a monthly payment of \$65 after deducting a 15% premium for construction (required under Tunisian law.) House features include rear terrace and separation of toilet from other bathroom facilities.

Ruberoid glorifies today's floors with high fashion...

in Luran[®] Airtred "100 Plus" foam-cushioned vinyl!

This is *Carmel*...a Ruberoid sheet vinyl pattern inspired by the rocky shores of California. Adds prestige and value to residential and many commercial situations.

Carmel is richly embossed for beauty and to help hide indentations. Heavier vinyl wear surface. Quiet-CorTM foam interlayer for warmth, quiet and comfort underfoot. AquaflexTM back for installation on, above or below grade. (See magnified cross-section of 3 layers).

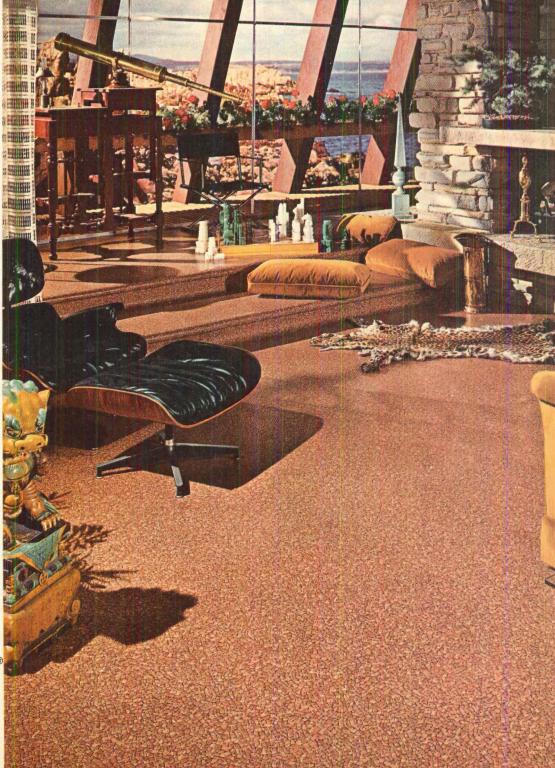


7 V/3000

Yields ... then back it comes

Luran vinyl is as carefree and as scrubfree as a floor can be. Resistant to grease, alkali and most household stains. Comes in 6' wide rolls...easy to install with a seamless wall-to-wall look. Available in Canada, too.

Ruberoid creates high style floors for every purpose...in sheet vinyl and vinyl asbestos tile. For the name of your Ruberoid retailer, look in the Yellow Pages under "Floors," or write The Ruberoid Co., Fullerton, Pa., 18052, Dept. HH-37.





FINE FLOORING

Costs WORK SAVERS

WING Quick-Set CLAMPS (Pat. Pending)



Trigger-Release SHAFT

- RESETS INSTANTLY!

Everyone who uses clamps appreciates the timesaving convenience of Wing Quick-Set Clamps. They are the only clamps that permit INSTANT resetting of shaft. NO TURNING! Just press the trigger to release the grip on the shaft and move the shaft up or down to the new position. It locks instantly in place.

It is durably built with aluminum alloy frame, Quick-Set trigger lock of hard, die-cast anodized aluminum and shaft of high-strength steel. 6 sizes, 1" to 4".

Prices f.o.b. factory

\$1.00 to \$6.00

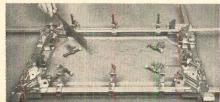


WING M-100 (U.S. Pat. No. 3,199,556) ROUTER TEMPLATE

Routs a BORDER Design in 30 Seconds

Speeds up routing of designs and changing from one design to another. Adjusts quickly to panels ranging from 3½" x 3½" to 24" x 36". For larger panels, longer extension rods are available. Complete with cadmium-plated tubular steel extension rods, die-cast aluminum base plates and 4 sets of die-cast aluminum guides.

Price f.o.b factory..... \$69.95



WING T-300 (Patent Pending) MOLDING JIG

Quickly positions and holds moldings for cutting without waste. Quick-Set Clamps permit instant resetting of shafts. No turning! For any size panel from 53/4" square to 24" x 36". Longer extension rails available up to 6'. With Disston saw, 8 saw guides and 14 Quick-Set Clamps.

Some distributorships available Write for FREE brochures! WING PRODUCTS CO., INC.

Drawer R, 805 Farmer Avenue TEMPE, ARIZONA 85281



HEAVY CONSTRUCTION uses brick cavity walls and tile roof, supported by 13 reinforced-concrete columns, to insulate against summer heat.

-and signing an agreement that he believes is unique. Specifically:

• He accepts a 5% profit on the \$5million project and re-invests all but \$50,-000 of his profit in Tunisia, a provision that aids Tunisia's balance of payments.

• He accepts complete technical and accounting control by the state secretary but reserves the exclusive right to make final decisions concerning the project.

 The government develops the lots and sells them to Carnoy at about 39¢ a sq. ft. Lots average 651/2 x 82 ft.

Be a sport. With this agreement in hand, Carnoy arranged permanent mortgages through three U.S. insurance companies-Fidelity Mutual Life Insurance of Philadelphia, Bankers' Life of Des Moines, and Union Mutual of Portland, Me. All loans are guaranteed by AID, and plans must be approved by FHA.

After succeeding in getting AID to grant him a construction loan, Carnoy went ahead with his models last fall. On opening he took full-page ads in Tunis newspapers and magazines. The subsequent sellout startled even Carnoy, who now attributes his success to his prices, well below the \$12,000-plus range for private Tunisian housing, and to the attraction of home ownership. Another attraction was the offer of ownership of about 5,000 sq. ft. of land.

"We Americans are accused of being exploiters of big profits and being neocolonialists for withdrawing profits," says Carnoy of his profit agreement. "But it's time we showed we are happy to reinvest our profits. You have to be a very good sport about



BUILDER ALAN CARNOY left suburban building in U.S. to export home ownership.

"A CASE IN QUALITY



C. G. Wollaeger

W. G. Wollaege

Twenty years is a long time for a fail owned and operated manufacturer to single. Gigantic mergers and weddings commonplace today. But we remain sin and here's why . . .

Our philosophy is basic. As a manufact of trims, studs and casings, we know the personal touch has built our comp We have specialized in a few products, they are our only business. As such, quality is the finest.

Our plant is located in the heart of American steel center. We use no force steels in any of our products nor are quality control inspectors misnamed. I their only responsibility. Our salesmen top notch men located in every major r ropolitan market. They are thorough screened and are visited regularly by of the principals of the company. As as ourselves, Charles B. Plunkett, our S Manager, travels the country visiting tomers and representatives. We feel is truly a personal service to our men to your prospects and customers.

So you see, we have grown with this I osophy of personal service. After two years, we have over 100 employees ar nationwide operation with warehouses Seattle, San Francisco, Los Angeles, Den Dallas, and Orlando. Casings' products of the finest quality at the lowest poss price.

We would like to be doing business to YOU! Please write for our latest catalog prices on Drywall Trim or Plaster Casi They will be sent to you by return mail

> Clay Wollaege Bill Wollaege

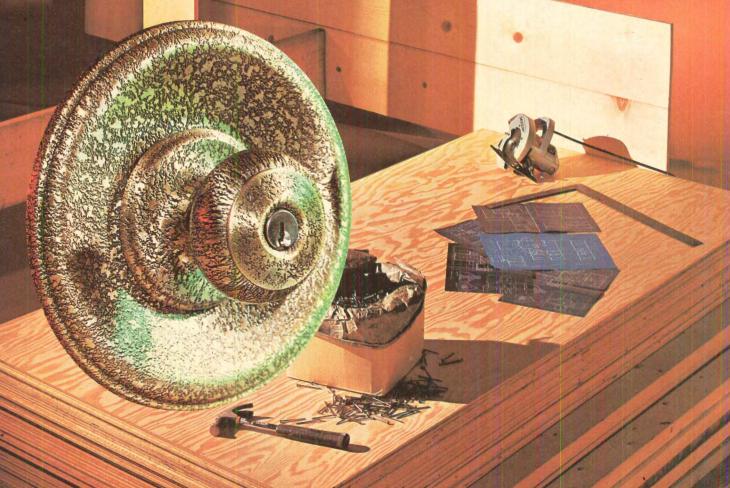


WEST MIDDLESEX, PA., 16159

Circle 35 on Reader Service card

from START TO FINISH

Building materials determine true home value. Weiser Locks add to the value through decorative beauty and dependable year-after-year performance.



WEISER LOCKS

WEISER COMPANY . SOUTH GATE, CALIFORNIA

Mortgages: Money train rolls and builders climb aboard

"We've had money a go-go," reports mortgage banker Chris Gebhardt from housing's sensitive barometer city of Los Angeles. "For the first time in months a substantial group of lenders are advertising money for investment in mortgages."

His colorful thumbnail summary* describes most of the nation. With money moving again, the housing industry's only question is how fast builders can put it to work.

The consensus of 15 top housing economists at a Bankers Trust Co. seminar in New York was that it might be six months before starts would reflect the new

Upward-bound building. Economist George Christie of the F. W. Dodge Co. is far more optimistic. With private starts having advanced three months in a row, to an annual rate of 1.24 million in January, Christie predicts a first-quarter rate of 1.05 million in 1967. He sees that moving to 1.25 million in the second, 1.3 million in the third, and a strong 1.45 million in the fourth. And economist Saul Klaman of the National Association of Mutual Savings Banks is even more exuberant. His fourth-quarter bet: 1.6 million, or double last October's 20-year low of 846,000.

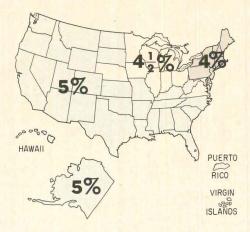
Says mortgage banker Bob Tharpe in Atlanta: "The money will turn into starts faster than you expect. It should show up by the second quarter and be pronounced by the third."

Spreading optimism. A survey of builders and of House & Home's mortgage advisers in 20 cities also indicates an accelerated upturn. In a five-week swing through the South and Southwest, editor Richard O'Neill found housing men more active than at any time in the last six months. The major builders who produce 80% of the nation's starts were particularly optimistic.

"Things are taking off," says Ben Deane of Occidental Petroleum in Los Angeles, and Vice President Michael Tenzer of the Larwin Group of privately owned companies in Beverly Hills reports his January sales are 50% above those for January 1966. Milt Kettler says his Kettler Bros. operation in Washington had its best January ever. And both Dave Carland of Haft-Gaines in Fort Lauderdale, Fla., and Walter Carrington of Austin, Tex., say their markets are already moving up.

Better buyer psychology. Banker Gebhardt says his builders have detected a subtle change in psychology among buyers in Orange County, Calif., always a lush housing market when money moves.

"They are now responding to the favorable publicity given to 'easier money' and are less prone to postpone purchases," he



NEW DISCOUNTS were set Feb. 3 on 6% FHA-VA loans sold to FNMA. Rates include 1/2 % fee and ½ % loss on purchase of 1% in stock.

says. "More important, buyers are finding that they can sell their present homes at greatly reduced costs because of lower discounts (or points) needed for refinancing, with the end result that their equities may now even provide for down payments necessary in completing new purchases.'

Gebhardt found that seven builders he finances had 710 houses under construction January 1 and then made 81 sales -11% of their inventory—in the first two weeks of the month. That was twice the same builders' sales for all of December.

Mortgage discounts. The mortgage rates Gebhardt cited are continuing downward. The Federal National Mortgage

Assn. raised prices (or cut discounts) by a full point on new and used-house mort gage purchases on Feb. 3 (see map). I scrapped its requirement that loans b submitted within four months of FHA in surance or VA guaranty, and it abolished ceilings on mortgage amounts. The privat secondary market traded up to prices o 96½-97, which means discounts of only 3 to 3½ points and a yield of 6.02% 6.06% to investors on the basis of a 3/8 % service fee. Those figures compare witl 8 to 10 points only four months ago.

Gebhardt predicts a further reduction in discounts, with yields falling to 5.75% and then stabilizing at 5.75-5.87%.

General rates put downward pressure of mortgage discounts. Commercial banks cu the prime rate to 53/4 % in several mone centers, and rates paid on certificates o deposit were sinking below 5% in Nev York in mid-February.

Brighter future. As important as the statistics themselves was the political con text. President Johnson is now moving actively to aid housing (see page 16). "The burden of tight money is being lifted," the President said in his 1967 Economic Report, and he predicted a strong rally in building this year and the start of a majo housing boom in 1968.

Money, sales, psychology, and public policy are all working in housing's favo as the industry moves confidently into the spring building season. The outlook is the brightest since the early '60s, and th only road leads upward.

HOMEBUILDERS' MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending February 17.

	Discou MinDov	A Sec. 203b— nt paid by build vn* 30-year imm	er ied.w	FHA 207 Apts.,	Comm. banks,	Savings banks,	Savings banks,	Construction Loan Rates
City	FNMA 6%	Private 6%	mkt. Trend	Discount 51/4 %	Ins. Cos.	S&Ls 80%	S&Ls Over 80%	Interest+fees All lenders
Atlanta	5	3-4	Down 1	a	61/2-63/4	63/4	63/4 -71/4	7+1-2
Boston	4	Par	Down 3	a	61/4	61/2	a	61/4-61/2
Chicago	41/2	31/2-41/2	Down 1¾	a	61/4-61/2	61/4-61/2	61/4-61/2	61/2-7+11/2-2
Cleveland	41/2	4–5	Down 1½	a	61/4-61/2	61/2-63/4	6¾+1-2b	61/2+1-2
Dallas	5	3-41/2	Down 11/4	а	61/2	61/2	63/4-7	7+1
Denver	5	31/2	Down 2½	a	61/2	61/2	63/4-7	63/4 +1-2
Detroit	41/2	3–4	Down 1	a	61/2-63/4	61/2-63/4	63/4-7	63/4-7+1-2
Honolulu	5	5-51/2	Down 11/4	а	63/4-7	7-71/4	а	7-71/2+1-2
Houston	5	3–4	Down ¾	а	61/2	63/4	7	7+1½
Los Angeles	5	3–4	Down 2	a	61/2-7	61/2-71/2	b	61/2-7+11/2-3
Miami	5	4	Down 2	а	63/4-7	61/2-7	63/4-7	61/2-7
MinnSt. Paul	41/2	3–4	Down 1½	а	61/2-63/4	61/2-63/4	63/4-7	$6\frac{3}{4} + 1$
Newark	4	2-3	Down 2½	10	6	6	6	63/4-7+1
New York	4	1-2	Down 1½	10	6	6+1-2	6 ÷ 2-21/2 b	61/2-7+1
Okla. City	5	31/2-5	Down 1¾	a	61/2-63/4	$6\frac{1}{4} - 6\frac{3}{4} + 1$	$6\frac{3}{4} + 2$	61/2-7+11/2-2
Philadelphia	4	3	Down 2	a	6	6	61/2	61/2+11/2
San Fran.	5	3–4	Down 2½	а	61/2+1	61/2+1-11/2	7-7½ b	61/2+11/2-21/2
St. Louis	5	5–7	Steady	а	61/2-63/4	63/4-7+1-2	a	7-71/4+1-2
Seattle	5	4-5	- ALKEN	a	61/2-63/4	63/4-7	63/4-7	a
Wash., D.C.	41/2	3-5	Down 2	5-6	6+2-3b	6+2-3b	а	$6\frac{3}{4} + 1 - 2$

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

Quotations refer to prices in metropolitan areas, discounts ma run slightly higher in surrounding towns or rural zones.
 Quotations refer to houses of typical average local quality.

Footnotes: a—no activity. b—limited activity. c—Net yield to investor of 6% mortgage plus extra fees, w—for comparable VA loans also. x—FNMA pays ½ point more for loans with 10%. y—discounts quoted are net after seller pays ½% marketing fee and ½% adjustment for stock purchase. Seller must pay 1% of mortgage for stock calculated in §130 units, of which \$30 is contribution to FNMA capital and \$100 is for a share trading at about \$62.

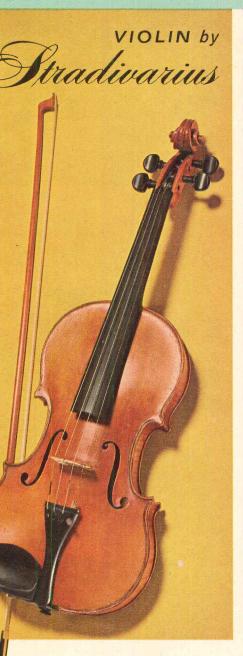
Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, pres., Boston 5g Savings Bank; Chicago, Robert H. Pease, pres., Draper & Kramer Inc., and Robert H. Wilson,

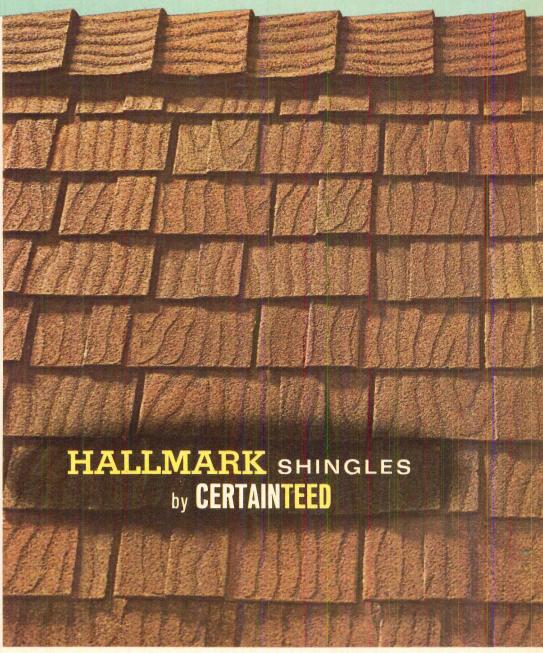
pres., Percy Wilson Mortgage & Finance Corp.; Cleveland, David O'Neill, vice pres., Jay F. Zook, Inc.; Dallas, M. J. Greene, pre Southern Trust & Mortgage Co.; Denver, Clair A. Bacon, pre Mortgage Investments Co.; Detroit, Sherwin Vine, vice pre Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pre Bank of Hawaii; Houston, Everett Mattson, vice pres., T. J. Bett Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell C. Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Minn apolis-St. Paul, Walter C. Nelson, pres., Eberhardt Co.; New William W. Curran, vice pres., Franklin Capital Corp.; New Yor John Halperin, J. Halperin & Co.; Oklahoma City, B. B. Bass, pre American Mortgage & Investment Co.; Philadelphia, Robert Irving, vice pres., First Pennsylvania Banking & Trust Co.; S Francisco, John Jensen, vice pres., Mercantile Mortgage Co.; S Francisco, John Jensen, vice pres., Bankers Mortgage Co.; S Francisco, John Jensen, vice pres., Bankers Mortgage Co.; S Francisco, John Jensen, vice pres., Bankers Mortgage Co.; S Francisco, John Jensen, vice pres., Bankers Mortgage Co.; S Francisco, John Jensen, vice pres., Bankers Mortgage Co.; S Francisco, John Jensen, vice pres., Associated Mortga Cos. Inc.

^{*}Gebhardt's address, at the U.S. S&L League's secondary mortgage conference in Scottsdale, Ariz., is a virtual history of mortgage money movement in California during the year of tight money. He is vice president of the Colwell Co., 3223 W. 6th St., Los Angeles.

^{* 3%} down on first \$15,000; 10% of next \$5,000; 25% of balance-

classic accomplishments by master craftsmen





Just like the finest Stradivarius violin, this HALLMARK roof is a superior accomplishment of master craftsmen . . . at CERTAINTEED. Give it a hard look. We have built into HALLMARK . . . the texture of wood . . . the muted tones of slate . . . and classic beauty unmatched by any other roofing materials . . . at considerably less cost than either slate or wood shingles. And added to all this, HALLMARK Shingles are approved by Underwriters' Laboratories. Designed to satisfy the most discerning, sophisticated taste, these shingles are a revolutionary innovation in roofing. Look at the thick shadow lines — the sculptured effect — the rugged appearance. This is unmistakable quality! Complementary to all types of architecture, HALLMARK Shingles are ideal for both new roofing and re-roofing. And you can choose from three rich color blends of Pewter Gray, Bronzed Brown or Golden Tan. Luxurious 390 lb. HALLMARK...ask for more information...

write to CERTAINTEED, Building Materials Division, Dept. 32A, Ardmore, Pa. 19003





Wall Street bets on an early boom in homebuilding

That's why housing stocks are soaring.

Investors are putting big money into a wide range of building-materials, financing construction-company issues. For those investors now have this evidence that a dramatic upturn in starts and sales may be near:

- Money is easier, and mortgage rates are declining (see p. 14). Says California's colorful savings and loan leader, Bart Lytton: "The liquidity crisis is over."
- President Johnson is pushing on a broad front to revive housing markets. Said the President to Congress: "We are moving into a period of renewed homebuilding. I look for construction to rise briskly in 1967."
- The Federal Reserve Board is backing LBJ's plan to drive interest rates so low that thrift institutions will attract funds. (The thrift industry puts most of its savings into housing.)
- The Home Loan Bank System has reversed a policy of restraint and is making large sums available to s&Ls as "expansion advances." HLBB member Bob Rand told the U. S. S&L League's secondary mortgage conference: Forget the old stigma of "speculative builder" in your lending.

Stocks on escalator. Building issues figure in many big-block deals on the major exchanges, a signal that large commercial banks and major mutual funds are buying into housing. Boise Cascade, the materials producer, traded in one block of 130,000 shares on the New York Stock Exchange on Feb. 2.

Price advances are spectacular, and they extend into virtually every category of housing stocks. House & Home's value index of 72 of the industry's issues has risen 30% in a month, and the list includes a run-up of 125/8, to 583/8, by City Investing, the New York City diversified realty company, and a gain of 10%, to 34%, by Mortgage Guaranty Insurance Corp., the Milwaukee insurer of conventional loans (see chart). Here is how the various segments of the housing industry are perform-

	Dec. 5	Jan. 9	Feb. 8
Building	4.95	5.59	6.63
Prefabrication	1.62	1.80	2.45
S&Ls	7.44	8.46	12.05
Mortgage banking .	9.35	10.07	13.31
Land development.	5.28	5.40	6.40
Average	6.02	6.64	8.64

Big builders are setting the pace. Levitt & Sons of Lake Success, N. Y., the nation's largest homebuilder, reached an all-time high of 17½ on the American Exchange after moving into metropolitan Baltimore to open its tenth branch operation. Kaufman & Broad got up to 181/2, almost double its 1966-67 low of 934, and Jim Walter of Tampa, Fla., the shell house giant, touched 263/8. It was selling as low as 135/8 last year.

Auxiliary issues were also strong. The stocks of building-product companies rose

S&L EARNINGS-TREND IS DOWN

	Revenue	s (000)	Net	(000)
	1966	1965	1966	1965
California Fin. Corp.	17,300	17,400	440	2,012
Far West Financial	20,702	21,521	a3,181	a1,412
First Charter Fin.	127,597	123,621	12,665	20,338
Gibraltar Financial	27,553	26,500	1,847	3,861
Great Western Fin.	102,300	100,900	5,500	10,500
Imperial Corp.	60,603	59,063	5,254	7,645
Lytton Fin. Corp.	45,015	45,861	a2,167	a2,030
United Fin. Corp.	23,006	23,017	218	1,282
Wesco Fin. Corp. a—Net loss.	27,301	24,484	3,919	4,894

Note: Lytton's figures are not strictly comparable. The 1965 figure includes special provision of \$3.7 million for possible realty losses, plus special writedown on securities of \$2.2 million. The 1966 loss excludes special provisions of \$5.4 million for possible realty losses.

16.3% in January alone. Among the leaders, Johns-Manville gained 8½ points, to 56%; U. S. Gypsum 11%, to 561/2.

Cement issues were up 26.8% that month, and Penn Dixie added 41/8, to 161/8, a 43% gain.

The red hot S&Ls. One of the more puzzling aspects of the housing advance, in stock experts' minds, was Wall Street's rush into s&L issues. House & Home's index of 22 s&L stocks was 115% above its October level after four months of steady advances. Most shares are selling at twice their 1966 lows in the wake of President Johnson's announcement of an additional \$1 billion in HLBB funds for the industr (News, Feb.). First Charter Financial of Los Angeles, the largest publicly held hold ing company, rose 6 points, to 251/4, i January. Twelve s&L stocks accounted for 9% of the 12 million shares traded on th New York Stock Exchange on Friday

Analysts argue that the s&Ls still hav their troubles, not the least of which ar poor earnings reports for 1966 (see box) One other major California company sti to report—Financial Federation—is ex pected to cite a deficit.

But Wall Street seemed to be looking ahead, not backward. The big Dreyfu Fund, one of the nation's leading mutual came into the new year buying virtuall every s&L share it could find, and th frenzy was communicating to other in vestors. Robert R. Gordon of the broke age house of Schweickart & Co. explaine it all this way in an analysis of the s& outlook:

"The California industry, having com close to destruction, appears to be emerg ing from the darkness of its recent pas The factors that wrought havoc—a saving war and a housing glut—are reversing themselves. Fortified with a newly foun and dearly paid-for responsibility, the in dustry may now be approached with more constructive attitude."

HOUSING'S STOCK PRICES

BUILDING COMPANY	Feb. 8 Bid/ Close	Chg. Prev. Month
- Adler-Built Inc Capital Bld. Ind. Cons Bldg. (Can.) - Dev. Corp. Amer. Edwards Inds. Eichler Homesb - First Hartford Rlty. First Nat. Rlty.b - Frouge. General Bldrs.b - Kaufman & Bd.b - Levittb - Lou Lesser Ent.b - Lusk - Nationwide Homes - Pres. Real. A.b - Sproul Homes. U.S. Home & Dev. Jim Waltere. Del. E. Webb - Del. E. Webb - Dev Dev. Corp. Amer Del. E. Webb - Dev Dev. Bld. Ind Dev. Bld.	566 1.70 ½ 1.30 6¾ 1.30 6¾ 1.4 2.3% 1.7½ 2.2 2.2 2.2 2.2 1.34 2.2 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.	+1/16 + 216 + 656
PREFABRICATION Admiral Homes Albee Homes - Continental Homes Inland Homes Modern Homes Natl. Homes As - Scholz Homes Steel Crest Homes Swift Industries	3/8 11/2 25/8 41/4 21/8 41/2 3 21/2 11/8	+ ½8 + ½4 + ½6 + ½6 + ½6 + ½6 + ½6 + ½6 + ½6 + ½6
S&Ls American Fin. Calif. Fin. °. Empire Fin. Equitable S&L. Far West Fin. °. Fin. Fed. °. First Char. Fin. °. First Fin. West First Lincoln Fin. First Surety. First Surety. Great West Fin. °. Great West Fin. °. Hawthorne Fin. Lytton Fin. °. Midwestern Fin. °.	7¾ 8½ 18½ 12½ 22 25¼ 7¼ 10½ 55% 6¾ 19¾ 14 8½ 9% 4½	+ 2½ + 3¾ + 2½ + 3¾ 6 + 4½ + 5¼ + 54 + 4½ + 3¾ + 4¼ + 4¼ + 4¼ + 1¼ + 2½

	Feb. 8	Chg.
COMPANY	Bid/ Close	Prev. Month
Trans-Cst. Inv.b.	0.000	+ 11/8
Trans World, Fin. c		+ 41/8
Union Fin	71/2	+ 21/8
United Fin. Cal. c	. 123/4	+ 43/4
Wesco Fin. c	. 22 1/8	+ 71/8
MORTGAGE BANKING	G	
Advance	. 61/2	+ 3/4
 Amer. Mort. Ins 	. 73/4	
Associated Mtg	. 61/4	+ 1 + 3/4
Charter	21/2	+ 3 ⁴ + 3 ³ / ₄
Colwell Cont. Mtg. Inv. c	341/8	+ 61/2
Cont. Mtg. Ins	55/8	+ 13/4
• FNMA	. 73	+ 33/4
First Mtg. Inv.	175/8	+ 43/8
Kissell Mtg.b. Lomas & Net. Fin.b.	. 41/4	+ ½ + ½ + 5/8
MGICb	2½ 34¾	+ 5/8 +103/8
Mortg. Assoc	41/8	+ 1
Palomar Mtg	. 21/4	+ 3/8
 Southeast Mtg. Inv 	. 43/4	- ½ + 1
United Imp. & Inv.b	31/8	+ 1
LAND DEVELOPMEN	Т	
All-State Prop	27é	+ 16é
American Land	5/8	+ 1/8 + 33/4
Am. RIty. & Pet.b	71/8	+ 33/4
ArvidaAtlantic Imp	7½ 19	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Canaveral Intl.b.	53/8	T 174
Christiana O.b.		1 /4
Coral Ridge Prop	51/8	+ 5/8
Cousins Props	143/4	+ 21/4
Crawford Deltona Corp.b	1 1/8	+ 3/4
Disc Inc	11/4	T 1/4
Fla. Palm-Aire	15/8	
Forest City Ent.b	5	+ ½ + ½
Garden Land	33/4	+ 1/8
Gen. Devel. b	91/8 d	+ 21/8

	Bid/	Pr
OMPANY	Close	Mo
ulf Americanb	81/2	+
olly Corp.b	11/8	+5
orizon Land	23/	7
aguna Nigake Arrowhead	33/8	+
Major Rity	25é	+1+++
McCulloch Oilb	111/8	+
o. RIty. & Util.b	25/8	+
unasco c	14	+
IVERSIFIED COMPA		
City Invest.	583/8	+1
Rouse Co	101/2	+
Tishman RIty. c	243/4 d	+
OBILE HOMES		
Con Chem Co	113/8	+
Divco-Wayne c	31 1/2	‡
Guerdon ^b Redman Indus. ^b Skyline ^b	5	‡
Skylingh	153/8	+
Skyline ^b	13%	+
short moute and to the	4.61.	
-stock newly added to	table.	D-cl

a-stock newly added to table. b-cl price ASE. c-closing price NYSE. d traded on date quoted. g-closing MSE. h-closing price PCSE. k-not able. p-formerly Wallace Investm q-formerly San Diego Imperial Corp not included in averages. x-adjuste 4-for-3 split. y-tender offer.

Sources: New York Hanseatic C Gairdner & Co., National Assn. of Secu Dealers, Philip Beer of Russell & American Stock Exchange, New York Exchange, Midwest Stock Exchange, I Coast Stock Exchange. Listings include companies which derive a major pa their income from housing activity an actively traded.

SHORT-TERM BUSINESS LOAN RATES

Percent interest and (net change) in year

LOAN SIZE (000)	New York City	7 other Northern & Eastern cities	11 South & Weste cities
\$1-10	6.60 (+ .86)	6.66 (+ .71)	6.91 (+ .
\$10-100	6.56 (+ .97)	6.81 (+1.01)	6.73 (+ .
\$100-200	6.38 (+1.04)	6.60 (+1.04)	6.52 (+ .
\$200 and over	6.09 (+1.10)	6.27 (+1.08)	6.29 (+1.
Source: Federal Reserve Ros	ord December 1966		

For the better homes in any neighborhood it's wood windows.

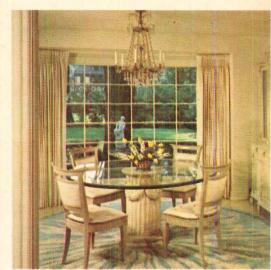




Ralph Huszagh, Architect



Designed by Ernest Blaylock, Southern Decorators



Designed by Lee Blake



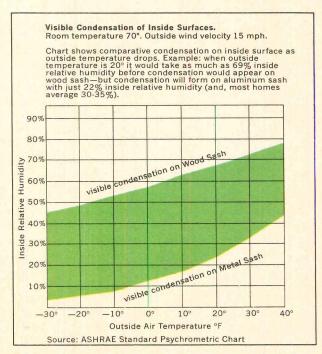
Why wood windows?

First, let's take condensation. When warm interior humidity hits a cold metal frame in winter, condensation takes place. Water drops form, drip over sills and down walls or wallpaper. Homeowners can't do anything about this problem. It's just the nature of metal—what heating engineers call excessive Thermal Conductivity. With quality wood windows, troublesome conden sation cannot happen—the chart at right tells you why.

Then, take total home comfort. Cold metal surfaces conduct heat or cold from rooms faster than wood surfaces. Again, too much Thermal Conductivity. Wood simply is a better insulator against heat and cold. That's why wood windows help keep homes more comfortable in winter, cooler in summer.

From every standpoint, it's wood windows! Wood windows blend with any architectural style — they're available in every type, style and size imaginable. And they give homes a warmth and beauty unmatched by any other type of window.

Free Window Condensation Calculator. Based on ASHRAE data, our exclusive Condensation Calculator helps you determine condensation problems so you can select the correct windows for the homes you design and build. It's free. Send requests on your business letterhead.





PONDEROSA PINE WOODWORK and the Western Wood Products Assn. DEPT. HH-37, 39 South La Salle Street Chicago, Illinois 60603

Has West's golden tide of newcomers slowed? Washington, California can't see nose-to-nose

One of housing's most tantalizing mysteries has been the amazing drop in starts in the 13 western states*, especially California.

In three years, the West's annual total fell more than 50%—from 435,900 in 1963 to about 215,000 last year. California builders cut back by 71%—from 292,100 in 1963 to 83,400 last year. As a result, California's share of all U.S. starts dropped from 20% to 7%, and some economists now pin their hopes for a national housing recovery this year on a turnaround in the Golden State.

Most housing men agree that a flood of easy mortgage credit helped bring on overbuilding in 1963. But they also believe that the subsequent slump resulted more from a drop in migration to the West. At issue, though, is just how steep that drop has been.

Last month the Census Bureau in Washington reported that net migration to the West fell by 68% in the two years ending in March 1966 (graph). Census estimated that net migration plummeted from an average of 489,000 persons annually from 1960 through 1964 to 175,000 in 1965 and 140,000 in 1966.

'Incredibly low.' But most Californians say "something's wrong" with the Census figures. And since California has been the destination of three of every four western immigrants, the state's housing industry has the most to gain or lose from any sharp change in the volume of newcomers.

"I would never guess the figure as being that low," said economist and Vice President Conrad Jamison of Security First National Bank in Los Angeles. "We were thinking in terms of current in-migration in the neighborhood of 180,000 per year for the 14 southern California counties alone. The [Census] report just seems incredibly low—I can hardly believe it."

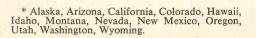
Jamison, however, says a moderation of over-all population growth (which includes the excess of births over deaths) has been evident in recent years, but he senses the downward dip may already have stopped because of a strong upward trend in employment.

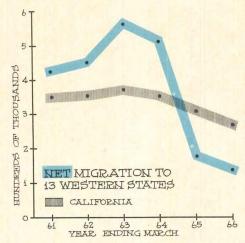
"The aerospace industries have been going like gangbusters," he says. "They've been adding 3,000 jobs a month net for the last year and a half in Los Angeles County alone."

'We're watching.' In Sacramento, California's chief population expert, Walter P. Hollmann, says, "We know about the Census report and are watching it."

Hollmann's Population Research Section also finds that California's inflow of new-comers has dropped since 1963 but not nearly as precipitously as indicated by Washington (graph).

For the last two years, immigration totals estimated by Hollmann's researchers for





CONFLICTING VIEWS of westward migration: Census Bureau reports sharp drop for 13 western states while California finds only a slight dip.

California alone have topped Census estimates for all 13 western states by more than 100,000 persons yearly. Part of this discrepancy could be caused by migration to California from the other 12 western states, a flow which does not show on Census' regional counts. But California historically has drawn only about 15% of its newcomers from these 12 states (the bulk of them come from Illinois, New York, Texas, Ohio, and Michigan).

And in the view of Californians, Washington has almost always lagged behind the higher nosecounts emanating from Sacramento simply because Census men are farther from the scene of the action. Time and again Hollmann's counters have proved to be more accurate than the Census men, and the State Chamber of Commerce, for one, is not about to desert a winner.

"We've found the Hollmann figures to be pretty reliable in the past," says a Chamber spokesman. Governor Ronald Reagan's administration seems to agree; the state predicts that homebuilding "quite probably will turn up in 1967" and anticipates "a strong upswing" in 1968.

Vacancy confusion. Vacancy figures add still another dimension to the western housing puzzle. In the 13 western states, apartment vacancies have been rising steadily for the past six months after falling to a four-year low of 9.9% last June. The Census Bureau last month reported this has now crept up to 10.9% in the December quarter. And in analyzing offerings of foreclosed or bankrupt apartments in southern California (p. 6), House & Home found many projects had high occupancy because rents had been cut well below their original schedules. No estimates are available on how widespread this rent cutting has been.

At the same time homeowner vacancy rates in the West are dropping along with the national trend (see adjoining column).

Apartment vacancies climb but house market tightens

Rental housing isn't filling as rapidly as housing economists have been expecting but the for-sale house market is the tightest since 1960.

Vacancies in all apartments inched upward to 7.0% in the Census Bureau's final quarterly count for 1966. Vacancies had slipped below 7% to 6.8% last June, the first time since 1959 they were below 7% and held at that level through the autumn

The new figures puzzle economists, who had expected the 22% slowdown in apartment building to 424,000 units last year to spur rentals. One clue: Economists note that apartments inside metropolitan areas are steady at a low 6.3% while vacancies outside the big cities are rising rapidly to stand at 8.8% now.

In contrast, only 1.2% of all home owner units were for sale in December, the lowest level since 1960. Census said the rate is "significantly lower" than the 1.4% of a year ago. Economists say this reflect the slowdown of used-house sales caused by extreme scarcity of mortgage money and high discounts on FHA loans for used houses during 1966. About 40% of the vacant sale units have been built since 1960, Census reported, and owners are asking a median \$14,500 price, up from \$13,000 a year earlier.

Housing's top growth market: low- and mid-income units

The budget sent to Congress last month by the Housing & Urban Development Dept reveals that four major programs receiving direct federal financial aid will account fo 127,660 units in the year beginning in June That's more than double the 57,666 unit of last year.

In addition, federal contributions will help rehabilitate 34,400 units next year, up sharply from 9,337 last year.

The big increase is due largely to gear ing up of the rent supplement program expected to soar from no applications las fiscal year to 42,000 units next year.

Public housing will rise modestly from 29,772 starts last year to 40,000 next year HUD expects that the turnkey program which lets private builders sell new units to public housing agencies, will account for 5,000 starts next year, compared to onl 343 starts last year. Last month, the first turnkey project, ten-story Claridge Tower in Washington, was completed by Whiting Turner Inc. of Baltimore at \$15,551 a unit about 15% cheaper and three years faster than normal public-housing building.

A third big booster of mid-income housing is the Sec. 221d3 sub-market loan program, popular because it lets builders ge mortgage loans at 3% interest. Next yea the sub-market loans will account for 39,000 units, or about 38% of all FH apartment applications.

A fourth program, Sec. 202 loans at 3% interest to house elderly persons, will ris from 4,100 to 10,660 starts.

NEWS continued on p. 2



USE ANYWHERE... including masonry blocks and hollow walls

"Red-Cap" has all of the BIG HOLDING POWER and other important features of the original "Hi-Red" anchor...plus a collar that keeps it from falling into masonry block cores and bottomless holes. Use with slotted tapping or wood screws.

BUY 'EM IN HANDY KITS ...OR CARTONS

Kits include anchors, screws, and masonry drill.



FREE SAMPLES





FIRST LEVITT SHOWROOM works with six nearby model homes in Willingboro, N.J., to offer 60 room groupings of furniture.

Levitt starts furniture chain to harvest homebuyers' dollars

Levitt & Sons has built more than 70,000 houses since 1929, thus providing the same number of customers for uncounted retailers selling furniture, carpeting, drapes, and hundreds of other household items. Now the nation's biggest builder is determined to lick the icing off its own cakes with a chain of retail outlets alongside the eight Levitt developments in the U.S. and the two in Puerto Rico and France.

The first store opened in February at Willingboro, N.J., with the claim that prices would run 10% below local competition. It offered 61 lines of furniture, bedspreads, mattresses, and appliances, and 340 choices of carpeting. Eventually, Levitt says, it will add small boats, pool tables and hi-fi gear.

First year volume in the initial store (above) is projected at \$1 million. Annual sales of \$20 million are expected when all ten units are open. President William J. Levitt says centers in Virginia, northern New Jersey, and Chicago will open by 1968.

Levitt predicted a year ago (News, March '66) that it would sell such optional items as storm windows and furniture to its new homebuyers. But a survey in one of its \$21,000-\$28,000 house markets showed that new buyers were spending \$1,800 on furnishings within a year of purchase, and Levitt decided instead on the full retail operation. A wholly-owned subsidiary, Levittmark Inc., will run outlets.

Three Philadelphia builders sue producers for overcharges

The trio—Lindy Bros. Builders, Denny Development Corp. and Camelot Inc. are asking a federal court to order 15 plumbing fixture makers and their trade association to pay treble damages for alleged overcharges from 1960 to 1966.

A victory for the trio could open the way for all operating homebuilders to collect similar damages, since the builders say they are suing under anti-trust law in behalf of all builders.

They sued the 15 plumbing suppliers and the Plumbing Fixture Manufacturers Assn. after the same group was indicted by a federal grand jury in Pittsburgh last October for criminal conspiracy to fix prices. The grand jury charged the companies—which include almost all major plumbing fixture makers—with conspiring under guise of trade association meetings.

NEWS continued on p. 24

DUD-FASTCOST-CUTTERS FOR BUILDERS



Round-head Nailer—Drives 6d common to 16d sinkers. Plain, ring-shank or screw-shank, 5 times faster than hand nailing. Built-in safety. Portable and powerful. For any job that calls for round-head nails.



Staple Nailer—Drives heavy, coated Duo-Fast Staples up to 2" long. Portable, air-operated. For wall sheathing plywood subfloor, soffits, bridging.



Finish Nailer—Drives brads and finish nails $\frac{5}{8}$ " to 2" long. Countersinks automatically to eliminate costly nail setting. For trimwork, moldings, cabinets, face nailing.



Hammer Tacker—Drives $\frac{1}{4}$ " to $\frac{9}{16}$ " staples as fast as you can swing it. One hand always free. For insulation, building paper, moisture barriers.

Write today for the Duo-Fast FT-26 Builders Brochure. Your Duo-Fast man will be pleased to demonstrate these tools.

7237 DUO-FAST FASTENER CORP., Dept. HH, 3702 River Road, Franklin Park, Illinois 60131





Can there be too many closets? We doubt it. Can you build extra closet space without extra cost? Yes—with folding steel closet systems.

Compare folding steel closet systems with conventional closets. Floor-to-ceiling height. Wall-to-wall width, if desired. Easily fitted to any-size openings. Functional, modern beauty in a wide variety of finishes, textures, and designs. Dependable, quiet operation. Elimination of expensive wall returns and wall areas above doors. What better way to add selling power to a house or apartment?













Bethlehem doesn't make steel closet doors, but we'll be glad to put you in touch with the best in the business.
Just mail us the coupon.

Bethle	hem	Steel	Corpor	ration
Sheet	and a	Strip	Div.	
Room	333E	Betl	ılehem,	Pennsylvania

Please see to it that I get complete descriptive literature on modern folding steel closets.

Name	
Firm	
Address	
City & State	Zip









Everything Hinges on Hager!

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



Circle 42 on Reader Service card



TRACK and GUIDES

For 1/8", 3/16", 5/16", 1/2" and 3/4" sliding doors.

E-Z Glide tracks and guides offer many advantages to builders, cabinet makers and furniture manufacturers. Neat appearance, smooth and silent operation, nothing to wear, corrode or rust. They mount easily in several ways. Doors lift up and out.

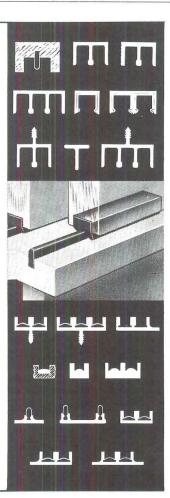


Free 38-page catalog on all EPCO sliding door hardware, magnetic catches, knobs and pulls available on request.

See Sweet's Catalog under Arch. file 19g-En and Light Const. file 7b-En.

THE ENGINEERED PRODUCTS CO.

P.O. BOX 108 FLINT, MICHIGAN 48501



S&Ls paid Bobby Baker \$100,000 —but saved over \$10 million a yea

When the **Bobby Baker** scandal developed, House & Home was among the first publications to ask what three California s&L associations got for the \$100,000 they gave the former Senate page (News, Feb. '66).

Now that a Washington federal court has convicted Baker of tax evasion, theft, and conspiracy to defraud his government, the answer seems clear: The s&L associations won elimination of a tax amendment that would have cost capital-stock associations \$10 million a year.

Here is the quid-pro-quo sce-

President Kennedy's bill to increase S&L taxes cleared the House in mid-1962. It accorded equal treatment to S&Ls owned by stockholders, which operate principally in California, and to the more widespread mutual associations owned by depositors.

But Sen. Robert Kerr of Oklahoma added an amendment letting mutuals put 60% of taxable income into tax-free reserves to only 50% for stock associations. Cost to the latter: \$10 million a year. The bill sailed through the Senate Aug. 7, and, said Baker's attorney, Edward Bennett Williams, stock S&L officials descended on Washington "like locusts on a lettuce patch."

On Sept. 24, Baker himself testified, lobbyist Glen S. Troop of the U.S. S&L League called to say that Kenneth D. Childs, then president of Home S&L of Los Angeles, the largest stock association, wanted to meet Baker's friend, Sen. Kerr.

Baker said he actually called Sen. Kerr from the Senate floor to see Childs. Later Baker met Childs, and it was about this time, according to Prosecutor William O. Bittman, that Baker told the Californian: "The s&L business isn't making contributions the way it should. Why don't you get on the bandwagon?" Baker himself said Childs told him that, as a result of his chat with Sen. Kerr, he was returning to California to raise money.

One day later, on Sept. 25, the Senate-House conferees killed the Kerr amendment.

On Sept. 27, Childs testified, there was a meeting at the Los Angeles home of Howard Ahmanson, the almost legendary personality who owns the \$2-billion Home s&L. In attendance: Chairman Mark Sidney Taper of First Charter Financial Corp. of Los Angeles, the largest public s&L holding company; Charles Wellman, then president of First Charter; and John F. Marten, then president of Great Western Financial Corp. of San Fran-



WASHINGTON'S BAKER
Got S&Ls on the bandwagon

cisco. The topic, said Childs, w Mr. Baker's suggestion.

Stuart Davis, now boa chairman of Great Western, too the story from there. He raiss \$5,000, then got \$12,100 from Marten and \$33,000 from A manson's nephew, William Ahmanson. On Oct. 21, five da after President Kennedy sign the s&L bill, Davis delivered t \$50,100 to Baker in Washington

Marten said he took \$16,20 more to Baker Oct. 31. Tap did not make the arduous trip Washington but, he said, he d receive Baker in Los Angel Nov. 9 and presented anoth \$33,300. It made, in all, \$99,60

The prosecution and the samen suggested the money we for senatorial campaign function. That, said attorney Williams, we nonsense. Baker was an errar boy collecting for Sen. Kerre exchange for the Senator's droping the amendment, William said. He stopped short of using the word bribe, but he implied repeatedly. At one of the trial most dramatic moments he asked the jury if it thought the samen were "gullible farmer rather than a crowd of "squint eyed bankers" who knew who they were after.

Press commentators saw the Baker verdict as a sharp comment on the standards of the savings-and-loan business.

"What observers see as in portant, so far as public condence in elective government concerned, is that the executive contributed the money in thope, and for the purpose, of iffuencing the votes of Senators said The New York Times.

Why weren't the S&L men i dicted? Said the Wall Stre Journal:

"Even now the s&L men car be sure that the Justice Dep won't turn on them. No dea have been struck. Prosecuto haven't promised immunity... But as a practical matter the d partment rarely turns against coperative witnesses. To do would hamper future prosection." NEWS continued on p. 2

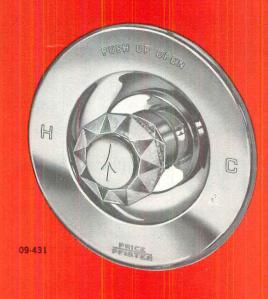
MIX'N MATCH

FLOW-MATIC®

and



Price Pfister — the only manufacturer offering two prestige lines with coordinated styling. Each line is complete and comprehensive in itself—coordinates with the other in any combination of valves and faucets for matchless decorator effects.











Established 1910

PRICE PFISTER BRASS MFG. CO.

13500 Paxton Street, Pacoima, California 91331 Sold only through wholesalers. Warehouses in these principal cities: Birmingham, Alabama; Chicago, Illinois; Dallas, Texas; Pacoima, California; Elizabeth, New Jersey.

PRICE PFISTER'S PRODUCTS . . . INSTALL EASIER, WORK BETTER, LAST LONGER.

* Ceramic plates manufactured by Coors Porcelain Co.
using Alcoa Alumina — developed by Aluminum Company of America

"FLOW-MATIC" and "CONTESSA" were conceived together, to provide a dramatic design continuity and flexibility, never before achieved in plumbing brass.

"FLOW-MATIC" combines the diamond-like effects of lucite, with our exclusive maintenance-free ceramic cartridge. *

"CONTESSA," our supremely elegant prestige line of dual handle fittings, combines brilliant crystal-like lucite handles with minimum-maintenance replaceable stem cartridge assemblies, and renewable seats.

Each line offers a complete and comprehensive selection of tub and shower combinations, tub fillers, shower valves, lavatory and kitchen fittings.

Price Pfister answers today's demand in fashionable homes, hotels and apartments for integrated design harmony. Specify Price Pfister — the world's largest independent producers of plumbing brass.

Colonel Logan STANDARD SIZE

ORNAMENTAL IRON

... sparks home sales!



NEW! Free guides show you how to build—and decorate—with iron.

Decorative Ideas in Iron. With this FREE guide and your imagination, there's no end to the sales-sparking magic you can create with ornamental iron. Profusely illustrated new book shows how little touches of iron add so much excitement and sales appeal to any home—inside or out.

Big 16-page Catalog. Jam-packed with illustrations of all the wanted designs in columns, railings and decorator accessories. All standard size to save you money over custom



BOTH BOOKS FREE! MAIL THIS COUPON TODAY!

Logan Co. 401 Cabel St., Louisville, Ky. 40206

Please rush me your new "Decorative Ideas in Iron" guide, and new catalog.

Name	
Company	
Address	

_____State_____Zi

Materials producer purchases 50% of a second big California builder

Boise Cascade Corp. of Boise, Idaho, has bought a half-interest in Daniel Schwartz' Perma-Bilt Enterprises of San Leandro, Calif. Last year the materials producer acquired a similar interest in Ray Watt's homebuilding operations in Los Angeles.

Perma-Bilt operates in six San Francisco Bay Area subdivisions and reported nearly \$19 million sales in tight-money 1966.

Since its founding in 1952, Perma-Bilt has built 10,000 houses in the Bay Area, and in 1964 began building high-rise apartments as well (H&H, Nov. '66). Perma-Bilt started its new partnership with Bc by buying 4,800 acres in Calaveras County (near San Andreas) in the foothills of the Sierra Mountains.

BUILDERS: J. Curtis Tyler Jr. has been named vice president for all Caribbean housing operations for International Basic Economy Corp.'s housing subsidiary, IBEC Housing Co. IBEC

Housing headquarters have shifted to San Juan, Puerto Rico, where IBEC has built 12,000 units.

Mrs. Helen G. Gray steps up to vice president for real estate for Sunset International Petroleum Corp. of Los Angeles. She succeeds Richard Weiss, now with Levitt & Sons.

John W. Galbreath, Columbus, Ohio, developer, and Peter W. Ruffin of New York City will handle planning and sales for 12,000 apartments that a subsidiary of Mobil Corp. will build in Hong Kong.

Warren G. Haight, 37, succeeds Frederick Simpick Jr. as president of Oceanic Properties, land development arm of Castle & Cooke Inc. Oceanic is active near San Jose, Calif., and in Hawaii

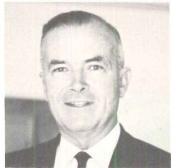
U. S. Plywood steps up its activities in homebuilding by naming Harry G. Leggett its director of real estate ventures. He formerly headed K&L Develop ment in Columbus, Ohio, a company organized by Union Carbide

Mortgage man Ewart Goodwin dies

The lending leader who guided the Mortgage Bankers Assn. through the initial period of tight money has just lost a lonely six-month battle with cancer in San Diego. He was 59.

Ewart Wade Goodwin became California's first president of the MBA in November 1965, when money began to tighten. He was

HGH Staff



LENDERS' GOODWIN
A guiding voice falls silent

a highly articulate and widely popular spokesman for the lending profession until last July, when illness hospitalized him and he gave up the presidency of the Percy H. Goodwin Co. to become its chairman. The San Diego realty and mortgage-banking concern had been founded by his father.

As a founder and president of San Diegans Inc., Goodwin became a key figure in the city's greatest building boom by encouraging construction of its Centre City complex. He was known as an optimist of impeccable dress and courtly manne He argued tirelessly against gov ernment manipulation of the mortgage market—and agains all comers who even hinted tha San Diego was a "bust town."

Stephen Currier, urbai leader, lost on flight

Stephen R. Currier, the 36-year old philanthropist who was the driving force behind Urbar America Inc., apparently per ished when his chartered airplant vanished on a flight from Sar Juan, Puerto Rico, to the Virgin Islands Jan. 17. Missing also was his wife, Mrs. Audrey Currier, granddaughter of Andrew W. Mellon and said to be one of the world's wealthiest women.

The Curriers were among the nation's most generous but least publicized philanthropists. Stephen Currier's encouragement let to a union of business men and designers—the formation of Urban America Inc. through the merger, in December 1965, of the American Planning and Civit Assn. and Action Inc. He becam president of the new group, which recently had expanded its effort to stimulate non-profit housing with a \$100,000 annual granger from four Protestant denominations.

DIED: Sigurd G. Pearson, 71, former vice president of NAH and a founder of the Minneapoli HBA, Jan. 31 in Minneapolis.

Leaders start on p.

What a builder should know about Kwikset finishes.

Three critical factors determine the worth of any lockset: Performance, styling, finish. Kwikset insists on *perfection* in each. With us, finish doesn't come last.

Here are some ways perfection applies to Kwikset finishes:

Kwikset gives you more than 17 choices. From a wide selection of old favorites like polished

brass and satin bronze to the *rich* new etched and antique, Kwikset has finishes to please every taste and *enhance* every architectural style and color scheme.

Kwiksetfinishes are strictly homemade. Kwikset doesn't job-out its finish work to suppliers. Everything is done right in the Kwikset plant to the highest standards of excel-

lence. Quality control is relentless and rigid.

The result is finishes of *superior* quality and *lasting* beauty.

Kwikset brass and bronze finishes are not plated. Brass and bronze knobs and rosettes are *meticulously* fabricated from high-grade metal, then the flat, dull stock is buffed and polished to a jewel-like finish.

Kwikset assures lasting beauty. Except for satin and polished chrome, all Kwikset finishes are permanently protected by an exclusive alkydplastic coating to prevent peeling, cracking, chipping, and crazing.

This tough but invisible film is electrostatically baked on to provide *lasting* protection for the finish. Then the products are again inspected to insure that their finish is flawless.

Kwikset's new antique finishes complement every decorative theme. Blending the old with the new is the *fashion* these days and Kwikset's antique finishes were made to order for the trend.

Antique finishes are created by first blackoxidizing the raw metal, then hand-sanding and buffing until a *rich* charcoal patina is achieved. **Kwikset etched finishes give three-dimensional**

beauty. The dramatic new etched finishes were created to answer a demand for a handsome finish that would effectively withstand uncommon *punishment* from the elements, particularly salt air.

A delicate pattern is permanently etched deep into the oxidized metal knobs and rosettes, resulting in a distinctive look of

tasteful luxury.

Kwikset gives you finishes to enhance the beautiful design and superior quality of its lock-sets. This is one case where you can tell a lot about the book by looking at its cover.

Kwikset's sleek

new Facet knob design is shown here in lustrous antique brass. Equally handsome is the Copa design in etched nickel.



America's Largest Selling Residential Lockset

Kwikset Sales and Service Company Anaheim, California A Subsidiary of Emhart Corporation



How Geon vinyl helps Andersen Perma-Shield Windows prom "lifetime maintenance savings"

They call this the window "that does not need painting. Nor scraping. Nor rubbing down. With a finish that won't pit. Won't corrode. Won't dent. Won't warp. Can't rust. And stubbornly resists scratching." ☐ Geon vinyl makes it true. Thick rigid vinyl is extruded directly over a wood core, giving the finished window an all-vinyl exterior. Maintenance problems are almost totally eliminated. \square As manufacturers of

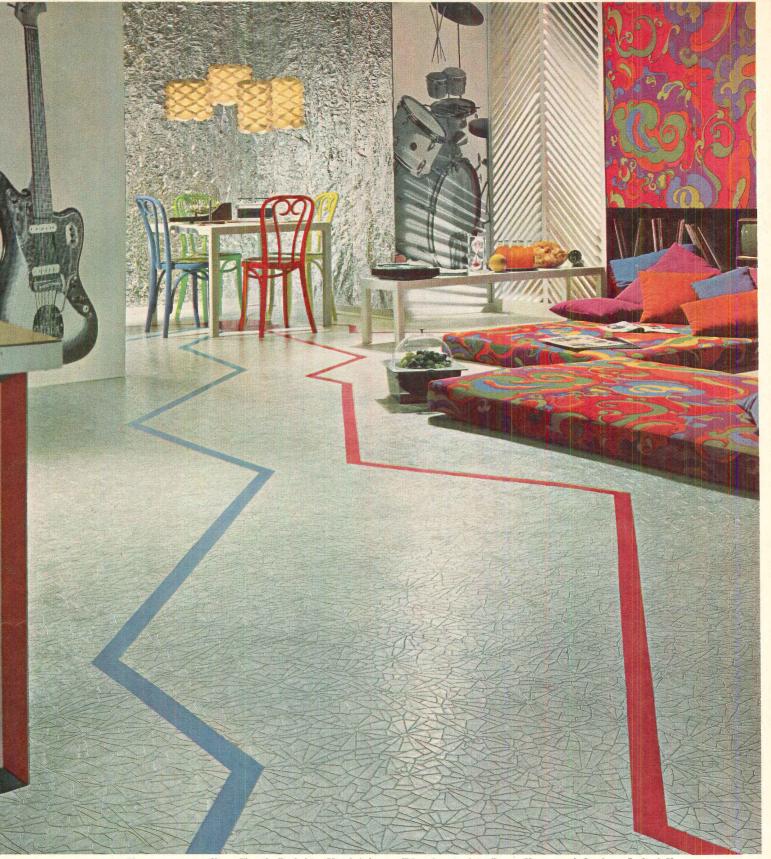
building products discover the advantages of Geon viny find them using it more and more - in siding, electrical co pipe, baseboard raceways, built-in vacuum tubing, shu

and many others. For additional information on th of Geon vinyl in building products, write B.F.Go Chemical Company, Dept. H-9, 3135 Euclid Av Cleveland, Ohio 44115.



B.F.Goodrich Chemical Company

a division of The B.F.Goodrich Company



Your prospects will see Kentile Berkshire Vinyl Asbestos Tile advertised in Better Homes and Gardens, Ladies' Home Journal, other top national magazines. Tile is 12" x 12" x 1/16." Quiet and comfortable. Colors: 5. Shown with feature strips.

Berkshire Vinyl Asbestos Tile lets you cut costs, keep value!



Kentile Berkshire adds that extra touch of quality to home-improvement projects and to your new homes. Yet it's priced right. It's textured, tough, and long wearing. Greaseproof, easy to clean. And individual tiles permit quick, low-cost installations. Samples? Call your Kentile® Representative.

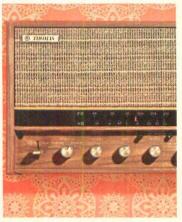


Now... a surface-mounted radio/intercom that's a fire and burglar alarm, too.



urface-mounted for easy stallation.

here's no rough-in framing. laster unit hooks on bracks—connects simply. Colorbding makes wiring easy.



25 transistor, solid-state AM/FM features.

"Instant-on" performance with automatic frequency control that gives drift-free reception. Low power source system is hazard free—no city or state code restrictions.



Choose from two systems.

System can include up to 16 stations (in walnut and silver oak finishes). Ideal for garage, basement, bedroom, and workshop installation.



Burglar and fire accessories signal trouble.

Easy-to-install fire and entry alarm sensors. When triggered, sensors send a howling signal throughout entire system.

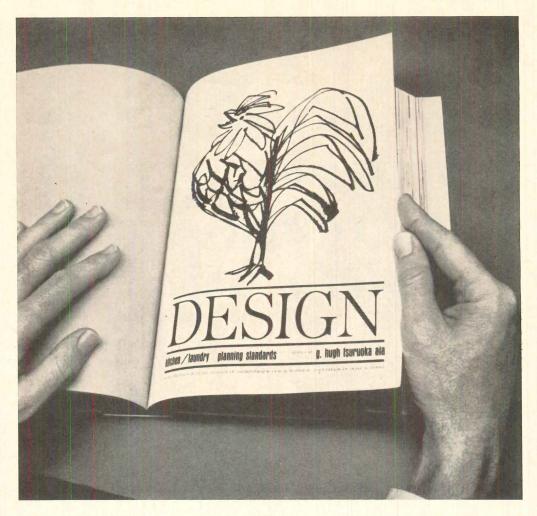
Give your prospects something special to remember in your model homes: a Thomas radio/intercom sound system.

You can bet they'll remember the fire and burglar alarm feature . . . and the portable station you took out on the patio. They'll remember the low cost, the handsome cabinets, and the resonant sounds, too.

They'll remember your model home.

If you'd like to learn more, write us: Thomas Industries, 207 East Broadway, Louisville, Kentucky 40202





A New Kitchen Design Guide in Sweet's.

See Section 12 of your 1967 Sweet's Light Construction Catalog File.

This new, 32-page Guide will help you plan kitchens that *sell* houses. Nine major subjects are covered in useful detail:

Basic planning—of U-shape, L-shape, Corridor and Island kitchens.

Available equipment, cabinets, and appliances. Countertops—by design, use, and materials.

Flooring-by design, use, and materials.

Lighting systems—types, locations and intensity requirements.

Ventilation systems and locations.

Period stylings—Early American, Modern, Mediterranean, and French Provincial.

Accessories—to complement the basic components of your model kitchens.

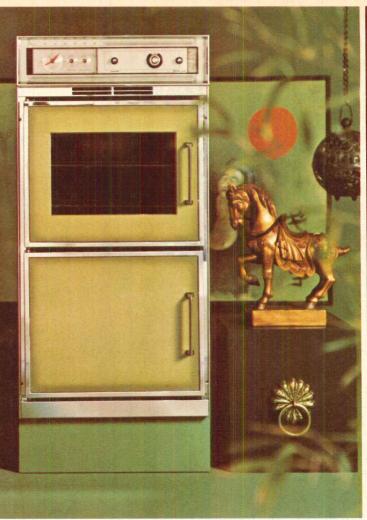
This valuable addition to your Sweet's File was developed by George Tsuruoka, AIA, well-known leader in the house design field and a First Award winner in the recent Construction Industry Advertising and Product Literature Competition.

The Guide is intended to speed and simplify your design work, and make this part of your job more profitable. Why not check your Sweet's File now?

And tell us if the Guide is as useful to you as we think it is. Sweet's Construction Catalog Services, F. W. Dodge Co., McGraw-Hill, Inc., 330 West 42nd Street, New York, N.Y. 10036

Sweet's Pays.







Did you know... You Can Have Chambers For Not A Cent More Than Other Leading Brands?

It's true! You can have all the merchandising advantages of America's top quality brand at no extra cost. Certainly, this doesn't mean our quality standards have been lowered! It simply means that you can select a Chambers kitchen package with various optional features to fit practically any building budget . . . and still be positive of built-in Chambers quality, beauty and prestige. Write us for information on our complete line of built-ins: ovens and surface ranges, dishwashers, disposers and refrigerators. Remember nothing speaks quality as quickly as Chambers.





Signalure Bath

Designed for you ... Presold to millions of your best prospects

Forty million potential home buyers will be sold on American Olean's Signature Bath this Spring.

They'll be sold by full-color ads in the February, March and April issues of McCall's, Better Homes and Gardens, House & Garden, House Beautiful, American Home and other leading magazines.

They'll be sold on its quality, beauty, and practicality.

They'll be sold on the range of ceramic tile colors, textures and designs that lets you make this bath as distinctive as a home buyer's signature.

They'll be looking for the Signature Bath in the model homes they see.

Now is the time to install the Signature Bath in your model home—in time for the big Spring buying season. Find out how. Send today for American Olean's Signature Bath Builder Kit. It includes floor plans and working sketches, consumer ad reprints and point-of-sale materials. Just fill in the coupon!

AMERICAN OLEAN TILE COMPANY 1070 Cannon Avenue Lansdale, Pa. 19446

Please send me my free "Signature Bath Builder Kit."

NAME______(please print)
FIRM_____ADDRESS_____

CITY____STATE__ZIP__

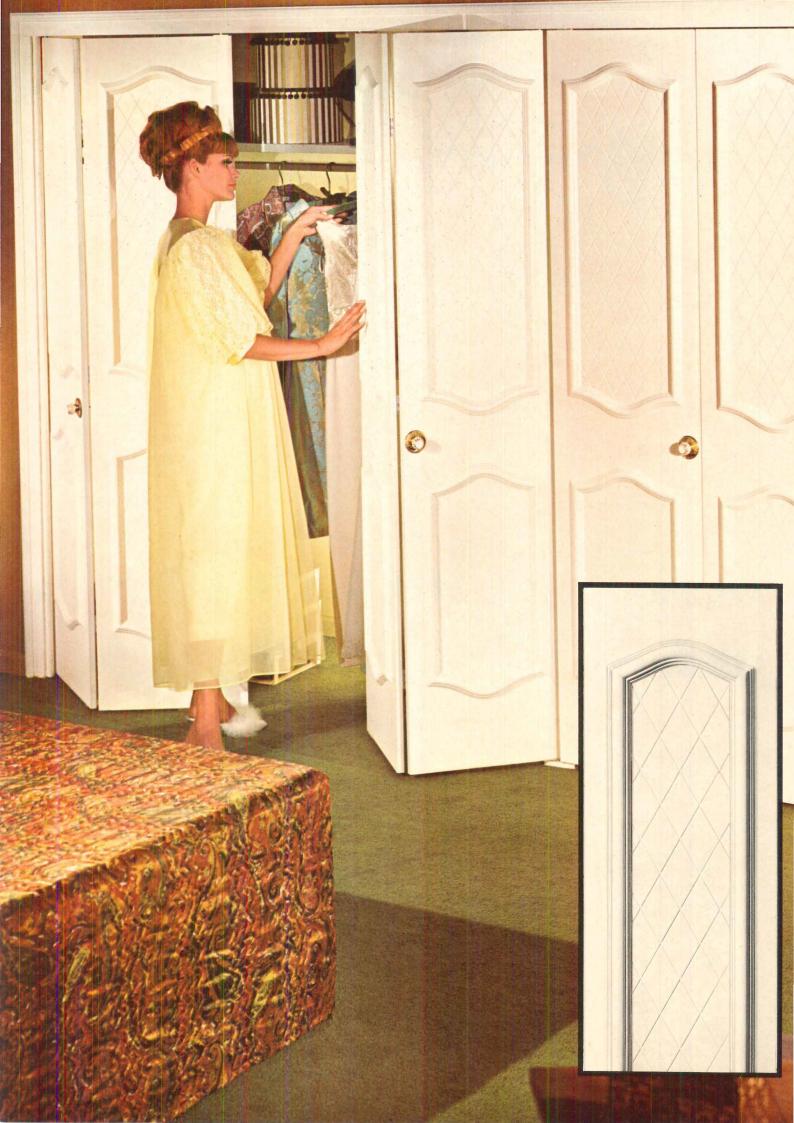
Number of units planned in 1967

Price range:

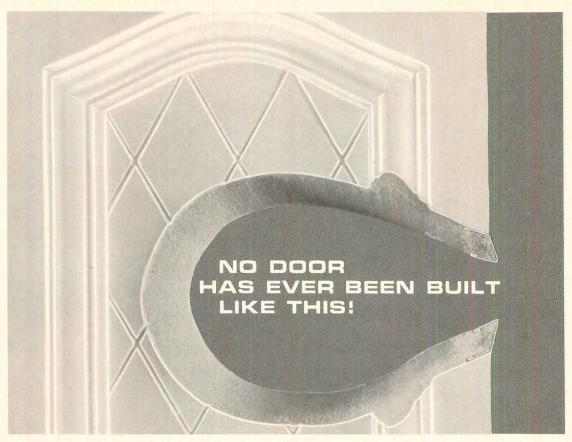
☐ \$15-25,000 ☐ \$25-40,000 ☐ over \$40,000

American

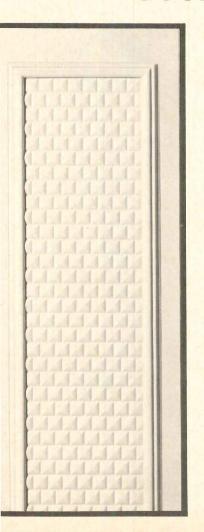
A Division of National Gypsum Company

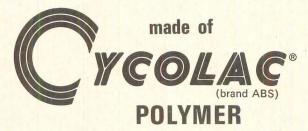


NEW IDEA HELPS YOU SELL MORE HOMES!



X-quisite. FOUR SEASON BI-FOLD DOORS





CAN'T WARP, WON'T SWELL, NEVER STICK. UNCONDITIONALLY GUARANTEED FOR FIVE YEARS.

Home buyers will love these beautiful, durable doors that won't scratch, scuff, stain, dent or scar. That's because they're made of CYCOLAC®, the same rugged polymer that makes golf club heads, football helmets, telephones, typewriters, luggage and other performance-demanding products stand up to extra years of punishment.

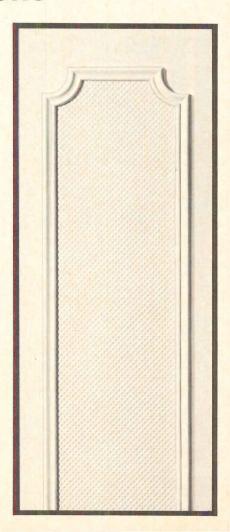
The doors are manufactured by H. C. Products Co., Princeville, Illinois. Guaranteed to provide smooth, quiet, effortless operation in *every* season—winter, spring, summer or fall. They'll add selling magic to your homes.

MAIL THE ATTACHED POST CARD TODAY

MARBON CHEMICAL . DIV. OF BORG-WARNER CORP. . WASHINGTON, W. VA.

Marbon chemicals







are they?

eople who prefer gas. Gas ranges. Gas dryers. Gas er heaters. Gas furnaces.

nd, nowadays, gas air conditioning.

hat's why it's going to be worth your while to ure gas air conditioning in your next project.

'll help sell the homes. And your gas company will , too, with active support.

nd, because the gas companies are doing more a ever to promote gas this year, and especially air conditioning, the gas house gang will be bigger 1 ever.

nd with Bryant equipment, they'll get dependable air conditioning.

It's quiet. And, in the long run, economical.

There are few major moving parts in the cooling system, so there's less to wear out or service.

And, because it's gas, it costs less to operate.

We back it up, too. With our more than 60 years of experience in gas-fired equipment. With our national network of distributors, branches and factory-trained dealers.

So, come on, be one of the gang.

Call your local gas company for more information.

Or write Bryant Manufacturing Company, 2020 Montcalm Street, Indianapolis, Indiana 46207.



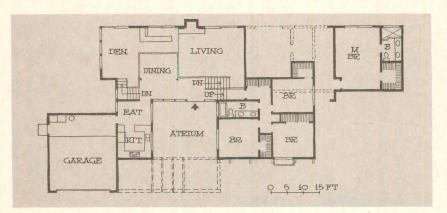
GAS AIR CONDITIONING

THE DEVICE THE DOLLAR TO THE DOLLAR TO THE TENTE THE TEN

Both of these builders' sales models reflect a strong regional flavor

This house, built in Tustin, Calif., has a Spanish character: tiled roof, heavy carved double entrance doors (below), and an arched facade on its shady entrance courtyard. It and four similar models were built by Leo Shanahan in a 124-house project, and all but 12 have been sold in just over a year. Price of this model was \$56,000 to \$59,000 (on \$20,000 to \$22,000, half-acre view lots), depending on optional items like central air conditioning. Other features: a raised dining deck with wine storage below, a built-in bar between the living room and den, and a private master suite.

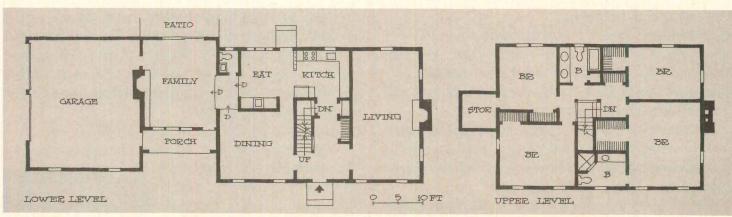






This two-story colonial house in the Philadelphia area serves as the showcase for a custom builder. Situated on a major highway, it is designed to show buyers the type of house they can have built on their own lots anywhere within a 50-mile radius. It was opened about a year ago by Scarborough Custom Homes, which is a subsidiary of Scarborough Construction, a large project builder in Haddonfield, N.J. The 2,500-sq.-ft. house has four bedrooms and two baths on the upper level. Large formal and informal living areas on the lower level are separated by a rear kitchen. Five similar houses have been built from architect Lester Weckesser's plan. Price of the model (on the owner's land): \$34,000.





Letters start on p. 4

URETHANE FOAM PROJECT REPORT

Part of a series of product-use bulletins published by Mobay to keep architects, engineers, builders and contractors informed on new developments in urethane foam materials for the commercial and residential construction industries.

MOBA

DEVELOPER OF RELOCATABLE BUILDINGS SHOWS SCHOOL BOARDS HOW TO SAVE UP TO ONE-THIRD ON SCHOOL CONSTRUCTION COSTS

One of the big problems school planners face stems from the population explosion itself and is measured by numbers of kids. But size of enrollment is often a simple problem compared to the one of population movement. One family in five moves each year and the resulting enrollment shifts, complicated by consolidation and shifting of school districts for other reasons, have school planners looking more and more seriously at relocatable structures as the most practical answer to the problem.

One leading builder of conventional type schools, the Vinnell Steel Co., of Oakland, Calif. 94623, has developed a modular school concept which successfully combines the mobility of a relocatable unit with the aesthetics, economics and permanence features of a conventional struc-

ture built on site.

The modular classroom unit has plan dimensions of 10' x 32' with an 8' overhang at one end and 4' at the other. Each unit is completely prefabricated down to the last finished detail, including tile or carpeting on the floor. Units are interchangeable and are designed to form a complete structure when two or more are joined together.

All adjoining units are self-aligning and, when connected, insure positive alignment of floors, walls and roofs. The modules may be easily separated, hoisted, and transported on state and national highways by stock equipment, or by attachment of a trailer hitch and wheels to the frame, with no unusual permit required.

The main structural support for the units is provided by an all-welded, self-supporting steel frame capable of withstanding all applicable de-

sign loads for permanent buildings.

Wall panels are of conventional sandwich-type construction, 2" thick. The exterior surface is 24-gauge galvanized steel, factory finished with 2 coats of baked-on alkyd melamine paint. The interior surface is 20-oz. vinyl sheet with 1/2" fiber or gypsum board backing.

The core and insulation material is self-bonding, self-extinguishing rigid urethane foam, poured in place, with a minimum density of 1.8 pcf, using a foam system supplied by Reichhold Chemicals, Inc., White Plains, N. Y. 10602. Although the



These children will be middle-aged before the 40-year minimum life expectancy of these mobile school buildings expires. A wall core of rigid urethane foam combines structural strength and insulation for long-term economies.

sandwich panels are non-load-bearing, the urethane foam imparts a degree of self-supporting rigidity which makes them true structural components since they form the entire wall enclosure.

From 9 to 12 panels are foamed at one time by means of a special stacking press utilized by the fabricator. Once installed, the panels rest vertically on the floor of the structure, attached at bottom and top to the steel members, and are connected and sealed vertically by extruded alu-

minum and neoprene mouldings.

Presently, the finished buildings sell for \$12 to \$14 a sq. ft. installed at the site and are completely ready to use with connection to electricity and water supply. They include heating and air conditioning facilities, all lighting and wiring, plumbing, and finished walls, ceilings and floors. A wide choice of fitted window arrangements is offered. The relocatable buildings are also being marketed for a variety of other uses besides schools, such as stores, restaurants, medical offices and dorms.

For further information on this project, please contact:

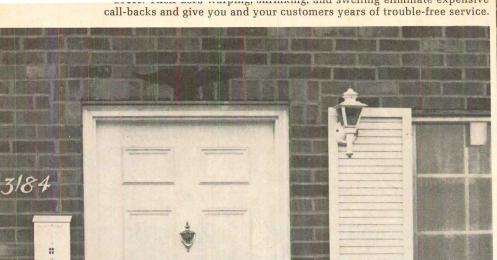
Builder:

Vinnell Steel Co. Oakland, Calif. 94623

Supplier:

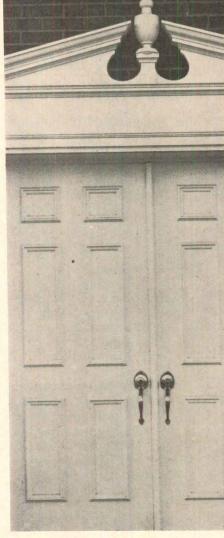
Foam System Reichhold Chemicals, Inc. White Plains, N.Y. 10602

For additional information on the use of urethane foam in other insulation and construction jobs, write on your letterhead to:









Steel doors for: durability, beauty, trouble-free performance

Residential steel doors provide a unique combination of advantages that attracts the buyer — trouble-free, long-lasting service plus pleasing appearance.

Steel doors and frames won't swell, twist, warp, or shrink despite the ravages of weather and age. Made of Armco ZINCGRIP PAINTGRIP® Steel, they not only have strength and rigidity, but are impervious to moisture, have the added protection of a durable zinc coating that assures years of maintenance-free service.

Steel doors are available in various designs and styles, both exterior and interior.

Plants, lights, and mouldings in numerous designs and styles enable you to tailor steel doors to any type of over-all design or architectural theme. Available in either single or double installations, they can be hung with or without louver screens.

Also, the steel door eliminates the need of a storm door. You get the same protection and insulation with one door that formerly required two.

Why not evaluate the advantages of steel doors for your homes? For more information and the name of steel door manufacturers. Write Armco Steel Corporation, Dept. E-917, P. O. Box 600, Middletown, Ohio 45042.

Circle 57 on Reader Service card

Housing the poor

H&H: Hurray for your January editorial. From all I know about the problems of low-cost nousing, you have put the spotlight on the No. 1 problem: the cost of land.

WILLIAM H. SCHEICK, executive director The American Institute of Architects Washington, D.C.

Hah: You come to grips with basic housing problems more realistically than anyone else tread. Your editorial on housing for the poor is a real thought-provoker. Just as you say, and costs are a formidable barrier to low-ncome housing. Having cities provide sites is worth a try. But it may take an awful hue and cry to bring this about—city regimes are defeatist in attitude because of their financing woes and the crushing veto power of federal offices over local housing authorities.

MERLIN BLAIS, manager, product publicity Western Wood Products Assn.

Portland, Ore.

H&H: My firm has specialized for years in low-income housing. Having built several apartments, I find the biggest drawback in getting a program to house the poor is on the local level.

No one wants to do anything but draw maps and plans and talk of building luxury apartments, offices, and shopping centers. When you ask where the displaced people will live after all the condemnations, the town fathers seem to believe these people will move to the next town.

Builders are willing and able to build for the poor, but they must be given half a chance. I am sure that an excellent job could be done if only the local authorities could be motivated.

> Joseph Fabiano, president Blake Construction Ltd. New Shrewsbury, N.J.

FHA carpeting rules

H&H: I cannot say I was very happy over the table in your January news article on the FHA carpeting order or over some of the text of the article itself.

To the average reader, the table indicates that you surveyed 165 builders who built 2,511 houses and used wall-to-wall carpeting in the living rooms of 98% of them. It was not pointed out that the 165 builders were a group that used carpeting to some extent in residential construction and that the percentage figures were applicable only to those units in which carpeting had been used. Your readers were thus given an entirely erroneous impression.

In the third paragraph of the article the following statement is made: "Carpeting is

H&H editorial index

HOUSE & HOME'S 1966 editorial index, an eight-page reference guide, is now available.

It includes a cross-reference listing of all subjects covered last year by H&H—115 in all, from acoustics to zoning—plus a combined, chronological table of contents of major articles.

If you'd like a copy of the new index (there's no charge), write to: Reader Service, House & Home, 330 West 42 Street, New York, N.Y., 10036.

not mandatory but once a builder installs carpeting meeting the new specifications, FHA district officers cannot reject it but must fix a value for it instead."

FHA Use of Materials Bulletin No. 44 actually says: "However, carpeting use is not mandatory. It is permissible where the local insuring office finds that carpeting is acceptable in the area."

HENRY H. WILLINS, executive vice president National Oak Flooring Manufacturers'

Assn. Memphis, Tenn.

Assessment battle

H&H: Presenting quaint generalizations rather than facts behind an issue is a reporting sin you committed in your December article on Irene Hickman's advocation of 100% assessment on real property in Sacramento.

You are presumptuous in stating that "nearly all property tax assessors have ignored state laws ordering that real estate be assessed at full value." There are no laws prohibiting fractional assessment—just as there are no county or state agencies to date who have assessed at 100%. As a matter of fact, Assembly Bill #80, passed during 1966 by the California State Legislature, requires all counties to assess at 25% of market value. All counties have been instructed that they must comply with this newly enacted law by 1971.

It is, therefore, readily apparent that Mrs. Hickman's policy advocating 100% assessment in Sacramento is contrary to the contents of A.B. 80 as approved and passed by the State Legislature.

If Irene Hickman assessed all property in the county at 100% of value, the local schools would lose over \$20 million in school aid alone. The reason: If Sacramento assesses property at 100%, while all other counties

continued on p. 52

CHANGING YOUR ADDRESS?

ATTACH LABEL HERE

Please give five weeks notice before change of address becomes effective. Attach mailing label here and print your new address below. If you have any question about your subscription, include address label with your letter.

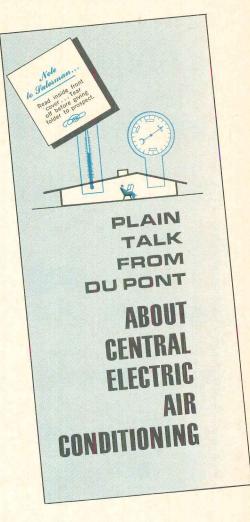
MAIL TO

House & Home, 540 N. Michigan Ave., Chicago, III. 60611

name			
address	HA AL		
city		state	zip code

Subscribers: HOUSE & HOME is available only by paid subscription. The publisher reserves the right to refuse nonqualified subscriptions. Position and company connection must be indicated on subscription orders forwarded to address shown at left. Unconditional guarantee: The publisher, upon written request, agrees to refund the part of the subscription price applying to the remaining unfilled portion of the subscription if service is unsatisfactory.

Free booklet tells you how to use central air conditioning to close more sales



Selling more homes more quickly is important to you...air conditioning can help you do it. Central electric air conditioning is a reality of modern living. Almost one out of every four new residences constructed in 1965 was centrally air conditioned. Make sure you are armed with the facts you need to cash in on all the sales advantages central air conditioning has to offer. Get the booklet "Plain Talk From Du Pont." For your free copy, mail the coupon.

FREON®



BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

Du Pont Co., Room 4947 Wilmington, Delaware 19898
Please send me a copy of your booklet on central residential air conditioning.
NAMETITLE
COMPANY
ADDRESS
CITYSTATEZIP

Thermasol brings the Steam Bath back home

A 4,000-year-old idea is 1967's most exciting nev

home feature! 2033 BC:

was the rave of the best

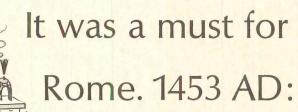


The steam bat Korean caves.

445 BC: The Greeks said it cured wha

ailed 'em. 200 BC:

luxury homes in





The Turks said it was positively Turkish. 1967: Thermasol makes the

bathroom a second family-fun room!

Thermasol . . . the amazing breadbox-sized electronic generator . . . lets any shower stall or tub area double as a personal steam bath. Thermasol steam bathing is *in*, it's fun, it's marvelously relaxing. Progressive builders everywhere are featuring Thermasol as the ultimate bathroom luxury in ads, model homes and apartments. Nationally advertised, Thermasol has proved its tremendous appeal to both men and women. It creates traffic and excitement in model homes . . . repeatedly makes the difference in closing sales *fast*. Let us put this really *unusual* feature in your next model, and watch the *action!*

For details, contact:



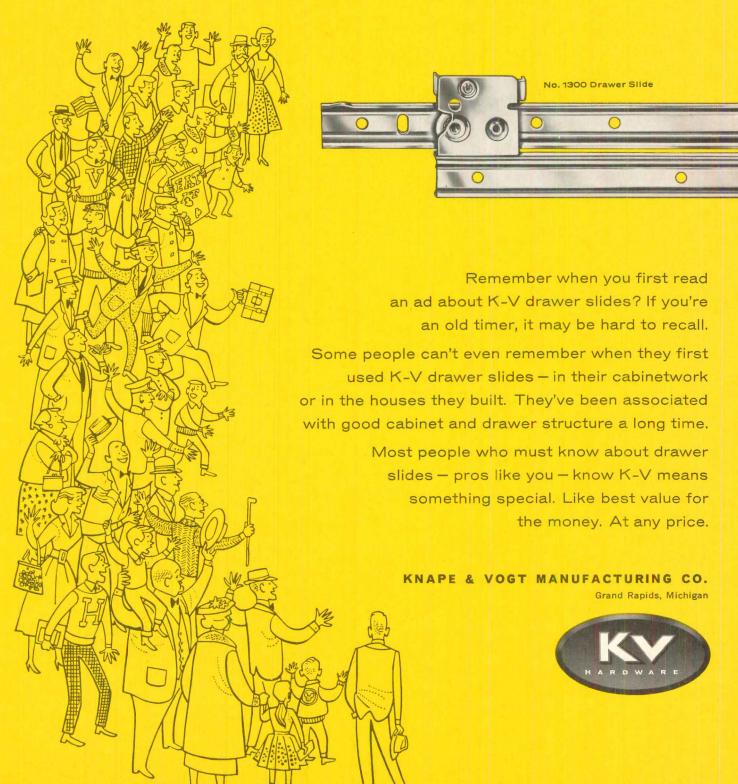
101 Park Ave., New York, N. Y. 10017

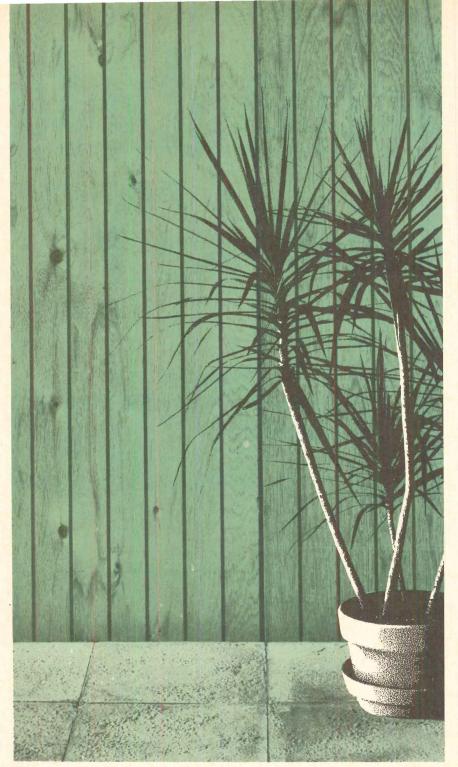
New York: (212) MU 4-7766 • Washington: (202) 296-3909 • Chicago: (312) 935-1890 • Los Angeles: (213) 748-7983

NATIONALLY ADVERTISED: Look, The New Yorker, House & Garden, House Beautiful



Nearly everybody knows KN





For extra curb appeal, tone up both wood and concrete with Rez Color-Tones.

Rez Color-Tones are pigmented stains that sink deep into wood and concrete, adding color warmth without masking natural textures. They hold their color against the effects of sun and weathering. And they resist peeling or blistering.

Rez Color-Tones come in a wide range of colors, plus the popular trend color, "Bleachtone." You can intermix them for an endless variety of natural colors, decorative and design effects.

Boost the curb appeal of your next home. Use Rez Color-Tones to tone up both wood and concrete.

For more information, write The Rez Company, Department HH-37. Springdale, Pennsylvania Torrance, California



assess at fractional assessments as they cu rently do, the Sacramento schools would b automatically disqualified from the man types of state and federal aid programs now available.

Consider the repercussions of Mrs. Hicl man's proposed methods in other vital area of our economy: a) Veteran's-exemptio benefits will be eliminated in Sacramento; b inventory taxes in Sacramento will be ac versely affected; c) 123 special districts in th county must request a change in the law governing their rates and procedures.

The key issue is not whether the rate is 5% 20% or 100%, but that, whatever the rate, must be uniform throughout the state All laws revolving around the many aid pro grams are predicated on fractional assessmen A.B. 80 has made fractional assessment law, thus providing the uniformity necessar for its implementation.

If Mrs. Hickman is successful in having th courts require uniform 100% assessmen throughout the state rather than 25%, th only result will be the waste of time, expens and energy-all at the cost of the taxpayers money-required to change the multitude o related and affected laws and procedures is the state, in each county, and in the man districts within each county. The taxpayer will thus suffer twice, for they will be actuall paying for the cost of the red tape involved in raising their taxes!

FRANK N. SCOTT JR., executive vice presiden El Dorado Hills West Sacramento, Calif.

The constitutions of 33 states require ta assessments at full market value. Thirtee states specify percentages of full value, an

the remaining four have local options.

The 1957 Census of Governments, in a assessment-sales ratio study, found "dee underassessment on virtually a nationwid basis," and numerous authorities have foun that underassessment generally leads to in equitable assessment.

California is among the 33 states whos constitutions call for market-value assessmen and House & Home correctly reported the Mrs. Hickman was challenging the right of the California legislature to set any lowe percentage. The conflict between state const tutional mandate and practice is being debate in many other states; Kentucky, for one, he already ordered conversion to 100% assess. ments.-ED.

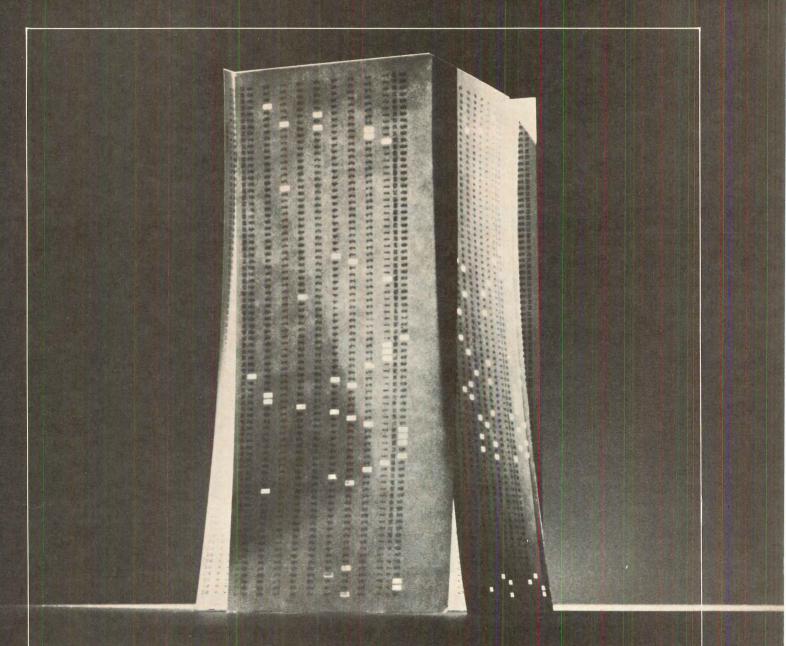
Elusive products

H&H: Your "Market Memo" complaint [Nov that not enough new products are being use by builders reminds us of an interesting side light. A small builder often can't buy a ne product! Unbelievable?

Recently we tried to buy paper- and/o vinyl-covered gypsumboard, an apparently ne product advertised in House & Home. In city of over a million people, not one r tailer seemed to carry it. No demand. The advertiser's branch office says he can't carr it—makes his lumberyard customers ma Well, name one where we can buy it; I can't-but if we'd care to buy a car loa

After months and many attempts, we s cured enough to line three garages, but the forgot to send the matching nails. Some da it doesn't pay to read about new items or to to utilize them.

> JOE WILSON, Happiness Hom Clute, Tex.



"No machine is ever going to design a building!"

"The bewildering choice of electrical/mechanical systems for a large building makes a computer a very useful design tool," states Robert G. Burkhardt, PE, head of a Chicago consulting firm. "However, mathematical models can't match a seasoned engineer's judgement in designing a system tailored to each

building's peculiar requirements.

"Early investigation of environmental requirements by a consultant can be a most prudent investment. We've often found it possible to suggest to architect and owner a compatible system that conserves space, improves performance and reduces total building cost." Bell & Gossett pioneered new efficiency in building heating/cooling systems through new products and design innovations such as single-pipe circuits, high-temperature-drop radiation and primary/secondary pumping. Ask the Consulting Engineer to investigate B & G on your next project.

When you buy Weyerhaeuser Primewood® products, you're buying time.



Time saved on the job.

We're now priming a wide variety of our most popular wood products. A perfectly smooth, perfectly uniform base coat saves you all kinds of time and trouble. Saves you paint, too. The finish coat flows smoothly and evenly — making an expert painter of the greenest apprentice. The prime is scientifically formulated to be compatible with all present-day house paints. It's applied under controlled factory conditions — to all surfaces and ends of every Primewood product. And, because the wood is protected during construction, it makes a four-season builder of you!



Time saved in selling.

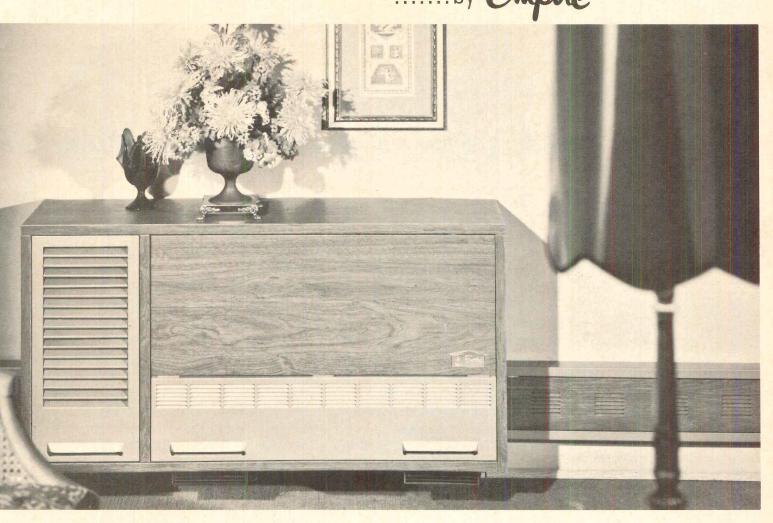
Primewood products give you an edge over competition. When you point out to prospects that your paint job is backed by a 5-year guarantee from the biggest name in forest products, you've speeded the sale. Your homes will have that "just painted" kind of freshness that's noticeable clear from the curb. You get that quality look only when the prime coat has been properly applied.

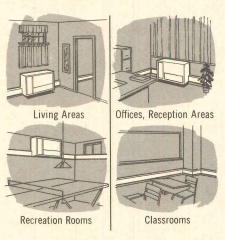


No time lost on call-backs.

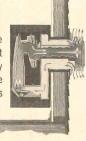
We don't like call-backs any better than you do. If we guarantee a product that must withstand the ravages of weather for five years, it must be of premium quality. So start using Primewood. And forget about call-backs due to such things as blistering and peeling. Your Weyerhaeuser dealer can get you started. Or write us at Box B-2557 Tacoma, Washington 98401.

THE MOST DRAMATIC FORCED-AIR HEATING DEVELOPMENT IN MORE THAN 50 YEARS!!





Direct venting assures safe installation through most outside walls. No chimney or flu is needed. Secure outside vent cap conforms to building lines.



An Economical, Wall Mounted, Direct-Vent Gas Furnace with Baseboard Extensions for Peripheral and Multi-Room Heating...

Forced air gas heating has never been so easy to install, so economical, so flexible! New Classic-Aire offers complete adaptability with the use of open and closed face baseboard extensions in varying lengths to put heat where you want it. It's a bold new idea that permits thermostatically-controlled peripheral single or multi-room heating. Direct venting does away with vertical flu, duct work and expensive installation costs.

Nothing else does so many heating jobs so well and so economically in homes, apartments, offices, classrooms and multi-dwelling buildings. What's more, Classic-Aire's richly-handsome wood grain styled cabinet and baseboards add a tasteful decorator's touch to living areas. There's never been anything like it—until now!



TO: Mr. Lee A. Brand Empire Stove Co. Belleville, Ill. 62222

Dear Lee:

You've got me interested. Now send me the full story on Classic-Aire including dimensions, specifications and performance data.

NAME
COMPANY
ADDRESS
CITY STATE ZIP

Growing problem: equity transfer

It takes bold ideas to move people from old

To an auto dealer, the very fact that you own a car automatically makes you a good prospect for a new one. Not so in houses. Chattels move freely in the marketplace, but real property doesn't—not because it's impossible, but simply because the housing industry lacks the legal and financial tools to transfer equities easily from old to new houses.

So most housing men regard trade-ins as tougher than selling the Brooklyn Bridge to a Wall Street banker. And even though frozen equities in old houses represent at least 80% of potential newhouse sales, builders have been consistently unwilling or unable to work out trade-in problems.

That view makes sense if the builder must go it

alone. But if builders, lenders, real estate brokers lawyers, and title companies work together to solve the problem, they could make trade-ins more like selling meals to hungry men. If they could make i easy to unlock the equities in old houses, they could open up a vast new housing market—owners who can afford new houses but stay put because they can't get their money out of their old ones.

This year U.S. consumers will have income totaling about \$500 billion. And a \$150-billion piece of that pie will be purely discretionary income—to be spent as the consumer chooses. But housing will get only the crumbs because it is held back by three big roadblocks to equity transfer:

Roadblock No. 1: the lack of workable trade-in programs

By and large, trade-in plans that work (and several do) are confined to a few metropolitan areas where an occasional builder, an alert real estate broker, or a combination of both has developed local answers to individual transactions. But these isolated solutions are a far cry from what the whole industry needs.

- We need to establish a nationwide list of brokers who will cooperate with a similar list of builders in guaranteeing, financing, and freeing the equities in old houses for new-house buyers. Such listings could lead to the ultimate—the transfer of equities from one part of the country to another.
- · We need to set up ground rules, transfer procedures, fee arrangements, and similar criteria that participating builders and brokers would follow.
- We need to eliminate duplicate title fees, prepayment penalties during holding periods, and assumption fees when a dealer is really acting as a transfer agency.

- We need to develop management programs to prevent deterioration of existing properties, and therefore equity, during transition phases.
- We need to create re-insurance funds to which builders, brokers, and others can assign part of the risk in executing guaranteed trades.
- Finally, and most important, we need to find new ways to conserve the homeowner's present in vestment so that it can move intact to his new house For instance, we must set up funds to provide tem porary equity financing above existing first loans Also, builders should be willing to forego their profit on a new house until the buyer's old-house equity if free. What's more, builders could guarantee rentate of a buyer's old home for a year or two until it can be sold in a better market. Rental vacancies in single-family houses today are almost at the zero level, and the owner of a rented house can get sizeable tax deduction by depreciating the house of the sum-of-the-years-digits basis.

to new houses—why be afraid of bold ideas?

Roadblock No. 2: outdated lending practices

No one doubts that mortgage interest rates should be free to seek their own level in the open market. Fha and va should eventually have flexible interest rates to eliminate discounts which, in fact, place a far heavier burden on homeowners trying to move than on builders who have to absorb them.

We also need:

- · Uniform mortgage-lending laws. Today's state mortgage laws inhibit institutional investors because pertinent documents—including performance bonds, mortgage servicing agreements, title policies, and the like—vary widely from state to state.
- Uniform usury laws. Ten states now have maximum interest rates of 6%; one state has a 21% maximum; and four states, all in New England, impose no limit—and yet this area has always maintained the lowest interest rates in the country. Great Britain has not had a national usury law since 1854, but if we must have one, a national limit of 8% would let the law of supply and demand operate ef-

fectively on a nationwide basis and under a higher ceiling than most states now have.

• Uniform foreclosure procedures and redemption periods. At least half the states have no statutory redemption period for foreclosure, and other states vary greatly in redemption time, foreclosure costs, and the procedures for completing foreclosures.

Finally, mortgage paper, which has reached national stature and is now considered to be as negotiable as promissory notes, should be standardized under national rules. With nationwide piggy-back financing not far off, 90% conventional loans for both new and old housing may soon be available in most states. Piggy-back financing (usually a 75% first mortgage combined with a 15% second mortgage at a slightly higher rate) would go a long way towards releasing the frozen equities in existing houses. It could move like greased lightning if we had nationwide lending standards.

Roadblock No. 3: the assumption that old houses always sell at a profit

That's a false assumption, but it is slow to die.

Many a homeowner is still convinced that his house has appreciated in value and that he's bound to make a profit when he sells. What's more, he expects to get back the price of every gallon of paint he has splashed on his walls and every bag of fertilizer he has lavished on his crab grass.

But the coming generation of homebuyers may not be so sure that a house is a high-appreciation investment. These young people have grown up in an age of affluence. They make a lot of money, and they're willing to pay the cost of living well. Hopefully then, the time is coming when it will be much easier to convince a homeowner of the real market value of his house—even if that value is no higher than when he bought it.

Can we clear these roadblocks to equity transfer? Yes—but only through long-range cooperation by many segments of the housing industry. Already, NAHB and the National Association of Real Estate Boards have gotten off to a good start with the first of a series of taskforce meetings. The results of such a team effort can be far beyond the expectations of any participant.

—RICHARD W. O'NEILL

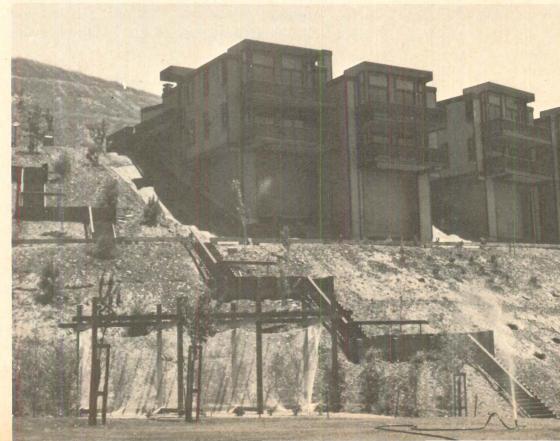


Luxury resort project in Palm Beach, Fla.



Small semi-resort project in Marin County, Calif.

Large year-round project in Oakland, Calif.





M. Burns



CONDOMINIUM comes of age

And its growth has been phenomenal. Just over five years ago condominium was such an unknown quantity that House & Home deemed it necessary to define the term at length before beginning an article on it. Most states didn't have condominium statutes, and only a handful of projects had been built in the entire

Today condominium is an accepted form of ownership for a wide range of housing types (photos, left) in most marketing areas. Builders offering it for the first time in other areas find that buyers understand it well. Only one state (Vermont) does not have condominium legislation on its books.

FHA statistics alone offer dramatic proof of condominium's growth. Up to November 1966, only 728 units had been insured under FHA section 234; today more than 3,000 units, valued at \$54 million, are either in or awaiting FHA processing.

Nevertheless, condominium still has growing pains. New projects sometimes fall on their faces, and when they do, other builders nod sagely and allow that while condominium may be fine in some places, it won't work here.

But a little digging usually shows that the failures are due to other factors. For one thing, there is still a tendency to think of condominium as a cure-all that will turn a bad project into a success. For another, condominium is still so new that relatively few builders have a solid background of experience with it; hence mistakes are made.

Most of these mistakes can be avoided. And when they are, condominium turns out to be immensely valuable for both builder and buyer. To see why, turn the page.



For the buyer, condominium offers the economics of home ownership plus maintenance-free living

And it brings these advantages to two growing types of housing: apartments and planned unit developments. Without condominium, families who wanted to own their apartments would have to turn to co-ops, which don't offer condominium's clear-cut ownership. And families that wanted the environment offered by P.U.D.s would be forced into homeowners' associations, which can also prove unsatisfactory.

The fact that condominium is unfamiliar to many buyers can be a help to the builder. Says Martin Berger, partner of Robert Martin Assoc. of White Plains, N. Y.: "The best thing our salesmen can be asked is 'What is condominium?' It gives them an opening to talk about the advantages." Here are the advantages Berger and other condominium builders have found to be most appealing:

Condominium offers the buyer all the economic and tax advantages of conventional home ownership. These advantages have long been used by homebuilders to lure prospects out of rental units: The monthly rent is money gone, but some of the monthly mortgage payment becomes equity. All interest on the mortgage and all real estate taxes are deductible from personal income tax. And if the property appreciates—as it almost always does—the increased value goes into the owner's pocket when he sells.

In this regard, condominium does better by the buyer than either the co-op or the homeowners' association. Here's why:

The co-op, almost always a garden or high-rise apartment, is a corporation in which the "owner" is actually a stockholder occupying his apartment under a proprietary lease. His interest payments and real estate taxes are deductible, and some of his monthly charges go into equity. But many co-ops demand that units be resold to the corporation at the original price; so the co-op owner cannot share in the property's appreciated value.

The homeowners' association is a non-profit corporation which owns and maintains all common land and recreation areas, and its stock is held by owners of homes in the project. These owners pay monthly maintenance fees that include real estate taxes and, possibly, interest on the common property; owners cannot deduct this.

By contrast, each owner in a condominium P.U.D. has a deed that includes both his home and an undivided interest in the common property. His mortgage and his real estate taxes are based on the

deed; so, in effect, the interest and taxes on his share of the common property are deductible.

Condominium gives the buyer more security than other kinds of common ownership. This is most evident in the comparison between condominium and co-op.

In a condominium, an owner is responsible only for his own home and his share of common property upkeep. Should another home be foreclosed the foreclosing agency is responsible for keeping up all payments, which are a lien on the property By contrast, if a member of a co-op defaults, his monthly payments must be made up by the other stockholders.

In a condominium, an owner can sell, lease, o rent to anyone and at any price he can get. (A common stipulation is that other owners have the right of first refusal.) By contrast, most co-ops give stock holders, in effect, the right to veto a sale. It is some times possible for a few recalcitrant members to hold up another member's sale indefinitely, and often for frivolous reasons.

Condominium is backed by state law. Here, the most important comparison is with homeowners associations. Says Edward L. Schiff, attorney for the Condominium Council, a New York advisor and consulting group: "An association is set up of the basis of lawyers' opinions, and a court may not agree with these opinions. If deed restrictions were found to be overly restrictive, for example, the association could be ruled invalid."

Adds Alexander Paulsen, a New York Cit builder of high-rise condominiums: "The state law gives us a better position with our buyers. When they say, 'Will you really do this,' we pull out the rules and say, 'Look, the state says we have to.'"

Condominium takes most of the home-maintenance load off the buyer. This is of greatest importance in single-family P.U.D.s. The buyer lived like a conventional-house or townhouse owner, but for a monthly charge (usually from \$35 to \$50 he gets a package of services that includes law mowing, landscaping, drive and sidewalk main tenance, exterior painting, and some insurance, a well as maintenance of common green areas an recreation facilities.

The service package is the chief reason wh condominium has shown great appeal for the older—and usually wealthier—buyer.

For the builder, condominium offers flexibility plus a way to sell a wider market

As any builder knows, the criterion of success is not how much money you make but how much you keep. Beyond a certain amount, most ordinary income is eaten up by taxes. But much of it can be retained if a builder invests in rental property; the property's depreciation can offset much or all of the income.

Condominium allows the builder to combine in-

come and depreciation in the same building or proect. If he were to build, say, a 100-unit condominium garden-apartment project, he might hold some of the units himself as rental property and take their depreciation. Also, if the sales market proved slow he could rent out still more units to help carry help debt service load. Builder Alex Paulsen figures he can afford to hold 15% of the units in each of his buildings (to date he has built three of 150 units each). "This gives me a balance between income and investment properties," he says, "and I'm also building up my own estate."

Condominium gives the builder the chance to share in the appreciation of his project. If economics follows its normal course, the apartments that Paulsen is holding today will be worth more ten years from now. When he sells (having had the advantage of ten years' depreciation write-off), he will realize the appreciation, and his tax on the difference will be capital gains, not straight income.

William Aubin of Amherst, Mass., has devised another way of using condominium to realize appreciation. In his new P.U.D. (H&H, July, '66) he has designed rental townhouses that can later be converted to condominium.

"I expect my project to become one of the most desirable residential areas in town," says Aubin. "If I sell it now, someone else will benefit from my good planning. But by renting now and converting to condominium later, I get both depreciation now and appreciation later."

Condominium lets the builder meet a wide range of buyer needs. Says Paulsen: "In a co-op, every buyer must put down the same amount of cash and pay the same monthly charges. But with condominium an older buyer with a limited income can pay all cash and keep his monthly charges to \$35, while a younger family with little equity but high earning power can get up to a 90% mortgage."

Most important, condominium is the best way for builders to take advantage of the growing demand for better environment. The best hope for better environment is the P.U.D., with its cluster siting, open areas, and recreation facilities; and P.U.D. in turn means common ownership of some land and facilities. The problems of co-ops and homeowners' associations have been discussed above; and deeding common areas to municipalities raises problems of politics and future changes in the greenbelt areas. Condominium remains the best answer.

But in areas where condominium is brand new, builders need guidelines and buyers need educating

The most important guideline, according to builders who have built condominium projects, is this:

Condominium won't bail out an otherwise unsalable or unrentable project. A condominium must be just as carefully laid out, designed, built, priced, and sold as any other type of development. By the same token, condominiums are just as subject to market problems (like tight money) as any other type of housing. When condominium ownership is blamed for the troubles of many projects, it usually turns out that the fault lies elsewhere. For example:

In Frederick, Md., Brosius Homes Corp. built a 38-unit condominium townhouse project, sold only five units in a year (a dozen more are now rented). But, says President William Brosius, the causes of slow sales actually were that 1) Frederick hadn't seen new townhouses in years, and buyers were wary of "row houses," 2) the design is contemporary while Frederick is used to colonial, and 3) a similar rental project built by the company in nearby Hagerstown was, in terms of monthly payments, a better value.

In Providence, R. I., Anthony Viola built a nineunit, medium-rise condominium, still has three units unsold after two years. "The design got out of hand," says Viola, "and the apartments are overpriced."

In Lakewood, N. J., builder Robert Schmertz sweated out two years of slow sales in the first section of his 5,000-unit Leisure Village condominium. "The problem," says Schmertz, "wasn't condominium, it was loneliness. Retired people don't want to move into a new project when few other people are living there." Now, with almost 20% of the project sold, Schmertz is selling briskly.

The first section of a large condominium project shouldn't be too big. Says Bob Schmertz: "Our first condominium was 300 units, and once we started it we were locked in. Some of the models sold poorly, and we couldn't change them. We should have held the section to 50 or 60 units."

But a condominium shouldn't be too small either. Says Anthony Viola: "Buyers of luxury units want luxury features like a doorman, and nine units is too small to support such things without exorbitant monthly payments. I think 50 units is a minimum."

Buyers are receptive to condominium—providing they understand it. And in most markets today, they do understand it. Says Martin Berger: "In our area, people know about condominium and they like it. It has a good image."

But the builder who is pioneering condominium in his local market will almost certainly have to undertake some sort of education program, both for buyers and for others involved in selling and financing homes. For example:

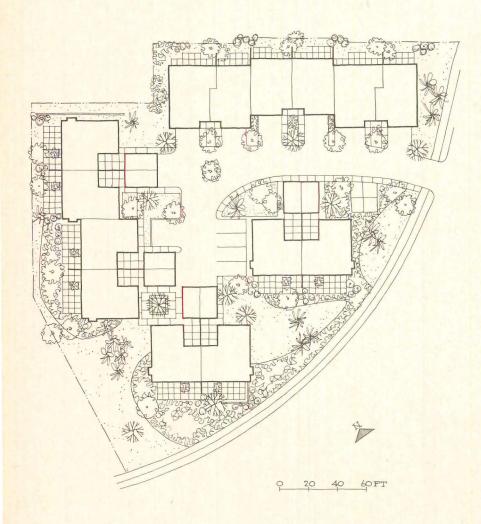
William Brosius found that his biggest education problem concerned bankers and town officials. "They were unfamiliar with condominium," says Brosius, "so naturally they didn't talk about about our project with great enthusiasm. Finally we asked them to a dinner meeting at which we explained what condominium was and how it worked. It helped the atmosphere tremendously."

Dunbar Builders Corp. of Chicago, one of the country's biggest condominium builders (H&H, Nov., '66), introduced a garden-apartment condominium to Chicago in 1963 when not just the city but most of the country was unfamiliar with the concept. "Our biggest problem at first," says President Herbert M. Rosenthal, "was just to get people to pronounce the word correctly." Dunbar executives embarked on an educational program that included 1) personal contact with financial institutions, both to arrange for financing and to create a favorable atmosphere; 2) a brochure that explained the condominium principle, traced it back as far as ancient Rome, and pointed out its advantages; and 3) a large press luncheon with bankers, architects, and the city's assistant mayor and commissioner of urban renewal on hand to answer questions.

The combination of publicity and official prestige worked so well that the 30-unit project was closed out in less than three weeks.



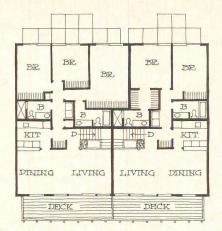
COMPACT PLAN places units along the perimeter of the pie-shaped, 1.3-acre site. All the private patios face outward; parking is in the center.



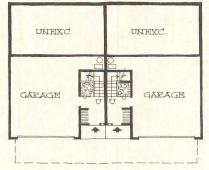
One-level living in a small condominium helps sell older buyers

Though the 14 units were not advertised as a retirement project, most of the buyers are retirees. Their preference for one-level plans is shown by the fact that this project has sold just as well as a neighboring condominium—specifically billed as an adult community—that has two-story units.

This project is located in San Rafael, Calif.; its slow sales record could make other builders think twice about condominium—if the real facts were not known. It opened near the beginning of California's market slump, and four units were sold. But as the market tightened, Peacock Lagoon Construction Co. closed the project for relandscaping, later added a pool. Since then there have been three more sales despite 1) a disastrous market, especially in Marin County where hundreds of realtors have gone out of business, and 2) an area that has so far resisted all but the lowest-cost condominium projects. Price range: \$29,000 to \$33,500. Architect: Karl Treffinger.



UPPER LEVEL



LOWER LEVEL 0 5 10 15 FT





UPHILL UNITS have both balconies and on-grade patios. Living areas are above private garages.

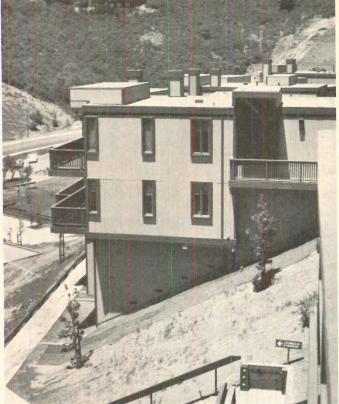




LARGE LIVING ROOM (plan, left) has full glass wall, doors to patio.



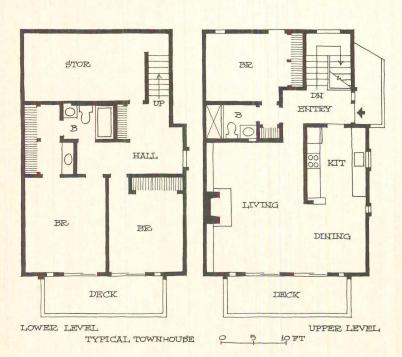
ON-GRADE UNITS have rear patios facing golf course, plus private courtyards behind garages.



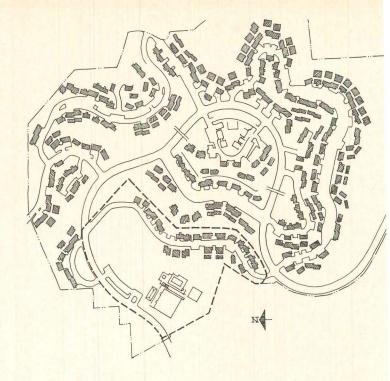
TWO-STORY UNITS (see plan) overlook 5-acre recreational area



LONG-LEGGED FOUNDATIONS support pairs of two-story townhouses.



PARKING AREAS serve upper and lower units on private drives.



Condominium allowed this pioneering use of urban hillside land

The alternative would have been expensive and ordinary: single-family houses on terraced pads. Instead, the project's 569 units will occupy only about 12% of the 67-acre hillside, and the land will retain most of its natural topography.

Condominium ownership made it possible to pull apartment and townhouse units into tight groups. A typical condominium is a small neighborhood of about 34 units along its own private drive. In the first such neighborhood, designed by Callister and Payne, eight plans were offered. They ranged from a one-bedroom apartment at \$25,000 to a three-bedroom, twostory house at \$60,000. Despite the desperate lack of mortgage money in California, ten units have been sold since the opening in June, and other sales are pending now that the market has begun to ease. The project, in Oakland, is a joint venture of the Weldwood Division of U.S. Plywood, Moana Development Co., and Bothin Real



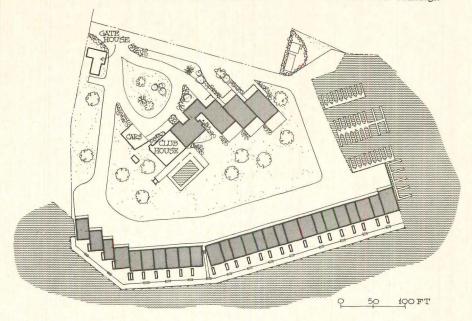
Condominium put most of these townhouses right on the water

wenty-six of the project's 30 units are rung out along an 800' strip of waterfront and connected by a continuous 8'-wide oardwalk only 1' above the water. Under tore conventional planning, many units yould have been farther inland on the tree-acre site, with only a view of the rater and beach privileges.

The close grouping of the units along ne community boardwalk was designed attract retirement buyers who like to et together to talk and fish. Result: a oneear sellout for this Hot Springs, Ark., roject (while a nearby high-rise condoninium set well back from the water renains only 20% sold after three years). Architect Granger McDaniel's designs also eld construction costs to about \$11 per q. ft. Prices ranged from \$20,700 to 31,860 for the 24'- and 28'-wide units. Builder A. D. Babcock attributes part of his uccess to the expert help on condominium inancing and marketing he received during NAMB conventions.



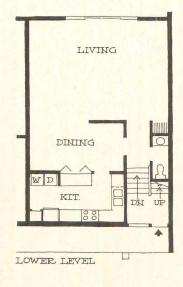
CLUBHOUSE and caretaker's house are remodeled older buildings.

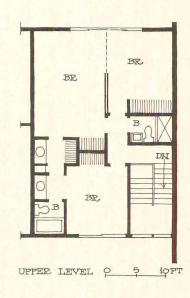




AKEFRONT BOARDWALK, just above water, is only a step down from each patio. It is the community sidewalk as well as a fishing-boating pier.





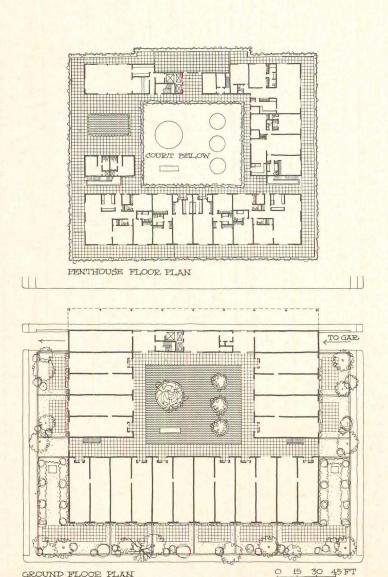


MASTER BEDROOM at rear of typical townhouse unit overlooks lake.

MARCH 1967



DISTINCTIVE DESIGN includes two-story-high louvered panels and long verandas that are reminiscent of southern colonial architecture.

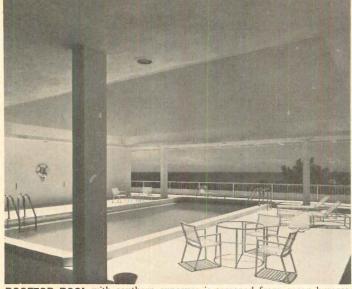


Outstanding design and excellent services sold this luxury condominium

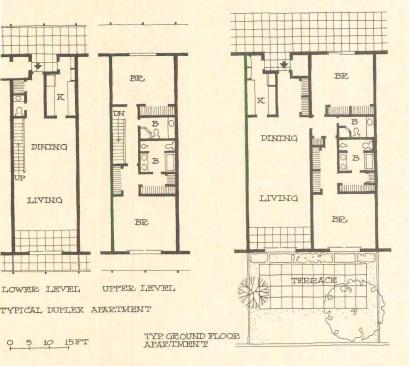
The idea: to offer a beautiful building on the beach in a wealthy resort town, and to include round-the-clock services for the owners. The developers chose an architect of international repute: Edward Durrell Stone. And Stone designed this 64-unit, six-story luxury building, which is now a landmark in Palm Beach, Fla.

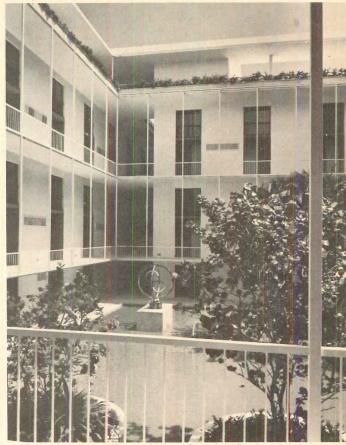
Opened four years ago, when condominium was new everywhere and unknown in Palm Beach, the apartments and duplexes sold slowly at first. Twenty of the units were first offered as rentals, however, and as tenants began to enjoy the unusually luxurious services, most of them exercised their options to buy. In a little more than three years, all the units were sold. Prices ranged all the way from \$36,000 for a second- and third-floor duplex on the inland side to about \$100,000 for the rooftop apartments.

HOUSE & HOM



ROOFTOP POOL with southern exposure is screened from ocean breezes.





WATER COURT provides cool atmosphere for all entrances.



OCEANFRONT PROJECT contains ten units on ground floor; 48 two-story units on second, third, fourth, and fifth floors; and six rooftop apartments.

7



Are sectional houses finally on the road to a

They've been around since the '50s—factory-finished houses that are rolled to the construction site in halves. Their manufacturers—mostly from the mobile-home industry—have tried many technical gim-

micks and marketing schemes to make them part of homebuilding.

But sectional houses are still not produced in large numbers—perhaps 20,000 will be turned out this







Krawiec and wife

Kearney

Yes, say small-volume homebuilders like these

The builders above have two things in common:

1) They all sell the sectional house shown at the top of the page, and 2) they have no illusions about their product's role in homebuilding.

The manufacturer—Capital Industries of Avis, Pa.
—is building a ten-state dealer network that seeks housing experience and discourages the fast-buck novice. And the credentials of the cross section of

builder-dealers shown above are typical:

Kemp Begley is a former commercial contractor who started selling sectional houses and mobile home three years ago.

Steve Krawiec and his wife, Earline, have bui sectionals and sold mobile homes since 1960.

Clifford Kearney has built conventional and prefabricated houses for 20 years—and, for the pas



bigger share of the housing market?

year. And to a lot of people they're still not houses, out just glorified mobile homes. They offend zoning poards, alarm building inspectors, and make lenders suspicious.

So why hold out hope for sectional houses? Because there's a new kind of sectional evolving-and it's attracting a new breed of dealer. What makes it new? It looks like a house.



Partners Lydon and Taylor





Wright (left)

and their rising profits show why

six, has run his own custom-prefab shop, producing 50 houses a year for other builders.

Jim Lydon and George Taylor are developing a 40-lot tract of sectional houses after years of dealing in earthmoving and materials-handling equipment.

Dan O'Malley, a general contractor for 15 years, has built prefab houses and also developed four mobile-home parks.

Art Wright started building houses and small commercial buildings in 1952, then switched to sectional houses three years ago.

These builders are sold on sectional houses for a variety of reasons, all of which boil down to this: For their low-overhead operations, sectionals guarantee higher profits than either stick-built or panelized houses. To see why, turn the page.

Sectional houses are finally shaking off their mobile-home image

Sectionals have always looked like mobile homes because mobile-home manufacturers invented them. The early ones, introduced in the '50s, were little more than double-wide trailers. They had uncommonly low roof pitches, aluminum windows with no sills, panel ceilings with batten strips, 2x2 framing, and an unsightly seam down the middle of each gable end. In short, the sectional house didn't look like a house.

But sectionals made great sense to manufacturers because they could be run off mobile-home assembly lines just as efficiently as mobile homes. They made sense, that is, until three big problems cropped up:

- 1. Mobile-home dealers turned out to be poor homebuilders. Their merchandising was sharp, but they fell short in site work, construction, and call-backs.
- 2. Code officials could see little relationship between sectional-house construction

and local requirements. Their objections ranged from framing that was too thin to factory-sealed wiring and plumbing they couldn't see.

3. Lenders couldn't decide whether sectionals were trailers or houses. So, to be safe, they continued financing them just like trailers—with high-interest, short-term loans

Established homebuilders, needless to say, stayed away from sectional houses in droves. They were built primarily in noncode areas for use as vacation and rural housing.

Most of today's sectional houses are still just a cut above double-wide mobile homes. Like mobile homes, they have grown from 20' wide to 24' wide, permitting better floor plans—but in finishing and design they still have all the earmarks of a trailer.

A handful of manufacturers, however, have begun breaking away in the past two

years. These companies have been tryin to make a sectional that will be accepted not only by building codes, mortgage lenders, and homebuyers, but also by established homebuilders.

One of the most promising new ap proaches is the Capital Industries sectional Capital started making sectional house and high-priced mobile homes in 1960 Its sectionals had the mobile-home look for five years; then came three big changes Capital 1) found a way to raise its roo pitch to 4-in-12 (see p. 92), 2) adopted conventional finishing materials through out, and 3) won acceptance by a state code and a state board of architects.

Now some 70 dealers are selling Capita sectionals in 10 states, and more are entering the fold. They have high hopes for their newly upgraded product, particularly when they come up against building-code officials.

Code men are finding that sectionals beat conventional construction

Sectional houses have to be more rigid than conventional houses. They are towed over all kinds of roads at maximum speed limits, and then jacked or craned onto foundations.

And this rigidity is essential when the

interiors contain finished drywall and ceramic tile. So all skins in the Capital houses are plywood, and they are glue-nailed to the framing. Half-inch drywall ceilings are screwed and glued over plywood. All openings are double-framed. And the house is

fastened to a base of 10" or 12" I-beams. Result: In 700 houses, Capital has had only three ceramic-tile failures, and fewer drywall cracks than in average conventional houses.

The Capital house equals or exceeds all

This is how any builder can move a sectional house onto a foundation



1. FIRST SECTION is towed up to foundation after a dozer operator has backfilled so that grade level is at maximum height. Careful site preparation is essential to handling sections.



2. STEEL BEAMS are laid across foundation walls in prepared slots; supports are set up beneath them.



3. JACKS and cribs are set under house section's steel perimeter beams, and lifting starts. Under ideal site conditions, total lift is only 4½".



4. RUNNING GEAR is unbolted as section is jacked clear. Manufacturer retrieves gear later.

tructural codes on the eastern seaboard. t carries the factory-applied seal of the Aiddle Department Association of Fire Jnderwriters of Philadelphia, and has seen accepted by the New York State ruilding code, New York Board of Fire Jnderwriters and FHA.

But acceptance at the local level is far rom automatic. Local inspectors insist on eeing wiring and plumbing despite state pkays. And some local building departments in New York State are demanding a blanket letter of approval from the state code office, which the state is refusing o provide.

Capital satisfies most inspectors by leavng key wall areas exposed. Its main plumbing tree can be seen from the basement, and all pipe joints can be inspected by removing a wall panel in a utility area. Electrical boxes are often pulled out of walls so an inspector can check wire size, even though much of the wire is exposed in attic space.

Some dealers have solved inspection problems by having inspectors look at the house twice: before and after it is placed on the foundation. And before dealers introduce sectionals in unfamiliar code areas, they first submit a plumbing layout so Capital will know what size drain lines to install.

"We meet code problems one at a time," says Kemp Begley of Victor, N.Y. "I say

to code men, why not go along with us on one house so you can see what we've got? And we eventually persuade them."

So the dealer's code problem has nothing to do with construction deficiencies. The problem is how best to inform and educate building officials.

"Even after we've licked a code," says Art Wright of Rhinebeck, N.Y., "we keep running into new inspectors and have to start all over again with each one."

But almost all of Capital's dealers are making headway. The only serious obstacles are in large metropolitan areas. And the dealers are having the same gradual success against a second source of resistance—mortgage lenders.

Banks are finding sectionals as safe a bet as conventional houses

Banks are less apprehensive about financing a sectional house when it looks like a house instead of a mobile home. The new Capital house looks so much like a conventional house that some appraisers can't believe it comes to the site in two halves. One Capital dealer—Clifford Kearney of Schenectady, N.Y.—couldn't get a banker to okay his plans, but when the same banker saw the finished house, he approved it on the spot.

Banks are also less apprehensive when the sectional-house dealer looks like a builder instead of a mobile-home dealer. They want a guarantee that one company will assume responsibility for completing and servicing the whole job in the same way as a conventional builder.

So Capital Industries is concentrating on finding established builders to sell its houses. And it is encouraging its few combination dealers to keep their sectionalhouse and mobile-home operations well separated.

"One thing we never mention to the man at the bank," says combination dealer

Kemp Begley, "is the sectional's original advantage—that the buyer can relocate it to another site."

Capital's efforts are paying off so well that many of its dealers are already getting top mortgage terms. Combination dealer Stephen Krawiec of Randall, N.Y., gets up to 35-year mortgages from Montgomery County Trust Co. in Amsterdam, N.Y. The bank approached Krawiec after seeing his first few houses; now it is the backbone of his business over a 75-mile radius. Krawiec gets bank commitments on

continuea

without a crane—if his grading and masonry are on the nose



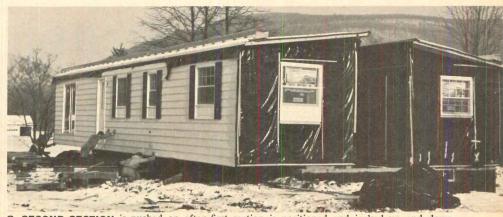
5. ROLLERS are placed under jacked-up house section after short extension beams have been interlocked with longer beams spanning foundation walls.



6. TRANSFER of house from jacks to foundation walls is made by jacking section down onto rollers and pushing it across.



7. PUSHING a section is so easy that sometimes it takes only a stiff breeze and an anchor chain.



8. SECOND SECTION is pushed on after first section is positioned and jacked up and down again to remove rollers. Job goes smoothly as long as foundation walls are level within 1".

his houses before he buys them from Capital.

Clifford Kearney is getting 25-year mortgages on \$10,000 sectional houses—\$900 down and \$80 to \$85 per month—from a commercial bank with 51 branches. A main attraction for the bank is Kearney's written guarantee that he will erect and service every house he sells—even if it is sold through another builder.

Banks also like two other features of sectional houses:

First, the over-engineered construction is as reassuring to bank inspectors as it is to code inspectors. The steel perimeter beam, for example, is considered termite

protection as well as proof that the house is durable.

Second, low-price sectional houses give banks an opportunity to increase their volume of small mortgages—especially important in the wake of tight money.

Most important to the bank, however is the new breed of builder-dealer.

Homebuilders switch to sectionals because they are simpler and safer

They are simpler because the manufacturer does at least 85% of the work. And they are safer because they permit precise cost control by even the most unsophisticated builder. More specifically, the sectional builder's major advantages lie in the following five areas:

1. Labor saving. A 52'x24' Capital house requires 136 man-hours of field work for the average builder, not counting foundation and site work. The work breaks down this way: 36 hours to jack and join the sections on a foundation, 42 hours to finish the exterior, and 58 hours to finish the interior. Perfect site conditions may reduce this total to 110 man-hours, and the use of a crane—where transportation distance is feasible—can save still more field work.

2. Time saving. Once the builder's crew has completed the structural and finishing work, there is no long wait for tradesmen to complete the mechanicals. Wiring and

plumbing are already in place—they need only to be hooked to outside service lines and sewers. And in less restrictive house markets, the builder's crew can also do the hooking up. Result: In Caledonia, N.Y., Lydon & Taylor, using a four-man crew, can let a buyer move into a 52'x24' house six days after the sections arrive at the site. Average time for other dealers is ten days to two weeks.

3. Cost saving. For most small builders, Capital's sectional house costs less than any comparable house they could build conventionally. And it can beat the cost of panel-and-truss houses. For example: Clifford Kearney is buying a 36'x24' sectional that is an exact copy of a house he prefabbed in his own shop for six years, and it is costing him \$1,000 less. Most of Kearney's saving comes from eliminating skilled labor—e.g., drywall mechanics, tile setters, electrician, and plumber.

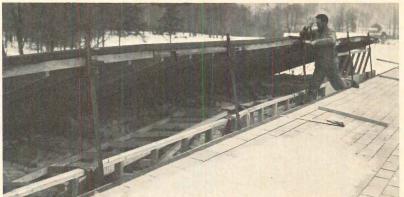
4. Low overhead. Switching to sectionals lets a conventional builder handle up to two or three times more houses without adding more men. He can buy his own house-rolling equipment (photos, pp 90, 91) and a trailer to carry it for \$3,000, and chances are he already owns a truck or tractor for moving house sections at the site. One builder, Art Wright, has combined his tools in a one-ton truck tailored to sectional-house work—it carries his rolling equipment on an overhead rack and has double rear wheels so it can tow his houses.

5. Low working capital. A sectional-house builder's money is rarely tied up more than six weeks. Capital needs about three weeks to supply a house, and the builder needs two to finish it. So a small-volume builder can manage without a construction loan, providing he gets a mortgage commitment before ordering the

A jack-up roof (patent pending) gives this sectional a 4-in-12 pitch



1. JACKS are evenly spaced under roof section of a Capital Industries house shipped with a 2-in-12 pitch.



2. ELEVATING to 4-in-12 pitch is done by one man raising each jack 6" at a time—total, 29". Capital says one man can raise both roof sections in about 45 minutes.



3. KNEE WALL, shipped flat in attic space, is inserted in sections after roof is jacked to full height.

4. GABLE-END PANEL is inserted and nailed. House sections remain 2' apart for roof work.



ouse and a mortgage assignment requirng the bank to pay him directly at the

Sectionals also offer builders these other dvantages over conventional houses:

Sectional houses can be built year-round. The sections are closed in for shipping, so hey can be stored at the site in snow or ain and erected when the weather clears. Call-backs are fewer. Capital dealers ay they have virtually no service calls for common faults like drywall cracks and ticking doors. Reasons: glue-nailed construction, room-length drywall panels that eliminate vertical joints, and minimumdistortion framing lumber.

Market range can be expanded. Sectional-house dealers can build at least 50 miles away from headquarters, and some build in a 100-mile radius. After a foundation is completed, the builder has just one delivery to schedule—and no danger of work-stopping shortages.

Model homes can be replaced more often. And they can be displayed in more lavish settings. Why? Because a builder can pull a model out of its setting and move in a new one-without making a new investment in land and site work. Kemp Begley, for instance, sells off a model whenever a buyer needs a house in a hurry.

"They think the model is somehow better," he says, "so we split it apart and let them have it." He displays several models amid several thousand dollars worth of permanent landscaping.

Most of Capital's dealers build fewer than 20 houses a year. But not all—one is a big-volume lumber company.

A lumberyard-prefabber prefers sectionals to its own component houses

So Chapman Lumber Co. of Syracuse, N.Y., has phased out panel houses and switched to 1) sectional houses for lowerprice markets and 2) stick-built houses for nigher-price work.

Chapman runs its own construction crews through a division called Hiawatha Homes, and has prefabbed and erected nundreds of panel houses in the past 15 years. Last year its lumber and truss business grossed about \$10 million.

But building 80 to 175 houses a year on tracts and scattered lots throughout central New York gave Chapman costly supervision problems.

Also, Chapman began seeing a growing market around Syracuse for \$15,000 houses which its own building division couldn't supply profitably.

Now Chapman is buying houses from Capital for three different markets: vacation, subdivision, and scattered-lot. The vacation house is a 20'-wide rental unit for a ski resort Chapman is developing. It has a take-out wall for conversion from two singles to a double. Chapman's subdivision sectionals are versatile: They are mixed with conventional houses in some areas and separated in others.

Says manager Ernest Kuhn: "We had gone into apartments to supply the \$110to-\$125-a-month buyer, but we can do better with sectionals."

Mobile-home dealers use trailers to complement sectional-house sales

The few dealers who make a success of both types of housing have three advantages over a homebuilder:

1. By running a trailer trade-in business, they can convert mobile-home equity into sectional-house sales. Some dealers, like Dan O'Malley of Clifton Park, N.Y., have abandoned new-trailer sales but retained a trade-in lot

continued

Extra finishing work covers up sectional-house earmarks



HINGED OVERHANG is lowered for exterior finishing after house sections have been drawn together at their perimeter beams (by hook and ratchet) and bolted.



SHINGLES, plus felt and flashing, are added to cover up eave hinge and ridge. Capital also includes prefinished soffit system.



SIDING is applied conventionally to end walls on Capital houses to avoid batten strip or patchwork common to most prefinished sectionals.



- 2. A combination dealer doesn't have to depend solely on homebuilding to keep his men busy. Good mechanics can be used to work on both sectional houses and mobile homes.
- 3. Developing a mobile-home park lets a combination dealer balance his homebuilding work and take up the slack during construction slumps.

But a mobile-home dealer also faces disadvantages when he moves into homebuilding.

First, financing is much more complicated—unlike mobile-home loans, which can be approved in 24 hours with no title search, no fire insurance, and none of the other red tape that slows a house sale.

Second, the dealer gets involved in construction details entirely foreign to the mobile-home business—and they can't all be solved by subcontracting. For example, even though a dealer may subcontract foundation and grading work, he must still supervise both jobs closely: His house erection could come to a halt if the foundation is not accurate to within 1" or the site not properly graded and filled.

So the successful combination dealers are those who have added experienced construction workers to their mobile-home crews. Dan O'Malley, for example, carried over two men from his mobile-home business but added a carpenter. Steve Krawiec, who sold 22 sectionals last year and runs

a prospering mobile-home sales and park business, once subcontracted even the rolling-on of sectional houses. But now he carries a four-man crew—including a carpenter, plumber, and electrician—and subcontracts only grading and foundation work. At least 50% of Krawiec's houses are sold to buyers trading in mobile homes

Despite a few successes with combination dealers, Capital prefers to keep mobile-home people out of sectional-house building. Capital has more than once had to call on its own factory crew to finish a sectional-house job started by an ill-equipped mobile-home dealer. Capital's ultimate concern, of course, is not with the dealer but with the buyer.

Homebuyers like sectional houses because they eliminate headaches

The first headache a sectional eliminates is unexpected costs. Buying a Capital house is almost as foolproof as buying a mobile home. The package includes all kitchen appliances, carpeting, draperies and curtains—everything but loose furniture. All the pricing information for five models can be printed on a single sheet of paper, because each model has only three possible prices: with crawl space, with basement, or exclusive of foundation.

Other than land, there is nothing more to buy unless the customer wants to sub-

stitute from a half-dozen options: double-glazed bow window, electric heat, electric range, stainless-steel sink, parquet floors, and inlaid linoleum.

The second headache a sectional eliminates is discrepancies between the model selected and the house received. Capital's production process is so rigidly standardized that the buyer's house is, for all practical purposes, an exact copy of the dealer's model.

"The buyer," says Art Wright, "can be absolutely certain of the kind of job he's

going to get."

The third headache a sectional eliminates is construction delays. Buyers can count on moving in within six weeks after they sign the contract.

Capital's dealers have a lot to show homebuyers. Their house, unlike other sectionals, has conventional wood windows with sills. Foyer floors are finished with quarry tile. Kitchen-cabinet doors are raised-panel oak with self-closing hinges. The standard heating system is hot water, and if the buyer chooses electric heat, his

Exteriors are becoming a strong point with Capital Industries sectionals



OLD MODEL, built in 1965, shows Capital's transition from double-wide trailer toward conventional-looking house.



NEW MODEL—with higher roof pitch and conventional windows and siding—abandons all ties with mobile home, though Capital manufactures both on adjacent production lines.



CUSTOM EXTERIOR shows three options—brick facade, fireplace, carport—a sectional builder can offer.



CONVENTIONAL INTERIORS set Capital houses apart from most sectionals. Kitchen above and ceramic-tiled bathroom at right are standard in a 36'x24' house selling for less than \$10,000.



nouse will be insulated to electric-heatingndustry standards. The drywall interiors re accented by vinyl wallpaper in the lining room and cherry paneling (applied over drywall) on one living-room wall.

Some dealers also get merchandising nileage out of Capital's construction. Steve Crawiec, for example, always builds his

models on basements so that prospects can see the steel I-beam perimeter frame and double I-beam center girder.

For buyers who object to buying a house off the dealer's shelf, Capital makes a few free changes. Besides a choice of three siding materials and four standard elevations, it will move some windows,

doors, and partitions. Floor plans are expanded in 2' and 4' increments from 24' x 42' to 24' x 56'. A line of under-1,000-sq.-ft. houses starts at 24' x 36'.

And for buyers who object to buying a house that's built in two halves, Capital builders can honestly reassure them: "Once it's up, you won't know the difference."

But sectional houses are limited to a \$10,000-to-\$20,000 price range

Below that range is the mobile home, and above is the custom-house builder. Sectionals can't compete with either. They aren't produced and sold efficiently enough to beat mobile homes, and they aren't glamorous enough to beat higher-priced conventional houses.

They can be customized to some extent. Dan O'Malley, for example, added a fireplace and two-car garage to a model which he sold for \$19,500 minus land. "But," he says, "that's my limit."

And there is a way to enlarge a sectional house without adding much to square-footage costs. Several dealers set them on exposed basements and turn them into raised ranches.

But sectional houses are too expensive to be used as cores for customized houses. Capital's dealers are selling 1,000-to-1,300sq.-ft. standard models for \$14 to \$15 a sq. ft. without land, and making a profit of \$1,000 to \$2,000. Additional fieldwork—unless it adds to square footage—only makes prices less competitive and doesn't add significantly to profit margins.

So more than one dealer would like to sell Capital houses without any options at all. And many want even less field work than the average 136 man-hours.

And despite future upgrading, sectionals will always be limited

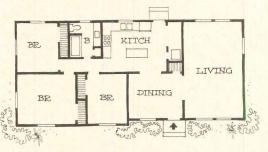
The limitations all stem from highway rules, which restrict the width, length, and height of truckloads. Capital has overcome the height problem, but only by adding factory and field work—and thus costs—to its roof. Another manufacturer solves the height problem with an even greater compromise: a knocked-down roof that requires 200 man-hours of field work.

Sectionals can be glamorized with bow windows and dressed-up basements, but the basic package can't be enlarged much more—even if state highways are opened to 13'-wide loads. One near-future approach: a split-entry house—half factory package and half basement—that could offer 2,000 sq. ft. for \$24,000.

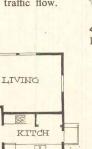
So the sectional house will continue to

find its best sales among five lower-price markets: retirees, newlyweds, ex-mobile-home owners, vacation-home buyers, and rural families with lots so remote that conventional building is unfeasible. One other possibility: minority housing in metropolitan areas on lots that have been taken off the tax rolls. This market may soon be tapped in both Syracuse and Schenectady.

...but floor plans still have a way to go—especially around entryways



52'-LONG PLAN provides dead-end living room but places dining room and kitchen in central traffic flow.

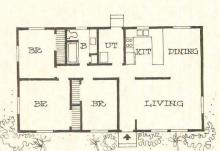


56'-LONG PLAN offers extra half-bath and kitchen utility nook but locates main entry in dining room.

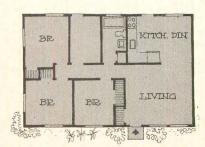
DINING

0 5 10 15 FT

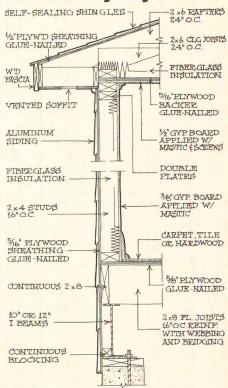
BR



42'-LONG PLAN contains utility room and large bedroom closets, but no closet at entry.



NEW VARIATION eliminates center bearing wall—a traditional problem for sectional houses—and permits central corridor. A box beam carries roof.



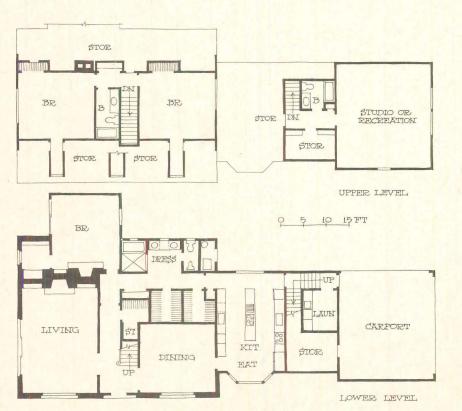
ABOVE-AVERAGE CONSTRUCTION, to insure that Capital houses will stand up under shipping stress, gives dealers some impressive features to merchandise.

MARCH 1967



SHOWCASE HOUSE built by Atlanta architect Henry D. Norris (above) has 3,500 sq. ft, of living area. He built it for \$60,000 on a \$20,000 lot.

This architect's home is a showcase of ideas for builder-clients



Architect Henry D. Norris of Atlanta is using his new home in much the same way an auto salesman uses a showroom.

"My product is salable ideas," says Norris, "and my objective is to convince builders to include these ideas in their houses. In the past this was often difficult, partly because I could only describe or draw a new idea and estimate its cost. But now I can take builders through my home and show them how the ideas will actually look and work in their houses.' And because he has actually built them, Norris car also quote actual installed costs for his ideas.

Since the nine-room house was completed in August, builders who have toured it have been enthusiastic, and Norris is thinking of expanding his twoman staff to handle the resulting new business.

Some of Norris' best ideas have been installed in the house's most salable areas—the bedroom, bath and kitchen. Moreover, Norris can show interested builders both big ideas, such as a master bedroom that is really three rooms (p. 98), and small ideas such as a \$10 kitchen cabinet that is tailor-made for pots and pans (p. 100).

For a room-by-room tour of architect Norris idea showcase begin at the top of the next page

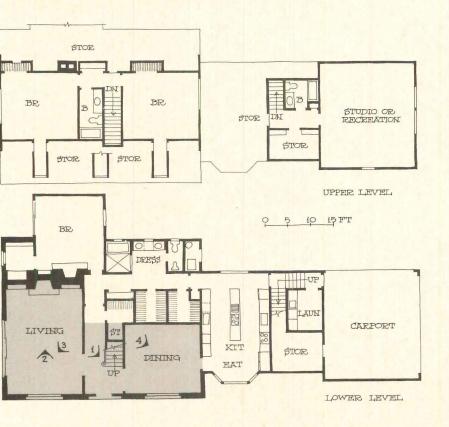
HOUSE & HOM



FRONT ENTRY (1 in plan, below) has oversized panel door that cost \$70. Matching wooden trim (stock fireplace surround at 70¢ a foot) was used as crown and door molding. In all, \$90 worth of extra trim was added throughout the house.



FORMAL END of living room (2) has wall of rough-laid bricks. Gas-fired fireplace cost \$700, the two built-in hutches for hi-fi equipment cost \$100 each. Overhead lights (there are nine in all) cost \$15 apiece.



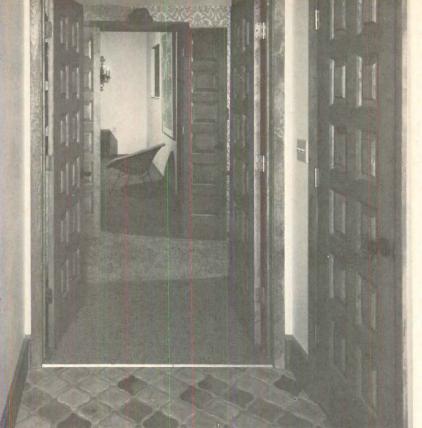
DINING ROOM (4) also has plank-and-beam ceiling and wood floor "to soften the formality," says Norris. Ceiling cost \$1 a sq. ft. Window and \$225 shutters have matching trim.



INFORMAL END of living room (3) has sliding door opening to patio. Ceiling is simulated plank-and-beam.



continued



BEDROOM-SUITE ENTRANCE (*l in plan, right*) has two sets of paneled double doors. Far doors close to keep bedroom private, while foyer doors open to offer guests access to master bathroom (*see plan*). Foyer closet is at right.

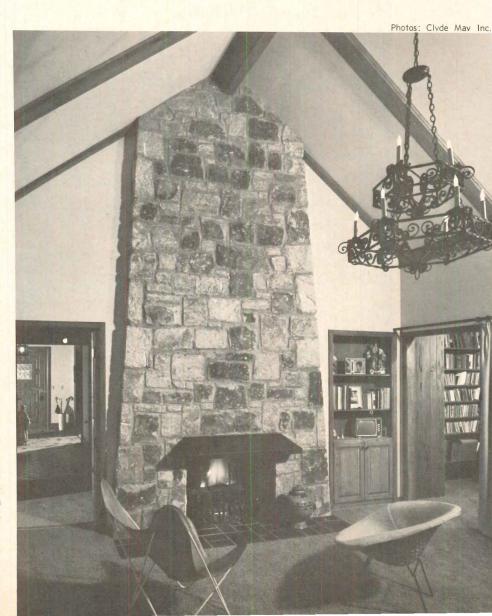


MASTER BEDROOM (2) has false beamed ceiling that added \$100 to cost. Sliding-glass door to patio cost \$150.



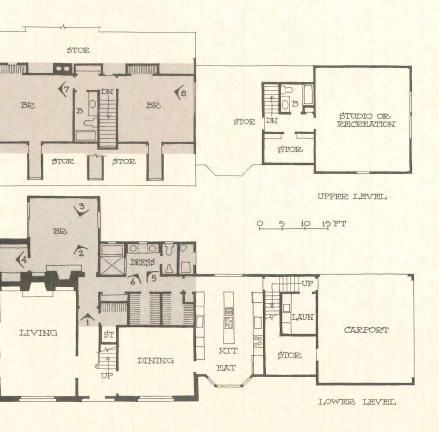
wood-Paneled alcove in bedroom (4) has two walls of bookshelves. Architect Norris uses alcove as his private work room.

LEISURE CORNER of bedroom (3) is like a room by itself, says architect Norris. It has stone-front fireplace that cost \$700, and built-in hutch for books and small television. Cost of hutch: \$100.





combination shower room and tub (5) fits into corner of master bath. Says Norris: "It's more practical than a sunken bath and cost not one tent more." Bedroom entrance is a short walk down the hall.





WALL-TO-WALL VANITY (6) has his-and-her sinks and mirrors, Luminous ceiling and window provide light. Pocket door at right saves space.





UPSTAIRS ROOMS (7, 8) are big enough—256 sq. ft. each—to be used as bedrooms, family rooms, or children's play rooms. Painted ceiling beams add informality.

SHOWCASE HOUSE continued Photos: Clyde May, Inc





WINE CLOSET cost \$15, is built into near end

of cooking island (photo above).



food-preparation area. Cost: \$10.

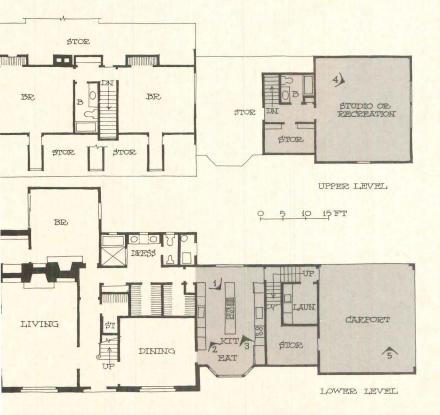
SERVICE COUNTER (2) has built-in bar-refrigerator and ice-maker. There are 12 separate fluorescent lights over the counter top.



cooking island (3) includes food warmer and barbecue. Hood has ight outlets for appliances, plus an antenna outlet for portable television. Otal added electrical cost: \$20. Maple top costs \$40 more than plastic. Counter is low to ease work. Cabinets have roll-out and adjustable shelves.



UTENSIL RACKS surround electric range. Plastic laminate covers walls as well as counter tops. Cost: \$1 a sq. ft.





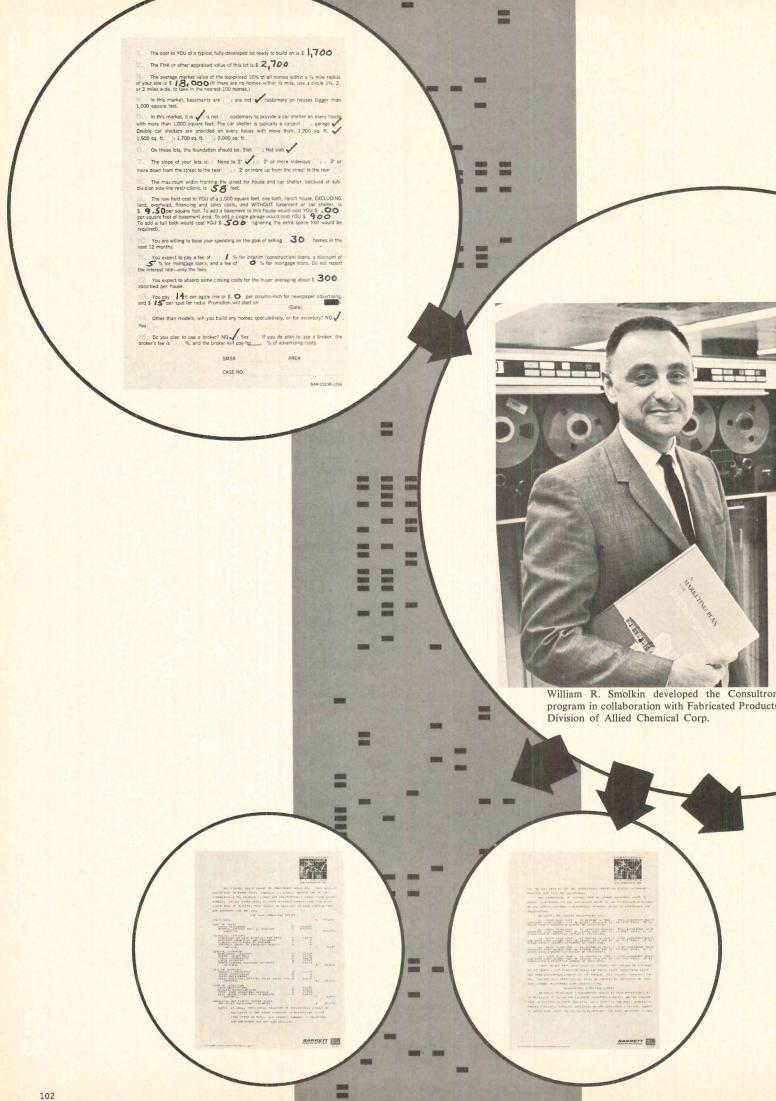


STUDIO (4) is attic space over carport. Cost: \$4 per sq. ft. A kitchen, installed opposite bath, could turn the area into an efficiency apartment for in-laws or house guests.



UPSTAIRS WINDOW for bedroom (5) was created by cutting out section of adjoining roof line. Cost was negligible.

CLEAR-SPAN CARPORT (6) is supported by two steel Ibeams, which carpenters installed. Installed cost: \$160.



This computer program can put you on the path to better management and higher profits

To date, some 5,000 builders have used the program. And reports from these builders indicate that it not only works but also often revolutionizes their management.

The program, called Consultron, is, in effect, a management consulting service in miniature. Working from a few basic facts, it produces a report that tells the single-family homebuilder how he should price his product and how he should budget his entire operation. And it tells garden-apartment builders if—and how—their projects will succeed in their local markets.

What's more, Consultron is available to any builder in the country at no cost what-soever.

Consultron is the joint work of William R. Smolkin (photo, left) of New Orleans, a marketing and management consultant who set up and now operates the program, and the Fabricated Products Division of Allied Chemical Corp., a building-product manufacturer which sponsored the program and now makes it available to builders.

Consultron's heart is the computer; its speed and versatility allowed Smolkin to analyze the operations of hundreds of successful builders of all sizes, then use these operations as the basis for guiding other builders. Now that Consultron is fully programmed (on the basis of some 750 mathematical equations), it can issue a report in a matter of seconds.

Consultron tells the single-family builder where his money should be spent. To provide the raw data for his budget, the builder must answer about two dozen questions on a card (see page 104). In most cases, he can provide these answers without leaving his office. (Apartment builders, however, must do a modest amount of market research.)

Consultron's computer digests this information, then issues a report (a sample is shown on the following page) that tells the builder 1) what house prices will be best for his project; 2) what proportion of his total budget should be ear-marked for

financing costs, general overhead, sales expenses, and promotion; and 3) what media his advertising should go into and how this advertising should be scheduled. The report also recommends types of houses and includes typical elevations. Finally, the budget anticipates a profit of 8% to 10% before taxes.

For the garden-apartment builder, Consultron offers feasibility analyses based on the economics of his local market. Details of this program were explained in a previous House & Home article (Sept. '65); briefly, it tells the apartment builder 1) whether his project is feasible in view of his financing and market, 2) how many units he should build, 3) what mix of apartment sizes he should build, 4) what his rent range should be, and 5) what his probable return will be. Consultron's program for apartments includes basic market statistics which Smolkin has gathered for every major metropolitan area in the country.

But Consultron cannot substitute for a builder's own ability and good judgment. Like any computer system, Consultron is only as good as the data it feeds on. If a builder overestimates his market or submits inaccurate construction costs, for example, there is no way the computer can correct him.

Nor is Consultron a rigidly precise program. For one thing, it is based on averages from all over the country, and local market conditions vary from these averages. For another, all builders run their companies differently; each Consultron report includes with its recommended budget this notation: "The figures below cannot be considered ironclad. There will be exceptions in every case."

But within these limitations, Consultron can provide very sound management guidelines for almost any builder. To see how it works, and how it has benefited three builders, turn to the next page.



This typical report shows what Consultron provides

Data supplied by builder

Developed lot cost		1,700	
Appraised lot value		2,700	
Top house values in market zone		8,000	
Direct cost per square foot	\$	9.50	per sq.ft.
Basement cost per square foot	\$.00	per sq.ft.
Cost for single garage	\$ \$ \$ \$	900	
Cost for second bath	\$	500	
Maximum width permitted		58	Feet
Sales goal		30	Houses
Construction loan fee		1.00	%
Mortgage loan fee		.00	%
Mortgage loan discount		5.00	%
Closing costs absorbed	\$	300	Per house
Newspaper rate per agate line	555	.14	
Radio rate per spot	\$.15	
Broker fee		.00	%
Advertising paid by broker		.00	%
Basements?			No
Car shelter?			Yes
Type of car shelter			Garage
Double car shelter on houses over		1,200	Square feet
Slab foundations?			No
Slope of lots			
None to 2 feet			Yes
2 Feet or more sideways			No
2 Feet or more down from the street			No
2 Feet or more up from the street			No
Speculative inventory?			Yes
Broker?			No

The builder must supply Consultron with 25 items of information on each project he wants analyzed. Data like that at left (which actually was submitted by a midwestern builder) is put on a card and sent to Smolkin; the Consultron computer digests it and produces a report.

It seems incredible that a detailed program can be produced from such a small amount of information, but it can. Smolkin has set up an abstract mathematical model of a building operation, complete with established averages and ratios of cash allocations; once a builder's gross income goal and various construction costs and limitations are plugged into this model, the computer comes up with an optimal operating budget.

The builder himself must supply an accurate sales goal and such factors as cost per sq. ft., etc. Here, for example, the computer was accidentally fed the information that radio spots cost 15ϕ each, instead of \$15. So the merchandising budget (not shown) recommended 1,245 radio spots rather than 12.

Recommended price range

You have advised us that your lot cost averages \$1,700 compared with an appraised value of \$2,700 and that the upper range of home values in the neighborhood is about \$18,000.

Under such circumstances, the best-selling price range in this situation would probably be \$14,300 to \$18,900.

These prices include the house and lot. They are not the only prices at which houses can be sold, but ones that have produced good results around the country in similar situations.

One-year operating budget

Sales goal			\$498,000
Cost of sales	•	E1 000	
Lots, developed	\$	51,000	
Houses, average cost of \$10,126	\$3	03,805	¢254.005
Subtotal			\$354,805
Financing expenses	_	0.000	
Construction loan interest and fees	5	9,960	
Mortgage loan fees and discounts		24,900	
Closing costs paid by builder	5	9,000	
Interest costs on inventory houses	\$	2,490	£ 46.250
Subtotal			\$ 46,350
General overhead	c	7 470	
Management salaries	5	7,470	
Office operations	\$	4,980	
Field supervision	\$	4,980	
Field overhead	55555	7,470	
Other general overhead expenses	Þ	4,980	£ 20.000
Subtotal			\$ 29,880
Selling expenses	¢	0	
Broker commissions	4	1000	
Sales commissions	\$ \$ \$ \$ \$	4,980	
Sales management	4	2,490	
Sales overhead, office, sales aids, etc.	Þ	2,490	\$ 9,960
			\$ 9,960
Cost of promotion	đ	4 222	
Paid advertising	\$555	4,233	
On-site merchandising	D D	2,492 2,550	
Model home operating expense	4	2,550	
Less advertising paid by broker Subtotal	Ф	U	\$ 9.275
Projected net profit before taxes			\$ 9,275
and after management salaries			\$ 47,730
and after management salaries			ф т1,150

Note: In small operations, salaries of individuals should be allocated to the above accounts in proportion to the time spent on each. All figures subject to rounding, and therefore may not add exactly.

Consultron supplies both a range of house prices for a subdivision and an operating budget (they are shown at left) which, if followed, will give the builder a profit close to 10%. For smaller builders, the value of the operating budget is that it breaks down all the costs of an operation and sets them up in proper proportion to each other. Thus it gives the builder a plan to follow—an outline against which to measure his own progress.

The house price itself may appear to be based on slim information, but most builders have found the recommended price not only fills a gap in their market but is also the lowest possible price they can set without sacrificing profit.

The case of one homebuilder who didn't follow Consultron's recommendation illustrates this point. The computer program suggested prices in the upper middle-income range, but the builder thought he saw an opportunity in a lower bracket. So, chucking the Consultron recommendations, he started building and selling a tremendous number of lower-priced houses. There was only one problem—he found he was making no profit at all.

..and these case studies show how well it can work



'Consultron boosted my profits from zero to more than \$40,000 the first year I used it'

So says John V. Wheeler of East Greenbush, N.Y. In 1965, Wheeler built 28 houses—all of them on scattered lots—and ended up with only a \$15,000 salary in his pocket. In 1966, having reorganized his firm on the basis of Consultron's recommendations, he sold 40 houses—nearly half of them in a subdivision—and ended the year with the same salary, plus a \$40,000 profit.

The reason for Wheeler's drastic improvement: The Consultron report persuaded him to become a manager rather than a carpenter. Wheeler came across Consultron at the 1965 NAHB convention in Chicago, and he also talked to Smolkin himself.

"I told him," said Wheeler, "that I spent a lot of my own time out on the site pounding nails and unloading trucks. He told me that I knew too much about the trade, that I was in the field saving dollars when I should be in the office saving thousands."

So early in 1966, Wheeler restructured his entire operation to match the guidelines suggested by Consultron. "I stuck to the report like a bible," he says. The result was a chain reaction:

- 1. Wheeler hired a construction superintendent at a salary Consultron indicated he could afford—\$14,000. "He more than earns his salary," says Wheeler. "He's taken over most of my production headaches and given me time to run my business. I have time to dicker with several subs instead of grabbing the first one I can get; I can negotiate prices of materials; and I can deal with my bankers."
- 2. The superintendent persuaded Wheeler to drop his own crews and subcontract everything. "Now, for the first time," says Wheeler, "my costs are really predictable. With my own crews, carpentry labor—which should have been, say, \$1,600 on a \$20,000

house—would sometimes go as high as \$2,200. The sub may charge me more than my lowest cost used to be, but in the long run I'm saving money."

Wheeler actually started 1966 with his own crews. But he didn't have the manpower to handle his new subdivision, so he subbed out some of his odd-lot houses.

"We found that these houses were coming in much cheaper than the others," says Wheeler, "so we changed over the whole operation."

3. Subcontracting slashed overhead. And this, says Wheeler, was the biggest saving of all.

"I used to have 34 men on the payroll, divided up into five- and six-man crews. And each crew had to have a pickup truck that required fuel, maintenance, and insurance. When I sat down and figured it out, I found that it costs me more than \$6,000 a year to support a crew. So just in this respect, subbing saves me close to \$30,000 a year."

4. Eliminating the paperwork required by his own payroll let Wheeler make much better use of his office personnel. "I have a man who estimates and does drafting," he says, "but we were so swamped with paperwork that he was becoming little more than a bookkeeper. Now he's doing his proper job, and he has time to catch costly planning mistakes before they get built into my houses."

Consultron's overall effect has been to cut Wheeler's total costs by \$600 to \$700 per house. "Even if costs go up 5% to 6% next year, as everyone expects, I should be able to hold my present prices," says Wheeler. He is beginning a second subdivision of houses in the \$30,000 range. And with Consultron's backing, he is shooting for a total of 70 houses in 1967.



'Consultron showed me that I needed to spend a lot more money on my merchandising'

So says builder Arthur Spielmaker of Grand Rapids, Mich. Two years ago Spielmaker built 20 houses; last year, having restructured his operation to conform to Consultron's recommendations, he boosted his sales to 25 houses—despite tight money; and this year he is confidently shooting for 40.

The key to these rising sales is a vastly increased sales and advertising budget, which the Consultron report advised and which Spielmaker followed despite initial misgivings.

"The report told me it would make sense to spend more money," says Spielmaker. "I didn't believe this at first." But having decided to follow Consultron to the letter, here are the changes he made in his merchandising program:

Spielmaker is spending almost 1,000% more on his advertising. "I used to think I was on the right track saving money on advertising," he says. "Two years ago my total budget was about \$60 a month. But last year I spent \$300 a month, and for 1967 I plan to raise it to \$500."

The Consultron advertising schedule, which suggests when lineage and radio spots should be heavy and when they should be cut back, also helped. "Before," says Spielmaker, "I had no systematic plan for advertising. I don't know whether I'll follow the

schedule exactly, but I've got a good solid basis to start from."

Spielmaker set up two model houses last year in response to Consultron's recommendations. One was fully, and the other partly, furnished. The cost, established by the Consultron report, was about \$2,500. Now Spielmaker feels models are so important that he's made them a permanent feature of his merchandising.

Spielmaker hired a full-time salesman. "I was surprised," he says, "when the report told me that a 20-house builder could afford a full-time man. But I brought one in anyway, and it's paying off."

Leaving his models unmanned and working through a broker, Spielmaker sold about six houses in the first part of 1966; when he temporarily took over the sales program himself and began manning the model house—albeit on a part-time basis—he still managed to make 19 sales in the remaining seven months of the year. Now, with a salesman in the models on a full-time basis for the first time, he expects sales to improve even more. The salesman gets, in effect, a 2½% commission on each house he sells.

Despite the added cost of his new merchandising program, Spielmaker's profits climbed from 7½% in 1965 to almost 9% in 1966. ("And," he adds, "it would have been up to 10% if I hadn't had to pay up to four and five points on my financing.") This

was partly due to the increased sales and partly to a boost in house prices. But, says Spielmaker, much of the credit goes to Consultron for recommending that he hire a construction foreman. "I didn't be lieve I could afford one, but Smolkin said I could and he was right." The result has been a faster building schedule—an average of 60 to 75 days versus about 90 days in Spielmaker's pre-Consultron operation—hence faster turnover of working capital and a lower per-house overhead.

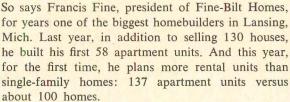
Consultron's long range contribution has been to give Spielmaker the basis for a well-managed company.

"Before," he says, "I was floundering around. was working without a plan; my cost accounting was sloppy; I had never asked myself questions like how many houses I should build next year and whether could actually produce them. Everything was hit o miss. Now I have a plan, and I know how I'm going to implement it."

Because he hired a salesman and a construction foreman, Spielmaker now has time to look at the future.

"I'm three years ahead on land. When I finish my present subdivision, I'll be able to move right into the next. This has helped my financing situation too. I used to spend a third of my time at the bank trying to get money. Now the bank says, 'You know what you're doing, so we'll back you.'"

'Consultron helped me to step successfully from homebuilding to apartment construction'



"Apartments look like they should be easy if you've had a lot of experience building houses," says Fine. "But actually they pose a lot of brand new problems. The Consultron report gave me the confidence to take the step."

It also gave Fine a complete financial and physical picture of the project he had in mind: the number of units and mix of sizes, what rentals to charge, the probable loan and debt service, and an analysis of probable returns.

But Fine's case also illustrates Consultron's two basic limitations: It requires accurate data from the builder, and it cannot substitute for the builder's own judgement and knowledge of his market. Here's what happened:

1. Fine underestimated his contruction costs. "It was inexperience," he says. "I didn't plan enough for things like carports, privacy walls, landscaping, and a community building. I allocated \$200 a unit for items like this, and it should have been nearer \$900 a unit."

Fine is now increasing his financing to cover the additional cost. "If I had given Consultron the right

debt figures," he says, "I think it would have recommended a higher rental range."

- 2. Consultron underestimated the Lansing aparment market. "The report said that an average of 490 units would be needed in Lansing over a five year period," says Fine. "This may be correct, but last year some 1,100 units were built, not counting student apartments."
- 3. Consultron underestimated the best rentarange. "According to the report, \$150 to \$190 were the most popular rents," says Fine. "But I saw none building in the higher brackets, and this looke like an opportunity." So Fine built 21 units in the range recommended by Consultron, 20 more a around \$220, and the rest as high as \$395.

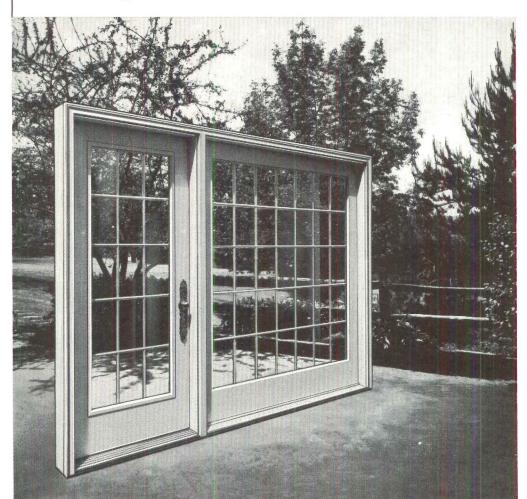
The result: The \$220 units turned out to be the strongest market. The lower priced units did requickly, as Consultron predicted, but they produce high turnover. The higher-rent apartments move slowly, but Fine thinks this is because Lansing simpliesn't used to luxury units yet.

"This market will grow," he says. "Right now, two other builders have decided to build for the ove \$300 tenant." But for 1967, Fine himself will concentrate on the \$220 range.

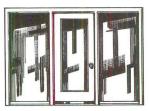
"I still consider Consultron immensely valuable, says Fine. "But I know I have to improve my ow information-gathering methods, and I know that it the last analysis, I have to depend on my own judgement."



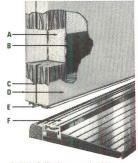
New type patio doors complement architectural styling











- A. Rigid Dylite foam core insulates
- B. Internal "kick" strip
- C. Thermal break-ends condensation
- D. Galvanized steel facings
- E. Seal strip on door—not walked on
- F. Adjustable universal sill

Batter Lumber Co. New Haven, Connecticut **Edward Hines Lumber Company**

Chicago, Illinois Springfield Builders Supply Co., Inc. Springfield, Illinois

Imperial Components, Inc. St. Charles, Illinois

Components, Inc. Hammond, Indiana

Home Lumber Co. New Haven, Indiana

You don't have to sacrifice architecture for patio doors anymore. Pease Ever-Strait Patio Door Units give you variety never possible with sliding doors.

But that's not all. Ever-Strait Doors can't warp-no call-backs, ever! The positive magnetic weather seal ends drafts. Ever-Straits come with single glass or insulating glass.

Any number of three-foot and six-foot sidelights can be combined to fit your particular needs. Each Ever-Strait unit is delivered primed and pre-hung in a wood frame.

Like to know more about the new type patio doors which complement architecture? See your nearest distributor, or write for free brochure and full details.

Pease Eve Dept. H-3, 900 Laurel Ave., Hamilton, Ohio

Patents No. 3,153,817, 3,273,287 and 3,238,573. Patented in Canada 1965. Other patents pending.

PEASE EVER-STRAIT DOOR DISTRIBUTORS

Alco Structures, Inc. Easton, Maryland L. Grossman Sons, Inc. Braintree, Massachusetts O'Connor Lumber Co., Inc. Westfield, Massachusetts Acorn Distributing Co. Detroit, Michigan Johnson Door & Specialties, Inc. Kalamazoo, Michigan

Sklar Door Corporation Bound Brook, New Jersey Gerrity Company, Inc. Albany & Syracuse, N. Y.

Minnesota Wood Specialties, Inc.
St. Paul Park, Minnesota
Rust Sash & Door Company, Inc.
Kansas City, Missouri
Sealrite Mfg. Co.
Lincoln, Nebraska
Sklar Door Corporation
Runnesota Wood Work Co. Inc.
Cleveland, Ohio
Iron City/Whitjax Co.
Cleveland, Massillon
& Youngstown, O.
Recomment Co. Inc.
Recomment Co. Inc.
Cleveland, Massillon Pease Woodwork Co., Inc. Hamilton, Ohio Keystone Alum. Window Company Lancaster, Pennsylvania

Iron City/Whitjax Co. Pittsburgh & Johnstown, Pa. Conner-Tate, Inc. Knoxville, Tennessee Timber Truss, Inc. Roanoke, Virginia Marling Lumber Company Janesville, Wisconsin

CANADA:

Whitjax, Ltd. Montreal North, P. Q. Toronto, Ontario



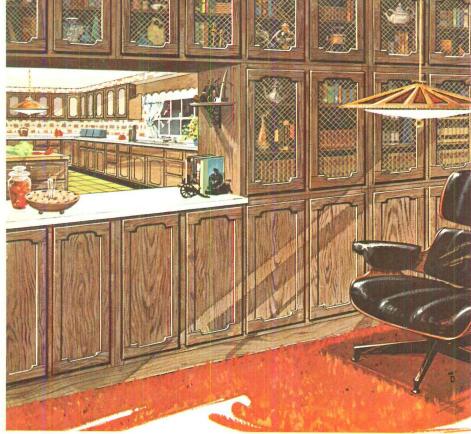














Here's why more builders are trying and then buying Kemper cabinets

Greater design originality, superior finish, more styles to choose from, consistent construction quality, fast



dependable delivery and a good builder profit structure. That's the straight word from successful builders all over America when you ask them, "Why Kemper?"

Let's look at some of these exclusive Kemper product advantages more closely and see if they would benefit you and your customer.

Kemper's famous glue block and concealed mortise and tenon construction pays off in several ways. This extra step construction means cabinets arrive at your job site



square and true. This means installation goes as it should... no racking problems, and less fillers needed because of Kemper Engineering. This quality pays off for the buyer, too. You can turn over the keys with complete confidence that the most beautiful part of the home, your Kemper Kitchen, will remain that way for years and years.

- A Kemper Colony Cherry Kitchen
 B Kemper Colony Cherry Kitchen
- C Kemper Provincial styled door with reversible feature
- D Kemper Provincial styled Kitchen and den/library area
- E Kemper Provincial styled Kitchen

With the introduction this year of Kemper English Oak, the most exciting Kitchen on the market today, builders have a tremendous selection of kitchen styles and finishes all readily available from one, convenient, dependable source. Kemper. As a builder you can choose such beautiful and popular kitchens as Traditional styled cabinets in both Fruitwood and French Walnut finishes, Provincial styling featuring the exclusive Kemper Varipanel® door in French Walnut finish, Colony Line V grooved door styling with









genuine cherry veneers and now, the new, the superb Kemper English Oak... an elegant Kitchen featuring full grained Oak, deep sculptured reversible doors and massive brass hardware.

Let's look at convenience features. All Kemper Kitchens offer such saleable conveniences as all metal, built-in bread-drawer inserts, handy cutlery drawers, sliding shelf kits, lazy susans and many, many others detailed in our full line, full color catalogs.

Finishing. That's a story we love



to tell. The well known Kemper finish is truly a remarkable thing. No short cuts here. Special polyurethane dips, conveyorized finishing lines and baking ovens deliver a consistently high quality finish on all cabinets. Kemper cabinets successfully resist the effects of household sorps, alcohol, boiling water



and coffee. Few cabinet manufacturers can back that claim with a guarantee. Kemper does. Kemper is the only Kitchen cabinet manufacturer licensed by the National Association of Furniture Manufacturers to offer the NAFM Warranty. That's your protection . . . exclusively from Kemper.

Can any company offer all these





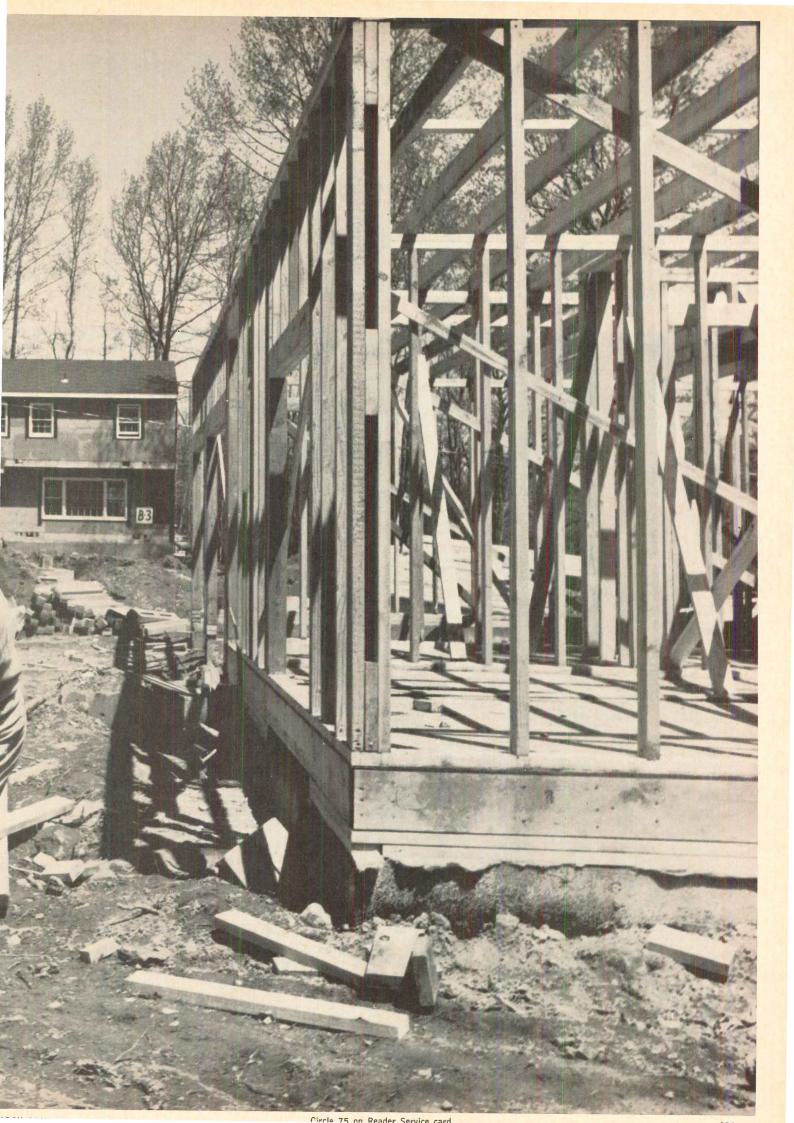
superior product features and still be competitive? The answer is an emphatic yes! Kemper is one of the most competitively priced Kitchen Cabinets you can buy. Anywhere.

Don't you think it's time you stopped in to see your Kemper Distributor? He's in the Yellow pages. If you prefer, write Kemper for complete catalog information on the full line of Kemper Kitchens and bathroom vanities. Either way, you win.



KEMPER BROTHERS, INC. RICHMOND, INDIANA





EMPIRE

THE KITCHEN STYLED IN CLASSIC PROPORTIONS

Connor proudly presents the newest look in kitchens...for the most discriminating tastes. Our new walnut-toned kitchen furniture with fluted trim and Antique English hardware combine fashion and function for the ageless appeal of classic design. Whatever the motif, superior Connor craftsmanship makes every choice a perfect one.

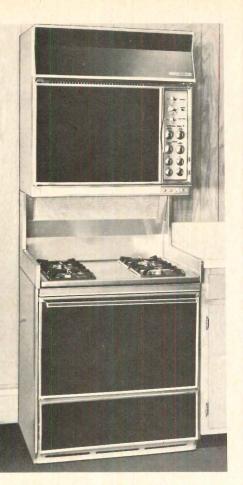
For a catalog and complete information, see your Connor distributor or write:

CONNOR CABINETS

P.O. Box 810, Wausau, Wisconsin



For more information, circle indicated number on Reader Service card p. 131

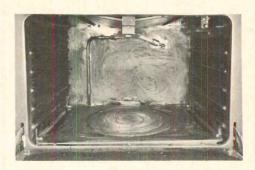


An oven-industry first—self-cleaning with gas

The appliance manufacturer that developed the gas industry's first self-cleaning oven (in model shown at left), hopes to begin producing it in April. The unit is now undergoing final testing by American Gas Assn. technicians.

The complete self-cleaning process takes two hours. The oven is first heated to between 875° and $1,000^{\circ}$ F. At that temperature, grease and food particles turn to a loose, dry ash that can be wiped clean when the oven has cooled (right). The amount of gas used, says the manufacturer, costs less than 5ϕ per cleaning.

Gas-oven manufacturers have been slow to follow their electric-oven competitors in producing a self-cleaning model because of a major engineering problem. Gas generates an excessive amount of waste heat when raised to the high temperature required for self-cleaning. The solution: a brand-new insulating method and venting system that keep the exterior temperature of the oven at that of conventional models and throw off less heat than that generated by normal baking. Modern Maid, Chattanooga, Tenn. Circle 291 on Reader Service card







A buried-conduit tracer speeds up excavating and grading

This new battery-powered tool makes an excavating crew up to 500% faster, yet it can be run by a laborer. The two-part instrument pinpoints both the course and depth of metallic or non-metallic conduit: telephone and electric cables, gas and water pipe, plastic or tile drains, cast-iron or clay sewer pipe, and wiring in floors or walls. The two parts: 1) a 20-lb. transmitter that sends an electronic signal through the underground line, and 2) a handheld probe that detects the signal through earth, asphalt, or concrete (photo, above). The transmitter's leads are connected to the buried conduit's most convenient point of access (photo, right). Delcon, Mountain View, Calif. Circle 290 on Reader Service card





Teflon-coating produces a smoother-cutting hand saw

Teflon makes sawing easier because it reduces friction. It also offers two other advantages: 1) A Teflon-coated saw blade doesn't need cleaning because resins don't stick to it, and 2) the blade is protected indefinitely against rust and corrosion.

The Teflon is not affected when the saw teeth are sharpened, because the coating is applied only to the sides of the blade.

And laboratory tests show that the Teflon stays effective through considerable use. After one wood-cutting test equal to a full-time carpenter building 20 houses, the Teflon coating showed wear on less than 5% of the cutting surface. A second test subjected the new saw to more than a million strokes in abrasive lumber and resulted in no visible wear.

Saw-blade Teflon is not the same as cookware Teflon. It is much harder, and referred to as "Teflon S." The new hand saw—a first application for Teflon S—comes in rip and crosscut models. H. K. Porter, Pittsburgh. Circle 292 on Reader Service card



THE BOLD LOOK

DASHING NEW COLORS, SPIRITED NEW STYLES HIGHLIGHT KOHLER'S BOLD LOOK FOR '67. LEADING OFF IS KOHLER'S "GO-WITH" COLOR OF THE YEAR...AVOCADO!

Readers all over America are meeting the Kohler Bold Look in lighthearted ads—in Better Homes & Gardens, American Home, House and Garden, Sunset. They're oh-ing and ah-ing over that Bold Look bath, with the new Avocado fixtures. They're reading about new Accent Color designs...about Kohler's elegant Flair fittings, available this year in amber, white, charcoal and clear.



Kohler Accent Color lavatories give your imagination free rein. With a pastel shade on the tub, closet and bidet, let the lavatory sound a bold, bright note of contrast. Use a vivid red against blue...accent a soft green with a deep jade...contrast a neutral tan with a rich expresso brown.



Something missing? Why, yes, the old metal rim. Not only does the lavatory look prettier without it, but there's a pretty penny saved on installation. Leave it to Kohler to make the bold moves!



For the Bold Look, a touch of Flair! Handsome Flair fittings are diamond-bright acrylic. Choose white, charcoal or clear with chrome...amber with polished brass.

Not bold...but a bright idea! Below you see the Kohler tub with the slip-resistant Safeguard[®] bottom. Unique textured surface helps guard against slips and falls. Available on any Kohler tub.





Avocado comes to the kitchen in a brand new design, the Lakefield self-rimming sink. Note the novel proportions: a conveniently sized basin for scrapings (into strainer or disposer)... a king size basin for dishwashing.

The Scintillating Six! Kohler Accent Color sinks in Antique Red, Expresso, Jade, Coppertone, Blueberry, Citron. Self-rimming for low cost installation.











KOHLER OF KOHLER

the Bold Look for '67/Kohler Co., Kohler, Wisconsin

Kitchens



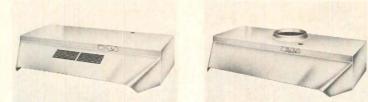
Three kitchen cabinets from one basic model offer the homebuyer these design possibilities: Mediterranean (left), contemporary (right), and Oriental (not shown). Face panels in the cabinets come in four patterns that are readily reversed by removing a retaining strip.



Some of the panel choices: dark-toned walnut with carved emblem simulated white oak with contemporary styling, and laminated plastic in several textures and colors. Tappan, Mansfield, Ohio. Circle 260 on Reader Service card



Stainless-steel laundry sink with a 10"-deep single compartment is intended for use in areas where space is limited. The line includes double-compartment models up to 42" wide for larger laundry areas. Elkay, Broadview, Ill. Circle 261 on Reader Service card



Duct-free and top-ducted range hoods are part of a lower-price line that includes three models in four sizes. All are offered in copper tone, shaded coppertone, and white. Leigh, Coopersville, Mich. Circle 263 on Reader Service card

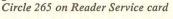


Built-in coffee maker brews from two to ten cups. It consists of a compact—4"x8"x12"—body, polycarbonate cone, and a glass decanter. The 115-volt unit is connected to the cold-water line with ½" flexible copper tubing. Brewmatic, Los Angeles.

Circle 264 on Reader Service card

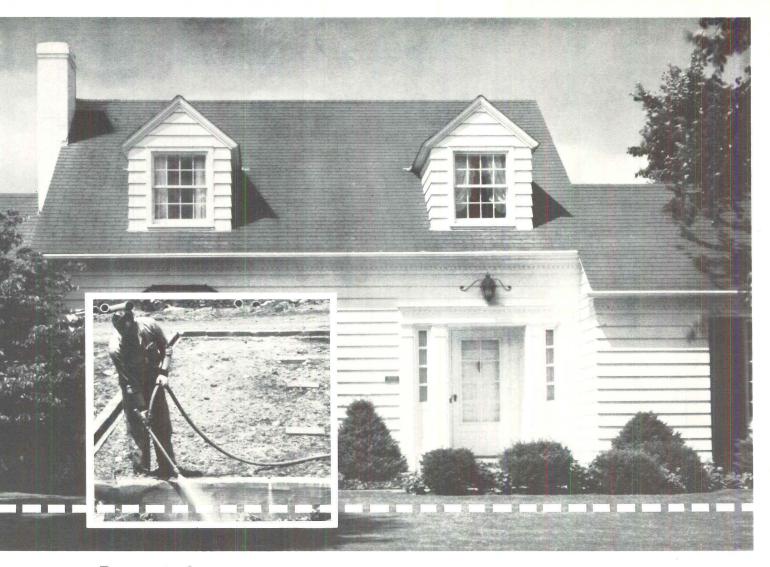


Eye-level gas range has allglass oven doors that reflect like a black mirror when light is off. Free-standing model shown is 30" wide, 66" high, and comes in avocado, coppertone, yellow, and white. Gaffers & Sattler, Los Angeles.





Easy-to-move refrigerator floats from its place on thin film of air to simplify cleaning. The air-lifting device, which connects to blower of vacuum cleaner, is an optional accessory on ten model Frigidaire, Dayton, Ohio. Circle 266 on Reader Service card



Protects investment...

Protects your reputation...

ADDS SALES POWER...

Long-lasting chemical termite barrier

Pre-treating foundation walls, excavations and backfill during construction with Chlordane or Heptachlor insecticide creates a chemical barrier that termites can't penetrate. And it gives complete, guaranteed protection that lasts for many years. It's the quality way, the more effective way, to eliminate later termite damage . . . protect your reputation . . . and give your customers (and their financial backers) the assurance they're looking for to protect their investment.

In official USDA field tests, Chlordane has proved 100% effective in providing termite protection for 18 years—longer than

any other chemical tested. Heptachlor, a newer chemical, has provided complete protection for over 14 years in official tests. Your professional pest control operator is fully equipped, in both technical training and experience, for proper pre-treatment during construction. Easily. And with no lost time.

Be sure to include pre-treatment with Chlordane or Heptachlor in your plans or specifications. Then call your pest control operator. He acts as a sub-contractor—and does the rest. And he'll be glad to provide you with a complete assortment of Velsicol sales aids—that close sales faster.

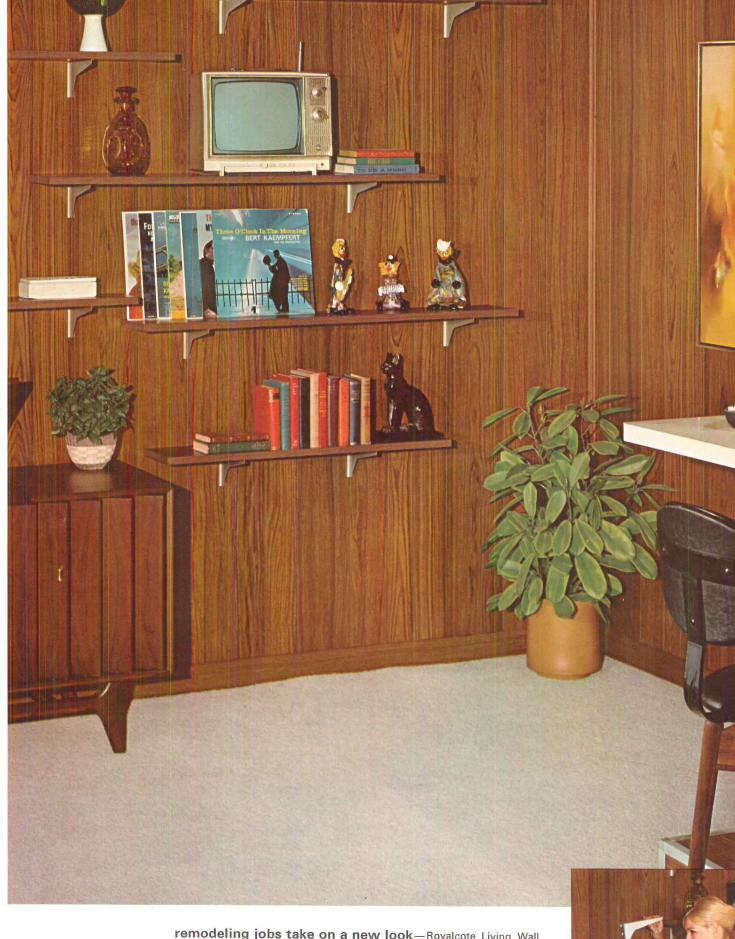
Chlordane & Heptachlor

Preferred chemicals from the Growing World of VELSICOL.



inala 70 an Dandau Camica cand

Construction Catalog.



remodeling jobs take on a new look—Royalcote Living Wall, the new Paneling that lets your customers organize living, reading, dining, entertaining, even children's rooms. Add, change, replace pictures and shelves without defacing the wall. Above, Living Wall in Teak woodgrain.

AN EXCITING NEW PANELING CONCEPT-

a wall
that
decorates...
and
works...

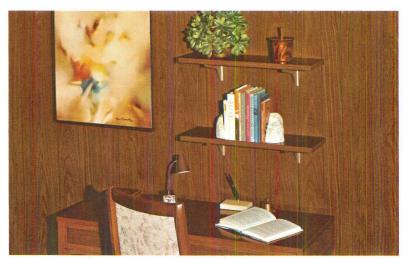


Royalcote Living Wall panels and shelves let your customer project her personality onto her walls. In glamorous Royalcote colors—Teak, Sable, Walnut and Honeytone Cherry—you can use one panel or an entire wall.

ROYALCOTE LIVING WALL by MASONITE!

You're familiar with Masonite Royalcote paneling. So beautiful in its woodgrain patterns. So easy to install. Imagine Royalcote hardboard paneling with concealed slots that support shelves, pictures and art objects. That's The Living Wall. Three Royalcote woodgrains—Teak, Honeytone Cherry and Sable Walnut. Mix 'n match Satin Walnut shelving comes in 5 different sizes, ranging from 2' to 4' in length, 8" to 10" in width, with metal brackets to fit. Gives you an extra sales "plus" that goes a long way toward converting lookers to buyers.

Your Masonite dealer has Royalcote Living Wall panels in stock now. See him today—or just use the convenient coupon.



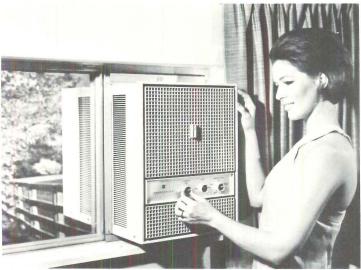
your homes become more valuable, your remodeling jobs more distinctive, when walls both work and decorate, as in this desk-work area. Royalcote Sable Walnut is the background here.



Masonite and Royalcote are registered trademarks of Masonite Corporation

	ORPORATION, Dept.	В
	e my free copy of your	colorful booklet or
Name	Company_	
Street		
		Zip Code

Heating, cooling, and ventilating



Air conditioner for horizontally sliding windows is 14¼" wide, 24½" deep, and 19" high. Thermostatically controlled fan speed increases automatically when temperature rises. Frigidaire, Dayton, Ohio. Circle 205 on Reader Service card

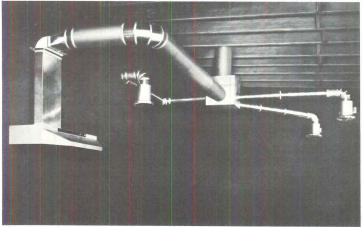


Color thermostat incorporates front-panel inserts that blend with a broad range of individual room decor. Inserts are offered in six shades: yellow, green, blue, walnut, copper, and silver. International Telephone & Telegraph, Van Nuys, Calif. Circle 206 on Reader Service card

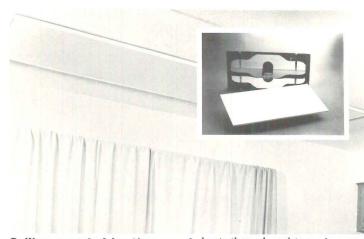
Power humidifier can be used in any forced-air heating system evaporator discs lift enough water into the air stream to humidify a 2,000-sq.-ft. house Unit is installed in plenum o duct. It needs no adapters. Leigh

Circle 207 on Reader Service care

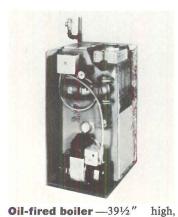
Coopersville, Mich.



Central exhaust system controls humidity in an electrically heated house with minimum heat and cooling loss. It includes a remotemounted power plenum, range hood, inlet grilles for bath and laundry. Swanson, Owosso, Mich. *Circle 208 on Reader Service card*



Ceiling-mounted heating panel heats through resistance in a conductive sheet. Panels—in three lengths from 4' to 8'—require 500, 750 or 1000 watts. They come in a flat, off-white finish but may be painted 3M, St. Paul, Minn. *Circle 209 on Reader Service card*



19" wide—will pass through an average doorway. Five pre-wired models, with a net I-B-R graduated range of 81,000 to 162,000 Btuh, are made with enclosed controls. A thermostat is standard equipment. Rheem, Chicago. Circle 210 on Reader Service card



electric-resistance furnace delivers from 12,000 to 119,000 Btuh. Up-flo model shown rests on an electro-static air filter. The normal operating temperature of resistance units is 500°, but they are tested to withstand 1700°. Lennox, Marshalltown, Iowa. Circle 211 on Reader Service card

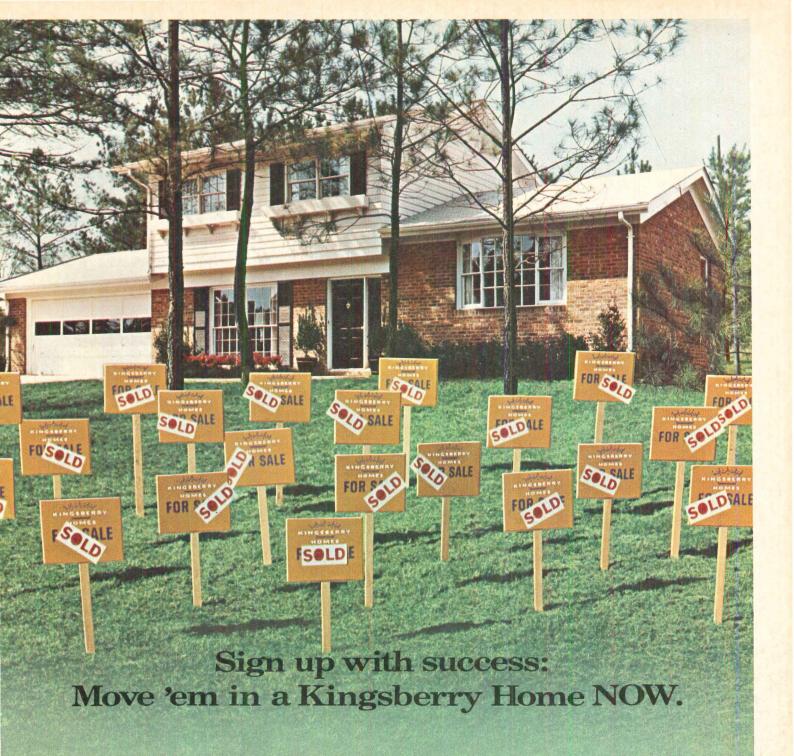


Two-speed bathroom fan, suggested for large bathrooms, is designed to deliver 100 cfm. Discharge fits standard 4" duct. Features: nail-up mounting bracket with adjustable header bar and a spring-mounted snapout grill. Air King, Chicago. Circle 212 on Reader Service card



Baseboard heating section comes in lengths from 2½' to 6 at wattages from 450 to 1200 And tandem sections from 8' to 12' range from 1600 to 240 watts. Additional equipment in cludes wall-mounted thermostal Hotpoint, Chicago.

Circle 213 on Reader Service car



ove ahead with Kingsberry, the manufacturer that eps things moving. With well-known builder boosters e construction financing . . . high design acceptance . national advertising support . . . liberal co-op allow-ce. (Not to mention the greatest line-up of over 100 odels that move customers to buy . . . and move in.)

Most important of all, though, is your per-

AIL THE COUPON BELOW TODAY

sonal house-mover at Kingsberry . . . the Kingsberry sales representative in your territory. Use him. Use his experience, his contacts, his broad know-how of this building business to speed up the action for you. Kingsberry now serves leading builders in 29 mid-Atlantic,

Midwestern and Southeastern states. Join 'em. Send in the coupon today.

KINGSBERRY

DIVISION OF BOISE CASCADE

COPYRIGHT © 1967 KINGSBERRY HOMES

. Robert C. Smith, Ger	ieral Sales Manager,	/Kingsberry Homes/Depa	rtment HH-2/5096 Pear	chtree Road/Ch	amblee, Georgia
Please send more info	rmation on the Kings	sberry program. 🗌 Please	e have your represent	tative call on m	e. My interest in
ngsberry Homes is	immediate	future planning. I ha	ivelots deve	loped and	lots available
development. During t	he past 12 months I	have built and sold	homes and/or	apartments	
me		Firm			
il Address			Phone		

_____State______Zip Code______

When they said, "Give us a home that takes care of itself"...the men at Reynolds gave them one with aluminum in 49 places.

There's a house out in Wilmette, Illinois that's a lazy man's dream. It uses 49 differ ent aluminum building products. Over four tons of aluminum, and just about every pound will save the owner work. It was buil by the men at Reynolds to show just how many ways this metal can be used to make a homeowner's life easier.

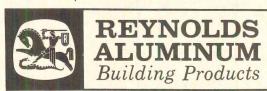
The four handsome, classic columns in front, for example—extruded Reynolds Aluminum with a tough, baked-on ename finish that will look new for years without repainting. Same goes for the siding and shutters made of Reynolds Aluminum; they will never rust, rot, chip, or peel.

The men at Reynolds developed pre painted aluminum Colorweld® back in 1955 And builders, as well as homeowners, have had good reason to be grateful ever since.

Those good-looking charcoal gray aluminum roof shingles and the easy-to-install rosoffit under the eaves are also products of the design engineering group at Reynolds

Other aluminum work-savers in the house include the acoustical ceilings, windows and sliding doors, self-storing and combination doors, ductwork, column and railing kits electrical conduit, flashing, gutters and down spouts, garage door, louvers and vents, even closet rods, screws and nails.

The men at Reynolds are old hands at developing new ways to save work and trouble for you and your customers. They can show you a houseful of ideas to help you build a better house or commercial building with aluminum. Call your local Reynolds office of use the coupon below.



Watch "The Red Skelton Hour,"
Tuesdays, CBS-TV

Building Produ	ETALS COMPANY ucts and Supply Div Ave., Dept. HH-37 nois 60068	vision
The second secon	a salesman call on me implete Reynolds Pro	
Name	Tit	le
Company		
Address		
City	State	Zip



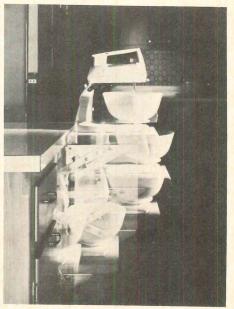
Hardware



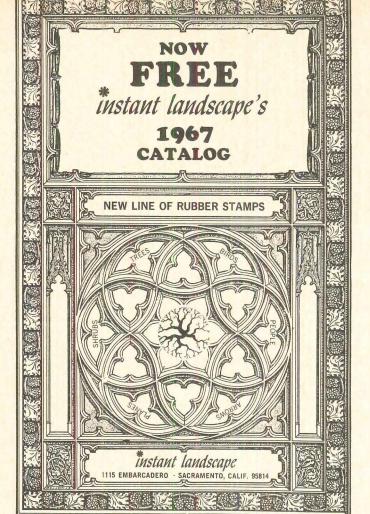
Telescoping hardware allows bifold door to swing 180° for full access to closet. Hardware can be used in either the header or jambs of doors from 1" to 13/8" thick, up to 8' high, and as heavy as 50 lbs Stanley, New Britain, Conn. Circle 200 on Reader Service card



Touchbar latch enables homebuyer to push open a screen or storm door while both hands are full. The bar fits across the inside of al 36" doors at waist height and can be cut to fit narrower doors. Idea Brass, Red Bank, N.J. Circle 201 on Reader Service card



Hide-a-shelf hard ware can be installe in any cabinet with a inside height of 22½ or more. (Shelves ma be any width.) Hard ware's adjustable sprin tension counterbalance from six to 30 lbs, and its locking mechanism locks firmly at counte or desk height. Amer ock, Rockford, Ill Circle 202 on Reade Service card



Circle 82 on Reader Service card



Photographed in the Los Angeles office of Welton Becket and Associates, Architects & Engineers

Movable File for Your Drawings

Plan Hold Rolling Stand goes where you need it . . . to your desk . . . to another room . . . to a hide-away spot when you're finished. Keeps plans, prints, maps, charts easy to find and wrinkle-free. Holds up to 1200 sheets. Stand adjusts in height and width for sheets up to 42" x 72". Write for catalog of 31 filing systems to Dept. H72, P.O. Box 3458, Torrance, California 90510.



® PLAN HOLD CORP.
TORRANCE, CALIF. ● AURORA, ILL.

Plan Hold Company of Canada, Toronto 18

New products continued on p. 12

No noise! No vacancy!



No wonder!

SHEETROCK*Wall and Ceiling Systems with RC-1 Resilient Channel offer ratings up to 52 Sound Transmission Class, and +2 Impact Noise Rating. They meet most FHA minimum standards, yet often cost much less than

other methods. Easy to install; only four basic components.

Get your free self-demonstrator kit for Sheetrock Systems with RC-1. Just write to us at 101 S. Wacker Dr., Dept. HH-72, Chicago, Ill. 60606.

UNITED STATES GYPSUM



Scheirich Royal, Birch and Bronzeglow, Birch Cabinets in MEDALLION, TRIM

with matching border

* T.M. Reg. U.S. Pat. Off. Applied For

"For the Most Beautiful Kitchens of Them All"



H. J. Scheirich Co., Box 21037, Louisville, Ky. 40221

BRONZEGLOW® BIRCH

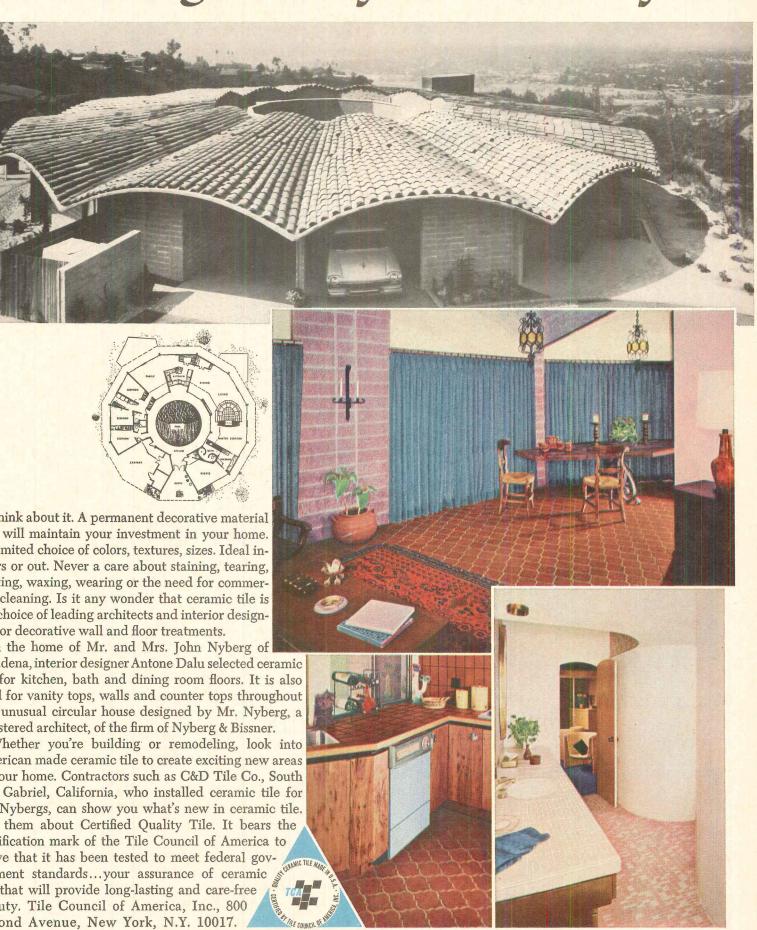
ROYAL® BIRCH

HEATHER® BIRCH

MOONGLOW® VANITIES



The Nybergs chose ceramic tile or lasting beauty. Shouldn't you?



ER COMPANIES: American Olean Tile Co., Inc. • Atlantic Tile Manufacturing Co. • Cambridge Tile Manufacturing Co. • Carlyle Tile Company • Continental Ceramic Corpo• Florida Tile Industries, Inc. • General Tile Company • Gulf States Ceramic Tile Co. • Hoffman Tile Mfg. Co., Inc. • Huntington Tile, Inc. • International Pipe and Ceramics oration • Jackson Tile Manufacturing Co. • Jordan Tile Manufacturing Co. • Keystone Ridgeway Company, Inc. • Lone Star Ceramics Co. • Ludowici-Celadon Company • Marshall Inc. • Mid-State Tile Company • Monarch Tile Manufacturing, Inc. • Mosaic Tile Company • Oxford Tile Company • Pomona Tile Manufacturing Co. • Sparta Ceramic any • Summitville Tiles, Inc. • Texeramics Inc. • United States Ceramic Tile Co. • Wenczel Tile Company • Western States Ceramic Corp. • Winburn Tile Manufacturing Co.



You've got to see it to believe it! This BLU-RAY Model No. 146 has everything—including low price. Extra wide throat (47") accepts wider tracings for wider prints. Jumbo lamp makes prints fast. It's the most revolutionary reproduction machine on the market—it's COMPARISON-PROOF! It's one of BLU-RAY's complete line of White printers. Prices start at \$239.50.

Get more facts free! Write or telephone now!

1-RHY BLU-RAY, Incorporated 3042 Westbrook Rd., Essex, Conn. 06426 Phone (203) 767-0141

For FREE 44 page Reproduction Guide and complete information on the #146 Whiteprinter. circle or write in No. 86 on reader service card.

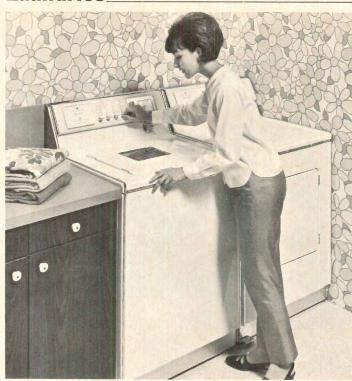
Circle 86 on Reader Service card



Superheated attic air increases temperatures in living areas below, shortens life of building materials. Excessive attic moisture damages plaster, paint, roof boards, eaves, etc. Kool-O-Matic with thermostat and humidistat removes attic heat and moisture automatically. Set it, forget it. Quality-built for lifetime service. Maintenance-free operation. Equip your homes with Kool-O-Matic and outsell your competition. Nationally distributed through building supply dealers.

Send me information about	Ko	OL(%)MA	XTIC ®
Kool-O-Matic.	Dept. 87	1831 Terminal	Rd., Niles,	Mich. 49120
□ Builder	Name			
☐ Architect	Address			
Other	City	S	tate	_Zip

Laundries



Automatic washer with solid-state, electronic controls and a wid variety of agitate and spin speeds permits a visual check through 1 window. Available in yellow, white, and two-tone copper and gree Frigidaire, Dayton, Ohio. Circle 280 on Reader Service card



Water conditioner softens water and also removes or neutralizes iron, hydrogen sulfide gas, and acid-objectionable agents which cause rust stains on fabrics, tarnished silverware, and corroded plumbing. Culligan, North-

Circle 281 on Reader Service card



Plastic laundry tub is molde of Avisun white polypropyler which, the manufacturer state can better withstand impact ar chemicals than other material Lightweight tub is 22" wide ar deep. Chicago Granitin Chicago.

Circle 282 on Reader Service can



Small commercial dryer for apartments is 48" high, 2834" wid 30" deep. Dryer is available for operation on gas or electricity. G model comes with standing pilot, but electric igniter is offered at r extra cost. Cissell, Louisville. Circle 283 on Reader Service card

New products continued on p. 1.



Let Rangaire clear the air—

—as to what women want in a range hood. When you install a hood, you want it to work, be quiet, and look good — to harmonize with kitchen decor. A hood that causes call backs and customer dissatisfaction can be the most expensive hood you ever installed. Rangaire builds range hoods that work — you can rely on it. And, they're beautifully styled, besides being made to last. We try to be as careful of your reputation as

we are of our own, and never let a builder down. And that's saying a lot, because we build a lot of range hoods. So, to be sure of hood quality, and of your customer's satisfaction, be sure to specify Rangaire.





You can save hundreds of dollars with this new line of beautiful and functional Fas-Glo electric fire-places. Full-size fireplaces, at a fraction of the cost of conventional fire-places. And there are no expensive installation or labor costs, no flue, no chimney to construct, no wasted heat. Your customers enjoy lasting, thermostatically controlled warmth year 'round.

Fas-Glo fireplaces may be permanently wired, or plugged into a wall socket. They are easily adaptable to any temporary or permanent room location. Living room, Den, Bedroom, Family room, Any room.

There are no dirty logs, dust or soot to clean up. Fas-Glo will heat any size room—with an installation that takes only minutes. The logs are of genuine oak and provide a simulated flickering flame when the unit is turned on. And the



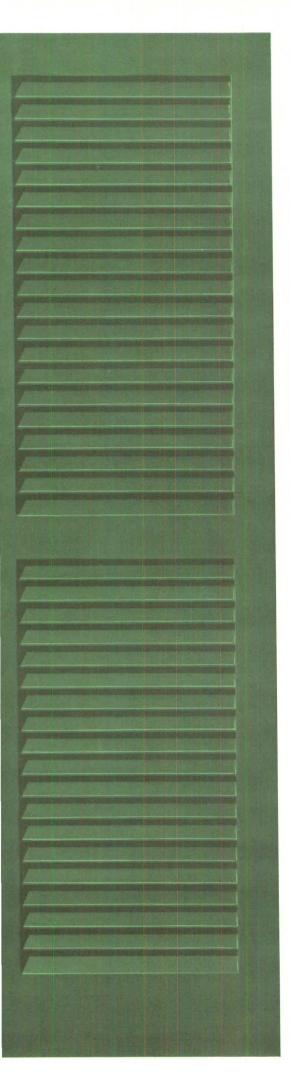


best part is the whisper of wood aroma and the crackling sound of burning logs.

Every Fas-Glo unit is available with or without heating elements in the base. And you can choose 1650 watt models, or 4000 watt models.

Every unit includes logs, fire screen, sound maker and scenter. But get all the facts. All the specifications. Send for our new brochure on Fas-Glo fireplaces.





Wood? No, Nylon!

New Du Pont Nylon Shutters meet demand for low maintenance, pre-finished, high-quality materials...give you fast, easy installation

Made of tough Du Pont Nylon, these pre-finished shutters won't rot, crack, dent. Slats can't fall out.

They're easy to install. One man can put up a pair in 5 to 6 minutes on any siding or masonry. No special tools needed. All painting and puttying eliminated. And they have the look of fine woodwork.

The durable factory finish—in black, white, dark green—won't blister, chip, peel. Once they're installed, there's almost no upkeep. If homeowner ever wants to change colors, they can be easily repainted.

On your next job include the most practical shutters ever made—Du Pont Nylon Shutters. They'll save you money. For full details, contact Du Pont Building Products, Room N-2521, Wilmington, Del. 19898.





"As apartment builders and owners, we're conscious of maintenance problems," says Leon N. Weiner, builder and President of the N.A.H.B. "We use Du Pont Nylon Shutters because of their durability and value."



Consultron 1967 has more answers than ever.

And that might surprise the 2,000 builders who've received more than 3,000 reports in the past three years.

But now, we've added a one-year self-correcting market forecast for more than 150 key metropolitan areas.

Plus 600 new house plans providing a total of almost 2,000 sales-proven home designs.

Plus even faster service to help get your project off the ground in plenty of time.

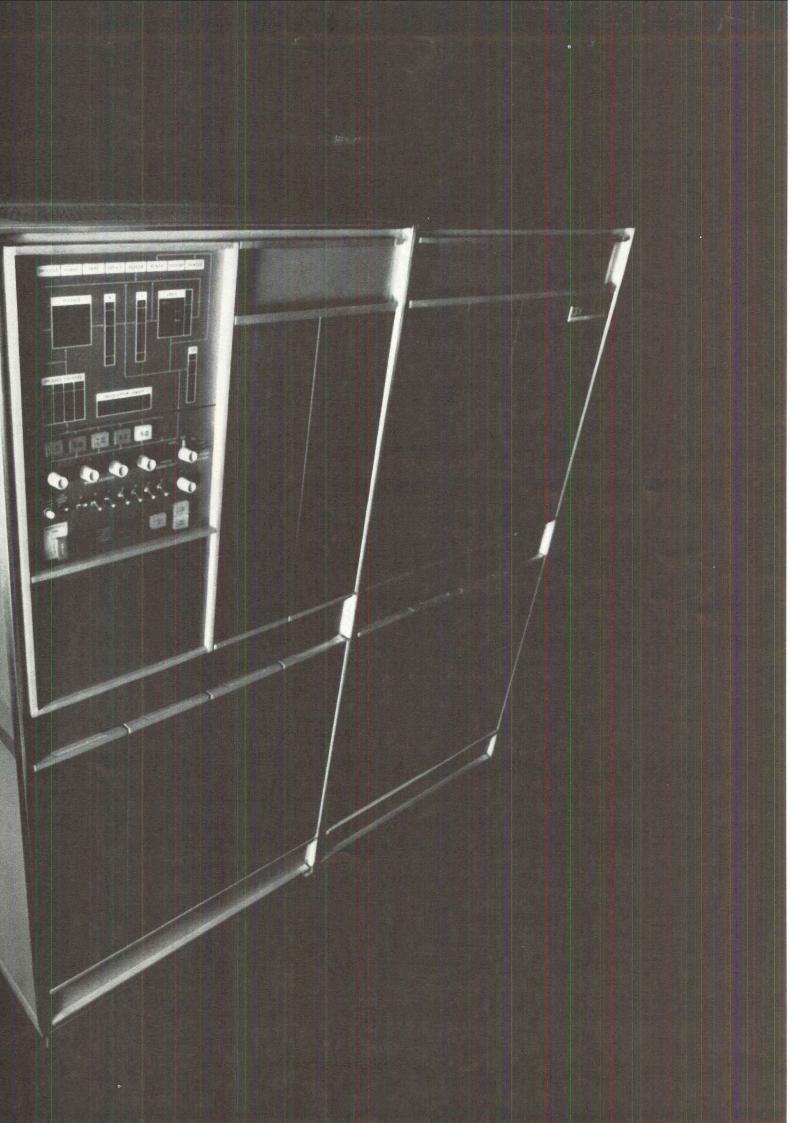
Naturally Consultron also offers the same valuable building guides as always. It will advise you on the best price range and appropriate house styles, and provide a complete operating budget and advertising and promotion schedules. It will, in addition, tell you population changes, home construction figures, and other vital data for your area.

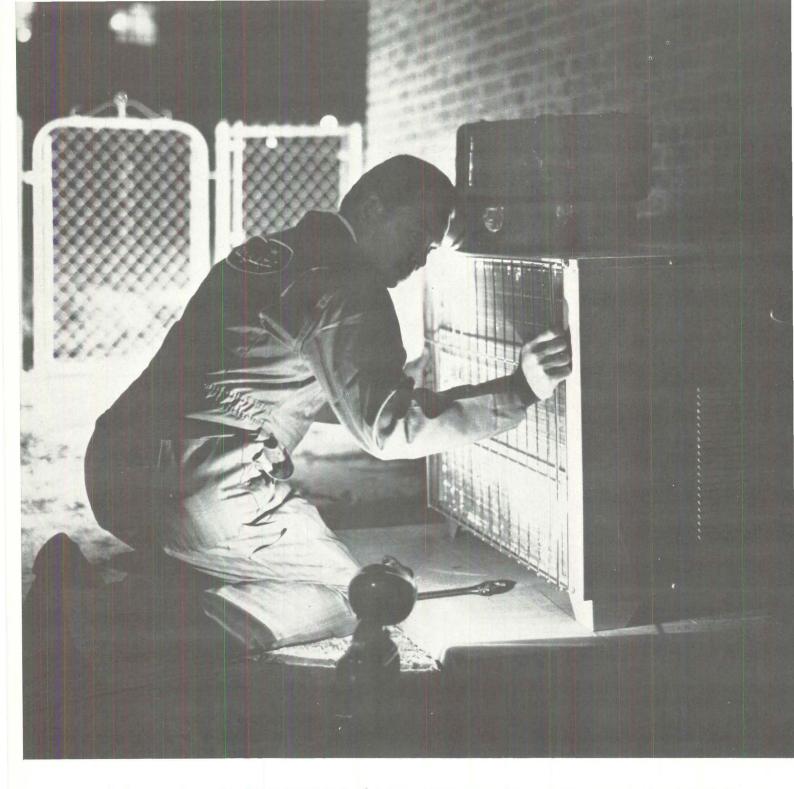
If you're building apartments, the report will rate the building site, and the market for apartments. It will also project your returns, and provide a guide for architectural design and a promotion plan.

In these tight money times, it's especially important to get sound advice for your building projects. Consultron will provide it. All you have to do is answer a few simple questions on a Consultron data card available from your Barrett Representative. Our IBM 1401 computer will take it from there.



Fabricated Products Allied Chemical Cos 40 Rector St., N. Y., Please send me mon help me plan my bu	rporation , N. Y. 10006 re information o	n how Consultron '67 can
Apt. bui	ilder	☐ Home builder
Company name		
City	State	Zip





RANGAIRE HEATING/AIR CONDITIONING DEALERS DO YOUR JOB RIGHT...THE FIRST TIME

You won't find a Rangaire heating and air conditioning dealer rushing off to his next job—not until he's sure your installation job is complete, and everything is working perfectly. Even though Rangaire systems are among the finest available, we don't have the biggest name in the business — yet. So Rangaire dealers work harder and longer to make sure each installation is perfect. And, builders appreciate this extra care and service . . . they get a great peace of mind when

our quality product is backed by our dealers' quality installations. Why not call your Rangaire dealer for heating and air conditioning systems . . . from 15,000 to 220,000 BTU capacities. Ask him about good-looking Rangaire COLOR/blend condensers, too, that harmonize with your homes' exteriors to beautify rather than detract. You'll find his price competitive, his products equal or better. And his eagerness to do your job right a refreshing change.



RANGAIRE CORPORATION

Cobell Industries Division • Cleburne, Texas 76031

Write for complete information and the dealer in your area.

Tools and equipment



levating scraper can travel at speeds up to 23.8 m.p.h. and make U-turn in 26'1". It permits a change of speed and speed range vithout declutching. Heaped-bowl capacity: 9 cu. yds. (10.8 tons). nternational Harvester, Chicago. Circle 220 on Reader Service card



umber buggy is a one-man ush cart for hauling up to 2,000 os. Four 16" stakes lock siderays against the load or turn nto the frame to make a flat top or hauling plywood. Height-2"—matches most saw tables. lawkeye, Longmont, Colo.

ircle 223 on Reader Service card



Fiberglas hammer handle, permanently bonded to forgedsteel head, has the flex strength to deliver all its power at the point of impact. Line includes three nail, two ripper, and five ball-pein hammers. Owens-Corning, New York City.

Circle 224 on Reader Service card



ish-tape reel for pulling wire rough conduit has moldedlastic housing and winder. Realt: It is shockproof and half ne weight of a steel reel. Tape zes include 1/8"x100', 1/8"x200', nd 1/4"x100'. Holub Industries, ycamore, Ill.

ircle 230 on Reader Service card



Portable spray rig combines a heavy-duty 1.5 gpm airless spray pump and a 3 h.p. electric compressor. Pump can handle heavy-viscosity latex. An 8 h.p. gasoline model is offered for areas where electricity is not available. Spee-Flo, Houston.

Circle 231 on Reader Service card

New products continued on p. 138

SUBSCRIBERS

House & Home



is available only by paid subscription. The publisher reserves the right to refuse nonqualified subscriptions. Position and company connection must be indicated on subscription orders forwarded to address shown below. Unconditional guarantee: The publisher, upon written request, agrees to refund the part of the subscription price applying to the remaining unfilled portion of the subscription if service is unsatisfactory.

CHANGING YOUR

ATTACH LABEL HERE

Please give five weeks notice before change of address becomes effective. Attach mailing label here and print your new address below. If you have any question about your subscription, include address label with your letter.

MAIL TO

ADDRESS?	House & Home, 540 N. Michigan Ave., Chicago, III. 60611			
ame				
ddress				
ty		ip code		

Designing a pool into your next project?

It makes sense to specify Oaragon) quality pool products

here's why. The built-in, no-compromise quality of Paragon pool products and equipment has a farreaching effect upon the design of any commercial, institutional or residential pool. That's because excellence - in durability, performance and appearance - is the only standard we accept. As a result, Paragon equipment has become the largest single grouping specified and selected by architects.

If you need technical information, specification sheets and data, we will be glad to answer your request. In addition, our skilled staff is ready to aid you with special custom fabrication requirements please submit details. See our Sweet's Architectural Catalog File 36c/PA or write for your copy.

Paragon Swimming Pool Co., Inc. • Dept. HH • Pleasantvi	lle, N.Y. 10570
Please send me a copy of Sweet's Arch. Catalog File 36c/PA.	
NAME	
ADDRESS	
CITY STATE	IP
Circle 90 on Reader Service card	125



Luxury living... with luxurious kitchens by



The Sandpiper at Palm Desert, California is a smart address next to several outstanding country clubs. It is condominium living in a lush setting . . . \$35,000 to \$45,000 homes circled around a Ramada with blue pool and putting greens, as pictured above. The Sandpiper is quality . . . and that includes all-whirlpool appliances in the convenient kitchens of the new units. Not only have the builders of the Sandpiper chosen an appliance line that is highly-styled and highly-featured, but they have also invested in deluxe models from that whirlpool line. As in every other architectural detail of this attractive community, the objective has been to please the type of prospects who are used to the best.



Only 26" wide, this 11.0 cu. ft. refrigerator (model ERL11C) is a popular apartment model.



A modest-priced two-door model, the ERT12D offers 12.3 cu. ft. of refrigerator and freezer space.



The IceMagic® automatic ice maker is the proved one. Over 1,000,000 WHIRLPOOL manufactured ice makers in use! The IceMagic fills, freezes, then empties ice into a handy bin that holds up to 480 crescents.



Hundreds of appliance models to choose from...all from one handy source

Whatever you're looking for in home appliances, chances are that WHIRLPOOL can fill your needs . . . exactly! For example, you can take your pick of 24 different refrigerator-freezer models in the WHIRLPOOL line. Those pictured at left illustrate how they range from compact, low-cost units to luxury featured models for the largest homes.

You get this same kind of wide choice in other WHIRLPOOL appliances, too. They include ranges, ovens, dishwashers, disposers, air conditioners, range hoods. There's a choice of gas or electric fuel in cooking equipment. And, of course, you get color and styling coordination when you use all-WHIRLPOOL appliances.

Just place one order. Deal with one man, instead of three or four. Get undivided responsibility and service. Ask your WHIRLPOOL distributor about this time-saving, trouble-saving idea . . .

No-Frost refrigerator-freezer in kitchen has many top features, including IceMagic® automatic ice maker.

It's a 16.4 cu. ft. model . . . stores 182 pounds in the big bottom freezer.



WHIRLPOOL CORPORATION, BENTON HARBOR, MICHIGAN

kitchen is equipped with a WHIRLPOOL food waste

*Tmk.

disposer, too.

Floors



Vinyl-asbestos tile features black, brown, and white stripes in a basketweave design. Large chips of translucent vinyl with fine marble particles are deeply inlaid on vinyl-asbestos backing. Azrock, San Antonio. *Circle 270 on Reader Service card*

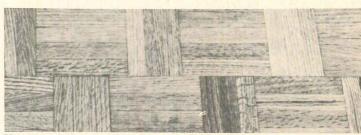


Embossed vinyl-asbestos simulates quarry stone, with 12"-sq. tiles seemingly divided into four stone squares. Mortarlike border masks seams. Johns-Manville, New York City. Circle 272 on Reader Service card

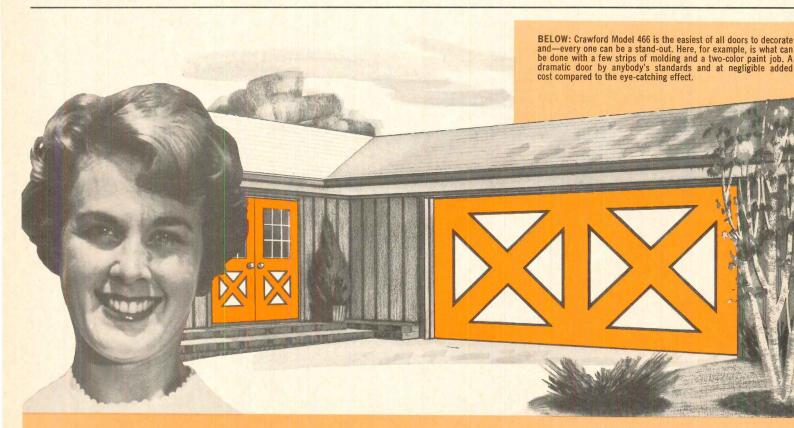


Sheet vinyl is produced in 6 wide rolls, in a choice of five colors. Non-directional pattern combines colored and translucent vinyl chips. Armstrong, Lancaster, Pa.

Circle 271 on Reader Service card



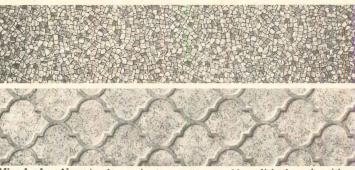
Hardwood flooring is composed of $\frac{5}{16}$ "x15.2"x19" panels. Its basketweave pattern is formed from four alternating runs of three and five slats. In red oak, maple, beech, walnut, cherry, and teak. Harris Johnson City, Tenn. Circle 274 on Reader Service card



Can a Garage Door Compete with Other Appliances in Buy Appeal?



Sculptured sheet vinyl has the look of quarried marble. The flooring is offered in the following six colors: sandstone, maple, gold, bronze, sandpiper, and white. It comes in 72" sheets. Goodyear, Akron, Ohio. Circle 275 on Reader Service card



Vinyl sheeting is shown in two patterns: 1) polished rock with a thicker wear surface for light-commercial applications (top); and 2) a Spanish-tile design in nine colors for residential use (bottom). Ruberoid, New York City. Circle 276 on Reader Service card



Cushioned-vinyl flooring simulates an old ceramic-tile floor with uneven grout lines on a textured surface. Subtle variations enhance colors: brick red, gray green, or antique beige. Mannington Mills, Salem, N.J. Circle 277 on Reader Service card

New products continued on p. 140

Here's how Crawford STYLIST Does it!

1. with OUTSTANDING APPEARANCE: Stylist is the easiest of all doors to Customize—with color for beauty and personality at no extra cost; with color, moldings, cut-outs for rich, sculptured breathtaking effects at nominal extra cost.

2. with HIGH VISIBILITY: the garage door is the largest, most visible single area in any home frontage; Stylist lets you merchandise it with magnetic beauty and design—which can be repeated on the front door and shutters for total buy-appeal.

3. with UNLIMITED VARIETY: with Stylist, every home on the project can look different from the curb even if floor plans are basically alike.

4. with QUALITY FEATURES:—LIFETIME WARRANTY ON Marvel-Life hardboard skins; LIFETIME WARRANTY ON STURDY, welded wood UNITIZED CONSTRUCTION; HONEYCOMB CORE which supports skins every inch in every direction; 120 DEAD AIR CELLS per sq. ft. add an insulation bonus.

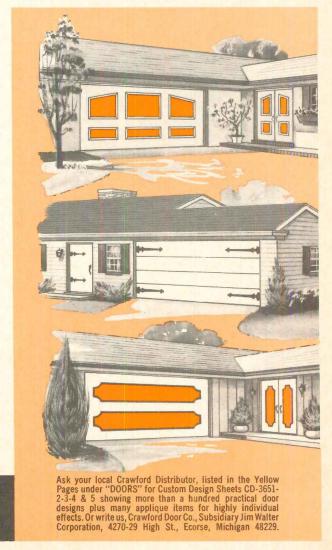
5. and NO CALL-BACKS: Stylist is installed and guaranteed for one year by your Crawford distributor. He makes the call-backs, if any. You're clear.

6. with **EASY CONVERTIBILITY** to ELECTRIC PUSH-BUTTON OPERATION by having the Crawford Distributor add a Door-Master Operator.

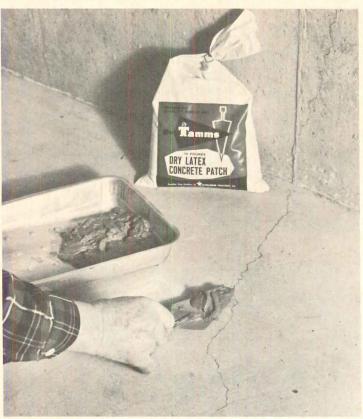
Make no mistake, the garage door is an appliance—the *largest* moving appliance in any home, and, the most visible. Many builders make it a high-ranking sales feature. You can, too.







Adhesives and sealers



Dry latex concrete patch requires only water—no catalyst or additive—for mixing. It is recommended for patching, resurfacing, leveling, and tuckpointing. In 5- and 10-lb. cartons, and 40-lb. drums. Tamms, Lyons, Ill. Circle 240 on Reader Service card



One-part acrylic caulk for difficult exterior applications requires no measuring or mixing. It can be gunned at temperatures as low as 30°F. West Chester Chemical, West Chester, Pa. Circle 241 on Reader Service card



Vinyl block filler for porous concrete fills voids and provides a smooth surface for finish coatings. One gallon covers from 75 to 150 sq. ft. Dries in about two hours. Pabco, San Francisco.

Circle 242 on Reader Service cara



Heatless weld kit combines two epoxy adhesives to bond 1) PVDC (polyvinyl dichloride) hot and cold water pipe to copper fittings; 2) copper to copper; and 3) plastic to plastic. Genova, Flint, Mich. Circle 244 on Reader Service card

New literature starts on p. 142



CHOOSE wanson BUILT-INS FOR KITCHEN GLAMOUR



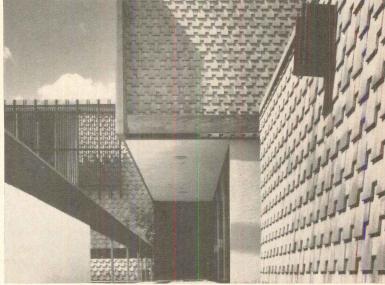
FREE...SEND TODAY!
Complete catalog of
"glamour" products to help
create better, more beautiful
kitchens and baths. Includes
"where to buy" list for your
locality.

SWANSON MANUFACTURING CO. 607 S. Washington St. Owosso, Mich. 48867 Free literature upon request ...

DELTA FAUCET COMPANY
GREENSBURG, INDIANA
DIVISION OF MASCO CORPORATION
IN CANADA: Delta Faucet of Canada Ltd. Rexdale, Ont.

People don't fall in love with the house.









They fall in love with something about it.

That something can be anything from a fine old tree in the yard to gold-plated knobs in the shower stall. Often it's the *line* of the house that gets prospects—the way it looks to them. And at them.

Red cedar shingles and handsplit shakes have a lot to do with line. Initially, their flexibility frees the hands of the architect to design, and the builder to build.

And once in place, these shingles and shakes speak a language of beauty and texture that homebuying prospects find easy to understand and difficult to resist. Solidly beneath the beauty lies the real sales clincher—red cedar's incredible wind-resistant

strength, insulative power and lifetime durability.

If you now build in an area where homes with red cedar shingles and handsplit shakes are being sold, you know what we're talking about, and if you don't, why not be the first in your area to find out?

Full Certi-Split, Certigrade and Certigroove specifications and application information appears in our Sweet's Light Construction Catalog listing, 3d/Re. Or write or call us:

RED CEDAR SHINGLE & HANDSPLIT SHAKE BUREAU

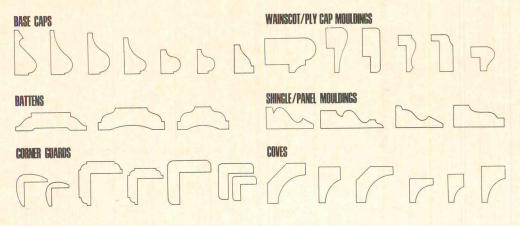
5510 White Building, Seattle, Washington 98101 (In Canada: 1477 West Pender Street, Vancouver 5, B.C.)







One of these labels under the bandsticks of the product you buy is your assurance it was made, inspected and graded under regulations of the Red Cedar Shingle & Handsplit Shake Bureau. Insist on these labels.



Molding patterns: Three producers write one standard

The three—Western Wood Molding Producers, Western Wood Products Assn., and Southern Pine Assn.—have combined forces to establish the first standard for the softwood molding industry.

The 24-page catalog includes all patterns

—from astragals to wainscot caps—currently being manufactured and distributed (see samples above).

For a copy, send 50¢ to Western Wood Molding Producers, Box 25278, Portland, Ore. 97225.

For copies of free literature, circle the indicated number on the Reader Service card, page 131.

SOUND-DEADENING BOARD. A noise-control system that uses 1/4" gypsumboard partitions is examined in a brochure with test results for several wall assemblies. Georgia-Pacific, Paoli, Pa. Circle 300 on Reader Service card

PLASTIC WALL COVERINGS. Three-dimensional coverings come in three patterns and four colors. A four-color product sheet includes installation photographs and artist's renderings of potential applications: wainscotting, doors, soffits, and accent panels. K-Lux, St. Louis. Circle 350 on Reader Service card

HARDWARE LINE. Ceramic, jeweled, brass and marble hardware lines—including switch plates, push plates, hinges, escutcheons, latch sets, and bath accessories—are the subjects of a four-page booklet. Includes a price list. Towne, New York City. Circle 351 on Reader Service card

ELECTRICAL BUILT-INS. Manufacturer's full line includes range-hood and exhaust fans, door chimes, music-intercom systems, heaters, vanity ensembles, and a food center. All are featured in an eight-page brochure. Nutone, Cincinnati, Ohio. Circle 301 on Reader Service card

HOME LIFTS. An illustrated catalog features a selection of home elevators and stair lifts. Inclinator, Harrisburg, Pa. Circle 302 on Reader Service card

PLYWOOD COMPONENTS. A 12-page summary of the designs offered includes short-form specifications for box beams, curved and flat stressed-skin panels, and folded plates. Plywood Fabricator Service, Tacoma, Wash. Circle 303 on Reader Service card

CERAMIC TILE. Catalog illustrates more than 100 patterns and color combinations for residential or commercial use. Three new floor tiles are displayed. U.S. Ceramic Tile, Canton, Ohio. *Circle 321 on Reader Service card*

RED CEDAR SIDING AND PANELING. Residential applications get the spotlight in a brochure that differentiates between types and grades.

Tables estimate the amount of siding needed to cover a 1,000-sq.-ft. wall area. Fastening and nailing methods are included. Western Red Cedar Lumber Assn., Portland, Ore. Circle 322 on Reader Service card

be equipped with a backhoe, angling backhoe, loader, clamshell, crane hook, jib, or fork. A brochure contains description, specifications, and working range diagrams. American Poclain, Rahway, N.J. Circle 305 on Reader Service card

BATHROOM ACCESSORIES. Recessed, concealed, or surface accessories—including towel bars and rings, soap and paper holders—are fashioned in solid brass with a satin finish. Product sheet also displays a vanity shelf and medicine cabinet in the same finish. Hall-Mack, Los Angeles. Circle 306 on Reader Service card

INSULATION BOARD. A line of insulation board for commercial use combines a core of rigid urethane foam with a variety of facings for specific applications. Items: roofing, plastic-coated wall board, plaster and drywall base, foundation insulation. Atlas, Wilmington, Del. *Circle 307 on Reader Service card*

DRAFTING TEMPLATES. Catalog shows a wide selection of templates for such details as plumbing fixtures and windows. Timely, Baltimore, Ohio. Circle 308 on Reader Service card

HARDWOOD FLOORING. Full-color product brochure displays solid hardwood floorings with specifications for each. Several patterns and wood choices are offered. Harris, Johnson City, Tenn. Circle 309 on Reader Service card

SOUND CONTROL. A guide for both floor and partition systems includes tips for added quiet conditioning and a summary of the FHA minimum standards for multi-family housing. Celotex, Tampa, Fla. Circle 310 on Reader Service card

POWER NAILING GUNS. Complete line—ranging from a lightweight tacker for stapling insulation to models that drive $2\frac{1}{2}$ "-long nails—is displayed in a four-page catalog. Includes FHA specifications for construction applications. Spotnails, Rolling Meadows, Ill. Circle 311 on Reader Service card

MASONRY WATERPROOFING. The characteristics of protective coatings in 27 colors are discussed in a brochure. For commercial use Sonneborn Building Prod., Des Plaines, Ill. Circle 312 on Reader Service card

concrete-form Plywood. Four-page booklet details the specifications for plywood that meets commercial construction standards TECO, Washington, D.C. Circle 313 on Reader Service card

seamless metal doors insulated with foamed-inplace urethane is examined in a 12-page catalog It includes detailed illustrations and specifications. Mesker Bros., Hazelwood, Mo. Circle 314 on Reader Service card

a 16-page booklet examine several admixtures Discussed: their effect on strength, durability volume change, watertightness, uniformity, and appearance. Master Builders, Cleveland, Ohio Circle 315 on Reader Service card

concrete form. A high-strength ribbed form for concrete roof and floor construction over steel supports is the subject of an information sheet Includes specifications. Republic Steel, Youngstown, Ohio. Circle 316 on Reader Service card

METAL SCREENS AND RAILINGS. Contemporary interior and exterior applications get the spotlight in a 16-page catalog. Items: colorful screens ranging in size from railing panels and counter facings to large-scale space dividers; solid poly-vinyl handrail moldings; and plastic clad railing posts. Julius Blum, Carlstadt, N.J. Circle 317 on Reader Service card

STAINLESS STEEL. Soft (i.e. easy-to-fabricate) stainless steel is the subject of a brochure. Applications include flashings, copings, down spouts expansion joints, gravel stops, gutters, and louvers Illustrations include suggested minimum gauges for stainless-steel roofing and flashing. Jones & Laughlin Steel, Detroit. Circle 319 on Reader Service card

prefinished interior wall paneling and color matched woodgrain molding is displayed in a full-color catalog. Celotex, Tampa, Fla. Circle 322 on Reader Service card

contractor pumps. Twenty-five self priming pumps with capacities from 5,000 to 90,000 gph are presented in a full-line catalog. The pumps move solids, sand, or mud; they may be used for heavy-duty ditch drainage, seepage control, process pumping, and continuous pumping of sludge, slurries, and debris. Kenco, Lorain Ohio. Circle 326 on Reader Service card

BUILDING MATERIALS. A wholesale catalog of building materials describes more than 10,000 items in 176 pages. Shipping policy: five day on all orders except customized items. Morgan Wightman, St. Louis. *Circle 327 on Reader Service card*

WASHER-DRYER COMBINATION. High-speed gas or electric models combine a washer and dryer in one unit less than 27" wide. Philoco Philadelphia. Circle 329 on Reader Service card

FREEZER-REFRIGERATOR. A no-defrosting freezer and refrigerator combination is the subject of a four-color information sheet. Specifications are included, Admiral, Chicago. Circle 33 on Reader Service card

American Originators homes



Most stains are easily wiped off the TEDLAR interior finish of Homasote Roof Decking—but even the harshest solvents and cleansing agents can be used safely.

American Originators, Inc. specializes in distinctively styled, solidly built homes. Homasote specializes in products that simplify achievement of that standard—with meaningful savings in construction time. The combination, therefore, is a natural winner.

American Originators' selection of Homasote Roof Decking with TEDLAR* for their homes in "Le Villiage Rustique" (Worthington, Ohio), for example, provides proof. Here, Homasote composition and design characteristics contribute weatherproof insulation, superior structural strength, fast application, and finished interior. Interior-side surface of TEDLAR results in a factory-finished ceiling of rich

true wood-grain appearance that has exceptional resistance to abrasion and stain and which never needs painting.

For full details about the advantages Homasote Products offer home builder and home owner, write Dept. BR-3 for the Homasote Building Product Selector Book.

Flexibility in roof-system design, structural strength, insulating values, and application ease are some of the other advantages found in Homasote Roof Decking.





Creatively designed and structurally sound American Originators homes emphasize features that generate extraordinary appeal to buyers.



Don Morrow, imaginative and practical designer, and President of American Originators, Inc., points to his use of white Kraft finish Homasote as another example of the unusually dramatic and tasteful interiors available with Homasote Roof Decking.

homasote Company

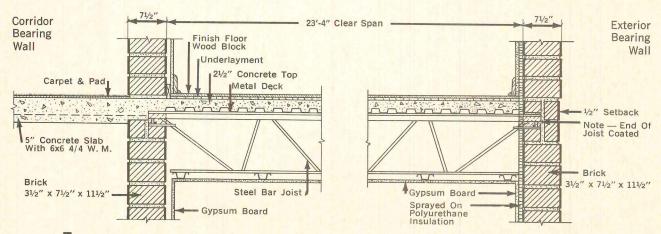


8" BRICK BEARING WALLS IN APARTMENTS

Oakcrest Towers III, Prince Georges County, Maryland

Architect/Bucher-Meyers & Associates Engineer/H. L. Keller & Associates Contractor/Banks Engineering Corporation 8" brick bearing walls are used through the entire eight floors of Oakcrest Towers III, located in Prince Georges County, Maryland, just outside Washington, D.C. Completed at a rate of one story per week, this apartment building contains 161,334 square feet of floor space. The contractor saved more than \$1 per square foot of floor area by using brick bearing walls rather than structural frame. (Speed of erection also offers a savings in interim financing.) Construction was simple because all brick wall thicknesses are identical from the foundations to the roof. In essence, Oak Crest Towers III is a series of eight one-story buildings, one atop another.

Maintenance of corridor and shear walls is eliminated because exposed brick serve as the interior finish and as the structural walls. The 4-hour fire resistance of the 8" brick wall provides safety and low insurance rates. Privacy, extremely important to tenants, comes from brick bearing walls with 58 decibels sound resistance. Oak Crest Towers III is another significant example of the modern brick bearing wall concept, providing structure, finish, fireproofing, and sound control.



For more information about this excitingly economical system of building with brick, call or write

Structural Clay Products Institute, 1520 18th Street NW, Washington, DC 20036 Area Code 202-483-4200

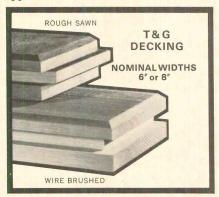
WHAT COLOR IS A WHITE FIR CEILING?

RANCH RED
SAGE BLUE
ANTIQUE GRAY
ADOBE TAN
CACTUS GREEN
RUSTIC BROWN
JADE
SNOW
SMOKE
SAND
SUN
SKY
SILVER
MOCCASIN
OR NATURAL

15 Prefinished Colors!

Select from 6 penetrating stains (top six colors), 8 pastel sealer tones or natural. Eliminate finishing time, materials cost, messy clean-up problems.

Potlatch factory coatings enhance natural grain appearance, provide matched color continuity from wall to wall and last far longer than jobsite applications.



All prefinished members are backsprayed with a water repellent preservative, slip sheeted and shipped in protective bundles. No sticker marks. Touchup colors are included with each order.

All Potlatch paneling, lumber and decking is kiln-dried. Potlatch 2-inch solid T & G decking is available endmatched with bevel ends to form an attractive end-vee when butted together.

3 Surface Textures!

Surf-sculptured "color brushed" surface is achieved by wire brushing the decking before application of pigmented pastel color tones. The natural beauty of grain configurations are emphasized by the resulting contrast in color tones and shadowed effect.

Saw-textured surface is created by rough sawing the exposed faces prior to application of the penetrating stains. The installed ceiling is one of rustic warmth that complements the architectural trend of designing with tactile building materials.

Smooth-planed surface of standard T&G decking can be specified prefinished in one of 8 pastel color tones or natural. All three types of solid decking have distinctive vee-line linear appearance.



Economy Plus!

Initial cost of solid T & G decking is nominal because it combines ceiling beauty and inherent insulation with structural strength and easy application. This product can also be used as floor decking and in solid sidewall construction.

Potlatch T & G decking is endmatched with bevel ends to speed installation and eliminate waste. Joints need not connect over bearings and only trim cutting is required. All members are comprised of sound, straight, selected kiln-dried lumber.



Contact your Potlatch Distributor for more information about T&G decking, solid wall paneling and other trendsetting products from the Potlatch Timberline.

ROUGHNECKS

International fork lifts defy dirty weather and raw,



cluttered job sites





GENTLE TOUCH. Hydraulic side-shift attachment (optional) moves the mast 3" right or left. The driver gets under a load fast, spots it precisely and backs away safely. Twin hydraulic circuits let him use both tilt and hoist controls at the same time without lag or fluid starvation.

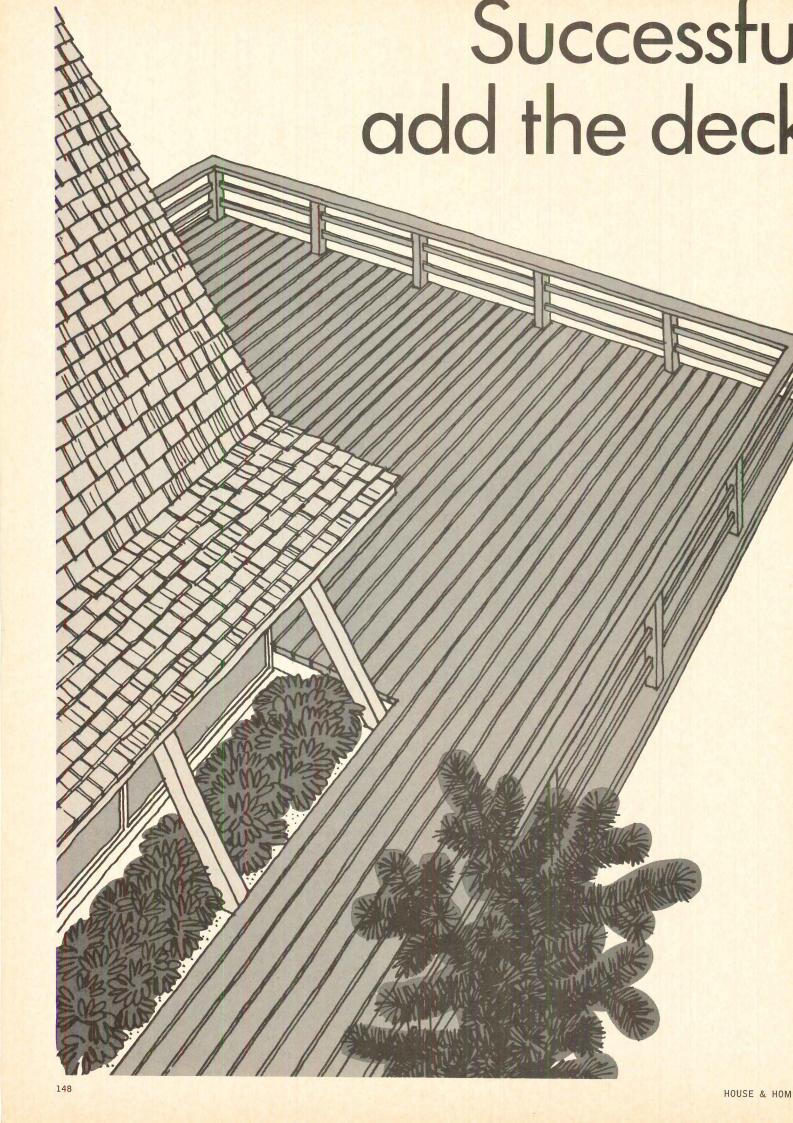


Twelve different International fork lift tractors are built especially for all-weather, rough-site transport, hoisting and stacking. And besides their obvious advantage over fork lift trucks, they're even more maneuverable than other fork lift tractors. Reverse speed is greater than forward. A driver can inch under his loads, back out fast. Independent rear wheel brakes permit tight turns.

And your IH dealer has an attractive offer on financing, too. One, two or three-year pay plans. Up to three deferred pay-

ments in slack seasons without penalty. Leasing. Leasing with purchase option. Or you suggest something. He wants to make a deal! International Harvester Company, Chicago 60611.

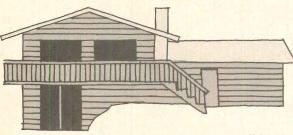
INTERNATIONAL HARVESTER COMPANY
The people who bring you the machines that work



builders agree: and sell the house.

Decks of Western Wood are real sales clinchers . . . from the Atlantic Seaboard to Southern California. They're right in step with the trend to gracious living, indoors and out. Western Wood decks can be designed right into the floor plan for outdoor living space that looks like it belongs. And decks are profitable options that sew up sales fast.

Here's what successful builders have to say about Western Wood decks.



From Chicago, Howard Clark, vice president, Kepler and Clark, Ltd., Westgate of the Meadows, Downer's Grove, Illinois:

"We know wood decks have strong customer appeal. So we design them into many models and offer them as options on the others. We use Western Wood for the decks, or balconies, because we know it'll take everything our polar winters can dish out for years and years.'

Schwartz, president, North American Development Company, builder and developer of Dunwoodie Estates, Putnam Green: "We used to think New England's traditional design pretty much ruled out decks. Not anymore. We've found that indooroutdoor living is

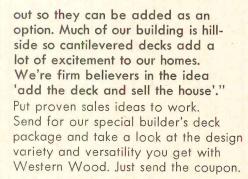
becoming a more

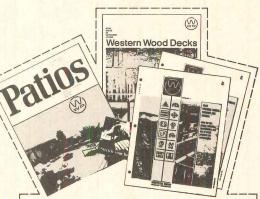
In Greenwich, Connecticut, Seymour

important feature of family life all the time. So much so that we include a big deck of Western Wood as an integral part of many of our luxury models. Wood decks will probably be "traditional" themselves around here, before long."

> And from Southern California, Arthur Ehrlich, vice president and marketing director, Kendall Construction Company, builders of Kevington in Thousand Oaks and Monte Vienda, in Camarillo:

"Out here, we've known for a long time that decks sell homes. Since outdoor living is a yearround activity, we design patios, decks and spacious balconies as an integral part of our architecture. Models that don't have decks as standard features are laid





Send me your free builder's kit of wood deck ideas.
NI

Address

Western Wood Products Association

Dept. HH-367, Yeon Building, Portland, Oregon 97204

MARCH 1967

House & Home ADVERTISERS' INDEX

Page				
Page 56	Admiral Corporation	108, 109	Kemper Brothers, Inc.	13
132W3	Ador Corp. (Sub. of Rusco	33	Kentile Floors, Inc.	148, 149
132M4, N8	Industries) Amcodyne & Company	121 26	Kingsberry Homes KitchenAid Home Dishwasher	54, 55
38, 39 58	American Olean Tile American Radiator & Standard	66, 67	Division (Hobart Mfg. Co.) Kitchen Kompact, Inc.	136, 137
	Sanitary Corp.	114, 115	Kohler Company	12
61-64	Andersen Corporation Armco Steel Corp.	51 128	Knape & Vogt Mfg. Co. Kool-O-Matic Corp.	
68, 69	Armstrong Cork Company	29	Kwikset (Division of	
2nd Cover	(Floor Division) Azrock Floor Products		Emhart Corp.)	
		65	Lennox Industries, Inc.	
30	B. F. Goodrich Chemical Co.	28	Logan Company	
132W6 53	Bangkok Industries Bell & Gossett—ITT			
22, <u>23</u> 57	Bethlehem Steel Corp. Bird & Son, Inc.	132W6A, W6B	Malta Mfg. Company	
128	Blu-Ray, Inc.	E1, E2 M4A, M4B		
25 44, 45	Bruce Co., Inc., E. L. Bryant Manufacturing	N1, N2		ADVERTISI
	Company	S6A, S6B 40, 43	Marbon Chemical Division	ATLANTA 30. Glenn P. Mac
		32	Marketing Information Network	(404) 875-052
132W2	Caesar Callan Homes, Inc.	118, 119	Masonite Corporation	BOSTON 021
3rd Cover	California Redwood Association Caloric Corp.	34, 35	Mobay Chemical Company Moe Light Division	James R. Scha McGraw Hill
12 15	Casings, Incorporated Certain-Teed Products Corp.	31	(Thomas Industries, Inc.) Mosaic Tile Company	607 Boylston S (617) 262-116
72	Chevrolet Motor Division	31	Mosaic The Company	CHICAGO 60
112	(General Motors Corp.) Connor Lumber & Land Co.	1.0	N. 7	Robert M. Bro
59 138, 139	Consoweld Corporation Crawford Door Company	1, 2	NuTone, Inc.	Ray W. Stodd Ave., (312) 60
150, 157	Crawford Boor Company			CLEVELAND
122NI9 A NI9D	Davidson's Lumber Company	19, 20	Ozite Corporation	Milton H. Ha 55 Public Squ
132N8A, N8B 140	Davidson's Lumber Company Delta Faucet Company			(216) 781-700
60 21	Dodge Truck Division Duo Fast Fastener Corp.	135	Paragon Swimming Pool Co., Inc.	DALLAS 752
132E7, N7	DuPont de Nemours & Co., Inc.,	107	Pease Woodwork Company	Richard Poole National Banl
\$3 49	E. I. (Building Products) DuPont de Nemours & Co.,	124 17	Plan Hold Corp. Ponderosa Pine Woodwork	(214) 747-972
	Inc., E. I. (Freon)	145 27	Potlatch Forests, Inc. Price Pfister Brass Mfg. Co.	DENVER 802 Edward C. W
			The Photos Brass Hills. Co.	(303) 255-548
110, 111 4th Cover	Edison Electric Institute Emerson Electric Co.	132W4	Rain Bird Sprinkler Mfg.	HOUSTON 7
	(Builder Products Division)		Corp./Rainy Sprinkler Sales	Kenneth G. C (713) 224-838
75 24	Empire Stove Company Engineered Products Co.	37, 132S1, SW1 S6, SW5	Rangaire Corp.	LOS ANGEL
		141	Red Cedar Shingle & Handsplit Shake Bureau	Donald Hanso (213) 482-545
132E4, E5, M2	Fabricated Products Div.	122, 123	Reynolds Metals Co.	NEW YORK
M3, N4, N5, S4 S5, SW2, SW3	(Allied Chemical Corp.)	52 11	Rez Company Ruberoid Company	Caswell Spear
132E3, M1	Fasco Industries, Inc.			500 Fifth Ave (212) 971-368
N6, S2	Float-Away Door Company	126	Scheirich Co., H. J.	PHILADELPI
132E6 132W5	Ford, Inc., Ivon R.	7 132W1	Sloane Mfg. Division, R. & G. Southern California Edison Co.	John C. Jacks
132MA-MD	Formica Corp. Fountain Lumber Company, Ed	144	Structural Clay Products	(215) 568-616
70, 71	Frigidaire Division (General Motors Corp.)	140	Institute Swanson Manufacturing Co.	PORTLAND
		36	Sweet's Catalog Service	Harry Abney, 222 S.W. Mor
129, 130	Georgia Pacific Corp.			(503) 223-511
220, 130	corp.	50 127	Thermasol, Ltd. Tile Council of America	SAN FRANC Robert A. Mi
24 21	Hager Hinge Company Holub Industries, Inc.	12/	2.10 Country of Famorica	(415) 362-460
143	Homasote Company	125	United States Gypsum Co.	
41, 42	Home Comfort Products Co.	133, 134	U. S. Plywood Corp.	DDADIIATIA
		73, 74	United States Steel Corp.	Vito De Stefa
53 124	ITT—Bell & Gossett Instant Landscape	132N3	Van-Ler Homes, Inc.	McGraw Hill, 330 West 42nd
146, 147	International Harvester Co.	1321\\ 117	Van-Ler Homes, Inc. Velsicol Chemical Corporation	New York, N (212) 971-320

The advertising index and reader service numbers published by HOUSE σ HOME is a service to its readers. HOUSE σ HOME does not assume responsibility to advertisers for errors or omissions.

W denotes Western edition M denotes Mid-Western edition N denotes North Central edition E denotes Eastern edition S denotes Southern edition SW denotes Southwest (Swing)

SING SALES STAFF

acNerland, 1375 Peachtree St 523

Weiser Lock Western Wood Products Association

Weyerhaeuser Company Whirlpool Corporation Wing Products

2116 haffer ll Bldg., n St. 160

50611 Brown; John L. Filson; Idard, 645 N. Michigan 664-5800

D 44113 Iall, Jr.; James O. Green; uare

201 ole, 1800 Republic nk Tower 721

0202 Weil III, 1700 Broadway,

77002 George, 2270 Humble Bldg.

ELES 90017 nson, 1125 W. Sixth St., 450

K 10036 are ve., 686

PHIA 19103 kson nter Plaza 161

97204 y, Mohawk Bldg., orrison St., 118

CISCO 94111 dierow, 225 California St.,

ON MANAGER Vito De Stefano McGraw Hill, Inc. 330 West 42nd St. New York, N. Y. 10036 (212) 971-3204