Goldsmith EDITORS ell C. Huntoon Jr. W. Rochon IATE EDITORS m J. Dukes ner Walker ANT EDITORS on Knight III n van Saun PARTMENT rd R. Berry, director nne Vlazny, assistant White, consultant RIAL ASSISTANTS Iane Davis **Kaknes** Stevely RIBUTING EDITORS Lalli w R. Mandala, Washington Thaler rke Wells RIAL CONSULTANT Jorcross JLTING ECONOMIST e A. Christie AW-HILL WORLD NEWS r Stanbury, director nestic and ational news bureaus TISING SALES MANAGER . Renouard ETING SERVICES MANAGER G. Hardwick LATION MANAGER D. Holbrook SHER E. Boddorf

& Home, January 1971, Vol. 39 No. 1. hed monthly by McGraw-Hill Inc. rr: James H. McGraw (1860-1948). iption rates, U.S. and possessions and at for individuals within circulation rations, \$8 per year, for others, \$15 per ll other countries, \$30 per year. Single f available, \$2. The publisher reserves ht to accept or reject any subscription.

ive, Editorial, Circulation, and Advertisices: McGraw-Hill, 330 West 42nd Street, York, N.Y. 10036. Telephone: 971-3333. class postage paid at Washington, D.C. additional mailing offices. Published at Eckington Place, N.E., Washington, D.C. Title ® in U.S. Patent Office. Copyright € y McGraw-Hill Inc. All rights reserved. The ts of this publication may not be reproduced in whole or in part without consent of copy-

wner. s of the McGraw-Hill Publications Company: t. Emery, President; J. Elton Tuohig, Senior resident; George H. Reppert, Group Vice Pres-Vice Presidents: Ralph Blackburn, Circulahn R. Callaham, Editorial, William P. Giglio, istration; David G. Jensen, Manuacturing; D. Luntz, Planning & Development; Joseph e, Marketing; Robert M. Wilhelmy, Finance.

s of the Corporation: Shelton Fisher, presioseph H. Allen, group vice president, publicaand business services; John J. Cooke, senior resident and secretary; Gordon W. McKinley, resident and treasurer.

sue of House & Home is published in national parate editions noted or allowed for as fol-Western W1-W6, Eastern E1-E2, Midwest M1orth Central N1-N2, Southern S1-S4, Swing W4.

aster: Please send form 3579 to Fulfillment er, House & Home, P.O. Box 430, Hightstown, 520.

House&Home

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

Volume 39 Number 1 / January 1971

FEATURES

- 91 Modular housing—it's here to stay And that's good. But let's not confuse fact with fancy—an editorial
- 92 Preview: new building materials and equipment for 1971 A House & Home shopping tour shows you 175 products—55 of them in color
- 106 Stuck with an unsaleable rental project? Convert it to condominium A detailed case study tells you why—and how—conversion can make sense
- 112 Four special projects for special multifamily markets They show how to satisfy such diverse groups as singles and empty-nesters

NEWS

- 4 President and Congress agree on \$3.3 billion for housing in '71
- 8 Interest rates take the big ride down—FHA rate cut
- 12 Nation's newest mortgage markets run into some problems
- 16 For the savings and loans—more money and more ways to help builder
- 18 Big utilities taking cautious step into housing
- 20 Mexican builder uses tenants' money to put up apartments for them
- 24 Tenants in revolt—and how apartment owner can head them off
- 32 A builder shows how to create an aura of elegance and privilege
- 34 Levitt, the town builder, opens a city-sized community in Florida
- 46 What will the NAHB talk about at the Houston convention? Here's the latest
- 52 IBEC convention: well attended, but there were few innovations
- 58 A new modular high-rise system that goes up on jacks
- 66 Easy way to move modulars: float them through the plant on air casters
- 70 Lightweight steel framing breaks the three-story barrier for these apartments
- 78 This turnkey public housing capitalizes on a skinny, quarter-acre site
- 82 How to avoid a uniform look in a row of almost uniform duplex houses

DEPARTMENTS

- 18 Housing-stock prices
- 86 The apartment scene
- 62 The modular scene
- 80 The legal scene
- 88 Letters
- 145 Reader service card
- 130 Products
- 188 Literature
- 192 Advertisers index

The President and Congress compromise on \$3.3 billion for housing in 71

HUD BUDGET FOR FISCAL 1971

The Department of Housing after waiting for several months —finally got its money for fiscal 1971.

Congress, speeding toward adjournment early in December, enacted the HUD appropriations measure—a \$3.3 billion compromise version of the legislation that President Nixon had vetoed two months earlier.

The legislation, shaved by \$300 million by Congress, won quick White House approval even though the funding was more than the Administration had sought.

Earlier veto. President Nixon vetoed the original legislation, carried as part of the \$17 billion Independent Offices Appropriations bill, calling the measure inflationary.

The White House objected to two parts in the original version of the bill-urban renewal, which Congress voted to fund to the tune of \$1.35 billion, and water and sewer facilities grants, awarded \$500 million in the vetoed bill. The Administration had sought only \$1 billion for urban renewal and \$150 million for water and sewer grants. In revising the measure, the House and Senate agreed to pare the funding for both programs-but not down to the level asked for by the Administration.

Compromise. A compromise was worked out, providing \$1.2 billion for urban renewal and \$350 million for water and sewer grants. This bill is \$300 million more than was sought by the Administration. It was viewed by Congress as "a reasonable compromise."

The revised measure moved through the House without difficulty and the Senate with

(in mil	lions)		
	President's request	Money voted in bill vetoed in September	Money voted in bill approved in December
Renewal and housing assistance			
Grants for neighborhood facilities	40	40	40
Urban renewal programs	1,000	1,350	1,200
Rehab loan fund	35 654.5	35 654.5	35 654.5
Low-rent annual housing contrib. Grants for tenant services College housing	5	0	0
Increased limitation for annual contract authorization Cumulative limitation for annual contract	(9.3)	(9.3)	(9.3)
authorization	(26.3)	(26.3)	(26.3)
Appropriation for payment Salaries and expenses	2.5 45	0 43.5	0 43.5
Total renewal and housing assistance	1,782	2,123	1,973
Metropolitan development Comprehensive planning grants	60	50	50
Community development training and urban			
fellowship programs	3.5	3.5	3.5
New community assistance	10 75	5 75	5 75
Open space land programs Grants for basic water and sewer facilities	150	500	350
Salaries and expenses	8.7	8	8
Total metropolitan development Model Cities and governmental relations	307.2	641.5	491.5
Model Cities programs	575	575	575
Salaries and expenses Appropriation	.7	.6	6
By transfer	(9.3)	(8.3)	(8.3)
Total Model cities and govt. relations	575.7	575.6	575.6
Urban technology and research	55	30	30
Mortgage credit Home ownership and rental housing as- sistance Home ownership assistance, increased limitation for annual contract authoriza- tion: 1971 1972	(140) (140)	(130) 0	(130) 0
Cumulative annual contract authoriza-	(225)	(205)	(205)
tion: 1971 Rental housing assistance, increased limi-	(335)	(325)	(325)
tation for annual authorization: 1971 1972	(145) (145)	(135) 0	(135) 0
Cumulative annual contract authorization: 1971	(335)	(325)	(325)
Appropriation for payments	115.1	115.1	115.1
Rent supplement program			
Increased limitation for annual contract	(75)	(55)	(55)
authorization: 1971 1972	(75)	(00)	0
Cumulative annual contract authorization:			
1971	(197)	(177)	(177)
Appropriation for payments Low and moderate income sponsor fund	46.6	46.6	46.6 3
Loans for housing and related facilities for		Ŭ	
elderly or handicapped families Salaries and expenses, FHA	0 6.29	10 3.5	10 3.5
Total mortgage credit	172.99	178.20	178.20
Federal insurance administration	172.33	170.20	TTOLE
Flood insurance	6.05	5	5
Fair housing	11.3	8	8
Department management	23.75	23	23
Participation sales	E0.70	1 50.70	1 50 704
Payment of participation sales insufficiency National Home Ownership Foundation	58.78		1 58.781
TOTAL DEPARTMENT OF HUD	2,993.02	1 3,643.08	1 3,343.081
Federal Home Loan Bank Board Interest adjustment payments	250	85	85

only minor trouble. Senator J. W. Fulbright (D, Ark.), did ask that the water and sewer grant funding be increased to \$500 million—the level at which the White House had objected.

Fulbright argued that the Administration's economic policies have changed since the

From a builders' economist: second thoughts on a boom in private housin

One of housing's leading economists warns that easier mortgage money alone will not be enough to restore vigor to suburban single-family housing.

He said consumers are still resisting rising costs.

Saul Klaman, vice president and chief economist for the National Assn. of Savings Banks, told the group's mid-winter meeting that indications of easier money, now appearing, would ordinarily support pre-

dictions of a strong housing upturn. But he warned:

"We are not so sure.

"We do expect a significant increase in *total* 1971 housing activity, with starts rising by perhaps 20%. But the compelling force behind this rise will be the federally subsidized housing sector, not the private homebuilding sector we have depended upon in the past...

"When all the numbers are in, they will probably show that one of every four housing units started in 1970 carried a federal subsidy to buyers and renters. In 1968 and 1969, only 10 to 12% of total starts carried a subsidy and in the first half of the 1960s, subvention programs amounted to less than 4%. The subsidized sector has clearly become a major force in housing. It will continue to be in 1971, when over 500,000 subsidized units are expected to be started, compared with 350,000

veto, and that President Nio was not seeking a more exp sionary economy. But with journment of Congress ne ing, the Senate rejected this.

Cuts under portest. In House, the Appropritions Cc mittee made it plain that cuts were made to satisfy White House. The commit report on the legislation no that "in view of the veto, committee...now recommen \$1.2 billion for urban renew The \$200 million increase o the budget ... should be of r terial assistance to many cc munities in updating url areas throughout the natio

As for the water and sev facilities grants, the Ho panel noted "the demand water and sewer projects very great. The committee advised that applications expected to far exceed recommended appropriation.

The committee further no that it had reduced the appr riation to \$350 million, "in effort to meet the objections the President."

Subsidies to S&Ls. Oth than the urban renewal a water and sewer grant adju ments the measure is unchar ed from that previously sent the White House. Aside fr HUD and other independ offices, the bill contains appropriation of \$85 mill to the Federal Home Lo Bank Board.

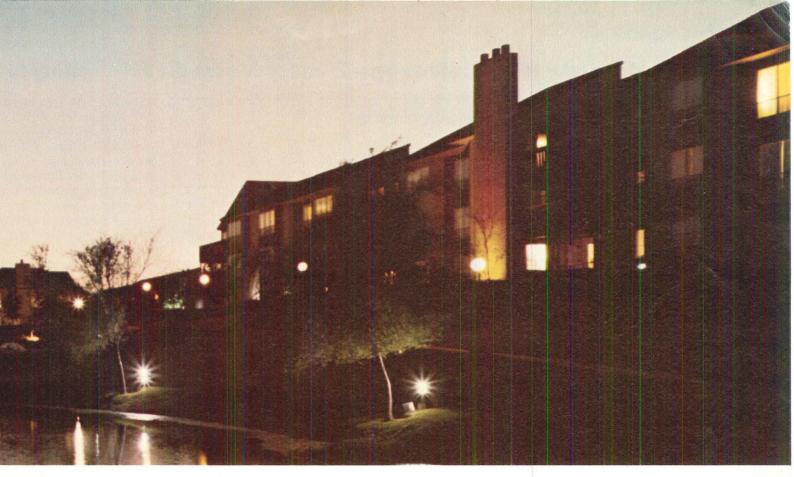
The Bank Board's money is be used as a subsidy on advan (loans) made by regional F eral Home Loan Banks to s ings and loan associations. Administration has asked \$250 million for this program —ANDREW R. MAND.

Washing

in 1970.

"Half of America's fami have been declared eligible In the non-subsidized privsector, economic and de graphic forces continue to vor the apartment house r ket.

"So we are less sangu than others about prospects non-subsidized single-fan homebuilding, even in the of a more favorable finan climate."



Every meal can be a picnic. u bring the outside inside to the g area and kitchen. And PPG *ulite K* tempered safety glass is the way to hold those indoor picnics parties.

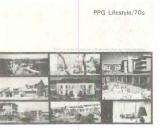
The private balcony. Every I unit at Willow Creek has ered glass sliding doors that open private balcony or fenced patio. n indoor-outdoor feature that residents into the middle of their tiful manmade environment.

Is there a fantastic view in plans? Then plan it with PPG in mind—and merchandise it all. into safe and clear *Herculite K.* ther-beating *Twindow*[®] insulating glass. And *High-Fidelity* mirrors, to brighten everything up a bit.

PPG INDUSTRIES, Inc. Department HH-1-2 One Gateway Center Pittsburgh, Pa. 15222

D.

PPG is Chemicals, Minerals, Fiber Glass, Paints and Glass. So far.



PPG Industries, "PPG Lifestyle/70s" Department HH-1-2 One Gateway Center, Pittsburgh, Pa. 15222

Gentlemen: Please send me a free copy of "PPG Lifestyle/70s" at the following address:

Name	
Address	
City	
State	Zip





CIRCLE 7 ON READER SERVICE CARD





Interest rates take the big ride down—Romney lowers the FHA ceiling to &

The mortgage market is catching up with what's been happening in the nation's money and capital markets—rates are heading down.

After lagging for months behind an improving bond market, prices for FHA and VA home loans began to increase throughout the country. And as the Nixon administration turned its attention to the sagging economy, Housing Secretary George Romney announced a reduction in the FHA mortgage interest ceiling to 8%. It had been at its historic peak of 8½% since last January 5 *(see chart).*

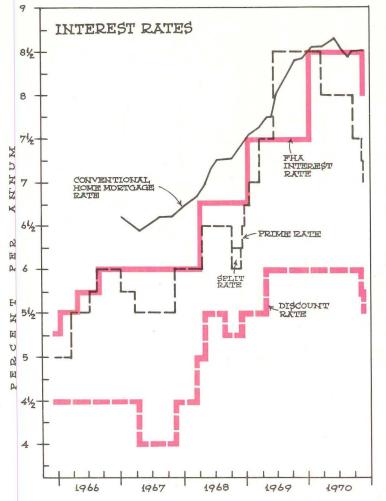
To most mortgage men the announcement was not unexpected. To some, it was overdue. But in most quarters the change was welcomed as a timely move.

The downsweep. It was just one day earlier that the Federal Reserve Board had lowered the nation's discount rate to 51/2 % -the second change in a month. And just days before that, the commercial banks' prime rate, charged for loans to their safest corporate customers, was reduced for the second time in eight days—to 7%. Treasury bill rates were running at levels close to 5% and federal agency issues sold far below 7% yields as compared with 8.75% less than a year earlier.

In the mortgage market, the Federal National Mortgage Association's auctions were indicating discounts close to two points—historically the level at which the FHA rate is changed.

Reactions. Mortgage men were in the main delighted when the Secretary moved the rate down by only ½%. The last time Romney adjusted the rate, he moved it up by a full point. The half point change is not expected to push points on home loans to too high a level —and private investors, now feeling their way back into home mortgages, are not likely to disappear as they would if discounts became prohibitive once again.

Indeed, Oliver H. Jones, executive vice president of the mortgage Bankers Association of America, who had vigorously objected to a possible rate change just a month before, said the action "was the right one to make."



Non-political. Romney had told the MBA at its Miami Beach convention in late October that there would be "no politically inspired rate changes," a reference to rumors he would reduce the FHA rate prior to the November 3 election and for political purposes. Mortgage bankers interrupted his speech to applaud that statement-but they now apparently agree the rate needed to be changed.

The MBA's president, Everett Spelman, says the action taken to lower the FHA and VA rates "is timely and appropriate." He pointed out that the significant reduction in long-term interest rates on corporate and government securities in recent weeks, coupled with an 8% mortgage, will increase both the availability and demand for mortgage funds in the months ahead. This, he said, should contribute to the recovery of the general economy.

Jones, who is an economist, believes the half-point rate change is most significant "because we're in a moving market."

"Any more would have been

too much at this time," he said. "I would expect discounts on home loans to increase somewhat because of the rate change, but then, because the market is improving, they should decrease to about where they were before the change."

Effect on housing. Whether the change will actually produce an increase in housing activity is a matter of conjecture. While Louis R. Barba, president of the National Association of Home Builders, says the rate reduction undoubtedly will have a good effect on starts, other experts believe any real improvement in housing will have to await deeper drops in mortgage and bond rates.

President Irving Rose of Detroit's Advance Mortgage Co. notes that the most serious deterrent to an improvement in starts is housing costs.

"Mortgage costs, and housing costs, too, are now so high," Rose says, "that only a steep decline in mortgage rates will have a significant effect on the housing market. And that may not come until late next year."

Rose's views appear in Advance's housing market report, published just days before rate change. The report no that mortgage rates had dropj only slightly from their pe At the same time, the stu goes on: "Since the last cont cyclical housing boom, in 19 the average costs of buying home have gone up 85% wh average earnings have increas by only 35%."

Rose says that bond rates v have to fall at least one is percentage point before more gage rates are free to drop s nificantly—and he doesn't pect this to happen before m 1971.

Romney's view. Romney, making the rate change, in cated he had been watching movements of other mark before taking action.

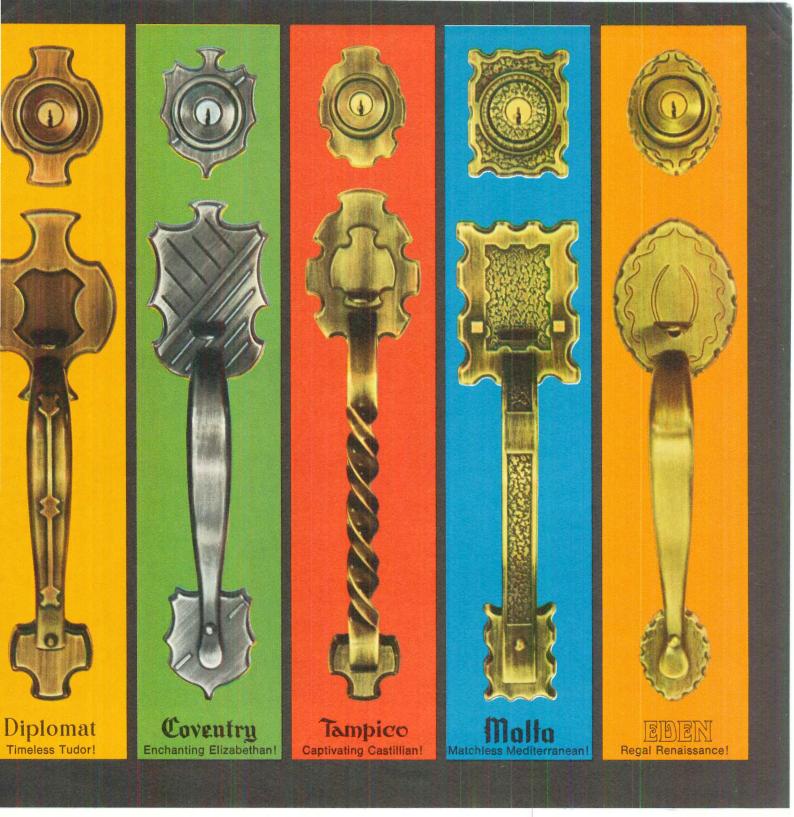
"The sharp declines that has already taken place in ot interest rates and the gene outlook for rates finally map possible a lower FHA mortga ceiling without causing eit an undue rise in mortgage of counts or an undue disrupt: of the flow of funds availa for FHA mortgages," he said

The flow of funds to FHA a vA mortgages has increased recent months—due mainly Fanny May and savings and lo associations, which have perienced large savings inflor

The S&L industry agreed w Romney that the rate chan should benefit housing. C Bentley, president of the I tional League of Insured Savin Associations, expects the act will bring more homebuyers the market.

"The lower rate, added to creased savings flows to savi and loan associations," Be ley said, "is likely to produc happy combination of m housing funds at more reas able rates to attract buyers."

Higher discounts. Fanny M for its part, decided to call its auction for the week up hearing of the rate change. T association's president, Oak Hunter, said seller-servicers I been anticipating the r change. As a result, he sa only \$116.5 million in t were offered to Fanny May the auction held the day put to the reduction. Discounts six-month commitments cal in at about $3\frac{1}{2}$ in the auction —A.



NEW KWIK5ET ENTRANCE HANDLE5ET5 can change a dull doorway into an elegant entrance.

eriors can be beautiful, but the important first impression of a home or apartment is from the entryway. That's why Kwikset has ined five new distinctively different sectional entrance handlesets. reate a lasting first impression, each design is complimentary mood, a period or a setting from Provincial to Mediterranean. For ncing exterior decor, a wide selection of finishes, including the atic new etched and antique, is available. Any of which will make egant entry of lasting beauty. Yet, each is much more than just beautiful, *they are custom crafted from solid brass forgings* and guaranteed to provide long years of dependable, trouble-free performance. In addition, important extra security is provided by an all new rugged cylinder deadlock with a massive pry-proof deadbolt... a solid brass five pin-tumbler keyed cylinder and a heavy-duty steel interior mechanism. New Kwikset Entrance Handlesets may be installed in the same fast, trouble-free way as all other Kwikset Locksets.

kwikset 🛛 🕹 K locksets

America's Largest Selling Residential Locksets KWIKSET SALES AND SERVICE COMPANY ANAHEIM, CALIFORNIA A SUBSIDIARY OF EMHART CORPORATION



res like the tower alconies, fences.

nts by apartment ers and archilifornia to Conthe benefits of

e more it fits into me idings and terrain of Dance ...

Viar Wi

West

Creat

501

facto

alker, Director of Plan-

e to construct units all wood, whereas, with

Looking for some fresh apartment Send for these. ideas?

Owner-Bui ports on the in Executiv Washington, "We wanted t

mosphere with We wanted imp. in well-landsca vide a parklike e city.

"Western Wood ; a light stain to sh wood. There is n age ... and no extern On the contrary, the

A great new booklet of dramatic apartment ideas. Interiors and exteriors. Traditional and contemporary. An exciting new idea file compiled for you from all over the country by the Western Wood Products Association.

The focus is on prize-winning, prestige apartments. Better designs, better construction and better earnings. But don't just read about it here.

Send for your copy of this new full-color Western Wood booklet now! It's FREE!

NAME ADDRESS

FIRM



Western Wood Products Association Dept. H&H-171, Yeon Building, Portland, Oregon 97204

ZIP

Hore in terms of ter

stitt. Lake Terrace is the t-family project we have have

mily

Iom-

surface

the succ

planned

Square w ect for the

WWPA's 1970 Grading Rules, approved by the Board of Review of the American Lumber Standards Committee, incorporate provisions of the new American Lumber Standard PS20-70, which establishes new lumber sizes, grades and identification requirements. They are now available from WWPA at \$1 per copy.

STATE

CIRCLE 10 ON READER SERVICE CARD

One of a series presented by the American Wood Council.



Architect Saul Zaik tells ern Wood was selected for interior and exterior finist resort condominium:

paneling because this condon in a remote vacation area, would subject to intensive wear, and is easily maintained. We just the paneling, and eliminated the of maintaining a painted surface addition, the use of wood panel permitted the walls to be partia pre-fabricated.

"The first unit built was used as model and held up extremely well after being open to the public for over a year. We feel that people react to wood paneling more favorably than

to other wall surfaces."

"We chose Western Wood for

ssential to

Owner/builder/developer: The Irvine Company Architects and Planning Consultants: Architects and Planning Consultants: Fisher-Friedman Associates Landscape Architects Sasaki, Walker Associates, Inc.

New mortgage markets running into some problems—and some criticism

Although the long-awaited secondary markets for conventional mortgages have finally moved off dead center at the Federal National Mortgage Association and the Federal Home Loan Mortgage Corp., mortgage men are not looking at the new conventional clearing houses as the answer to all their problems.

Indeed, the two secondary markets are seen only as "a step in the right direction" by most experts.

In fact, some say, unless restrictions are lifted, there may never be a true secondary market for the conventional mortgage loan.

Curbs on trading. Home financing experts have long held that a secondary market facility, where conventional mortgages could be traded freely, would be an enormous asset to the entire home mortgage market.

When Congress enacted the Emergency Home Finance Act of 1970, however, which gave authority for FNMA and the FHLMC to operate such facilities, the lawmakers imposed loan and trading restrictions that are already causing consternation in mortgage circles.

The loan limit on mortgages that can be traded in the secondary market is \$33,000, and no loan can be more than one year old. These and other restrictions are raising questions as to just how much of a benefit the new central clearing houses will be.

Supporters. Of course, President Oakley Hunter of FNMA and Chairman Preston Martin of the FHLMC have both lauded their programs as prospective



EONOMIST KLAMAN 'Let's not delude ourselves'

major aids to home financing. Hunter has pledged Fanny May to buy from \$300 million to \$500 million of conventional loans through an auction system in 1971. The program will begin in February.

While Martin has no dollar target as yet, he has said the FHLMC's conventional mortgage program "will be substantial." Already the FHLMC has begun a program of buying and selling loan participations from member savings and loan associations. Future plans include the permission for commercial banks and savings banks to do business with the mortgage corporation.

Servicing dispute. But the FHLMC has continued its restriction against mortgage banker servicing—and this, too, has added to complaints about the system before it has really gotten under way.

Officials of the Mortgage Bankers Association have even indicated that they may take their case to Congress to force the mortgage corporation to permit servicing by someone other than the seller of the loan.



Mortgage Banker Lapin 'All we have is a parallel'

While the MBA debates this question with Chairman Martin and his staff, it is known that the Senate is becoming concerned over other possible problems connected with the secondary mortgage market—particularly as it relates to the FNMA mortgage form.

'Inequities.' One Senate aide said that problems have arisen over "obvious inequities between the borrower and the lender." The aide stressed prepayment penalties and delayed charges connected with the Fanny May operation, and he indicated the Senate would seek "a more equitable arrangement" for the borrower.

"The Fanny May provisions in these areas are tougher than those required by the FHA," the aide said. "This is a program that has government backing, and we should attempt to give the consumer a better shake than he is getting from this initial effort."

Criticism. The loan limit of \$33,000 may also bring problems to the program, says Fanny May's former president, Raymond H. Lapin.

Lapin, now president of R.H.

Lapin & Co., a San Francise mortgage banking house, cotends that the limit is simp not realistic for convention loans. He explains:

"When we began thinkin about this at Fanny May, we d so with the thought that a co ventional loan program cou take some pressure off the FH. The FHA could then concentra on the low-income subsidy pr grams.

"With this limit imposed of the program, however, all v have is a parallel to the FHA pr gram."

Lapin notes, however, th the attempts to standardize tl conventional mortgage cou prove of great benefit to hou ing markets around the cou try.

'A beginning.' Another exper Saul B. Klaman, vice preside: and chief economist of the N tional Association of Mutu Savings Banks, agreed th standardization of the convetional loan "makes the effor worthwhile."

Klaman added, however:

"Let's not delude ourselv into thinking we have a re secondary market here. It is step in the right direction, b by no stretch of the imaginatic can Fanny May's operation 1 termed a true secondary mark in conventional mortgages.

"So long as these mortgag cannot be bought and so freely, without the restriction such as the one-year age limit of loans, we don't have the liqui ity needed for a true seconda market.

"About the best we can s. at this point, I think, is th we have made a beginning.". —A.I

Pennsylvania sues to force five builders to stop polluting state's streams

The Commonwealth of Pennsylvania has filed a precedentsetting suit against five Pittsburgh builders.

The defendants are Ryan Homes Inc., Crawford Homes Corp., the Toro Development Co., Block Homes Inc., and the Swift Development Co.

The suit says soil piles up at the builders' worksites and runs off into Turtle Creek when it rains, causing siltation.

The suit represents the first legal test of the state's power

to control siltation under Pennsylvaina's Clean Streams Act. Section 401 makes it unlawful for anyone to put into the waters or permit to flow into the waters from his property "any substance of any kind or character resulting in pollution."

The suit says siltation contaminates the state's water by changing its chemical properties, altering its color and taste, and rendering it unfit for fish propagation.

The builders say they had no

warning of the action.

Jay Baldwin, president of Swift Development, denied the state's charge: "We are not in violation of any laws at our Alpine Village Development in Monroeville, as far as we know."

A Ryan Homes spokesman said merely: "This is an entirely new proceeding. We are not familiar with it, and we have turned it over to our attorneys."

Calvin D. Crawford, president of Crawford Homes, said of the suit: "It is going to set a precedent across the nation."

But Crawford defended h own operation. He said t hillsides of his building sit were seeded immediately aft excavation, holding silt rund to a minimum.

"I don't see where we ha willfully or neglectfully pe mitted any silt to go into t stream," he said. "There is n more runoff in our plan the there is in any other plan in t nation." —STEVE LOMA McGraw-Hill News, Pittsburg



We make products that make uilding a little easier...a little etter looking...and a lot more desirable. And we built a house to prove it.

There are more than fifty Du Pont products in special show house. Fascinating new products h as CORIAN*—a Du Pont engineered product that dles and performs in bathrooms and kitchens as material ever has. Equally innovative is the millwork nolded Du Pont Nylon—from shutters and bifold ors to pilasters and window caps.

But whatever the Du Pont product, the key is

performance. If you'd like to know more about our products for the building industry, write to us: Du Pont Company, Building Products Division, Room 8959, Wilmington, Delaware 19898.

You can see our house and the extraordinary array of Du Pont products that built it at the NAHB Show in Houston, Texas, January 17-21.

*Du Pont registered trademark for its line of methacrylate building products.

DUPOND BUILDING PRODUCTS

NEWS/'FINANCE

Nation's S&Ls on the upbeat-more money and ways to assist builders

Delegates to the 78th annual convention of the U.S. Savings and Loan League, who braved a San Francisco drizzle to talk about the industry's worries, found that lots of the clouds had silver linings after all.

Good news came from:

 Preston Martin, chairman of the Federal Home Loan Bank Board, who announced programs to facilitate savings and loan participation in a new secondary mortgage market; and a more flexible advances policy.

 Undersecretary of the Treasury Charles E. Walker, who described a proposed Internal Revenue Service regulation that will make it easier for associations to sell mortgages into secondary markets, and who told a press conference that Regulation Q may be extended. That should keep interest rates under control and protect deposits in S&LS.

• Wright Patman, chairman of the House Banking and Currency Committee, who promised to introduce legislation broadening the industry's role in lending.

Biggest conclave. A recordbreaking 6,000 delegates, wives, and guests gathered at the Masonic Memorial Temple and Nob Hill hotels Nov. 8-12 for the discussions.

Martin challenged the lenders to increase housing construction in 1971 by taking advantage of the Board's new programs. He added:

"This is an economic moment in which a little slack in credit gives a much-needed opening for housing finance."

Emphasizing the Board's interest in low- and moderateincome housing, Martin told the savings and loans:

"We'll buy their mortgages and we'll lend them the funds to re-lend. In '71, we'll begin subsidizing interest rates to borrowers. We encourage lenders to go into new markets in their states and lend, into inner cities and lend, and to utilize the savings and loans that are already operating in inner city to service mortgages newlyloaned there."

New secondary market. Martin offered some ways to get the financing job done.

The newly-formed Federal Home Loan Mortgage Corp.,



TREASURY'S WALKER Says Regulation Q will stay

created under authority of the **Emergency Home Finance Act** of 1970, will buy \$1 billion worth of FHA-VA mortgages in 1971, and will follow this with additional commitments to buy conventional mortgage participations. Sellers will service the loans.

'We're saying to this industry, here's a billion dollars on the counter. Get out and make these mortgages, because we are underwriting the mortgage market, along with our sister agency, the Federal National Mortgage Association," Martin declared.

Martin declined to estimate how much conventional paper the new mortgage corporation will buy, but he hopes it will top the \$1 billion for FHA-VA mortgages alone.

Servicing dispute. Controversy has developed over the FHLMC ruling that sals must service the loans they originate for the secondary market. This eliminates a lucrative role for the mortgage bankers, longtime friends of the S&L men, and unhappiness has been reported from both sides.

One industry leader described the reaction of savings and loans

Next Capitol architect may be a plumber

HELP WANTED Plumber of the Capitol-no exp. nec. Bkgrd in politics helpful. Architects only need apply at 1600 Penna. Ave. or Capitol Hill.

Reacting to recent rumors that President Nixon is about to appoint lame-duck Rep. William H. Ayres (R-Ohio), a former plumber, as Architect of the Capitol, Rep. Andrew Jacobs



THE HOUSE'S PATMAN Pledges new laws to aid S&Ls

to the servicing requirement as "favorable, but not terribly enthusiastic." But he has no doubt they will participate.

Money for S&Ls. Martin outlined other Home Loan Bank plans:

• The Board's advances policy, by which money is channeled into housing by Home Loan Banks to savings and loan associations, will be made more flexible. A new policy will stress long-term advances on this basis: (1) firm differentiation between short- and long-term advances; (2) use of firm commitments on a fee basis; (3) pricing advances at a fixed as well as variable rate, with emphasis on the fixed rate; (4) use of Congressional subsidy, for refunding specially priced advances and for moderate- and lowincome housing.

 Under the Emergency Housing Act, \$250 million has been authorized to subsidize the interest rate for Federal Home Loan Bank advances which are to be invested in mortgage financing for moderate- and low-income housing. Martin estimates \$80 to \$85 million may be available for these subsidies in 1971, after

Jr. (D-Ind.) has introduced the

of the Capitol shall be an archi-

tect, or, in the alternative, the

Physician of the Capitol shall

Were he to be named, Rep.

Ayres would succeed the late

J. George Stewart, another for-

mer Congressman and non-

"Resolved, that the Architect

following resolution:

not be a physician."

architect.

Bids S&Ls help house poor Congress passes the appropr.

BANK BOARD'S MARTIN

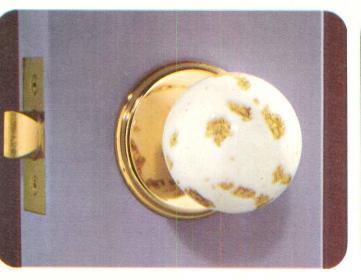
tion bill for this purpose. A proposed regulato change would increase t amount of funds which savin and loan associations can le for housing nationwide, fro 5% to 10%.

 Another change would performed and performed and performance and mit sals to expand their lendi territories to a radius of 1 miles from any branch or age cy. The limit is now 100 mil from home offices.

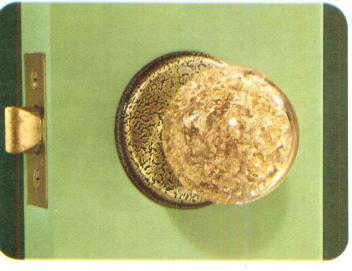
• The associations are bei urged to form service corpo tions, either alone or in group which would make it easier participate in various fede and regional housing program according to FHLBB memb Thomas Hal Clark. Patm (D., Tex.) said he would int duce legislation to set up National Development Bar which would draw on pensi funds and foundations to p vide money for housing loans poor families.

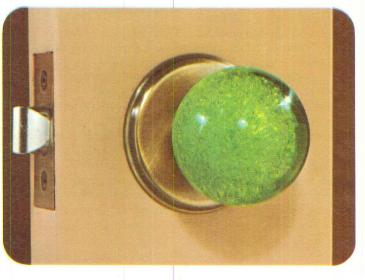
Patman said he would al draft an omnibus bill to pla the savings and loan indust on a more equal footing with financial competitors.

The legislation would all associations to offer comple checking account servic make more consumer loa particularly for househo items; let them share in posits of tax funds by t Treasury; provide 100% ins ance by the Federal Savings a Loan Insurance Corp. for all posits of local public agenc in savings and loan association and give associations full account to the Federal Reserve discou -JENNESS KEE window. McGraw-Hill World Nev San Francis











Weiser GA Series are available in three sizes: large knob is $2\frac{1}{8}''$ diameter; middle size knob is $1\frac{3}{4}''$ and small knob is $1\frac{1}{4}''$ diameter.

Locks to match this exciting age of color

Putting Weiser GA Series locks in the home is using color with imagination. These exquisite new crystal like lock creations scintillate with color . . . blend in beautifully with modern door treatments like those shown above. But don't stop with doors. Weiser GA Series are available in three different sizes for bi-folds, closets, cabinets, drawers. You can match each room separately or color-key the entire home. Now you can say "this home is a gem"—and mean it!



WEISER COMPANY • SOUTH GATE, CALIFORNIA DIVISION OF NORRIS INDUSTRIES

"LOCKING-BY-KNOB" CONVENIENCE IS EXCLUSIVE WITH WEISER

Utilities develop housing to preserve their market in blighted city areas

Some of the utilities that were content to supply service to the homes of customers are beginning to supply the homes as well.

And they are encouraging others to join them.

Their goal is to preserve their market for services in the decaying areas of their cities.

The emphasis has been on building and remodeling of lowand moderate-income housing, but plans are shaping up for the development of two new towns

So far, five builders-utilities have remodeled 2,800 units and built 669 new homes. And utilities plan 1,000 more new units.

But the utilities claim they are hampered by state and federal agencies that regulate their activities and profits.

Housing council. A Utilities Housing Council was organized as a promotional group last summer by 11 major utilities. The roll included such prestigious names as American Telephone and Telegraph, General Telephone and Electronics, Consolidated Edison of New York, and Southern California Gas. The council hopes to ease the regulatory strictures and to encourage more utilities to move into housing.

Five have actually done so. But of those, Mississippi Power and Light has sold its housing interests and Michigan Consolidated Gas may follow suit.

The other entries are Niagara Mohawk Power, Florida Gas, and Eastern Gas and Fuel Associates.

The obstacles. The Michigan and Mississippi utilities, both subsidiaries of interstate holding companies,* recently ran afoul of the Securities and Exchange Commission (News, Aug.).

The sec ruled in June that housing is not among the "other business" permitted under the Public Utilities Holding Act of 1935. The act gives the SEC authority over interstate utility holding companies.

Michigan Consolidated is trying to have the act amended so it can retain its three lowcost housing projects in Detroit

American Cyanamid enters housing

The New Jersey chemical company has moved into the home construction business via agreements with two builders.

The most recent was an agreement to buy Sunstate Builders of Tampa, Fla., now developing an 850-home community, Carrollwood, in Tampa.

Sunstate will be operated by the Ervin Co., a wholly owned Cyanamid subsidiary with headquarters in Charlotte, N. C. Cyanamid's first venture into homebuilding came with its purchase of Ervin in September. American Cyanamid's head-

quarters is in Wayne, N.J. U.S. Home's 11th. Chairman Robert H. Winnerman has announced that U.S. Home & Development Corp. of West Orange, N.J., a community developer, has arranged to buy its 11th building company-the Orrin E. Thompson Construction Corp., which erects single-family housing in Minneapolis.

and complete three others ha ed by the SEC ruling. The s projects, containing 432 uni involve \$16.8 million.

Chances for change. T amendment's prospects appe ed dim. It cleared the Senate b failed in the House of Represe tatives. It got one last chance a House-Senate conference.

An sec member, Hugh Owens, said the commissi supported the amendment the act so as to allow holdi companies to develop low- a moderate-income housing.

"It certainly was in the or nary course of business Michigan Consolidated to p tect its present market for g in Detroit and, hopefully, expand that market," he sa

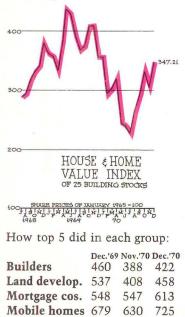
"A very direct way of acco plishing that end was to ass in the creation of new housing which could utilize gas powe

Even without the amen ment, Michigan Consolidat could still try the courts.

* Mississippi Power and Light is a s sidiary of Middle South Utilities. Mid gan Consolidated Gas is a wholly ow unit of the American Natural Gas Co

Housing stocks up

HOUSE & HOME's index of 25 housing stocks reversed field to rise from 306.83 to 347.21 in the month ended Dec. 3. Cuts in mortgage and other interest rates fueled the rally. Issues on the index are indicated by bullets (•) in tables at right. Here's the composite index.



163

139

162

HOUSING'S STOCK PRIC Dec. 3 Bid/ Chng. Prev.

COMPANY	Close	Month
BUILDING		
Behring Corp. ^b . Bramalea Cons (Can.) Capital Divers (Can.) Centex Corp. Christiana Oil b Cons. Bidg. (Can.). Dev. Corp. Amer. Dev. Int. Corp Edwards Indus First Nat. Rly. b. Frouge. Frouge. General Bidrs. b. Hunt Building Marts a ·Kaufman & Bd. e. Key Co. b (Kavanagh-Smith) Leisure Technology.	$16\frac{1}{2}$ 3.12 3.96 38 $\frac{1}{4}$ 7 $\frac{1}{8}$ 1.10 21 10 $\frac{1}{4}$ 7 5 2 $\frac{1}{4}$ 5 $\frac{5}{8}$ 2 $\frac{1}{8}$ 4 $\frac{3}{4}$	$\begin{array}{c} - \frac{12}{12} \\ + \frac{125}{12} \\ + \frac{10}{12} \\ + \frac{10}{14} \\ + \frac{10}{14} \\ - \frac{12}{12} \\ + \frac{12}{12} \\ + \frac{12}{12} \\ - \frac{12}{$
Leisure Technology Corp. b H. Miller & Sons McGrath Corp. National Environment (Sorout Homos	17 5 ³ ⁄4 5 ³ ⁄4	+ 2 $- \frac{1/4}{1/2}$ - 1
(Sproul Homes) Nationwide Homes	61/8 101/2 19 91/4 17 46 191/2 5 34 321/2 9 7 41/4	$ \begin{array}{r} - 1\frac{1}{8} \\ + \frac{1}{2} \\ - 1\frac{1}{2} \\ - 1 \\ \hline \\ - 1 \\ - 1 \\ + 2\frac{3}{4} \\ + \frac{23}{4} \\ + \frac{3}{8} \\ + \frac{3}{2} \\ - \frac{5}{8} \\ + \frac{1}{2} \\ + \frac{1}{4} \\ \end{array} $
S&Ls American Fin. Calif. Fin. • Empire Fin. • Far West Fin. • -First Char. Fin. • First Char. Fin. • First Surety. First Surety. First Surety. Gilbraltar Fin. • -Great West Fin. • Hawthorne Fin	17% 81/4 143/4 131/2 153% 441/4 55% 171/2 25% 223/4 237% 83/4 121/2	$\begin{array}{r} + 2\frac{1}{9}\\ + \frac{3}{9}\\ + \frac{3}{9}\\ + \frac{1}{1}\frac{1}{2}\\ + 1\frac{1}{2}\\ + \frac{1}{2}\\ + \frac{1}{3}\frac{1}{2}\\ + \frac{1}{3}\frac{1}{9}\\ + $

ES		
COMPANY	Dec. 3 Bid/ Close	Chng. Prev. Month
•LFC Financial (Lytton) • Trans-Cst. Inv Trans World Fin. • Union Fin. • United Fin. Cal. • Wesco Fin. •	55/8 63/8 93/8 83/8 83/4 181/4	$^{+ \ 78}_{- \ 3/8} \\ ^{+ \ 1/8}_{+ \ 1/8} \\ ^{+ \ 78}_{+ \ 1^{3}/4}$
MORTGAGE BANK	ING	
Charter Co	16 20¼ 19½ 24¼ 7½ 58¼ 7¼ 23½ 67¼ 23½ 18¾ 23½ 23½ 23½ 23½	$\begin{array}{r} - \frac{14}{4} \\ + 2 \\ + 1\frac{34}{4} \\ + 1\frac{5}{6} \\ + 4\frac{14}{4} \\ + \frac{18}{4} \\ + \frac{18}{4} \\ + \frac{13}{8} \\ + \frac{13}{4} \\ + 1\frac{3}{4} \\ + 1 \\ - \frac{3}{8} \end{array}$
LAND DEVELOPME		
All-State Properties American Land -AMREP b Arvida Atlantic Imp Canaveral Int.b Crawford Corp -Deitona Corp.b Disc Inc Don the Beachcomber Ent. (Garden Land) FPA Corp (Fla. Palm-Aire) -Gen. Devel.o -Holly Corp.b Horizon Corp Major Realty -McCulloch Oil b Scientific Resources o (Sunasco) So. Rtly. & Util.b	30 7/8 85/8 12 47/8 41/4 30 25/8 63/8 77/8 243/4 15/8 321/4 35 4 45/8	$ \begin{array}{c} + 1\frac{1}{2}\\ + 3\frac{1}{4}\\ - 1\\ - \frac{1}{16}\\ + 3\\ - \frac{1}{16}\\ + 3\\ - \frac{1}{16}\\ + 3\\ - \frac{1}{16}\\ + 3\\ - \frac{1}{16}\\ + 2\frac{3}{16}\\ + 2\frac{3}{16}\\ + 1\frac{1}{16}\\ + 3\\ + \frac{1}{16}\\ + 2\frac{3}{16}\\ + \frac{1}{16}\\ $
DIVERSIFIED COM Boise Cascade •	421/2	ES - 73/8
Citizens Financial ^b	131/4	$+ 1\frac{1}{8}$

COMPANY	Dec. 3 Bid/ Close	Chng. Prev. Month
City Invest.« CNA Financial « Cousins Props Forest City Entr.» Great Southwest Corp Investors Funding »	15 ³ / ₄ 15 31 ¹ / ₂ 13 ¹ / ₈ 1 ⁷ / ₈ 10	$+ \frac{1\frac{1}{2}}{+ \frac{1\frac{1}{4}}{- \frac{1}{8}}}$
Leroy Corp.ª Midwestern Fin.b Rouse Co Tishman Realty «	10 4 17 32 16¾	$ \begin{array}{r} - \frac{1}{8} \\ - \frac{1}{8} \\ + 2\frac{3}{4} \\ + 1\frac{1}{4} \end{array} $
MOBILE HOMES &	MOD	ULES
Con. Chem. Co. ^b •Champion Homes ^b Commodore Corp. ^b •Fleetwood ^c •Guerdon ^b Mobile Home	8 ¹ / ₈ 31 ³ / ₄ 6 ⁷ / ₈ 39 ¹ / ₄ 15 ¹ / ₈	$ \begin{array}{r} + & \frac{3}{8} \\ + & 2\frac{3}{4} \\ + & \frac{1}{8} \\ + & 4\frac{1}{4} \\ - & \frac{3}{4} \end{array} $
Industries b Monarch Ind.« Redman Indus.« Rex-Noreco b «Skyline « Town & Country Mobile b Zimmer Homes b	14 16¼ 22¼ 19 33⅛ 8 12¾	$\begin{array}{rrrr} - & \frac{5}{8} \\ - & \frac{1}{4} \\ + & \frac{3}{4} \\ + & \frac{1}{4} \\ + & 6\frac{1}{2} \\ + & \frac{5}{8} \\ + & \frac{3}{8} \end{array}$
Hodgson Houses	5	+ 11/4
Modular Housing Systems Inc Nat. Homes A. « Shelter Resources Stirling Homex Swift Industries	18 ³ / ₄ 20 ³ / ₈ 9 ³ / ₈ 20 ⁷ / ₈ 3 ¹ / ₄	$-1\frac{1}{2}$ + 2 $\frac{1}{8}$ - 1 $\frac{5}{8}$ + 1 $\frac{1}{8}$

a-stock newly added to table. b-closing price ASE. c-closing price NYSE. d-mo traded on date quoted. g-closing pric MSE. h-closing price PCSE. k-mot avail able. --Computed in MOUSE & MOME's 25 stock value index. y)-adjusted for 1-for-reverse split. z-adjusted for 3 for 2 split NA-mot applicable. Sources: New York Hanseatic Corp. Gairdner & Co., National Assn. of Securitie Dealers, Philip Beer of Russell & Save American Stock Exchange, New York Stoct Exchange, Midwest Stock Exhange, Pacifi Coast Stock Exchange, Listings include onj to their income from housing activity and are actively traded.

S&Ls

....you'll be a bit braggadocious

1.5.5.5.0

666666

BUILT-IN STEREO with CASSETTE RECORDING TAPE PLAYER and RECORD PLAYER are exciting buyer persuasions. The unpretentious beauty of WOOD CABINETS add new elegance and a center of interest to interior decor "you can hardly wait to show friends." To provide family SECURITY there's new SAFETY from INTRUDERS with instant DOOR ANSWERING from all rooms, selective room to room communication and CHILD MONITORING. A CLOCK automatically turns the music Off and On. Available in Walnut, Pecan or Custom Finished to Order. Competitively priced \$100.00 below comparable stereo systems.

circle 19 on reader service card

TATE AN ON TATUTURE I TING

Here's a builder who uses the apartment buyers' money to build the apartments

By collecting cash before a spade touches the ground, a Mexican builder has put up \$16 million worth of condominiums without borrowing a peso.

Hector Hinojosa first used his pay-in-advance technique five years ago to build a vacation condominium in Acapulco for family and friends.

It was so successful that outside prospects came to Hinojosa seeking a similar deal.

Now, 16 buildings and 500 units later, the 42-year-old Mexico City architect-turnedbuilder has 85% of Acapulco's residential construction market and plans to expand elsewhere.

Look, no financing. Playasol S.A., the company that Hinojosa incorporated with his brotherin-law, Jose Riojas, doesn't begin building until it is guaranteed enough money to complete a project.

The apartment buyer makes a 25% cash downpayment when he signs a contract. He agrees to pay the balance over 25 months. Playasol agrees to deliver a specified unit within 20 to 25 months.

There is no performance bond in Mexico, hence the builder's reputation is the buyer's only guarantee that he won't have to go to court if his contract is not satisfied.

Playasol's reputation is such that it has received propositions from Puerto Vallarta and Baja California landowners who want to increase tourism.

Optimum climate. Playasol was started in the right place at the right time, Riojas concedes.

The stretch of beach where most of the company's buildings are located was almost bare when the first apartments rose. Today, hotels and condominiums form an almost unbroken line, and building is booming.

Playasol's clients are, for the most part, wealthy people who can afford to own a beach apartment that they use only part of each year.

But this is changing, Riojas says. More people are buying apartments as an investment. This is welcomed by Playasol because it has broadened the potential market.

Land banking. Playasol follows its cash-oriented philosophy in land acquisition.



The Typewriters is the nickname of this condominium complex overlooking Acapulco. Buyers of apartments paid for construction as work progressed.

Well in advance of anticipated need, it assembles a group of investors and forms a company to buy a specific piece of land for future use. Playasol takes about a one-third interest in each of these deals.

"When we start receiving down-payments for apartments and are ready to build, we buy the land at current prices," Riojas says.

"Land has been appreciating rapidly, so investors have been making about 50% over 18 months."

Land near the beach in Acapulco sells for about \$30 a square foot.

Payment choices. Land investors may take payment in cash or opt for an apartment in the upcoming building. Or, if their investment in land was large enough, they may receive both.

If the investor chooses an apartment, he gets a 15% discount, the amount that Playasol figures would be its profit.

"Our experience is that the apartments appreciate about 35% while under construction," says Riojas. "Add the 15% discount to that and you have a 50% profit if you sell the apartment."

In-house skill. Playasol, according to Riojas, cuts costs by its operating methods. Normally, he says, a developer hires an architect to design, and a construction company to build, and then sells the apartments. "We design and build ourselves, cutting out the architect's fee and construction contract," Riojas adds. "Then, by having the client pay as we build, we deliver an apartment at the same price a developer would pay."

Having developed a high volume business, Playasol can now buy materials at lower cost than smaller developers, and this multiplies the advantage produced by its all-cash purchasing.

Each building is a separate project, with its own bank account to segregate its funds.

Grand luxe. Most of Playasol's buildings are on the beach, and all have terraces facing the ocean. Each bedroom has its own bath.

Prices range from \$19,000 for a one-bedroom unit to \$140,000 for a four-bedroom penthouse.

About half the buyers are Mexicans who want a weekend home. Some 40% are U.S. citizens and the rest are mostly Canadians and Europeans.

Vacation rates. Owners can rent their apartments through Rentasol S.A., which Playasol organized for that purpose.

One-bedroom units command \$72 a day during the high season, Dec. 15-April 15. Rates are \$90 a day for two bedrooms and \$120 for three.

Rentasol takes 33% commission, pays 10% to travel agents and spends about 12% on advertising.

Rentasol is only one of the service companies formed to handle the needs of apartment owners.

There is Servisol S.A. for maintenance and Decorsol S.A. for decorating and furnishing. They will soon be joined by Supersol S.A., a liquor and grocery store, and Lavasol S.A., provide dry cleaning and laudry service.

Decorsol opened an Acapulo showroom last February. Cu tomers choose from this displa and their orders are sent to fa tories and suppliers. Anyon may buy, but apartment owned get a 15% discount.

These service companies a not only good business, they a a necessity, says Riojas.

Without a wide range of ser ices easily available, luxury v cation apartments would ha little appeal, he contends.

Partners. Playasol is beginning its first large joint effo a 33-story condominium ho with Playboy Enterprises.

Plans call for 475 suites, split-level penthouses, six ba four restaurants, a discotheg and a banquet hall.

The \$15-million building scheduled for completion early 1972. Riojas reports th 100 people applied to buy roos even before the deal w advertised.

Swap club. Hinojosa and R jas don't think Playasol will r out of rich customers for sort apartments, but they a seeking to develop incentive for ownership anyway.

One idea is an internation association of owners. Its p pose would be to arrange of changes between condominin owners in such places as H waii, the Mediterranean, a Acapulco.

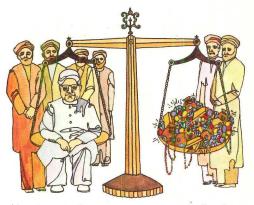
This could lead to a more phisticated type of vacationi Riojas maintains.

Playasol intends to carry pay-as-you-build operation yond the affluent resort are It has organized Inversol S.A. Mexico City to build comminium apartments for ye round residence.

"Some of our clients in A pulco want to buy apartme in Mexico City, so we've pre well sold our first building ev before we start," says Rio "But before we get this proj under way, we're studying w type of building would be m successful, because there's a of competition in Mexico Cit - GERALD PARKINS

McGraw-Hill Ne Mexico C

Boutique is more than just another pretty face. It's got Moen quality built-in to give your customers convenience and beauty. And it tells people a lot about the quality in your homes. Get Moen and give your customers quality they can look up to.



Now Boutique coordinates decor with matching handles for shower and lav. And with matching tub spout and shower head. Beautiful. And easy to use. Easy to clean, too. (The exterior is smooth—because the fluting is on the inside.) Give your customers quality, convenience and elegance. Put Boutique by Moen in your homes. Available in either goldtone or silvertone finish from your plumbing contractor.



Pakistan's Aga Khan III was weighed against gold, which he then donated to his people. We're not giving away Boutique, but it does have a surprisingly reasonable price. You'll like that. And your customers will appreciate lower water costs they get with Boutique and every Moen faucet. Weigh the advantages. Then get Boutique by Moen. There's only one.





Tenants in revolt: they'll take over unless the apartment owner does it firs

His tenants are organizing and rising against him. They are protesting poor maintenance, unfair leases, inadequate security, lack of facilities, unreasonable rents, absence of management...

They are demanding that an apartment owner do more than invest money. Tenants threaten that unless the owner moves deeper into the housing business and runs it right, they will take over the operation.

They may even reach through to imperil the apartment lender and his investment.

So the owner must move first —and fast.

He must learn what tenants want and satisfy them before they dissatisfy themselves.

For once tenants are angry, their demands often become irrational. The issues—the tenant's home and the owner's livelihood—become too emotional to permit calm talk.

This is the word from tenants and owners who confronted their joint problems for two days of spirited give-and-take in Chicago. The city's Urban Research Corp., a private research and publishing group, coaxed them together.

What to do. At the end it was clear there can be no sure way to avoid tenant revolt. Poor and organized tenants want more than middle-income and unorganized tenants, and many demands simply cannot be satisfied at once.

But giving extra attention to tenants' problems is a beginning with all; it may be enough for some.

Here are some techniques agreed on by both sides:

• Give tenants ample notice of any major change—particularly a rent increase. Tell them why in a letter or, preferably, at a tenants' meeting. Some owners have gone as far as showing the accountant's report. Others let tenants take part in the decision making.

• Pass all or most of a rent increase on to new tenants. Explains a tenant union leader: the old tenants will think you have done them a favor; the new tenants do not have a base for organizing against you.

• Train resident managers. The Kassuba Co., the nation's largest apartment developer,



Tenants, once they get angry, often see their landlord only as a slumlord to be defeated.

set up a manager training school after it learned that inept managers bring on tenant problems. Several rental manager associations offer training courses.

• Ask tenants what's wrong. The R&B Development Co., builder-managers of complexes for swingers and young-marrieds on the Coast and in Texas, mails questionnaires asking for complaints. Their only complaint: nobody does.

• Return security deposits whenever possible—and promptly.

• Give brochures. Dwelling Managers Inc. of New York City welcomes each new tenant with a letter and a guide to use of equipment and follows with pamphlets on building services in each rent bill.

• Throw a party. A New Jersey owner gave a Halloween party. Hers were the area's only buildings not vandalized.

• Respond to complaints. Two of the biggest developers admit: our problems were our fault; we didn't respond fast enough.

The unorganized. If he follows these suggestions, the owner-operator of a middle- or high-income apartment development should have no tenant rebellion.

Tenant leaders say these people are hard to organize anyway. They have little interest in the tenant movement if their surroundings are comfortable and their rents take no unreasonable jump.

But they have heard of victories by the rebelling poor and they are quicker to organize and fight than they were just a year ago. The organized. Poor renters of private housing are different. They have more problems, so they want more services. They find no stigma attached to organization, so they organize. They are eligible for free legal aid, so they get advice on tenants' rights from the Office of Economic Opportunity.

For these reasons, say tenant leaders and experienced owners, the poor tenants often organize and demand a voice in virtually all decisions that affect them even when their surroundings are comfortable.

The National Tenants Organization in Washington, D.C., claims some 300,000 have already joined its 177 state, city, or apartment development affiliates.

The NTO's missionaries are enthusiatic, and those members are told what services they can get and the best ways to get them.

Owner as organizer. Most tenant leaders and owners advise the owner-operator of lowincome apartments to institute a tenants' organization. He might as well, they emphasize, because it will come anyway.

Some believe the owner should hire a tenant to organize the association; others say a professional social worker or community organizer is needed; still others think only a neutral party, such as the NTO or the Urban Coalition, can do the job.

Once the organization is set up, the owner must consult it on these typical decisions:

• Rent increases whenever rents are not regulated by the

FHA. (The tenants may want forego some service instead facing a rent hike.)

• Award of a constructi contract. (The contractor's for should be racially integrate for example.)

• The services to be offer (Most tenants ask for at leas day-care center.)

Federal help. Owners show know what federal progra are available for tenants a should take advantage of the The cost, except in time spe preparing the application, is lo and it buys priceless good w Some owners train the reside manager to make the appli tions. Later the tenant assoc tion can incorporate and apj directly for the funds.

The owner must be able make his case when he take new program to the tenan Low-income tenants may not able to spot a loophole in t plan, but they may have lead who are educated and known tenant laws. If the owner holding out, they will know it

The rewards. If the opera of low-income apartmen makes these extra efforts, should have no problem w his tenants. He may even fi the extra effort pays off.

Some owners report that sociations give tenants a ser of responsibility and that th take more care of the faciliti

If he ignores these guilines, the owner can expect tenants to organize against h and try to take the building in receivership.

The radicals. It is just su unhappy tenants who listen the third and smallest group tenants—the militants.

Warned one at the Chica session:

"We're talking about powe "We are going to stop peo ripping us off.

"We are going to rise against people making a pro off our necessities. Housing the human right and rights are n negotiable demands... We we deal with power against peowho interfere with our rig"

But it need not be this w

Most owners are still in cu trol. They will stay there they move now and go the ex mile. —MARILYN VAN SA TO FAG



We'll be at the **NATIONAL ASSOCIATION OF HOME BUILDERS' CONVENTION** Houston, Texas January 17-21, 1971, Stands 2224-2230 and 2325-2329

RESTWOOD KITCHENS LTD., 225 No. 5 Road, Richmond, British Columbia, Canada Initure-fashioned kitchen cabinets cole 191 on Reader Service Card TZPATRICK STAIR LIMITED, P.O. Box 460, 2394 Fairview Avenue, Burlington, Ontario, Canada Initure staircases of grandeur and grace Initure staircases of grandeur and grace Caller 192 on Reader Service Card REGG CABINETS LTD., 2000 Bedard Boulevard, Chambly, Quebec, Canada Initure staircase and elegant Caller 193 on Reader Service Card ASON WINDOWS LIMITED, 41 Lamont Avenue, Agincourt, Ontario, Canada Initure staircase and doors

cle 194 on Reader Service Card

P. H. PLASTICS INC., P.O. Box 220, Levis, Quebec, Canada rugged, reliable and attractive windows and window components
Circle 195 on Reader Service Card
RAYWAL LIMITED, 68 Green Lane, Thornhill, Ontario, Canada
decorative, stylish kitchen cabinets and bathroom vanities
Circle 196 on Reader Service Card
SAUNA CO. OF CANADA, 17 Belfield Road, Rexdale, Ontario, Canada
Sauna bath luxury — with economy
Circle 197 on Reader Service Card
CANADIAN WOOD COUNCIL, 77 Metcalfe Street, Ottawa 4, Ontario, Canada
Circle 198 on Reader Service Card

Department of Industry, Trade and Commerce, Ottawa, Canada



DR FURTHER INFORMATION, CONTACT: C. M. Forsyth-Smith/Consul and Trade Commissioner/Canadian Consulate/2100 Adolphus Tower

How to conduct a successful rent strike: lessons from tenants' handbook

Rent strikes have been an old and popular form of tenant protest. But, because they were illegal, few were effective.

Now they are legal in several states. Other legislatures are following in that direction. And tenant organizations are taking steps to see that tenants make maximum use of the new weapon.

Here, in excerpts from a draft of a National Tenants Organization handbook, is the advice that tenants will receive on organizing a strike.

Preliminaries. "Some tenant groups have tried picketing and pressure before going on a rent strike. Other groups start right off organizing a strike. Either way is all right; the important thing is that the group have some kind of a working organization...

"Ten percent of the housing units or 15 families is enough to start a strike if the tenants are together. If the housing project is very large, then a lesser percent will do...

"In addition to organizing, tenants need to lay the ground-



Rent strikers, picket signs at the ready, gather for a strategy session before taking to the street. One tactic is to embarrass the owner and make him give in.

work for the strike by building their case against the landlord. . ."

In-fighting. "The more you know about the landlord and his building, the less he can trick you by giving you untrue information.

"Tenants need information about three things: the building —to show its bad condition; the landlord—to expose him for other buildings in disrepair which he runs and for his unfavorable political, social, or business connections; and the mortgage holder. ..."

Radicalizing. "Another way to build a case against the landlord is through a code enforcement effort. . .

"A tenant group ready to go on rent strike should try to get the housing code enforced in their building before the strike begins. For one thing, the attempt to get decent code enforcement is usually a radicalizing experience for tenants.

"A couple of tenants show go through the building with inspector, pointing out the coviolations so he doesn't m any...

"Tenants should picket city building department a corporation counsel's office not enforcing the housing co They should picket the la: lord himself for not repairing building or keeping the re: down."

Embarrassment. "A gc place to picket is outside th homes (usually in a quiet, spectable suburb) or their con try clubs or their churches wh they're there for a party o service. The more embarrass the picketing, the more effect it will be...

"Tenants should go to co when their case comes Landlord-tenant court in evo city is like plantation justice the way it favors landlords a is grossly unfair to tenants.

"Seeing how bad the co works in practice radicaliz tenants."

-M.V

Boise Cascade keeps tenants happy by building more than just a home

Think of Boise Cascade and you think housing. But when a tenant thinks of Boise, he thinks of a friend.

That is because the big builder puts more than bricks and mortar into its low-income housing; it adds enlightened community development.

And, being no sentimental fool, Boise makes it pay.

Payment is not all in profits— Boise builds most low-income housing as a 6% limited dividend sponsor—but in ease of management and freedom from tenant revolt.

Problem solver. Boise does it all through its Washingtonbased Center for Community Development, which helps new tenants cope with the social and economic problems that come with their new homes.

The center's staff moves into each FHA-subsidized project before dissidents do. The staff hears tenants' complaints and helps them get their share of local services and federal aid programs.

The center's philosophy: we will talk to the tenants, find

out what they want, then do all we can to help them get it.

The staff, experienced in all aspects of community development, accepts similar assignments from other corporations and government agencies.

Inside a project. A typical assignment was Boise's 260-unit Hillside Gardens in Indianapolis, subsidized by FHA.

When the project was nearly completed, the center staff hired a tenant who, it believed, could understand people. It trained him to be resident manager and to organize a tenant association.

Boise tenant associations are usually organized the same way: president, vice president, secretary, and treasurer, with committies on complaints and grievances, membership, beautification, by-laws and rules, programs and activities.

Typical complaints. At their first meeting, tenants complained of construction defects



Tenants and management get together at Boise Cascade—on problems and special occasions. This time the celebration is for the opening of Hillside Gardens.

and asked for a day-care cen The staff had the defects paired and assigned one of day-care specialists to Hillsi

Later the staff helped set u credit union and developed manpower training program the construction trades. Bo trained 36 enrollees and them to work on another of projects.

Now the staff is advising association on incorporation a non-profit agency so the t ants can apply for federal fur

The result: no tenant unr

And the Klingbeil Co., wh manages the project, report that Hillside runs smoother cheaper than most.

The others. In other ap ment complexes the center s has organized and run ac education programs, develo tenant newsletters, run c sumer education progra helped settle local zoning pr lems, and designed recreat programs.

The tenants' reaction been the same everywhere.

They have returned the bu er's good will.

eautiful closings: Whirlpool appliances

All around the house — Whirlpool appliances are the perfect complement to your craftsmanship. Their quality and features will prove your foresight in building-in easier living.

Not just in the kitchen and the laundry, but in total environmental control. Our Complete Comfort

system for all seasons will cool, clean, warm, moisten and dry the air, automatically. We also have an unusual option that can make a dramatic exclamation point in any showing — the Trash Masher* compactor. It's the clean, convenient way to end the clatter and clutter of taking out messy trash cans. It compacts up to a week's worth of trash and garbage — including tin cans, bottles and foil — into a neat, little take-out bag. New. Different. Exclusive. Yours for a closing touch from Whirlpool.

We can help take better care of the builder's basics, too. With Accountrol* — our computerized accounting system that watches your costs. And Minirisk* that puts a giant computer at your command, to project your cash flow week by week for an entire building season. And a complete array of management counselling services from nationally known experts in solving the business problems of builders, profitably.

A call to your Whirlpool Distributor now could be the beginning of some beautiful closings. *Tmk.



Compact Trash Masher is just 15" wide, 24" deep, 34¾" high. Comes in edged copper, harvest gold, avocado or white.

Whirlpool

NEWS/MARKETING



High-style sales: how builder creates aura of elegance and of privilege

A marketing concept that bows to snob appeal is being used for the latest unit to open on California's Newport Bluffs. Some 71 Homes-on-the-Bay are offered with a sophisticated sales effort that is backed by a lot of experience.

The unit belongs to George M. Holstein & Sons. Holstein is a pioneer California builder and his company grew up on custom homes and movie-star mansions.

The buyer Holstein seeks can afford a \$500 monthly payment and \$60 for maintenance. Statistics show he will be a homeowner already living along the Orange County coast or in one of the more expensive places, perhaps Pasadena. He will be looking for a more care-



 Welcome stresses privacy as couple arrives to view homes on Newport Beach Bluffs. A guest pass admits visitors.

free life in a smog-free setting.

Spiro and Dinah. Holstein's marketing starts with these straight arrows:

• Newport Beach is a way of life, a last of its kind, with a vacation atmosphere all year.

Four golf courses are within a few miles. Nearby is the Newport Beach Tennis Club, where the middle-court couple may well be Spiro Agnew volleying with Dinah Shore.

• The Bluffs is a one-of-a-kind planned community, with Mediterranean-style homes (right up to tiled roofs), curved private streets, acres of park—and pools. And forget maintenance; its done by professionals.

• All this—and an investment opportunity. Bluffs units appreciate quickly. One bought in 1964 for \$29,600 (with \$1,800 cash down) was appraised last May for \$42,000. This is not only a \$12,400 increase in six years, it is a 690% return.

Smart selling. The Holstein idea man for Homes-on-the-Bay



2. Low-key hello includes coffee and picture books that trace the historic rise in Newport Beach land values.

is Bob (C. Robert) Perryman. He not only handles advertising but coordinates sales and merchandising.

He has taken a new tack.

First of all, kids are kept out of the seven model homes. They're welcome only in the adjoining playground area.

Next, only major living areas in each model are decorated. This helps them keep their own personality instead of taking on a decorator's. To reduce decorator dominance, four different decorators are used.

And Perryman has set up a sales staff and offices separate from the rest of the Bluffs' operations. He also put modelhome visits on an appointmentonly basis. Prices seem right for private showings: \$42,000 to \$58,000.

The 'in' ticket. The advertising approach is based on an appointment coupon. It is part of an ad that usually runs in Saturday papers. Prospects mail the coupon to Holstein, listing day and time. They get back a pass and, later in the week, they are rechecked by phone.

Problems. The trouble spots did not involve homebuyers, but those people already living in 800 other Bluffs units. And salesmen.

To keep these residents from turning up at the Homes-on-the-Bay without an appointment—



3. **Tour** begins in air of intimacy. One guide usually takes not more than two couples to inspect models.

but to keep them happy—Perryman gave a preview showing.

Salesmen, however, were a tougher nut.

"I had to sell them first," says Perryman. "Salesmen want bodies. They'd like to see the Roman army arrive on Sunday."

But one Perryman principle is that numbers mean nothing: "The average visitor is almost a



4. Vantage point on tour gives couple an overview of some of builder George Holstein's \$42,000-\$58,000 houses.

blur. He goes through the houses at a run and keeps running to his car. His main thought is to avoid salesmen."

Payoff in sales. In the first few weeks, 40 of the 71 homes on the bay have been sold.

What if people show up without an appointment?

If they're from some distant point—and look like live buyers —Holstein's hostess tries to



5. A salesman does turn up, but at tour's end—and then with a sell. Two closing rooms are nearby.

work them into a tour a with luck, only an hour o wait.

But some drop-ins do huffy when they can't see models. One scene drew a c ment from a Pasadena mat a scheduled visitor.

"He was a bore, anyway.



6. **Cruise to celebrate** home pure is conducted on Newport Bay. V trip sells the area's outdoor sports ir

just as well he doesn't through. We certainly d want him as a neighbor."

Says Perryman (hopefu "Those who are turned away are definitely interested come back." —BARBARA L McGraw-Hill N Los Ang

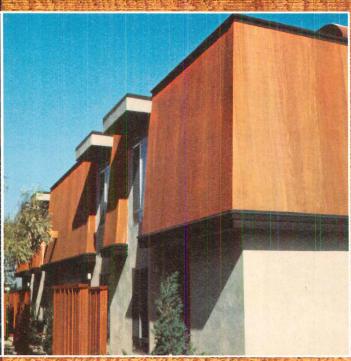


buyers an idea of their spacious expensive—new life in Newport.

Simpson



idence: Toledo, Ohio. Designer: Mark Arthur Schechter



Good design is a good reason for redwood.

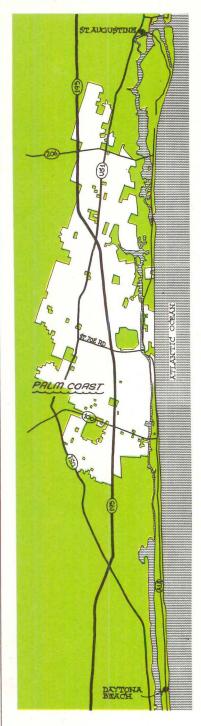
Good design has to be functional. It's that simple. There are a lot of materials you can use on your mansard roof. Some may look good. Others may last a long time. And still others may go up easily. But when you try to find one material that does all three beautifully, you'll be hard put to find anything better than our Ruf-Sawn redwood plywood or Sierra Sawn Redwood Bevel siding.

Our redwood products are designed for the person who's looking for a lot of things at once. Things that will help provide good design and functional performance.

For more information about Simpson redwood products, write or call: Simpson Timber Company, 2000 Washington Building, Seattle, Washington 98101. (206) 682-2828.



NEWS/MARKETING



Levitt, the town builder, starts a city-sized community

Palm Coast is about the size of Detroit. With 100,000 acres, it will outclass all other new towns and be the largest preplanned community anywhere.*

The ITT Levitt community is situated between Daytona and St. Augustine. Mid-point in the tract is about 25 miles from each (*map*, *left*). Stretching for 30 miles north and south and for ten miles inland, it includes six miles of Atlantic Ocean frontage and 20 miles along the Intracoastal Waterway.

The largely undeveloped, close-to-swamplike flatlands are covered with a thick growth of oaks, palms, and cypress. Most of the parcel was acquired when ITT bought up Rayonier, a cellulose manufacturer with its own timber lands.

* Irvine Ranch and Port Charlotte, with 93,000 acres each, come closest. Rancho California has 87,500; Port Malabar, 42,000; Port St. Lucie, 38,000; Lake Havasu City, 16,500; Columbia, 15,000; Mission Viejo, 11,000; Marco Island, 10,000; Reston, 7,000. The original Levittown, then considered large, had 5,300 acres for 17,447 houses. **Planned environment.** Most of the trees will be saved, a network of lakes and canals will preserve the fishing, only nonpolluting light industries will be allowed in, and everything will be done to keep the area from being spoiled. Norman Young, who heads up ITT Levitt Development, plans to maintain strict control over every stage of planning and development to insure the environmental balance. Land planners are Reynolds, Smith & Hill.

Only the jungle growth is being cleared in the first section, and an 18-hole golf course is under construction near the 25acre sales model and office area. Near it will be 3,850 of the 10,-000-sq.-ft. lots, most of which will be sold with houses.

Prices. Buyers can purchase lots farther out in the first 30,000-acre parcel as long-term investments for about \$2,795. Lots that are closer in will cost slightly more, and the buyer must build on them eventually. Comparable lots with houses are now selling at \$3,600. There are now nine mod ranging in price from \$14,000 \$30,000. There will be models by next year.

Four of the present hou were designed by B.A. Berl Associates of Los Angeles, a they show unmistakable sig of California styling (photos low). The five houses by Jo Sierks, Levitt's traditional aritect, incline to a Spanish tro cal look but reflect Flor rather than the Coast.

House sales have just beg although lots have been sell since May from offices in Ba more, Silver Spring, Md., N folk, Va., and Hartford, Co. The company expects \$200 n lion in sales by 1980.

Access. Palm Coast's sa area lies conveniently near junction of Route 195 and U.S and right off a direct route fr the coastal route A1A. Si direct vacationers to a f lunch and tour. Florida attra 22 million visitors a year. Lev hopes to catch a great many them.

-JENEPHERWALI



Landscaped models face curving walks through model area. Behind them are the waterways.



California styling is evident in rough stucco-like walls, win screens, double entry gates.

Question of the day on San Francisco Bay: when is a marina not a marina?

When it is a community of floating houses.

This zoning discrepancy was enough to sink 250 such homes into San Francisco Bay—and only six weeks after the proposal to build them was announced with a fanfare of publicity.

Had the project been ruled a marina, its builders could have filled in the land necessary for the houses and the cars needed to reach them.

But without a marina ruling, there would be no filling. That meant no cars and, ultimately, no homes.

A \$10 million plan. The

Trimont Land Co., a subsidiary of Fibreboard Corp., had designed the houses into a \$10million residential-commercial development proposed for the eastern shore of the bay.

Trimont named its community The Anchorage and splashed its story in the press in early May. Weeks later the company asked the approval of the Bay Conservation and Development Commission—and watched its houses disappear. Too many cars, too much fill, and too many zoning rules.

The rules. The BCDC held a hearing, and conservationists objected to the project by citing

a BCDC ban on filling of land for houseboats or floating homes.

But Trimont argued that the BCDC rule did permit a marina developer to fill up to 40 per cent of his property, and the company insisted that its project was a marina. It proposed to fill five of its 58 acres so residents could drive to their floating homes and park.

It was left to the staff of the BCDC to decide. Its ruling: no marina—and no fill.

End of the houses. The company could have appealed the ruling to the full BCDC, but it decided against it.

Said Vice President George

W. DeBacker: "We are starting in land developme and we own 167,000 acres ecologically sensitive areas.

"The last thing we wan was to get a black eye."

So Trimont eliminated houses completely and devi a purely commercial restaura and-boatel project. It has go-ahead from everybody, cluding the BCDC.

Houses? Someday Trim will try them again.

"Next time," says DeBac "we'll have enough dry lar

—Ty Marsh McGraw-Hill Ne

We're searching for difficult complex knotty formidable irksome tormenting aggravating FHA multi-family problems

We like to crack tough nuts!

For example, a tough nut cracked recently was the arrangement of financing for a union-sponsored cooperative apartment complex in northern New Jersey. This 88-unit project was financed under section 236 of the National Housing Act which permits moderate income families to enjoy housing at prices they can afford. Now *that* was a tough nut!

Moreover, Associated is actively involved in satisfying the national low-income multifamily housing commitment. We're securing millions of dollars for builders having a variety of requirements. Our capabilities extend to every state as well as Puerto Rico. Interested in advice on the feasibility of your project? We can have it for you within an hour. That's possible because of our Computerized Mortgage Financing Information System—the most advanced concept of its kind you'll find.

More facts are as close as your mail box. So fill out the attached coupon immediately and send it off to us.

And by the way, if you have an easy project financing deal, we'd like a crack at that, too.



Mr. Millon Abrams	
Associated Mortgage Companies,	Inc.
1120 Connecticut Avenue NW	

1120 Connecticut Avenue, N.W. Washington, D.C. 20036

Please RUSH additional facts on your FHA multi-family project financing capabilities.

____Zip___

Name_

Company_

Address_

City_

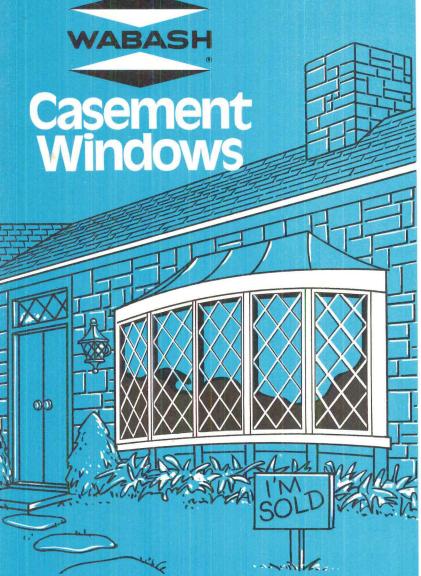
State

Phone Number_

Associated Mortgage Companies of Virginia, Inc., Hampton-Newport News, Virginia □ Frederick W. Berens, Inc., Washington, D.C. □ Berens Mortgage Bankers, Inc., San Juan, Puerto Rico □ City-Wide Mortgage Co., Kansas City, Missouri □ Pringle-Associated Mortgage Corporation, New Orleans, Louisiana □ South Jersey Mortgage Co., Camden, New Jersey □ Southern Mortgage Co., Aiken, South Carolina

Mortgage Sales and Placement: AMCO Investor Services, Inc., New York, New York

Build Homes that sell themselves with



Besides the attractive Radial Bow and Angular Bay designs, Wabash Casement Window units may be easily arranged in limitless combinations that compliment any architectural theme.

In fact, thousands of Wabash Casements were used last year alone to ventilate, brighten, and beautify new and remodeled homes all over the country. And this figure increases yearly.

Why? Because Wabash Casements are made of high-grade Western Pine for longer life, better looks, more efficient insulation, and more

economic installation. This makes your selling job easier and faster. Wabash Casements are built ready-to-install and factory furnished with insulating or regular glass, aluminum screens, removable Colonial or Diamond wood grids, operating hardware, and neoprene bulb weatherstripping. And Wabash Casements are Dri-Vac Treated to protect them against weather, rot, and insect damage. Let your local Wabash Dealer or Distributor help you build homes

that will sell themselves with quality Wabash Casement Windows.

WABASH, INC.

1217 FLORIDA ST. • MEMPHIS, TENN. 38106 • PH. 901/946-1671 Quality Wood Products Since 1884

FILL OUT AND MAIL THIS COUPON TODAY!

Please Dealer	send me the name and address of my n or Distributor.	earest Wabash
I would wood W	like more information on ready-to-inst indow Units, Patio Doors, and quality Lour	all Wabash all- vered Products.
YOUR NAME		
COMPANY		
ADDRESS		
CITY	STATE CIRCLE 38 ON READER SERVICE CARD	ZIP

NEWS/PEOPLE



CONSULTANT O'NEILL Setting up on his own. . .



EDITOR GOLDSMITH ... and taking over

It's a new editor for HOUSE & HOM John Goldsmith replaces Dick O'Nei

HOUSE & HOME has appointed JOHN FRANK GOLDSMITH, managing editor since 1964, to succeed RICHARD W. O'NEILL as editor of the magazine.

O'Neill is leaving to set up a resource development service for the housing industry.

The appointment caps an 18year magazine career for Goldsmith, most of it with the parent publishing company, Mc-Graw-Hill. A journalisin graduate of the University of Colorado and a rifle platoon leader in World War II, he joined Factory magazine (now Modern Manufacturing) as an assistant editor in 1952. He became managing editor of Fleet Owner in 1956 and came to House & HOME as an assistant managing editor in 1957. He was appointed managing editor seven years later.

Awards. Goldsmith has been a member of editorial teams that won two Neal awards for magazine writing and was a cowinner of the University of Connecticut's G.M. Loeb award for editorial excellence in business journalism in 1968.

As an editor, Goldsmith has repeatedly stressed the magazine's mission as a broad and sophisticated organ of housing industry management rather than as a how-to book of technology and technique.

The transition. Goldsmith has worked closely with O'Neill during most of their joint tenure on HOUSE & HOME. Goldsmith edited McGraw-Hill's Business and the Urban Crisis, a comprehensive report on ways in which business could-and indeed must-deal with the national emergencies in housing, education, and employment. As the project director, O'Neill organized the several McGraw-Hill editors who contributed to study. The report, published all McGraw-Hill magazines February 1968, won a spec citation from the Loeb awa committee.

O'Neill and housing. The port was in part a product O'Neill's role with the Doug commission. President Lync Johnson had appointed the e tor to the panel, the Natio Commission on Urban Pr lems, in 1967. And, with form Senator Paul Douglas as ch man, the group had begun year's study of the homebu ing industry with an eye eliminating slums.

O'Neill presided at severa the commission's public he ings in 22 cities and he wr the 32-page introduction the panel's report, Building American City.

His work with the comm sion broadened O'Neill's terests far beyond housing jo nalism, and he undertool heavy speaking schedule. traveled 100,000 miles a y mostly to crusade for hous reform.

O'Neill's campaign led l to join U.S. Plywood in arra ing three-day seminars to sch corporate executives in the tricacies of the housing b ness. A text was needed, so wrote a book: The Dynan of the New Housing Indus

From the seminars ca O'Neill's plan for a hous and advisory service-a kine O'Neill Inc. The service interpret housing news beh the general news, train exe tives in housing's challen evaluate new building syste and seek new sources of finan

O'Neill joined House HOME in 1955 and became editor in 1964. ---E.V

Only one consulting service like this, free to builders.

It's our Consultron* Service. A computerized feasibility study for any type and size housing project you're planning—custom single-family, subdivision, Sec. 235 low-income, modular housing, conventional apartment or Sec. 236 multi-family. Six consulting services—three of them *brand-new* to meet today's market. Consultron brings you valuable data, tailored to your own area; rental or price range, sizes and mix, mortgage facts and debt services, profit analysis, other important information. Prepared for you on a confidential basis by renowned consultants Wm. R. Smolkin and Associates, Inc.

Only one company offers Consultron Service.

Celotex. And at no cost to you. How come? Simply because successful builders buy more building products. And that's good for our business. Our business is manufacturing and marketing the most complete line of building products ever. For whatever and wherever you build. For inside, outside, on top. Gypsum Board Products
Hardboard Siding • Hardboard Paneling • Asphalt Shingles
Built-up Roofs • Ceiling Products — Tile, Lay-in Panels, Grid, Lighting Units • Insulation Products — Rigid Urethane, Fiberboard Sheathing, Fiberglas[†] Blankets • Flexcell[®] Concrete Expansion Joint Filler • Sound Control Products • Carpeting





THE CELOTEX CORPORATION Tampa, Florida 33607 Subsidiary of Jim Walter Corporation CONTRIBUTING TO THE PROGRESS OF MAN THE BUILDER

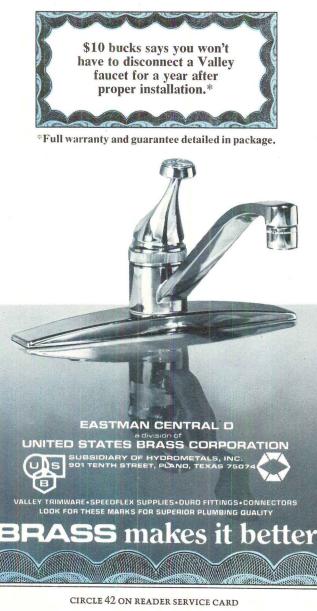
WHILE YOU'RE IN HOUSTON . . . drop by the Celotex booth. Our Consultron computer will be there to provide helpful marketing data on your next project. *Service mark of The Celotex Corporation 1TM Reg US Pat. Off. OCF Corp.

We'll bet you 10 bucks* you'll never have a call-back on a Valley faucet.

INSTALL a Valley single lever faucet and if for any reason you have a call back within a year which requires a disconnect, Valley will replace the faucet at no charge and give you a \$10 labor allowance.

Valley's unconditional call back guarantee (and *five year* parts warranty) proves how good these faucets really are. They work at a "feather touch." Water control is positive. The seal is self-adjusting. The Triplate finish lasts and lasts, and resists corrosion.

Call our \$10 bet and we all win you — your customer and Valley, the plumber's single lever faucet.



INE WS/ FEOFLE

Realtors are told:

Today's houses due for sales spu tomorrow may belong to the modu

Sales of new and existing houses will pick up in the next months.

That's the prediction of Rich Port, president of the National Association of Real Estate Boards.

Port said a slight softening of mortgage rates and a backlog of desire for new homes have brought knowledgeable buyers into the market.

"They know we are going to continue to have inflation," he said. "They know the interest rates will not change much."

Convention. Port spoke at a press conference at the opening of the association's 63d annual convention. Some 8,000 of NAREB'S 93,000 members attended the session in Chicago and elected Realtor Bill N. Brown of Albuquerque, N. Mex., as Port's successor. Brown will be installed at NAREB's winter meeting in San Diego.

Looking ahead, Port predicted a change in the way houses will be built.

"The modular is the home of the future because on-site build-



NAREB'S BROWN Into president's chair

ing is too expensive," he sa Low-cost units. H. Hat Crowell Jr., chairman of NA Washington Committee, ported Port's stand duri panel discussion later in convention.

Crowell said today's t tional building industry not provide single-fai houses for the \$10,000 to 000 wage earner without cal changes in building metl Others on the panel agreed

If apartment swingers wed: a solut

Nobody knows better than a singles apartment developer (except an old maid) that young singles tend to marry, and they all grow old. When they do, they leave the developer with empty apartments.

It has been a problem for these apartment owners since the singles-apartments craze got swinging some five years ago: just how to keep a paying tenant paying after he has married or grown too old to swing (NEWS, Sept. 69 et seq.).

Developers have sought a solution by building more of the same for young marrieds. But one North Carolina developer has gone further.

He plans to keep the singles after they marry, after they have children—indeed, until they are ready to pay rent to the local cemetery.

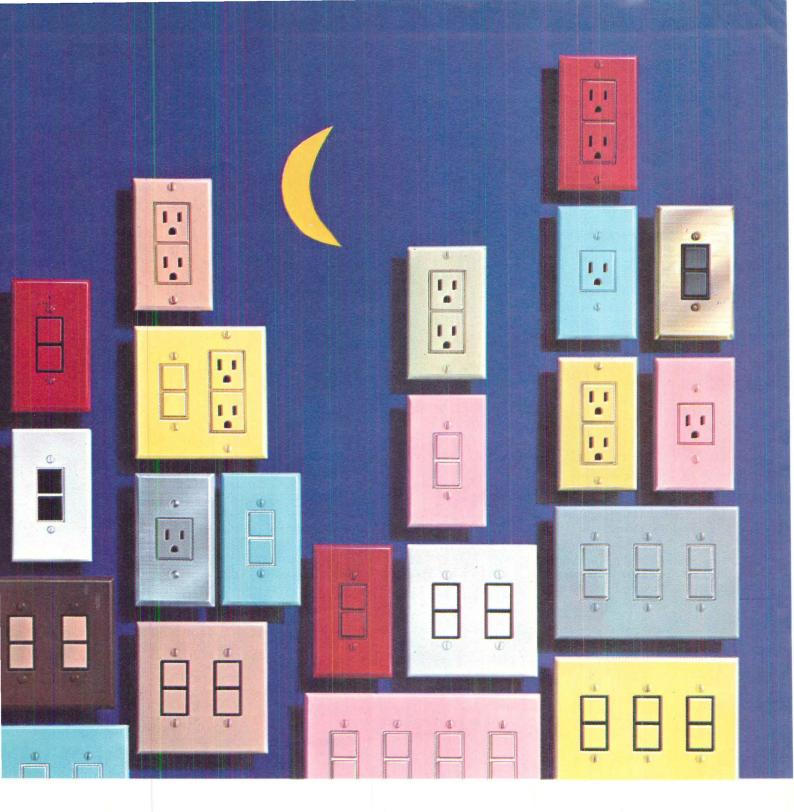
Clusters for all. Charlottebased C.D. Spangler Construction Co. has just broken ground on a \$40-million project that will cluster singles, young marrieds with and without toddlers, and senior citizens. The singles will move one-bedroom, motel-style a ments with swimming and nis.

The eldsters probably be directed into a high where they will be free of and children and stren recreation facilities.

The largest cluster will townhouses for the mar and families. Only this will allow, and provide children.

Youth and age. There as be no age restrictions on clusters—"If the older ter want to live with the y people, they're pretty m swingers themselves," goe Spangler philosophy—but will be no married couple children allowed in the sin area and no children amon senior citizens.

The 217-acre project, t called East Lake Village, be owned by Spangler affi Golden Eagle Industries It will have two shopping ters, 11 pools, and two p made lakes.



Centura City, USA

Look what's happened to Centura devices since we introduced them in 1968. In cities and towns all over America, Centura wallswitches and outlets have captured the imagination of architects, interior designers, builders and owners. Centura devices were first to offer elegant styling and a choice of colors . . . a dramatic departure from the ordinary. In addition to distinctive appearance, Centura offers a host of labor-saving features. All devices are top specification grade construction, UL Listed, CSA Approved, and backed by Leviton's unprecedented 25-Year Guarantee of Performance. Write for our latest Centura Catalog, then design with imagination.

America's Largest Manufacturer of Wiring Devices • 236 Greenpoint Avenue, Brooklyn, N.Y. 11222 • (212) 383-4500



NEWS/CONVENTIONS

IBEC Convention: well attended, but there were few innovations

The first Industrialized Building Exposition and Congress (IBEC) was held in Louisville, Kentucky, last month. It drew observers and participants from all over the United States and Canada; even contingents from South America, Europe, and Japan could be seen walking through the exhibits, presumably looking for the next millenium in housing.

The millenium was not in evidence. What the builders, developers, manufacturers, designers, government officials, and others actually found were products, materials, and tools that have been around for a long time, exhibits of housing systems which, with one or two exceptions, have been in the news for months, and seminars consisting chiefly of speeches that have been given many times by the same people over the past two years.

However, most observers agreed that the convention had been worthwhile. Said one:

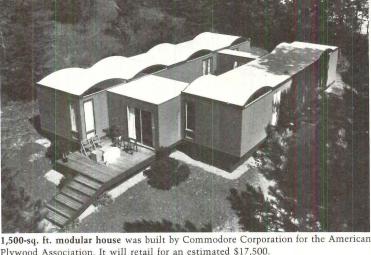
"Even though there wasn't much that was new, it was an important emotional eventsort of like a revival meeting. Everyone was enthusiastic about industrialized housing. The people I talked to were saying sure, there may be no great market in modulars for three or four or five years, but this show has started a lot of thinking."

And in terms of sheer numbers, IBEC must be counted a howling success. A reported 11,700 people attended, many of them putting up (with differing degrees of cheerfulness) with 70-mile daily drives from hotel to show, so overtaxed were Louisville's facilities.

Here is a general recap of what the IBEC attendees saw:

Exhibits. There were some 340 product or technology exhibits inside the single rectangular exhibition hall, and several more displays outside. Visitors entered and left the hall at one end only, giving displays in this location an advantage, but a beer garden and continuous movies at the other end helped to draw traffic that way. There were six doubleloaded aisles of exhibits between these ends.

Many booths featured the same general housing products



Plywood Association. It will retail for an estimated \$17,500.

and materials that will appear in the NAHB convention in Houston this month. Other exhibits showed models, and sometimes full-scale prototypes of modular apartment units, or single-family houses.

A conspicuous exception to the non-newness of most exhibits was that of Stirling-Homex Corp., which used the exposition to unveil its new steel high-rise system (see page 58). Developed for use in turnkey housing, hotel and motel developments, and as dormitory facilities, the system uses hydraulic jacks to raise buildings one layer of modules at a time.

Few of the low-rise and singlefamily modular residences on display differed from the ordinary in design. The nearest thing to an exception was a house displayed by the American Plywood Association. Designed by architect Walter Brown, it had a board-andbatten exterior with barrelvaulted skylighting over portions of the interior spaces.

Several companies selling fabrication systems kept up the noise level in the exhibition hall. In particular, Automated Building Components, Inc. of Miami, Florida, showed the latest version of their electronic jig system for building stud walls. Computer-controlled saws and air-hammer nailers on an overhead rail network produced wall panels that are practically untouched by human hands; the only visible person was a keypunch operator typing in the correct patterns. Computer print-outs and paper tape were all over the flooran appropriate piece of symbolism.

The seminars. There was aggressive participation in these sessions; three different groups of speakers were under way at all times, and this timetable continued morning and afternoon for all four days of the exposition. Every session was full, or nearly full; the registrants seemed intensely concerned about acquiring fresh



Modular high-rise by Stirling-Homex is raised by hydraulic jack system.

concepts. This created one problem: a registrant could not possibly attend all the seminars, and there was a lot of shifting from session to session as a particular speaker seemed to be saying the same things people had heard before.

A few of the seminars were newsworthy or potentially use-

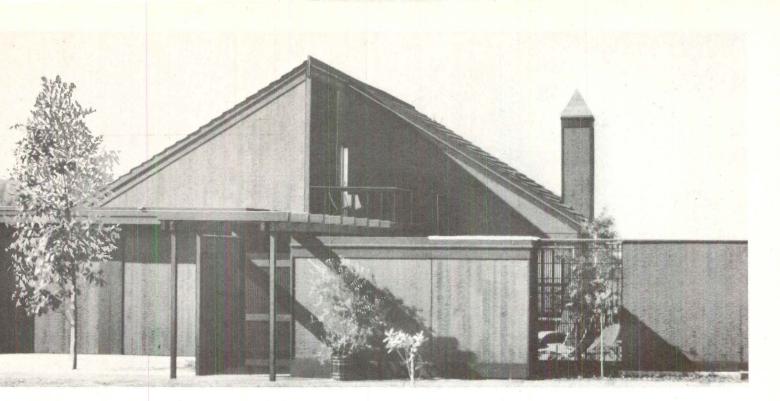
ful. Two examples:

Joseph A. Walsh, vice pre dent of the United Assoc tion of Journeymen Plumbe talked about the stance th craft unions will be taking toward factory-produced ho ing. He quoted a passage fro the Union-commissioned B telle Report of 1967 on the fut of industrialized housing, wh said that craft union carp ters, plumbers, and electri workers would be the hard hit of all workers in any fut relocation of housing work fr site to factory. The Uni Association has made a pol decision, according to Wa to follow the work from job site to the plant, and th object now is ". . . to bi craft union representation the workers who are build homes on assembly line Unions, he said, are at pres negotiating contracts w much of the modular indus according to Walsh.

Charles Biederman, presid of Levitt Building Systems, I gave a clear and hard-hea account of the principal fac in the current home-build market that has caused Le to invest in a modular p for future production. The lo for Levitt, resides almost tirely in the labor probl they can no longer be cer of getting enough skilled labor to build their hou conventionally. Biederman said the same things be but in a field where fa logic, and common sense not always in evidence, sounds a reassuringly s note.

A top executive from on the biggest modular hou firms summed up the s this way; "I was impre with the quality of the tendees. They worked very at listening and looking; tried to learn. And things beginning to move in the components end. I was prised to see so many fabricated bathrooms; weren't around two years

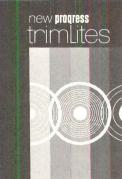
"But I was not impressed w most of the other exhibits. completed prototype house display is still a long way f mass production, and w seen lots of roofing shir before."



Vhy was Progress Lighting selected for Computer House? For lower building costs and faster sales!







The Computer House in Houston was designed and constructed, with the aid of computer technology, to demonstrate how a home can be built faster. With lower material and labor costs. To sell faster. And Progress Lighting was selected exclusively for the entire home!

Why? Because Progress can deliver any fixture you need. In any style you want. In a price range to fit your budget. Promptly from local warehouses. That's how Progress became the world's largest manufacturer of residential lighting fixtures.

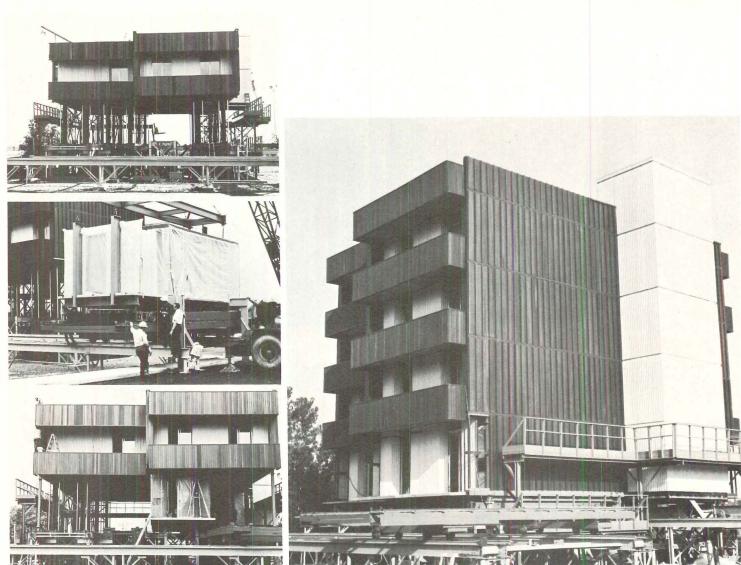
Take a new look at Progress. Our new Catalog 111 Supplement has great new Contemporary, Mediterranean and Traditional fashions for the entire home.

... especially the new, low-cost Trimlites. Recessed downlights that cost less—and save you money on the job because they're easier and faster to install! Another way you can make progress with Progress.

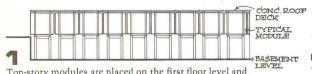
See Progress in Houston. At our exhibit 2566 and in The Computer House. Or mark the reader service card and we'll send you our new brochures. For faster action, write us direct. Dept. HH-1, Box 12701 Philadelphia, Pennsylvania 19134



NEWS/TECHNOLOGY



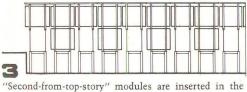
A new modular high-rise system that goes up on jacks a story at a time



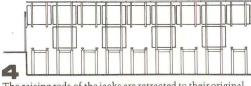
Top-story modules are placed on the first floor level and bolted to each other. Built-up roofing and exterior panels are applied.



Top-story modules are raised to the second floor level on hydraulic jacks which are mounted under every other module.



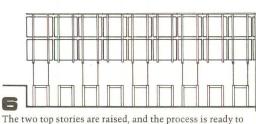
"Second-from-top-story" modules are inserted in the spaces between jacks, having been brought in on a rail system next to the building.



The raising rods of the jacks are retracted to their original positions, allowing the top floor to rest on the newly placed modules.



Remainder of "second-from-top-story" modules are installed. All bolts are tightened, all mechanical and electrical connections are made.



I he two top stories are raised, and the process is ready to start again with insertion of every other "third-fromthe-top-story" module. Spokesmen for Stirling-Hon Corp. of Avon, N.Y., say with their new system, a teen-story apartment build can be ready for occupancy four months from the time first shovelful of dirt is tur

The jack-up system was veiled last month, and sho at the IBEC Convention in Lo ville, Ky. (p. 52). Stirl Homex sees three major r kets for it: HUD Turnkey h ing, college dormitories, hotels and motels. And spo men say that they have or on the books for all th

As the pictures and p here show, steel-framed r ules are plugged in on gro floor, then raised on jack story at a time. Interior fir ing and electrical and plum connections can be done ir units as the building goes u

Modules for the proto building shown here are 1 high, 12 ft. wide, and 25 ft. But production models can varied from these dimensi









Have high bids stalled a building that you planned and urgently need?

edspace, the systems building operaof Potlatch Forests, manufactures ools, institutional and commercial dings, medical centers and offices. cision built to the architect's specific ign, they are delivered to the site by k as completed modules, virtually ready for occupancy. Speedspace supplied all the buildings shown above, with far more speed and economy than conventional building methods. We can do the same for you. Except for height, no limitations are imposed on size, shape or design. Speedspace offers architects, investors and developers a better answer to tomorrow's building problems, available now. Remember the name Speedspace. We mean what it says. So tell us your problems, today. Potlatch Speedspace, P. O. Box 3591, San Francisco, California 94119.



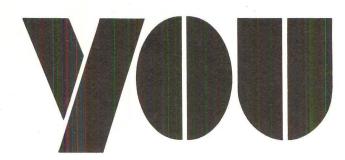
n't miss booth 3341, NAHB, Houston

tch, the forests where innovations grow...in wood products and factory-built structures, in paperboard and packaging, in business and printing papers.





Fern Green



can really open up the remodeling market with these striking new ideas in paneling!

Here's a whole galaxy of products that are years ahead of anything that competition can offer. Feature them in your next quotation and watch the excited reaction. Antique paneling that comes complete with authentic crazing, double-beaded grooves and distress-marked texture, in 5 Early American colors. A Feature Series that includes rich, textured woodgrains; rugged, rough-sawn effects; and the 3-dimensional beauty of marble and weathered stone.

All this Masonite brand paneling comes pre-finished. It's easy to work. Wipes clean with a damp cloth. Resists dents

and stains. See your Masonite Representative or write for free samples and complete literature to Masonite Corporation, Dept. HH-1, Box 777, Chicago, Illinois 60690.



Masonite & Marbletone are Registered Trademarks of Masonite Corporation

THE MUDULAR SCENE



"When will the building-product manufacturers realize that modular housing companies have their own special needs?"

It is painfully apparent to those of us who are involved in industrialized housing that some of the greatest waste of highly skilled manpower is taking place in the research and development departments of some of the largest housing product corporations.

Almost every one of these corporations has people investigating the new modular housing industry, trying to determine how their products can best be utilized. This is encouraging, and it does represent a big expenditure of time and effort. But too many of these investigations have all the earmarks of a typical government study, where action appears to be subordinated to the study itself. New ideas and concepts emerge much too slowly.

I have a lot of specific gripes.

Manufacturers with proprietary interests in steel, aluminum, plastic, gypsum, wood, etc., subordinate what should be creative, objective R&D to the proprietary interest. So instead of ideas that would help our industry, we get ideas aimed primarily at selling their materials, and most of these are not very different from what they're selling to the conventional construction market.

The generally accepted concept that codes and unions are major restraints to new ideas is just a smokescreen for the obvious fact that well conceived, thoroughly tested and economically feasible new products are not in production. Handmade samples of new materials or concepts mean nothing unless they have been tested, submitted for FHA approval, and will be available-in volume-in the near future. Too often, manufacturers don't know the capabilities of their own product-stability under atmospheric changes, fire and sound transmission ratings, proper adhesives or fastenings, etc. And they prefer to give their product a trial run on our production line, going through their learning process at our expense.

Steel and aluminum companies would like to see their material used in framing, but where are the simple production line fastening methods required? How can skin and framing be fastened together to provide stressed-skin strength?

Where is the simple, quick dry-gypsum system for factory production?

Why is there only one wood window

manufacturer producing a completely prefinished window?

Where is the door manufacturer that will prehang prefinished doors in matching prefinished jambs and trim?

Why aren't floor-covering manufacturers working day and night on a similar product for walls and ceilings? Consider the awesome potential for such a product—the average 1200 sq. ft. house has 5000 sq. ft. of wall surface.

Public relations men love exotic and revolutionary concepts, but the real requirements of modular manufacturers are more down to earth. A painted aluminum shingle which is more expensive and less attractive than a natural cedar shingle is hardly progress. The same applies to a prefabricated bathroom which is shipped in too many parts, costs too much, and is no larger than a walk-in closet.

Over the last 50 years, a fantastic amount of R&D has been directed toward replacing the 2 x 4 stud. Scores of panel systems have been devised, using all sorts of materials for spacers and cores. Most of them have only created complications and boosted costs. A simple prior study would have shown that the material and labor costs involved in standard wall framing represent less than 5% of the total construction cost of the average house. Much more money goes into interior and exterior skins and mechanical systems.

Like most of the companies actively producing modules, MHS builds a conventional house using mostly conventional materials that were designed for site construction. This may seem surprising, but it's the only logical way to put a company into volume production quickly. The innovations will come, but only after our industry gets its message to suppliers by force of sheer potential.

As they get the message, suppliers should be aware of our most pressing needs:

1. All exposed materials should be prefinished. Painting, or any other wet process requiring drying time, can't be tolerated either on the line or at the site.

2. Component parts and sub-assemblies must be supplied as nearly completed as possible. Doors should be prehung, windows complete with storms and screens attached, stairs assembled and prefinisl etc.

3. Floors, walls, roof and ceiling finis must be seamless, easy to install on a assembly table operations, and a full 8 12' wide as required.

4. Kitchen cabinets should arrive large, complete assemblies. Sinks sho be installed in tops and vanities.

5. Plumbing fixtures should be plumbed as completely as possible. Ev tually, we will want completely fa cated bathrooms.

6. Heating systems should be integr packages. We don't want furnaces from supplier, ducts from another, and regis from a third.

7. The packaging for products shippe us must be thoroughly studied. Exces packaging creates unpacking and wa disposal problems.

8. We need good technical assistance devise the best methods for using produ

9. Frequent and prompt service is a m A production line that employs hund of men demands extraordinary attent Deliveries must be on time and comp

10. As the nail and staple supplier plies guns, so the adhesive manufact should supply pumps and accessories, all suppliers should provide the spe tools and equipment necessary for the use of their products.

While I'm sure that innovations come, I'm impatient with the time taking. I strongly suggest that conce. suppliers get their best R&D people into field for first-hand experience. And I a word of caution to designers, engine and architects: pose the essential para ters as early as possible. Otherwise, ye be surprised how far along an obviously idea can get. Also, while new concepts desperately needed, remember that we building not world's fair exhibits, competitive, marketable housing for day.

The modular housing industry offer tremendous opportunity and challeng the creative imagination of building p uct manufacturers.

Think of it this way: in a few year could be your biggest market. You can a head start on it now.

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



The Tappan Package. It has everything you need to sell more homes and apartments.

Tappan unwraps more great kitchen ideas for you than anybody else in the business.

A really *complete* line of ranges including gas, electric, and electronic. Built-in, slide-in, drop-in, freestanding, over-and-under.

Plus everything else you need to close more sales. Five beautiful lines of cabinets. A full line of dishwashers, refrigerators, ventilating hoods and disposers. Call your Tappan distributor before you plan another kitchen. Ask him to show you everything that's new in the Tappan package. With no strings attached. Tappan, 250 Wayne Street, Mansfield, Ohio 44902.





Presenting:



BUILDING PRODUCTS

A new division of Combustion Engineering, Inc.

The brand newest name—and the newest brand name—in quality aluminum windows, sliding patio doors, curtainwall,storefront and shower-tub enclosures for the building construction industry.

C-E Building Products.

The industry's newest nationwide supplier. Contractors, building supply houses, distributors, chain accounts—we can service them all directly and on time.

Not only with the products they need, but with a reputation that's

already been built in other fields. Judge for yourself.

See our complete and competitively priced line of aluminum building products at Booths 1018, 1020, 1022 at the NAHB Show in Houston, January 17–21. Look for us there. And look for us from now on. Everywhere. We'll be coming on strong. Nationally and internationally. And we think you'll like where we're going.

C-E Building Products, a Division of Combustion Engineering, Inc., Executive Offices, 301 Almeria Avenue, Coral Gables, Fla. 33134.

CONTACT THE C-E BUILDING PRODUCTS SALES/WAREHOUSE IN YOUR AREA

CALIFORNIA

Chico Speedway Avenue Chico, California 95926 Los Angeles 11148 Scott Avenue South Gate, California 90281 (213) 869-1087 Santa Ana 3027 Halliday Street Santa Ana, California 92701 (714) 546-3966 Sacramento 8111—37th Avenue Sacramento, California 95823 (916) 383-4080 San Francisco 758 Clementina Street San Francisco, California 94103 (415) 621-9604

San Rafael

36 Front Street San Rafael, California 94901 (415) 454-8820 Santa Clara 710 Parker Street Santa Clara, California 95050 (408) 243-5187 Walnut Creek 2040 N. Main Street Walnut Creek, California 94596 (415) 933-3830

COLORADO

Denver 1125 W. Custer Place Denver, Colorado 80223 (303) 744-6291

FLORIDA

Coral Gables 301 Almeria Avenue Coral Gables, Florida 33134 (305) 446-8711

Miami 1890 N.E. 146th Street North Miami, Florida 33161 (305) 947-7531

Ft. Lauderdale 1080 N.W. 70th Street Ft. Lauderdale, Florida 33009 (305) 942-1420

St. Petersburg—Clearwater 10900 Grover Place Largo, Florida 33540 (813) 546-2431

GEORGIA

Atlanta 775 DeKalb Industrial Way Decatur, Georgia 53030 (404) 636-9423

Moultrie P.O. Box 930 Moultrie Industrial Park Moultrie, Georgia 31768 (912) 985-2200

MICHIGAN

Detroit 5972 Product Drive Sterling Heights, Michigan 48077 (313) 264-1040

TEXAS

Dallas 2659 Brenner Drive Dallas, Texas 75220 (214) 357-6337

Houston 6515 Winfree Houston, Texas (713) 644-6471

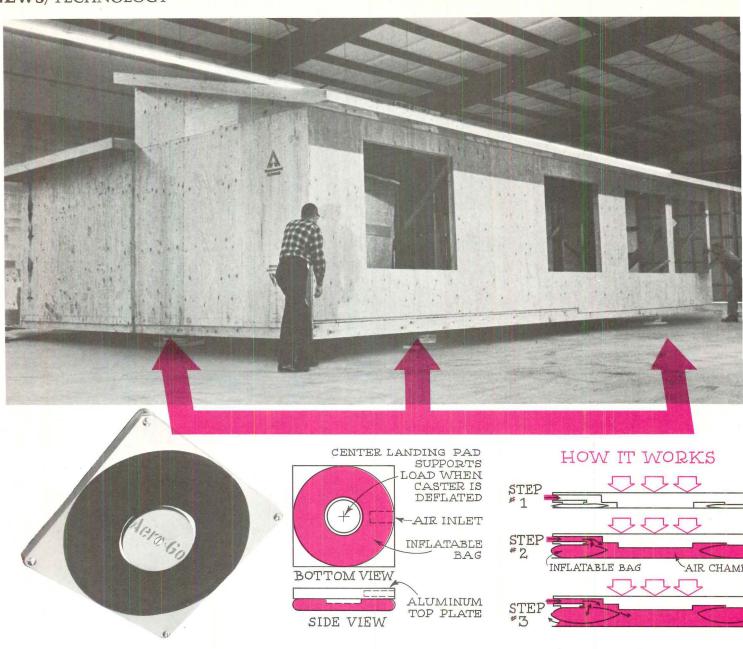
INTERNATIONAL Freeport

Box F-38 Freeport, Grand Bahamas Nassau

P.O. Box 4738 Nassau, Bahamas



INE W 3/ IEUTINULUGI



Easy way to move modulars: float them through the plant on air casters

If you've ever seen a hovercraft—a vehicle that moves over land and water on cushions of air-you'll understand the idea behind this new device for handling modular houses. A tiny version of the hovercraft-21 in. square-the Aero-Caster, lifts modulars off the floor and allows easy movement. And since there is virtually no friction between the floor and the modular, one man can move an 18,000 lb. unit, according to St. Regis Paper Co., whose modular housing division in Tacoma, Wash., uses the air casters.

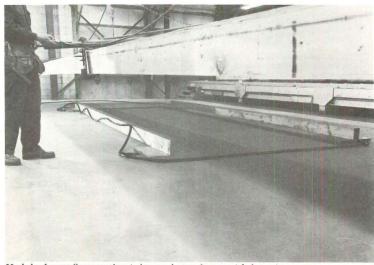
Charles Towd, president of Modern Modules, Lacey, Wash., reports another advantage: "We now have complete flexibility in our assembly line. The modules can be turned around or pulled off the line easily."

Each of the casters shown above can lift 7,000 lbs., but six because of long spans. The casters cost \$110 each. The manu- from \$50 to \$1,000. facturer, Aero-Go Inc. of Seattle, makes other models that can lift from 2,000 to 40,000 lbs.-

are usually used per modular they've been used to move 747s and a ship's hull-and that cost

> Here's how the air caster works (drawing above):

1. The caster rests on the



Modular house floor section is lowered onto frame with four air casters.

floor. Air enters through a h from a compressor (25 psi recommended).

2. The inflatable bag (ny reinforced neoprene) fills, a the excess spills into the chamber, lifting the top pl about one inch.

3. When air pressure in chamber exceeds the total l on the caster, the entire cas rises and floats on a film of a few thousandths of an in thick. Then the modular, or a thing else, can be moved.

Plants using air casters sho meet three major requirement 1) the floor must be sealed so won't leak out under the h pressure; 2) the surface must level-with even a slight gra a frictionless load will slip the area where the casters being used must be clean nothing can tear the air bag. CIRCLE 425 ON READER SERVICE C.

Read about this window before you start your next job.

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

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

The core is made of warm natural wood.

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

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

Think of exterior on-site painting costs, for example. With ordinary double-hung windows, you have to pay up to \$10 per window to have them painted. With Perma-Shield Narroline, you don't have to

pay a cent to have them painted. Less clean-up cost, too.

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

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

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

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

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

But we're running out of space.

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

	butor call me for an appoint	
Name		
Title		
Firm		
Address		
City	State	Zip
Mail to: Anderse	n Corporation, Bayport, Mi	nnesota 55003

NEWS/TECHNOLOGY



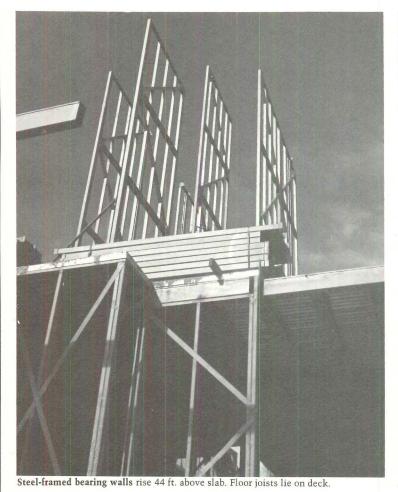
Luxury apartment complex has floors of steel framing completed. T and three-bedroom units will rent \$275-\$550 a month. Architect is p ning a second steel-framed project o stories.

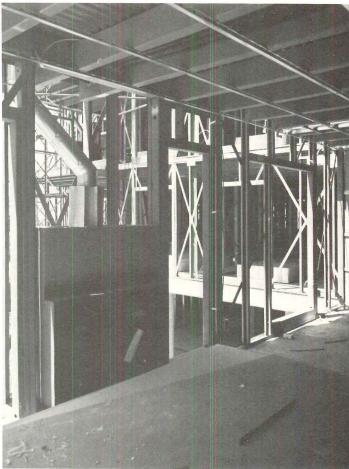
Lightweight steel framing breaks the three-story barrier for these apartmen

Faced with relatively high land costs, the developer of this Oakland, Calif., complex needed five stories and a penthouse to make it feasible. Wood framing was out; it could go up only three stories. Structural steel? Too expensive.

Lightweight steel proved to be the answer. The architect worked out a framing system consisting of steel studs and plates welded on 2 ft. centers. The framing members are of 16gauge sheet supplied by Kaiser Steel Corp. and cold-rolled into C-sections by a local fabricator. About 170 tons of steel went into the 46-unit, 60,000 sq. ft. building.

The prefabricated bearing sections are 8 ft. wide and 9 ft. high —and light enough to be handled by two men. They are set in channels, top and bottom, and bolted to 2 in. poured concrete floors. Floor joists are 8 in.deep, cold-rolled C-sections on 2 in. centers bolted to the wall framing. Over these are laid corrugated steel sheets. Gypsum wallboard is used for interior; exteriors are stucco. Cost of Broadway Terrad steel framing was \$3 per sq Total building costs for structure came to about \$12 sq. ft. or about \$1.50 more tl a wood-framed structure. Ov er: Broadway Terrace Asse developer: Richard Ralph; c tractor: Smith & Haley C struction Co.; architect: G Lam.





Steel furring strips are used to attach gypsum board ceilings and walls.

Residential concrete flooring systems cut costs. Accommodate heating, ventilating, cooling ... serve as ceiling for floor below. And if that isn't enough, they make excellent roof decks, too. Residential flooring systems adapt to any plans. They can be cast-in-place slabs or big precast sections that go together in far less time

than ordinary floors. The installed cost competitive vith wood floor construction. Costs are

duced sharply because

the systems readily accept mechanical, electrical, plumbing and communications sub-systems...simplify and speed installation.

Concrete floor systems provide for sound conditioning...cut

insurance costs too. What more could you ask of a floor that's a ceiling that's a roof?

oncrete load bearing walls go up fast, reduce maintenance. Whether cast-in-place, precast or concrete

masonry, concrete walls covide maximum fire resistance, sound ontrol, and weather protection. And that's ot all...concrete walls allow unlimited design flexibility, inside and out.

Add beauty and appeal with "Grounds for Good Living."

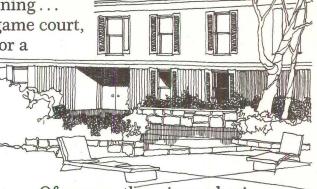
The right *Approach* makes your building stand out beautifully and provides a luxurious

setting to any low rise. It includes ample offstreet parking, a weather protected entry, and privacy with screens and decorative planting areas.

The proper Setting will provide

patios big enough for entertaining... perhaps a game court, a fountain or a swimming

pool.



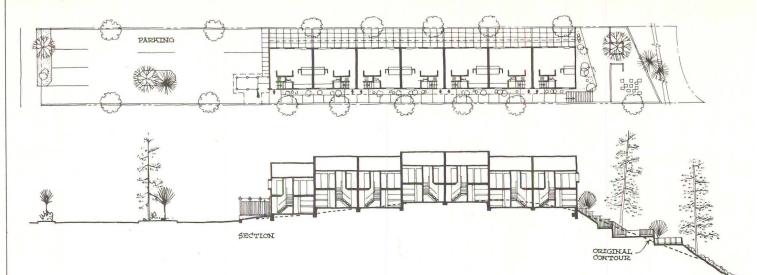
Of course, there is one basic reason for using concrete in any application: its inherent values. Its great strength and plasticity allows you to build the unusual, imaginative and eminently practical. And its unquestioned durability simply guarantees that the value lasts; a quality that's hard to come by these days.

For more information call or write Portland Cement Association, Dept.1-94, Old Orchard Road, Skokie, Ill. 60076. **Grounds for Good Living,** full-color publication illustrating and describing best uses of concrete around single- and multi-family residences, is available for \$1.25. Literature on **Concrete Housing Systems** available free (U. S. and Canada only).

PORTLAND CEMENT III ASSOCIATION

IMPROVING AND EXTENDING THE USES OF CONCRETE

TAT A Q DIOIGIA



This turnkey public housing capitalizes on a skinny, quarter-acre site

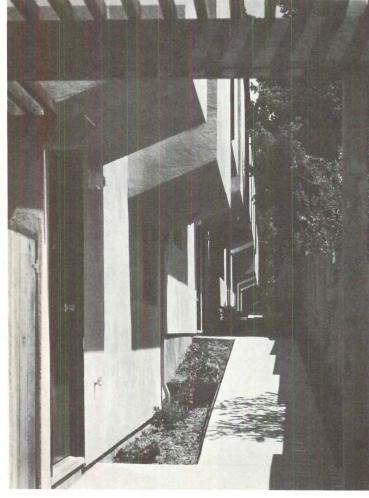
Low-income housing often gets the short end of the stick when it comes to good sites—and this one in Oakland, Calif., is no exception. Although 300 ft. long, it is only 36 ft. wide; what's more, there's a steep grade (30%) at one end.

Within these limitations, the architect, Wiener & Fischer, came up with a plan *(above)* that makes maximum use of the area. By placing the seven identical three-bedroom townhouses down the center, room was left for rear patios and an entry walk in front. Second floors are cantilevered to provide the 900 sq. ft. required in each unit. Units follow the land contour *(section, above.)* The steep end of the site was used for a terraced play area and the other end for a parking lot. Total cost (excluding land) was \$92,000. Rents are based on family size and income.

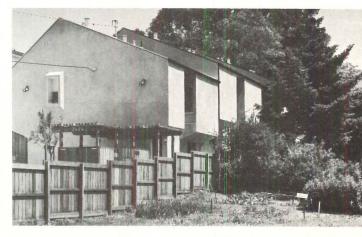
mily size and income. The project was developed by

Robert C. Ellis and built Carl Langberg for the Oakla Housing Authority. It is part a turnkey program approve three years ago by Oakla voters and calling for units scattered sites. So far, 1,2 have been built, and 600 m are under way. The housing thority now plans to conce trate on small projects units or less—in an effort to people out of slums and prevent slums from starting





Entry walk *(left)*, shaded by deep cantilevers and fence, is reminiscent of old Eurostreet scene. Building exteriors are stucco with redwood trim.



Our Irawing card.

Name	Title		
Company			
Address		Phone	
City	State	Zip	
I plan to build	houses,	apartments in 1971.	
I presently install:			
Dishwashers	Yes 🗌 No 🗌		
Food Waste Disposers		Yes No	
Hot-water Dispensers	Yes No		
Send me more information at	oout KitchenAid.		
KitchenAid Dishwasher Divisio	on, The Hobart Manufacturing (Company, Troy, Ohio 45373.	

Come see our new KitchenAid Hot-water Dispenser.

We're giving away 5 of the new KitchenAid Hot-water Dispensers a day at the Builders' Show in Houston. You could be a winner! Here's how: Fill out this coupon, and deposit it in the box at our Booth #3227. You don't have to be present to win. 5 drawings a day! 5 winners a day!



THE LEGAL SCENE



"A wave of change for the suburbs? That's the way the courts seem to be heading"

A series of court decisions and some policy steps have emerged from the recent welter of government interaction on housing and planning law. They will produce a profound change in the American suburban scene. And as the smoke of battle settles, two things are becoming clear: 1) that the wealthier communities on the fringes of our cities are in for a rough time, and 2) the builders and developers who build in these communities will have to face a whole new set of rules and new questions as well as new opportunities.

In a word, the impact of these decisions on American housing patterns is likely to be as significant as were the United States Supreme Court decisions on desegregation to the schools.

In Pennsylvania and New Jersey, two bellwether states, recent decisions by the highest courts have blasted through what had been called "exclusionary" zoning practices.

In Pennsylvania, the Supreme Court, which is the highest appellate court in the state, took up for review two significant cases. In one, The Appeal of Joseph Girsh¹, a developer who wanted to build apartments attacked the constitutionality of a zoning ordinance in Nether Providence Township, a relatively exclusive residential area near Philadelphia. The ordinance zoned out apartments, although two apartment buildings had been permitted by variance. The Supreme Court declared the ordinance unconstitutional on the basis of the fact that a zoning ordinance should not exclude apartment dwellers. The Court permitted the builder to go ahead with a 17¹/₂acre tract for which 280 units are planned.

In a companion case, but with much more startling language, the same court laid out new guidelines. Kit-Mar Builders had appealed (H&H, Dec. '70) to test the validity of two- and three-acre minimum zoning for single-family dwellings.² For some time, Pennsylvania had outlawed four-acre minimum zoning, and the question was whether

two- and three-acre minimum zoning was similarly improper.

The court there said that two- and threeacre zoning was improper, and came to the conclusion that one-acre zoning was about as far as you could go. And while it didn't have to, the court nevertheless went on to strike down a number of the township's "reasons" which, until now, had been much of the basis for rejecting higher density, lower-income housing. These reasons have long been the sacred cows of suburban legalistic reasoning.

The Township's statement to the court was that the town needed low-density zoning because they did not have the roads, schools, sewers, etc. to accommodate more population.

The court went out of its way to tell the township that this was just too bad, and they would have to widen the roads, build the schools, and put in the sewers. And they would have to raise the money, presumably by taxation or by borrowing, to do these jobs. If the Township's aim was to preserve open space, then the proper legal method of doing it was to enact a PUD ordinance.

It was a sharp setback for those communities which, the court felt, were attempting to zone out the encroaching city with all of its problems.

In the Supreme Court of New Jersey, the Englewood case stretched traditional zoning concepts. The court used social reasons as the basis for granting variances for low-income housing to break racial barriers in housing.³ In the Englewood situation, a non-profit housing corporation, which was to be state and federally assisted, was formed to develop a ten-acre site in a previously all-white suburb with 146 cluster-type, two story apartments. The municipality (Englewood) leased the land to the non-profit corporation, and a group of citizens took various legal steps to block the action.

The court went out of its way to approve the concept that the breaking of segregated housing patterns will tend to prom the public health, safety, morals, and g eral welfare of the community of En wood.

In Black Jack, Mo., just outside of Louis, HUD has asked the aid of the Dep ment of Justice to break a zoning ordina as being discriminatory against the po and presumably black, population.

What all this means to the suburb obvious. There is going to be increase pressure for "dispersal" of the innerghetto residents out into white, afflu areas. Accommodation will have to made to it. If local suburban offic fight by using zoning and building co to make real dispersal difficult or pra cally impossible, these ordinances will struck down. The suburbs' best bet wo be to seek some rational controls by all ing in a "digestable" amount of s units, either in PUDS or in convention development, and thus avoid having l income shoved down their throats in h amounts by litigation.

At some point in the future it oprobaly become mandatory for the builder to put at least some low-income housing in his project, if only to government-insured financing. It miseven be wise for him to start doing now, and point out to the municipat that plans for some low-income house now can take the heat off the town later that plans for some low-income house now can take the heat off the town later the town later the heat off the town later the town later the heat off the

The small and medium-sized builder conventional developments will also affected. He may be compelled to be some low-income housing to balance his higher-priced units. But he should prepared to trade vigorously for this w the town. Housing problems are of o cern to the entire community, and sho not be taken out of the hide of just homebuilder.

LENARD L. WOLFFE

Mr. Wolffe, a specialist in real estate and zoning law, has written and lectured for the Urban Land Institute and the National Association of Home Builders. He is a former assistant city solicitor for Philadelphia.

¹ Appeal of Joseph Girsh, 263 A2d 395

 ² Concord Township Appeal (Kit-Mar), 268 A2d 765
 ³ De Simone v. Greater Englewood Housing Corp. N 267 A.2d 31



PLEXIGLAS LETS THE SUN SHINE IN

Use sunlight to customize your homes and set them apart from the crowd. You get faster-selling, more profitable homes. Your customers get outdoors living year-round, plus brighter larger-looking rooms.

Transparent gray and bronze Plexiglas permits clear vision of the outdoors while controlling solar heat and light. These colors and the variety of low profile shapes that are possible with Plexiglas, make it easy to blend the skylights into the roof attractively and economically.

Plexiglas skylights are designed not to leak and come to the builder preassembled and ready for fast installation in standard sizes up to 8 feet square.

So it's easy to build sunlight into the home when you use Plexiglas acrylic plastic. And with Plexiglas, there's 25 years of outdoor use to prove that it will not change color or become brittle.



Write for our brochure on standard home skylights, names of manufacturers, and your FREE "Let the sun shine in" button.

Name		
Firm		
Address	·	
City	State	Zip
	D	

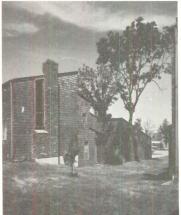


NEWS/DESIGN



PHOTOS: PAUL S. KIVETT

How to avoid a uniform look in a row of almost uniform duplex houses



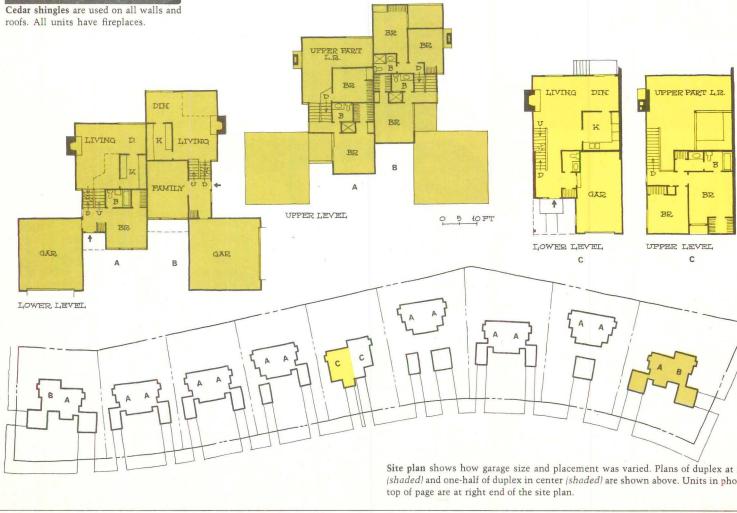
The streetscape above, in Kansas City, Mo., can hardly be described as monotonous. Yet 14 of the 18 units (*site plan, below*) are identical.

To avoid the look-alike look, the developer and his architects varied the size and placement of the garages, thus also changing the setbacks of the houses. Some garages are one-car, some two-car, some are attached, some detached. Interest was also added by mixing in two other models—one at each end of the row and one in the middle duplex—and by using a variety of colors for the garage and entry doors.

Developer C. E. Bleakly reports a long waiting list of renters for the two- and threebedroom houses. For rentals ranging from \$235 to \$275, tenants get such amenities as two-story living rooms, family rooms, full basements, and f places.

The section shown here a part of the 78-unit Mews, the Mews is part of a 400-u project that includes sing family houses and apartment Density is 10 units per acre or all, but only 6 per acre in Mews.

Two architectural firm Linscott & Haylett and V A. Nelson—designed the Me



Big show off!

Put the Cortina and its bold scale to work in your prestige entryways. The old world styling and hand-wrought, hand-rubbed inish snatch attention right now. No wonder. The idea of a ock is to lock; the Cortina captures just that in the look, the feel and the engineering of top security. (It's a five pin cylinder with positive deadbolt action.)

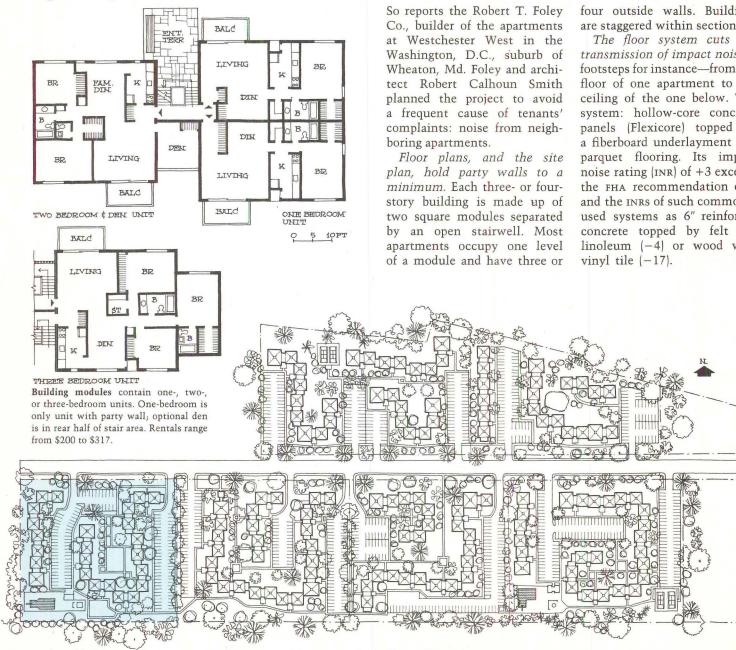
Beauty and security: great selling combination. Put it on something important — like your next house.





Living room baclonies face garden courts-away from parking areas-offering further privacy. Wood-truss roof is capped with cupola, creating distinctive design.

Design for privacy: it rents these apartments faster than they can be built



Clusters of small buildings create small courts in large project, which when completed will have 530 units on 24 acres. Photo was taken in shaded section.

New idea from OPINICa!

here's money in the remodeling business when you ell it this way: "We don't just remodel your kitchen r bath. We renew your environment at the same time."

you think your customers were pre-sold on Formica® brand laminates, ait till you tell them about the Formica Environment! Remind them of how actical Formica laminates are on kitchen surfaces . . . then point out how uch sense they make throughout the home. Walls, doors, cabinets, bathoms, built-ins . . . dozens of new places to sell the Formica Environment. or additional information, write Dept. HH-1.

This is the original spill-stain-heat-scrapeand bump-resistant countertop. And now there are more patterns, colors and textures than ever. Is your sample book up to date?



There's more to this cabinet than meets the eye! Just flip the reversible panel to change from a natural woodgrain to a bold color insert, now with a new surface texture. It's all Formica® laminate so you can scrub, scuff and bump it without worry. You'll never have to paint or refinish.



Formica practically invented the bathroom vanitory. The soft look of leather and the warmth of wood with a surface that's untouched by water, detergents, and colorful cosmetics. Just wipe 'em all off with a damp cioth.

Your own crew can install FORMICA® Panel System 202: right over any sound wall, simply, quickly with no special skills or tools. Twenty patterns for tub, shower, or the whole room.



Leadership by design



laminated plastic

THE APARTMENT SCENE



"Give us an ad agency that can gear down to the needs of an apartment developer"

Why is it we have such a hard time talking to advertising agency people? The truth is, they make us nervous.

We've tried the ad agency route for marketing apartments. We may even try it again one of these days. But we haven't yet been successful at it, and chances are we won't be the next time, either.

The first time we tried an advertising agency, we paid a monthly retainer. This was supposed to buy us the assurance that our account wouldn't get shelved between specific assignments. It was supposed to give the creative people incentive to brainstorm our problems all the time instead of just on order.

As it turned out, all the retainer bought for us was the assurance that someone at the agency would pick up the phone when we called. Besides our set monthly fee, which was in four figures, we still had to pay the going rate for each and every job we ordered. And the only services we ever got were those we specifically ordered. That monthly check began to bug us. Pretty soon we stopped it and the relationship ended.

Timeclock psychosis. Next we tried an ad agency that frowned on retainer fees and chided us for being dumb enough to pay one. This agency claimed to offer a much more equitable arrangement. They billed us only for the hours they spent actually working on our account. We didn't like the idea of our marketing arm working strictly by the timeclock. But the chances of buying a marketing service that offered day-to-day continuity looked hopeless, so we settled for the timeclock approach.

The only hitch here was that literally everything went on the timeclock. For example, a two-hour meeting for the purpose of bringing agency personnel up to date on our upcoming projects could cost over \$100 —the price of two or three men's time at the rate of \$25 per man hour. Asking for a rough quote on a proposed direct mail program might result in a \$200 or \$300 bill for the labor to assemble the figures.

Before long we were afraid even to telephone our agency for fear that phone calls might generate invoices, too. In fact, after seeing how costly it was just to kick around ideas with our new agency, we decided we'd better not go so far as to actually order a job. We stopped the planning sessions, paid our final bill, and took a breather from ad agencies.

Too much pizzazz. High cost wasn't the only thing about ad agencies that turned us

off. Advertising agencies just think too big for our business.

With 6,000 apartments under construction or in final planning stages, we're used to thinking big. But not as big as ad agencies. While we're thinking newspapers, they're thinking television. While our idea of a grand opening is a beefed-up sales push, theirs is a champagne party.

The difference between our kind of big think and theirs is that ours is tied to the economics of the apartment business. We know, for example, how many months of projected rental income we can afford to pour into opening-day drumbeating.

We also know which advertising media pull best for us, because we make a habit of asking every apartment prospect where he heard about us and we write down the answers and keep a tally. That's why we look skeptically at ad agencies when they suggest we buy saturation radio and television commercials to promote apartments. We've found much more efficient ways to spend that kind of money.

In fact, we find that most of the traditional ad agency approaches to marketing aren't particularly suited to us. The idea of dumping a big chunk of our ad budget into full-page newspaper ads, free champagne, saturation TV, and other high-priced promotion blasts is one we can't justify.

Old reliables. Our facts show that regardless of how much we spend on any kind of advertising, more than half of our prospective renters come consistently from drive-by traffic. In other words, our most important ad medium is the old triedand-true outdoor display—signs, billboards, arrows.

The next largest percentage of our prospects are attracted by newspaper ads. And, contrary to ad-agency and space-salesman recommendations, you don't have to buy a full-page newspaper ad to capture the reader's attention. All you need to dominate a classified-advertising page is a two-byfull—an ad that runs two columns wide and a full page deep, providing four days of advertising for the price of a one-shot full-page ad.

The ad agencies we've seen are too sophisticated for our business. They tend to over-engineer everything they produce for us. They approach apartment renting like selling a toothpaste or a car. We don't need the sales tools and the marketing programs of a national advertiser. They aren't economically feasible for us, and

they don't really do the job we need.

Best way to go. We'd love to turn o all of our marketing headaches to an agency. But until we find one that knc apartments, we're taking the do-it-yc self route. We've put together our o marketing-services team of independ outside suppliers: a graphics designer sign painter/installer, a photographer, interior decorator, and an assortment printers. We do the planning, they do work. We pay only for production—not conferences or three-hour lunches.

Our graphics man, our sign painter, our photographer take field trips with to study new jobs, sometimes devoting l a day of their time. Unlike our ad agenc they don't bill us for those planning and search sessions.

The graphics man provides us with al our design needs from ceremonial grou breaking shovels to corporate logos a complete outdoor sign programs. He signs all of our brochures and follows th through printing production. He desi our sales office displays, gets bids fr display builders, and supervises insta tion. The brochures he produces for cents a copy often outshine competin agency-designed brochures costing over dollar a copy.

No shopping tours. We keep our pr ing costs down by dividing the w among three different companies: a sn one for stationery, business forms, busin cards, and other repetitive jobs; a mediu size one for brochures in two and th colors; and a large one for expense brochures involving four-color work. rebid our printing frequently, but we do shop around much for cheaper replacement for the other members of our market services team. In their case, continuand loyalty are more essential than pr

As our print advertising is virtually newspaper, we handle that ourselves. ' toughest challenge here is keeping up date with the advertising needs of t dozen different projects, a job involv more scheduling problems than creat ones. Ads have to be rewritten, cance or inserted on a daily basis in a variety newspapers. But once this work is temized, a secretary can take care of m of it.

Our do-it-yourself approach doesn't m ure up to ad-agency standards for sop tication. But in terms of effectiveness efficiency, it measures up fine.

H. CLARKE WELLS, MARKETING VICE PRESIDENT, L. B. NELSON CORP. , PALO ALTO, CALIF.

These windows came completely pre-finished. XL-70 outside, white enamel inside. Cost to finish on the job: Not 1 cent.

Put them in the opening and apply pre-finished trim. That's all anybody has to do to these windows. No painting outside, no painting inside, no cleanup.

Marvin XL-70 exterior pre-finish lasts years longer than the best paints—and provides a hard white finish. Marvin interior finishes come in walnut, fruitwood, and white all beautiful.

This is the Marv-A-Tilt — Here's a double-hung window that's a work-saving masterpiece. Tilts in for inside-the-

room cleaning. Adjusts for perfect operation. Double balanced. Available with standard glazing or insulated glass. It comes in 135 different sizes (including mul-

lions and triples). And we ship within 10 days of order. Write us for the new 20page brochure and 36-page catalog of the world's largest line of wood windows.

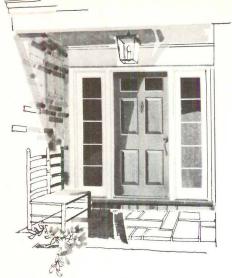


Warroad, Minn. 56763 (218) 386-1430

CIRCLE 87 ON READER SERVICE CARD

25





Dura·Mor . . . the <u>care-free</u> entranceway

New Dura • Mor Entranceways keep saying "welcome!" . . . vinyl exteriors won't need painting for 20 years! Select from many custom designs insulated sidelights or pattern glass to match. Write for free full-color catalog. Or see Sweet's Architectural file 17c/MOR or Sweet's Light Construction file 5b/MOR.



OSHKOSH, WISCONSIN 54901

LETTERS

Piece-of-the-action financing

H&H: Within the past year, there has been a growing controversy over the major institutional lenders' real estate investment policies. In fact, many people are beginning to refer to them as "passive arm-chair investors", "financial parasites", or words of similar descriptiveness. An excellent example can be found on the "apartment scene" page in your September issue.

It is unfortunate that educated individuals refuse to understand the purposes of a joint-venture financing arrangement between the real estate investor and a developer.

Apparently, perople fail to recognize that the investor often contributes 100% of the project's coststhe developer, in turn, provides his expertise. As a result, the developer is normally well compensated by a builder's fee, a management fee, an agreed depreciation percentage, and a portion of the cash flow dividends. In addition, the developer shares in the ownership of the property and thus enjoys appreciation over a period of years. During the lifespan of the partnership, the money partner carries the entire financial burden-and the return is always commensurate with the risk!

Today more than ever before, sophistication is the key prerequisite to any real estate transaction. This is true for the developer as well as the investor. Each party must protect not only his own interests, but also those interests of his partner to insure that the partnership remains healthy and productive. Anything less would be of undesirable consequence to both parties.

> Donald L. Johnson Kansas City, Mo.

Golf course costs

H&H: The article "Building a golf course? What should it really cost you?" in your November issue is a most interesting presentation of a problem facing many of the members of our association who are called upon to place a value figure on a golf course. Unfortunately, many appraisers never see the course they are to appraise until it is an accomplished fact—or fiasco. LYNDA SWANSON

> managing editor The Real Estate Appraiser Chicago

The Scholz Story

H&H: Your story about me ["The fall of Don Scholz"—Oct.] was superbly done, and reflects all the effort and work that was put into it. My only real criticism is of the two headlines, since from a personal viewpoint I do not think it was a "fall" or that we have been relegated to obscurity.

One thing the story proved is that

HOUSE & HOME is widely read in the industry; I received dozens of letters, most of which voiced a comment similar to that which I have just made.

As to detail, I have just two items of criticism.

First, the story did not reflect the fact that at the time of the merger I was absolutely convinced, in view of the stated intentions of Inland top management, that the merger would be good for all concerned, including myself and Scholz Homes. The directions eventually taken, subsequent to the merger, were, of course, the basis for our obvious final conflicting objectives. I feel that this is somewhat important since the story leaves the impression that I was dragged into the merger kicking and screaming every inch of the way.

Second, the indication given that our new operations represent small potatoes with respect to the previous Scholz Homes operations, I believe, incorrectly states the situation. In our discussions, I had given Frank Lalli [the writer] some general indications as to what was to transpire. We are actually moving at a somewhat faster pace than I had even projected then.

The new company, Donald J. Scholz and Co., is now incorporated with a Delaware charter. We have 12 projects in the process of cranking up that will provide for a substantial record in our first year of operations (1971). I would anticipate our sales volume (sales, not construction, which is an important difference in a publicly held company) will run somewhere between \$10 and \$20 million. I would expect to double this figure for 1972. The projects range from low-income FHA 236 projects, using Operation Breakthrough's "earmarked funds", to high-priced luxury developments. A number of these projects have already been presold to investor groups, which means we will be able to book construction in this first year as completed sales in these projects.

As a result of this, we are hopeful that we may even be able to bring the new operation public sometime late in 1971. Our original plans called for this step hopefully in 1972 or 1973.

I will provide you with more detailed information on all of this in due course. Maybe we can talk you into a story on "The de-obscuring of Don Scholz". In any event, I do want to reaffirm my belief that HOUSE & HOME is far and away the best in the industry.

DONALD J. SCHOLZ, president Donald J. Scholz and Co. Sylvania, Ohio

Reader Scholz is always good copy, and we wish him much success in his new venture—ED.

CIRCLE 88 ON READER SERVICE CARD

EDITORIAL

Modular housing

It's here to stay—and that's a good thing—but let's not confuse fact and fancy

From time to time, word trickles back to us that in some quarters, HOUSE & HOME is considered "negative" on the subject of industrialized or modular housing—that in some way or other we are opposed to it.

We find this rather puzzling in view of the number of articles we've run on the subject over the past months. But just so there can be no further misunderstanding, we're going to restate our views in as unambiguous a way as possible.

We are very positive on the subject of modular housing.

We consider it a highly promising tool for the homebuilder—the smaller builder as well as the big one. We think it will eventually prove to be the only practical means by which he can deal with the two-edged problem of decreasing labor supply and increasing labor costs. And we think he will reap such other benefits as better cost and quality control, shorter construction times, and a virtual end to seasonal construction delays in coldweather areas.

We are quite certain that by the end of this decade, modular housing will represent a very big chunk of all U.S. homebuilding. We welcome this growth, as we welcome anything that contributes to better housing at lower cost. We will do everything we can to encourage it. And we will continue to report and comment on all aspects of modular housing that we deem newsworthy and helpful to our industry.

However, we will *not* encourage the self-serving nonsense about modular housing that keeps being broadcast by people who should know better. On that subject we are not just negative, but downright hostile. For instance:

You hear that modular housing is a revolution that is sweeping the country. Nonsense. Dozens of small companies have entered the field, but they produce very few houses. There are currently less than half a dozen firms producing modulars in any real volume—most of them for the government-subsidy market. If you exclude sectionals (which have been around for years and now comprise an annual volume of perhaps 7,000 units), last year's production of modulars probably didn't reach 10,000 units. Not exactly a revolutionary figure. Growth will come. But it will be gradual—evolution, not revolution.

You hear that modular housing will be a brand new industry, dominated by giant corporations. That's silly. Modulars are simply a different way

to build houses; land must still be bought and developed, the houses must be merchandized and sold, and the present homebuilding industry is best fitted for the job. The giants will get into modulars, but in the same way they have entered homebuilding: via mergers with or acquisitions of successful homebuilding firms. (And even here, the track record of the giants is not particularly inspring—H&H, Oct. 70.)

You hear that modulars are the only way we can build low-cost housing. This makes no sense at all. Three or four years from now, modulars may have a real cost edge over conventional construction. But right now they are no cheaper, and sometimes cost more. High land and financing costs are the big bars to low-cost housing not construction.

This brings us to the subject of Operation Breakthrough. The impression has gained credence that Breakthrough and modular housing are synonymous, and that to oppose one is to oppose both and a little worse than damning motherhood.

In fact they are two very different things. And we have opposed Operation Breakthrough just as vigorously as we have supported modular housing.

Operation Breakthrough was started on the assumption that not enough low-income housing gets built because the housing industry lacks the production capability. The absurdity of that view is shown by what happened last year when the available supply of subsidy money—the real sine qua non of low-income housing—was doubled. The volume of subsidy housing promptly doubled too.

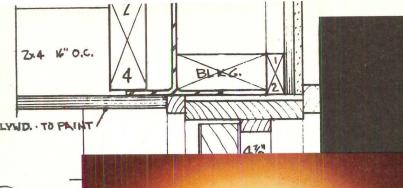
It could have gone still higher had more money been available—for example, all those millions that went into Operation Breakthrough.

We don't oppose Operation Breakthrough, and those myths about modular housing, just to be ornery. As we said above, we are convinced that modulars can be a vital help to housing. But their role can be delayed and perhaps diminished by irresponsible nonsense. In particular, if Wall Street does the same over-blowing job on modulars that it did on mobiles, the resultant disenchantment could make it very hard for legitimate modular builders to raise needed capital by way of public offerings.

As we see it, it's not primarily a question of being positive or negative. It's a question of sticking to the facts, and using a little common sense in analyzing them.

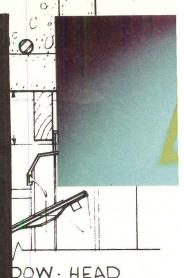
That's what we intend to keep on doing.

MAXWELL C. HUNTOON JR.



GRC

* 0010



THE BLEG

AT

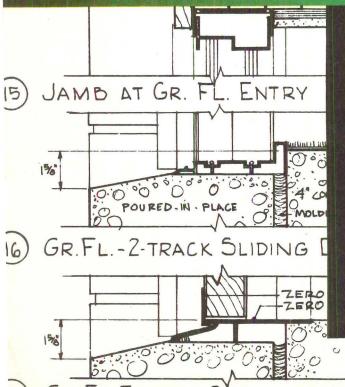
2

VORKO

NINDOW - HEAD

MARBLE SIL

NEW PRODUCTS 1971 E BBODISTICTOR



Starting on the next page is a preview of 175 new products to help you build better for less in 1971. Fifty-five are shown in color. Many will be displayed for the first time at this month's NAHB show in Houston. And some are so new that no news releases were available when HOUSE & HOME went to press.



INTERIORS

1. Diagonal paneling of clear redwood lumber highlights a hallway and stairwell in a California beach house. Laid up diagonally, the bright splashes of cream-colored sapwood are even more interesting and could dramatize any entrance or foyer. California Redwood Assn., San Francisco.

CIRCLE 201 ON READER SERVICE CARD

2. Rough-sawn plywood made of redwood is used to panel the walls and ceiling of a vacation home. Plywood needs no finishing and, even without the usual trim or ornamentation, creates a warm interior. Same texture is also available in Douglas fir, cedar, and lauan in 4' x 8', 4' x 9', and 4' x 10' panels. American Plywood Assn., Tacoma, Wash.

CIRCLE 202 ON READER SERVICE CARD

3. Plank-like paneling has ½"-wide randomly spaced black grooves for a three-dimensional effect. Finished in easy-to-clean acrylic coat, Dimension V (*shown*) comes in walnut, oak, and birch, plus three textured finishes in driftwood, black, or a suntan. Another weatheredwood planked paneling with an even deeper grained texture (*not shown*) comes in leather, adobe, bronze, sagebrush, and bone, is called Rio Grande. Georgia-Pacific, Portland, Ore.

CIRCLE 203 ON READER SERVICE CARD

4. Ovals within ovals contrast wetlook surface with a matte finish. The large-scale pattern, repeated every 22", also comes in yellow on yellow, white on gray, white on silver, gold on silver, and pearl on white. Grandioso, part of an 18-style line based on bold geometric shapes, comes 27" wide, is pre-trimmed and strippable. James Seeman Studios, Garden City Park, N.Y.

CIRCLE 204 ON READER SERVICE CARD

5. Jagged flowers are done in three vivid colorways on wet-look backgrounds: red, green, black, and white on yellow; lavender, cerise, green, and black on white; and blue, green, and white on brown. Paper is 28" wide, repeats pattern every 26". Color Me is one of 18 hand-printed large scale designs. Classic Wall-coverings Connoisseur, New York Citv.

CIRCLE 205 ON READER SERVICE CARD

6. Bull's-eyes in turquoise, blue, and olive are set within 3½" squares on a design imported from London. Mullion, one of 44 English patterns done on paper-backed vinyl, also comes in mustard golds, toast, and chocolate brown. ICI America, Stamford, Conn.

circle 206 on reader service card

7. All-wood spiral stairway is handcrafted of red oak or any other hardwood. Stairs are supported by twelve-sided center pole, $4^{1}/_{16}$ " x $4^{1}/_{16}$ ", of matched laminated pieces. Available 4', 4'6", or 5' diameter to any height, for left- or right-hand entry, with square or circular wellhole. Railing is one continuous laminated piece. Balusters have chamfered corner or can be turned (*shown*). Shipped unfinished; preassembled or ready to assemble. Unit compares in price to better metal models. Stair-Pak, Union, N.J.

CIRCLE 207 ON READER SERVICE CARD

8. Urethane beams are molded to look like hand-hewn wood. Even "iron" straps and nails look real. The 6" x 8" beams weigh one lb. per ft., are easy to handle, can be sawn, are applied to walls or ceilings with panel adhesive. Williams, Troy, Mich.

CIRCLE 208 ON READER SERVICE CARD

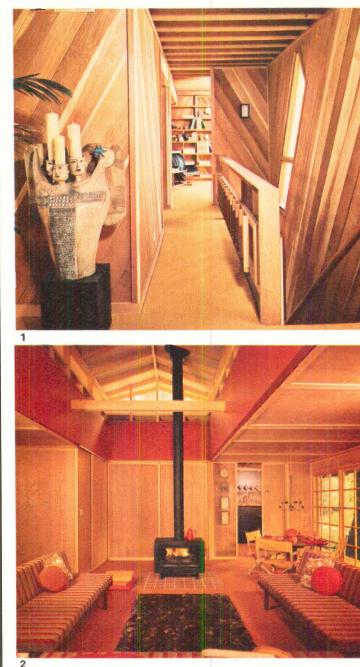
9. Bold stripes enliven hardboard wall paneling. Mod Stripes also comes in coordinated greens with yellow or browns with orange. Random width stripes are placed so that increasing or decreasing color value creates three-dimensional effect. Panels are 4' x 8'. Celotex, Tampa, Fla.

CIRCLE 209 ON READER SERVICE CARD

10. Vinyl-surfaced wallboard has a linen-like texture. Vinyl is bonded to one side of insulating building board and wrapped around the edges of the 4' \times 8' panels. Non-fading colors are sand, beige, gold, and a soft green. Vinylsote is sound-damping, moisture-resistant. Homasote, Trenton, N.J.

CIRCLE 210 ON READER SERVICE CARD

11. Textured pegboard looks like grasscloth, comes in beige, is unperforated on the bottom third of $4' \ge 8'$ panels. Masonite, Chicago. CIRCLE 211 ON READER SERVICE CARD

















DOORS & WINDOWS

1. Bifold closet doors, shown in flush style called Moderne, are also available with panels and/or louvers, can be finished in any color or mirrored. From 2' to 8' wide, 6'8" or 8' high. Roberts, City of Industry, Calif.

circle 212 on reader service card

2. Spanish style door of solid Ponderosa pine has three carved panels, measures 3' x $6'8'' x 1\frac{3}{4}''$. El Juarez is just one of two dozen Spanish and Mediterranean styles shipped sanded smooth and ready for finishing. Certain-teed Ideal Millwork, Valley Forge, Pa.

CIRCLE 213 ON READER SERVICE CARD

3. Large-scale carvings are molded urethane panels set into wood frame doors. Three designs shown—Carmel, Alhambran, and Acapulco—plus three others are available in six woodtone finishes and three colors. Foam insulates, can't warp or crack. Doors are 3' x 6'8" x 1³/₄" thick. Decor, Muskogee, Okla.

CIRCLE 214 ON READER SERVICE CARD

4. Aluminum storm doors come in five colors, taken from subtle colonial shades, of acrylic enamel electrostatically applied for long life and proven for five years in traditional white with no complaints. Featherlite, Detroit, Mich.

CIRCLE 215 ON READER SERVICE CARD

5. Skylights let sun into a living room, create an atrium-like planting center. Plexiglas (acrylic) bubbles come with aluminum frames, clear or in three shades each of bronze or gray, in several shapes. Rohm and Haas, Philadelphia, Pa. CIRCLE 216 ON READER SERVICE CARD

6. Louvered bifolds of polystyrene resist dents and scuffs, ride smoothly on nylon bearings, have no bottom track. Finished in white, they may be wiped clean, can be painted. Ceramic pulls included. HC Products, Princeville, Ill.

CIRCLE 217 ON READER SERVICE CARD

7. Vinyl-finished bifolds come in several colors, a textured white, plus birch, maple, and walnut wood-

grains. Both sides of the hollowcore doors, part of low-cost Vinyl Shield line, are finished. Georgia Pacific, Portland, Ore. CIRCLE 218 ON READER SERVICE CARD

CIRCLE 218 ON READER SERVICE CARD

8. Handcrafted doorpull, one of many original designs, is aluminum with bronze or pewter finish, is 34" wide, can be mounted on one side or back to back on aluminum frame glass door.. Forms & Surfaces, Santa Barbara, Calif.

CIRCLE 219 ON READER SERVICE CARD

9. Double lock has two dead-locking latches for extra security. Plate is $3'' \ge 9''$. Various knob styles are finished in etched, bright, or satin brass, or in bronze, chrome, iron, or stainless steel. Weiser Lock, South Gate, Calif.

circle 220 on reader service card

10. Two-piece entry handle lock, 15½" x 3", weighs 5 lbs. Cortina, in antique brass or silver, provides massive look for carved doors. All-steel mechanism, solid brass or bronze exterior parts. Weslock, Los Angeles.

circle 221 on reader service card

11. Carved Colonial doors have designs taken from early American furniture, tinware, and walls, of pears, grapes, sailing ships, tulips, eagles, and three other motifs. Carvings appear only on eye-level panels, so prices are comparable to plain rail and stile models. E.A. Nord, Everett, Wash.

circle 222 on reader service card

12. Mahogany carved door in largescale three-panel design, called St. Moritz, is one of four entrance doors of seven-ply chopping block construction, weighing in at 100 lbs. Elegant Entries, Worcester, Mass. CIRCLE 223 ON READER SERVICE CARD

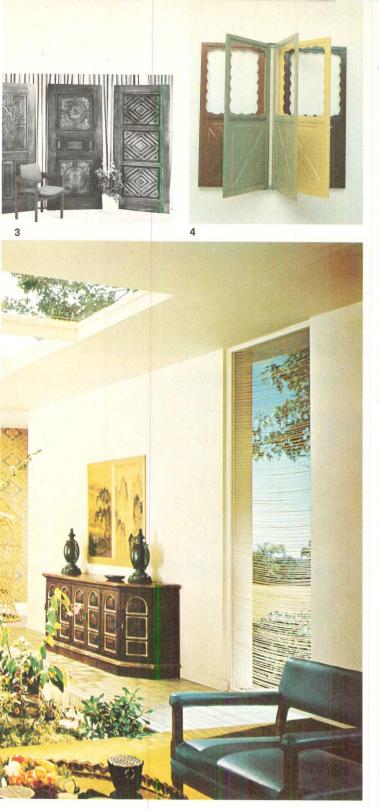
13. Red Venetian blinds represent only one of 96 colors for standard and narrow blinds. Colors include hot pink, wisteria, pumpkin, bold blues and greens, and some linenlike and marbled textures. Levolor Lorentzen, Hoboken, N.J. CIRCLE 224 ON READER SERVICE CARD





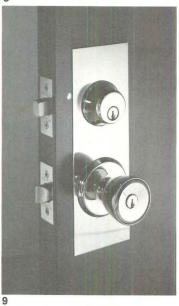






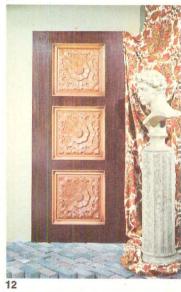














ELECTRICAL EQUIPMENT

1. Burglar alarm goes off *before* door is opened when pressure is pur on steel bolt. Sliding bolt into strike sets it; withdrawing bolt shuts it off. Runs on C batteries. Part of Guardware line. Stanley, New Britain, Conn.

CIRCLE 225 ON READER SERVICE CARD

2. Colonial lantern for indoors or out, can be mounted on the wall or a post top or hung from chain. From Regency series of classic designs, it is solid brass with weathered finish, measures 19" x 7", has clear glass panels. American Lantern, Newport, Ark.

CIRCLE 226 ON READER SERVICE CARD

3. Modestly priced fixture from Lite-Trend line has five brass or chrome arms around a wood column. Smoked glass globes sit in highly polished cups. Valu-lite unit is 22½" in diameter, 14½" high. Halo, Div. McGraw-Edison, Rosemont, Ill.

CIRCLE 227 ON READER SERVICE CARD

4. Entertainment center built into wall has matching stereo components and phonograph. Musicom also has optional intercom. NuTone, Div. Scovill, Cincinnati, Ohio. CIRCLE 228 ON READER SERVICE CARD

5. Intercom provides two-way communication from any room in the house to as many as 12 others, plus the front door. Speaker of the House has a no-hands feature. Executone, Long Island City, N.Y. CIRCLE 229 ON READER SERVICE CARD

6. Contemporary chandelier has six smoke glass globes around a polished aluminum hexagonal column. Diameter is 22"; height 21". Progress Lighting, Philadelphia, Pa. CIRCLE 230 ON READER SERVICE CARD

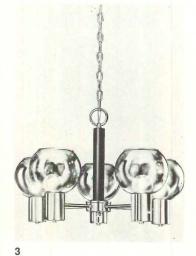
7. Mediterranean candelabra looks like wrought iron and weathered oak, has hand-blown amber seedy glasses with thick drip-mold candle bases. Madera five-light unit is 24" in diameter, 23" high. Lightcraft of California, Los Angeles. CIRCLE 231 ON READER SERVICE CARD

8. Crystal prisms hang from this chandelier, which can have five arms (shown) or six, eight, or twelve. Finishes: antique gold, silver, white, or lacquered colors. Wilshire Lighting, El Segundo, Calif.

CIRCLE 232 ON READER SERVICE CARD

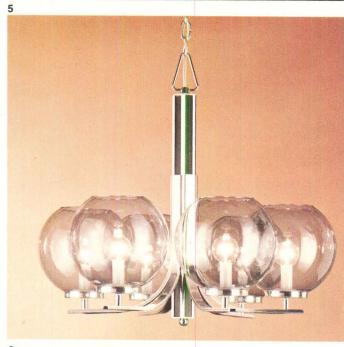
















XTERIORS

extured aluminum shingle of-protection for walls or roof flying sparks, needs no main-nce, has an easy-to-install four interlocking feature that has tested in hurricane winds. ic Shingle comes in green, n, and white. Kaiser Alumi-, Oakland, Calif. Le 233 on reader service card

sphalt shingles look like ran-wood shakes, have dots of no-plastic adhesive that form anent bond under hot sun. itect 70 shingles weigh 345 per square, have jumbo color ules in charcoal, brown, and Bird Fast Walpole Mass Bird, East Walpole, Mass. LE 234 ON READER SERVICE CARD

nsulating siding cuts heating cooling costs, stops wind, and ens sound. Polystyrene Rigid R-Foam 3⁄8" thick is sanded between polyvinyl fluoride ng and heat-reflecting foil. Surin DuPont's Tedlar or Al-Dymalar. Alsco, Akron, Ohio. le 235 on reader service card

Il steel exterior includes sidcorner posts, soffits, mouldings, ers, and downspouts. Super l siding is galvanized, given a ling coat, a primer, and a vinyl sh, applied electrostatically. en, olive, gold, red, brown, , or white. Alside, U.S. Steel, burgh, Pa.

le 236 on reader service card

edwood plywood with top ply notless all-heartwood lumber alled Palco-Ply. Shown in an rted batten style. Saw-textured ace may be bleached, stained, painted, or left to weather. fic Lumber, San Francisco. Le 237 on reader service card

andom board panels look like 1-hewn timbers, come 4' x 8', 0', or 12' and 3's" or 5's" thick. in ¾"-thick lap siding 8" wide 12' long. Oldbridge comes unhed or protected by penetrating n in three earth colors. U.S. vood, New York City.

LE 238 ON READER SERVICE CARD

olid vinyl clapboards with threeensional rough-sawn pattern d Barkwood comes in 8" or ble 4" style. Contour T-lok els have oversize nailing slots, positioning lock. White only. tic, South Bend, Ind.

LE 239 ON READER SERVICE CARD

hake-like lap siding of hardd is 12" wide, 16' long, has 5"-thick variations. Bayside es unfinished, will soon be lable primed. Masonite, Chi-







FLOORING

1. Red oak parquets are solid hardwood 5 1/16" thick (almost twice the thickness of laminated blocks) and 19" square. Saxony pattern is also available in white oak, teak, cherry, maple, walnut, and various combinations. Harris, Johnson City, Tenn.

CIRCLE 241 ON READER SERVICE CARD

2. Three tile colors—yellow, white, and blue—are used in herringbone and striped patterns on both floor and walls of a master bath/exercise room. Ceramic tiles, from Franciscan Terra Grande line, are 3" x 6", also come in lime, olive, tangerine, flame, russet, and bark. Tiles come in smooth glazes for walls, in textured glazes for floors. Interpace, Los Angeles.

CIRCLE 242 ON READER SERVICE CARD

3. Vinyl-asbestos tiles have an embossed pattern indexed so that tiles laid all in one direction have a wallto-wall pattern. Palacio del Sol tiles are $12^n \times 12^n$ and $1/16^n$ gauge, come in eight colors (with Spanish names) that range from white to red. Azrock, San Antonio, Tex. CIRCLE 243 ON READER SERVICE CARD

4. Muted tiles, in one unglazed earthtone and seven subtle glazes, come in 4" x 8" size that can be laid in herringbone or basketweave patterns or in 8" squares, $7\frac{3}{4}$ " hexagons, plus a Spanish style curved tile. All tiles in the Primitive line are suitable for use either on exterior walls or interior walls and floors. American Olean, Lansdale, Pa.

CIRCLE 244 ON READER SERVICE CARD

5. Polyester carpet of Dacron is a two-level lightly sheared loop construction for thickness and durability. It is, of course, easy to clean. Rivers Edge comes in 14 clear colors, 12' or 15' wide, with jute backing. Congoleum, Kearny, N.J.

CIRCLE 245 ON READER SERVICE CARD

6. Teak from Thailand laid in little stripes is called Picadilly and is one of 21 finger patterns available in teak and other exotic hardwoods like Asian ironwood and South American walnut. Teak makes a floor that is resistant to termites, vermin, and dry rot. Bangkok Industries, Philadelphia,

circle 246 on reader service card

7. Long-wearing parquets are a nuclear-fused composite: red oak, maple, or walnut has been impregnated with liquid plastic, then bombarded by gamma rays so the plastic fuses to the wood and hardens. Result: a permanent nowax finish and stable parquet flooring. Gammapar may be installed directly on concrete or underlayment subfloor with no backing, no sealing, no staining. Eight color finishes include red, blue, green, and gray. American Novawood, Lynchburg, Va.

circle 247 on reader service card

8. Printed nylon carpet can take the heavy traffic of a family room, is easy to keep clean, has a longwearing, high-density, heavy foam backing. This Spanish tile pattern called Vaquero is one of three designs in the Adventure Prints line and comes in reds, golds, blue/ greens, and greens. Armstrong, Lancaster, Pa.

CIRCLE 248 ON READER SERVICE CARD

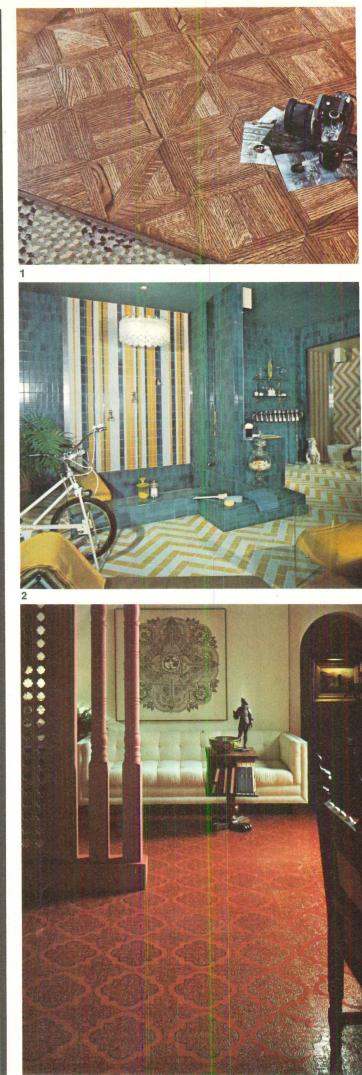
9. Floral pinwheels on a cushioned sheet vinyl flooring, come in blue, beige, green, white, orange, gold, and lime. Available in 6' widths, it is called Luran Regency Mansion. A transparent non-porous vinyl wear layer eliminates the need for waxing. Below the wear layer is a springy interlayer of vinyl foam for quiet and comfort, then an asbestos backing for installation on any floor or grade level. GAF, New York City.

CIRCLE 249 ON READER SERVICE CARD

10. Diamond-printed nylon has a high-density foam backing, comes in 12' widths. Tempo pattern also comes in red, gold, avocado, and orange. Jonas, Dalton, Ga.

circle 250 on reader service card

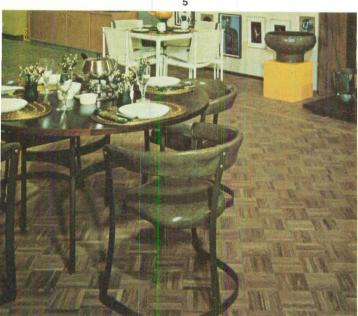
11. Nylon shag carpeting provides a high-fashion look with little upkeep. Called Curryvale, the carpeting comes 12' wide in 15 colors. Bigelow-Sanford, New York City. CIRCLE 251 ON READER SERVICE CARD



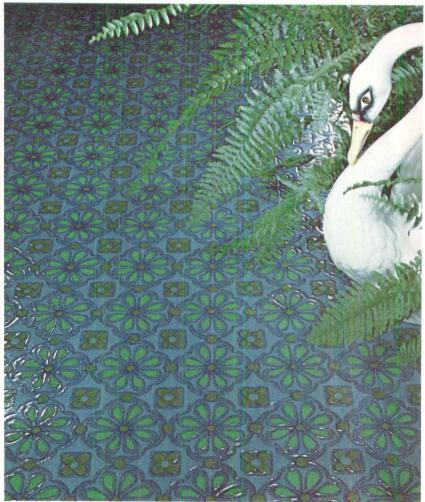
















BATHS

1. Vanity top, molded of one piece of marble-like material, has luxury look at moderate price. Although light in weight, it resists impacts, and it can't be harmed by most cleansers. All popular sizes. K-S-H, St. Louis, Mo.

CIRCLE 252 ON READER SERVICE CARD

2. Pewter dolphins that form handles and spout of 8" wide-spread faucet set also come in satin gold or chrome. Undercounter lavatory bowl is Evergreen pattern shown in white on green and available in several colors. Gerber, Chicago CIRCLE 253 ON READER SERVICE CARD

3. Gem-like faucet handles are solid semi-precious sodalite, hand-carved and set in cast brass finished in 24K gold, polished or antique brass, or antique nickel pewter. Other stones in Gem line: rose quartz, amethyst, malachite, aventurine, rhodenite, and tiger eye. Artistic Brass, Los Angeles. CIRCLE 254 ON READER SERVICE CARD

4. Transparent fittings come in bronze, charcoal, or clear acrylic for wide-spread or 4" lavatory sets, or for shower, tub, or sink. Marquis fixtures have a special finish for wear comparable to chrome plate, are available in polished, antique, or satin chrome, or antique bronze. Price Pfister, Pacoima, Calif. CIRCLE 255 ON READER SERVICE CARD

5. Prototype bath system forms two walls of a 5' x 8' bath, concealing all plumbing so there's no need to cut into walls. Pipes can be hung on existing walls or exposed surfaces of studs. Concept III's three fiberglass reinforced plastic modules are: one-piece tub/shower (pre-plumbed) and molded cap; lavatory section with molded-in cabinet and lighting (pre-wired), china bowl, and brass fittings pre-mounted and ready to attach; and toilet panel with wall section shrouding conventional bowl and concealing tank. Modules come in popular fixture colors. Eljer, Pittsburgh, Pa. CIRCLE 256 ON READER SERVICE CARD

6. Fiberglass tub and shower, compatibly styled, come in yellow, bone, beige, white, gold, avocado, green, or blue. Surrounds are sandwich panel construction with sound deadening foamed-in polyurethane core. Both Cameo fixtures are $73^{1/4}$ high, have molded-in shelves. Tub has contoured back, is 5' long, $14^{1/2}$ " high, $31^{1/8}$ " wide. Shower is 32" deep and 36" or 48" wide.

Certain-teed, Valley Forge, Pa. CIRCLE 257 ON READER SERVICE CARD

7. Builder-priced sauna, same as manufacturer's standard units in size and shape, has an interior lining of Vikalon that provides same heat retention as redwood for less money. Econoline also custom sized. Viking, San Jose, Calif. CIRCLE 258 ON READER SERVICE CARD

8. Whirlpool tub, 5' long, is porcelain enamel in blue, gold, yellow, sandstone, avocado, pink, or white. Motor is at drain end concealed by flange. Beauty Spa (with right- or left-hand finished corner) and Medallion II (for recessed installation only) have brass pumps that circulate 23 gals. per min. through four self-cleaning jets. Briggs, Sterling Heights, Mich.

circle 259 on reader service card

9. Surface-mounted cabinet needs no rough opening, can be hung on shallow or masonry walls. Plate glass mirror doors are guaranteed five years, glass shelves are removable, and four-bulb incandescent fixture can illuminate entire bath. Simplicity Slider is 24", 28", or 36" wide. Grote, Madison, Ind. CIRCLE 260 ON READER SERVICE CARD

10. Marbelized china fixtures—the Aqualyn 20" x 17" lavatory and the Elongated Cadet water closet—have soft beige-brown veining that is never the same on any two pieces. Marble/China is impervious to stains, cleans easily. American-Standard, New York City. <u>CIRCLE 261 ON READER SERVICE CARD</u>

11. Acrylic tub/shower is molded from one sheet of ¹/₄"-thick Acrylite, reinforced with fiberglass and polyester resin, and sprayed with temporary finish to prevent installation damage to non-slip floor. Material is resilient, resists chipping, comes in avocado, beige, gold, blue, or white. One-piece Bathing Suites are 84" high, 60" x 35¹/₂" for tub, 36" x 34" or 48" x 34" for shower, have molded seats and shelves. Formica, Cincinnati, Ohio.

CIRCLE 262 ON READER SERVICE CARD

12. Striped paneling has washable embossed plastic finish that resists wear, heat, stains, and moisture. Linen Stripe comes in green, gold, pink, and blue, is a $16" \ge 8'$ plank, $\frac{1}{4}"$ thick, with $1 \ge 6$ edges. Marlite, Dover, Ohio.

CIRCLE 263 ON READER SERVICE CARD











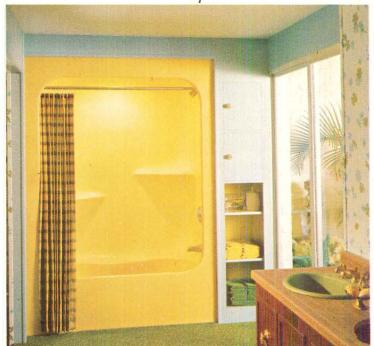


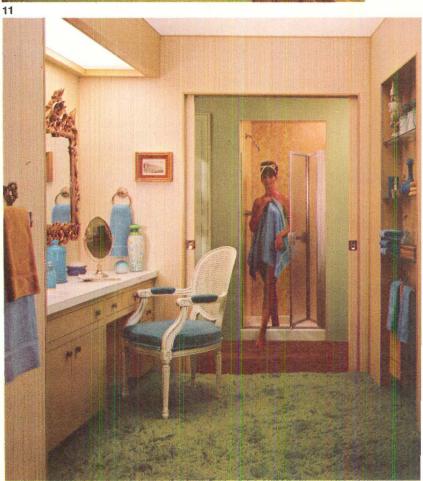












KITCHENS

1. Three-filter hood is duct free. Heavy-duty aluminum mesh coated with Teflon-S removes heavy grease particles. Spun glass fiber filter, chemically treated, absorbs smoke, removes fine grease particles. Fine granule activated charcoal filter absorbs odors. Air is returned to room through top vent. Select-A-Speed fan has infinite speed control and indicator light. Built-in work light; white, three colors, or stainless; 24", 30", 36", or 42" wide. Miami-Carey, Monroe, Ohio.

CIRCLE 264 ON READER SERVICE CARD

2. Ductless hood includes control for sound as well as air speed. Dialair's low sound level won't interfere with telephone conversations while operating. Three 20" x 11 7/16" filters: washable aluminum for grease, fiberglass for smoke, and charcoal for odors. Duct-Free comes in appliance colors, antique copper or brass, hammered copper, brass, iron, black. Broan, Hartford, Wisc. CIRCLE 265 ON READER SERVICE CARD

3. Plastic laminate for cabinet fronts lets color strips show through routing. In woodgrains or solids with black or gold reveals. Color Core never needs refinishing. Wilson-Art, Temple, Tex. <u>circle 2</u>66 on reader service card

4. Gas wall oven has panoramic doors, continuous self-cleaning, radiant heat broiler, automatic rotisserie and meat thermometer, and keep warm controls. Whirlpool, Benton Harbor, Mich.

CIRCLE 267 ON READER SERVICE CARD

5. Double oven range includes upper unit with full window, fourelement cooktop, and lower self-cleaning oven. All infinite speed rheostat controls are mounted on eye-level panel, including automatic thermometer shown in use. Americana 30"-wide model comes in four colors. General Electric, Louisville, Ky.

CIRCLE 268 ON READER SERVICE CARD

6. Paneled cabinets have solid oak formed drawer heads, picture frame doors with raised-panel grain con-tinunity, recessed hinges, and magnetic catches. In medium or dark brown. Excel Wood, Lakewood, N.J. CIRCLE 269 ON READER SERVICE CARD

7. Hoodless cooking island includes twin-grille unit and four-element cooktop, both with built-in ventilation system that draws smoke and odors *down* through filters and into ducts to outdoors. Grille has ceramic rock bed for charcoal cooking, as with rotisserie shown, and one side converts to a griddle. Available with optional chopping block covers. Jenn-Air, Indianapolis, Ind. CIRCLE 270 ON READER SERVICE CARD

8. Versatile cabinet system uses two-part hinge to match on the job cabinets, doors, and drawer fronts manufactured and stocked separately. Medium-priced line shown has two types of doors: full panels of particle board surfaced in gold or avocado, or oak, pecan, or beachwood grained laminate or removable panels set in hardwood frames finished in white or walnut. A lowpriced line has vinyl surface in walnut woodgrain. High-priced line is laminated inside and out. Thiokol. San Antonio, Tex.

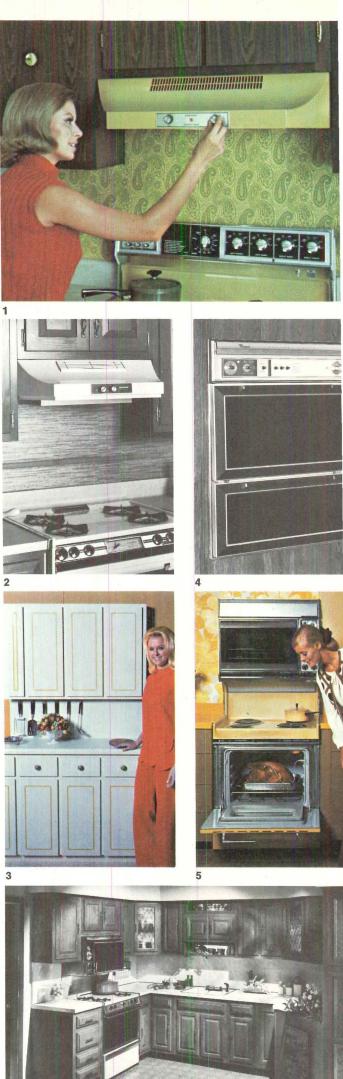
CIRCLE 271 ON READER SERVICE CARD

9. Compact laundry center is only 2' wide, fits into corner of a stairhall as shown, or the bath or kitchen of an apartment, mobile, or vacation home. Dryer sits atop washer, has slanted-back base so washer lid lifts up and is held by magnet. Skinny Mini is 5' 6" high. Frigidaire, Dayton, Ohio.

CIRCLE 272 ON READER SERVICE CARD

10. Electronic wall oven cooks meals in minutes, features a browning element, black glass doors. Thermatronic is available singly to hang under 24" cabinets or teamed with self-cleaning oven as shown. Thermador, Los Angeles. CIRCLE 273 ON READER SERVICE CARD

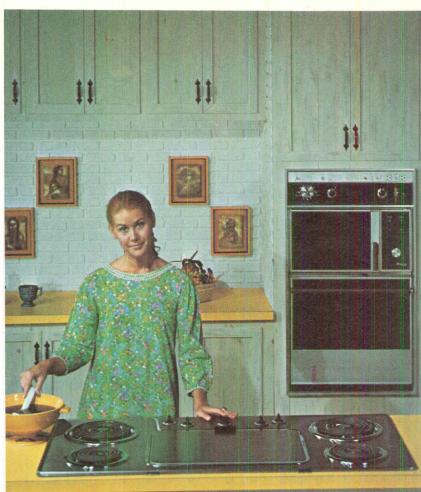
11. Deluxe cabinets have furniturelike finish for custom look plus easy upkeep. Vinyl-based sealer is baked on, brings out wood's beauty while protecting it from cleansers and preventing warping due to moisture. Grandeur line in dark maple color has self-closing hinges, adjustable wall cabinet shelves, drawers that ride on rollers, and gold-tone hardware with large gripping areas. Easily reversible for left- or right-hand opening. Tappan, Mansfield, Ohio. CIRCLE 274 ON READER SERVICE CARD



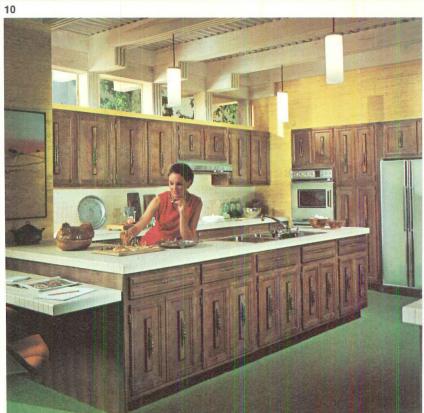












Stuck with an apartment project nobody wants to buy? It may actually be a gold mine, if you know how to....

Convert it to Condominum

as long as it made financial sense, then sell to another investor who was allowed to start the process all over again.

But since last July, only the original investor is permitted the double-declining method. Subsequent owners must use straight-line depreciation—a much less effective tax shelter. And as a result, first owners are finding it difficult—or impossible—to sell a project that is becoming progressively less attractive as a tax shelter, and is not profitable enough to justify itself as a continuing investment. Further, potential first-time investors are not as eager to put up new projects that they might not be able to get rid of.

The conversion route offers a highly attractive way out. The original owner can use his fast depreciation for as long as it makes sense, then convert to condominiums, sell, and pay only capital gains on his sales.

Condominium is important in the process because it is enormously flexible: anything from a duplex to a big high-rise can become a condominium. And the legal side of the conversion process is relatively simple, requiring little more than local approval of a subdivision map.

Here's how a typical conversion works

Pomeroy West is a 138-unit apartment project in Santa Clara. It was built as a co-op by Eichler Homes in 1963, but lower-cost houses were plentiful in the area at the time and Eichler could never sell the required 90% of the units so title could be given to the buyers. The project became rental apartments, and had been operated that way for several years before FHA acquired it. FHA then faced the question of selling the project as townhouses, condominiums, or to an investor.

Jack Tuggle, until recently deputy director of the FHA office in San Francisco, describes how the decision was made, and the project sold.

"The local office felt that either the townhouse approach, which would have given an individual parcel of land with each unit, or the condominium approach, would be most advantageous to the Secretary of Housing and Urban Development," Tuggle says. "It would return a greater cash flow, and we would be giving 138 families the advantages of home ownership. Also, our risk would be scattered over 138 individual home owners instead of concentrated in one investor, who would not have the same amenity interests in a property as a home owner.

"Our Washington headquarters, however, felt that there might be trouble completing the sale of this many units, and we'd be stuck with a project that was half sold. So they favored selling to an investor-type operator with a 10% minimum down payment and a 40-year, 6% commissionerheld mortgage."

"We opted for selling it with 138 mortgages placed in the private sector of the economy through normal lending channels. This meant the Commissioner wasn't holding a 6% mortgage in a market where the going rate is $8\frac{1}{2}$ % and up—which in effect would have been a discount of 15-25%, discounting the 6% mortgage to the market."

This decision meant that FHA had to put more into the project in repairs and rehabilitation than if it had been sold to a single investor. But the gross return was higher—\$3.3 million, a net yield of a little over \$600,000 above the projected return had the project been sold to an investor.

Tuggle recommends selecting a contract sales broker who is also qualified to function as property manager while the condominium is being sold. In this case, FHA chose the William H. Young Co. of South San Francisco, whose owner, William H. Young, has extensive experience in building, selling, and managing condominiums.

The contract sales broker was made responsible for all the paperwork, including getting the project through the county planning commission, moving it through the State Division of Real Estate to get a recorded map, seeing to the advertising program, and establishing an on-site sales office. For this, Young was guaranteed 2% on all sales. If he sold to an original owner who was in occupancy, the total commission was 3%. If he sold to someone not living there, he got a full 5%. If another realtor participated in the sale, 2% went to the contract sales broker and 3% to the originating salesman.

FHA first notified tenants of the building of their intention to sell the units, giving them first chance to buy if they wished. Then full page advertisements were run in the local Santa Clara and Palo Alto newspapers, followed later by quarter page ads in the Sunday San Francisco paper. Tuggle considered the primary market for the units to be in Santa Clara County and environs, TO NEXT PAGE

least, that's what experts in the San acisco area are saying. Their cases in at are three foreclosed FHA apartment ects which have recently been sold as dominiums to individual buyers rather as total packages to investors—and an eye-opening results:

he projects sold out fast—the slowest c only three months, the fastest (and llest) sold out in two weeks.

ales costs were low, largely because by of the units—30% in one instance e bought by families who were already and in them as tenants.

ross returns were nearly 25% higher a could have been expected from selling projects as packages to investors.

he importance of these successful consions stems from recent changes in the laws. Until last July, the owner of an rtment project could use his doublelining depreciation as a tax shelter for in areas where the average house was selling for 20% to 25% more than the condominiums but offered no more in the way of living accommodations. And because the government was selling the property, Tuggle specified that the basis of the appeal should be that the property was being sold at a very fair and reasonable price.

"We believe that to be successful, condominiums have to sell at least 20% cheaper than a single family dwelling on its own site. People prefer the single family dwelling unless they get a lower price. At least this is true where you're selling shelter, as we were. It may not apply to another type of condominium, for instance, when you are selling a way of life to retired people or single swingers."

Prices must give buyers a choice

The pricing structure at Pomeroy West was worked so as to produce the desired gross return of \$3.3 million. But within this framework, a wide variation of prices was assigned to the two-, three-, and four-bedroom apartments—24 different prices in all. Tuggle believes that sellers of condominiums, cooperative apartments, and subdivisions often err by not differentiating enough between prices of different units.

FHA assigned to the contract sales broker and his sales manager the responsibility for putting prices on each individual unit.

"The admonition to the sales force was, price them like you think you can sell them. But we didn't want to wind up toward the end of the sales campaign with all the highest-priced or the lowest priced, and we didn't want them to be all in one area," Tuggle says.

According to Jonas C. Harschel, director of sales for the Young company, the previous history of the project showed that when it was first offered for sale as a cooperative, the four-bedroom units were the slowest sellers. The three-bedroom units, which were larger and better located, far outsold the fours, but the three were nevertheless priced the same or even lower. So the new sales agents priced the threes higher than the fours.

Harschel and Young assigned new prices principally on the basis of location within the project, with a spread of \$3,000 from the lowest to the highest-priced in each of the three types of units.

"There are 22 twos, and we had six

different prices. There are 52 threes, and we had ten different prices. There are 64 fours, and we had eight different prices," Harschel explains. "The difference is a little larger back yard, a corner, near the pool, far from the pool, or on the perimeter street. Many people argue that these differences are too great, but it is an essential thing to the sale of your project to make these differences important."

He says there are two types of buyers: those who don't mind paying more but who always want the best, and those who are willing to buy the same house down the street for less.

"And it's important for you to sell the slow sellers as well as the fast sellers. In the case of a subdivision, when you have one side of the street selling fast and the other side slow, no one is served, not even the buyer on the good side of the street. Because as long as the houses on the slow side are still selling for the original price, or standing there accumulating vandalism and weeds, the value to the buyer of the better-located houses is not going to go up. And your profits are going up in smoke."

Finally, Young says it is essential to stick to the original prices on condominium units, and not be tempted to raise them when units become scarce or lower them to close out the last few sales.

"We set target dates from authorization six months ahead," says Tuggle, "and we made every target date. I think it's attributable to the fact that we'd had some experience with two other conversions. We used existing FHA standard forms so there wasn't any need for extensive legal review either by FHA or the Division of Real Estate. We priced our properties well below the market for equal accommodations in a single family dwelling. And we pitched our sales message to people who were used to looking at more expensive properties, but who would consider Santa Clara an acceptable community in which to live."

Pomeroy West has the advantage of an excellent location and neighborhood. It is within a few blocks of a shopping area, has an adjacent park and a grammar school, and is within walking distance of a junior high school, high school, and churches. Public transportation is close and so is freeway access.

Santa Clara is a well-defined, small city of 20,000, not the conglomerate that much of the San Francisco Peninsula is. And houses in Santa Clara generally sell 10% higher than in adjacent areas of county, simply because of the quality reputation of the community, Tuggle s

"The neighborhood is much better t when the project was built. There a lot of high-rise, semi-luxury apartmbeing constructed in the same general a Some people thought these might hurt sales program. But this has not protrue, because their rents are high most of them will not take children."

Pomeroy West has one- and two-s buildings built in clusters. Each unit a private patio and garage space. There many common green areas, a 90-foo shaped swimming pool, and a commubuilding.

Money must be allotte for fixing up

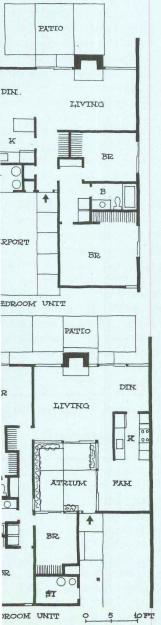
In addition to painting the outside of buildings (the original architect was gaged to do the color scheme), FHA paired streets, lights, and other comm facilities. Interior repairs consisted ma of cleaning and painting. Selling and proving was done concurrently. Beca the building was seven years old, no v was placed on stoves, refrigerators, garl disposals, and dishwashers. It was m clear to the buyers that FHA was, in eff giving them the appliances with the un standing that they would be operations the time of sale but carried no warrant all.

FHA budgeted its total selling expe on the property at \$599,500, but actu they were about \$392,800. Here is a br down of anticipated vs. actual exper

	Projected	Act
Sales commis- sions	\$157,500 (5%)	\$135
painting and re- pairs of exterior	75,000	58
engineering	14,000	12
title expense	30,000	18
discounts & ap- plication fees	168,000	112
repairs & misc.	140,000	42
advertising	15,000	15
	\$599,500	\$392

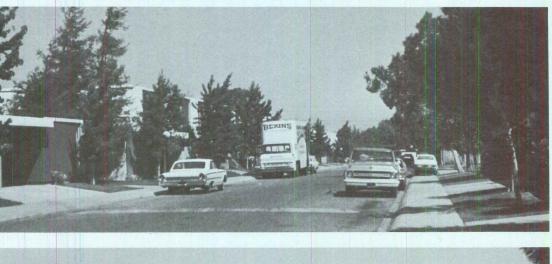
Nearly one-third of the buyers at P eroy West were families who alre rented apartments there; some purch





Originally designed as a co-op, Pomeroy West is ideally suited to condominium ownership. Site plan *(above, right)* shows majority of units built along five culs-desac; remainder are on the project's only through street. Floor plans *(left)* include two-bedroom unit *(top)* and three-bedroom unit with atrium *(bottom)*, both are very well oriented to outdoor living areas—a trademark of Eichler Homes which built the project. Two photos below show the project's handsome landscaping. At right is the community building facing onto a swimming pool. Top photo shows the sign at one entrance to the project which announced FHA's condominium sale.







the units they were living in, others switched. (In the other two buildings FHA converted to condominiums, this built-in market of tenants also accounted for 2.5% to 30% of the buyers.)

Renters at Pomeroy West were advised of the switch to condominiums six months in advance, giving them a chance to decide to buy, or to remain through the school term and look for other housing. As "D Day" approached, those tenants who remained were given 30 days notice, and almost all moved without protest.

A wide range of prices was offered

Those who decided to stay were offered the following:

• Two-bedroom townhouses at \$17,900 to \$20,900, with total cash requirement of \$1,195 to \$1,532. Monthly payments: \$198 to \$223.

• Three-bedroom units at \$23,500 to \$26,500, with total cash requirement of \$1,947 to \$2,435 and monthly payments of \$262 to \$290.

• Four-bedroom units, which have smaller rooms than the threes, from \$21,700 to \$24,500, with \$1,765 to \$2,049 cash required. Monthly payments: \$245 to \$272.

Buyers were given a complete financing package, with the Bank of America providing 30-year loans at 8½ plus ½% monthly mortgage insurance, (MMI). Terms were negotiated at 4 points, with FHA paying the points. FHA paid all closing costs except recurring items such as tax and insurance reserves.

One unusual condition: the agency required a contribution from each buyer to an operating reserve, so that the project would be a going concern in good financial condition at the time it went into operation.

On a \$26,500 house, for example, the down payment included equity of \$1,750; operating reserve, \$297; two months' taxes, \$114; two months MMI, \$20; one month interest, \$188; and condominium start-up fund, \$65, for a total cash payment of \$2,434.

On this \$26,500 unit, for a total yearly housing expense of \$3,485, about \$2,970 is either equity accumulation or deductible on income tax. First year equity accumulation is \$193, real estate taxes are \$686 and interest is \$2,090. Average yearly equity accumulation over the life of the mortgage is \$825.

The buyers' monthly housing expenses are about 5% to 10% higher than their previous rents, but they are accumulating equity and a tax shelter, which is important to middle-income families.

Condominium ownership and assessment, with the exception of insurance, was allocated on the basis of square footage of each unit. Monthly condominium expenses range from about \$20 for the lowest-priced units to \$32 for the highest-priced. FHA established blanket insurance policies on the condominium and each individual owner.

FHA's Washington office stipulated that title could not be registered in the names of the owners until 60% of the units were sold; most lenders make a similar stipulation, often requiring that 80% be sold.

During the sales period, FHA provided a manager for the project. When it is sold out, the home owners association can either keep the same management or hire their own manager, provided he is approved by FHA.

Here's a typical buyer's experience

Among the tenants of Pomeroy West who bought a condominium were Alan and Betty Laude, who first rented a twobedroom apartment there in November, 1969. After 22 years of frequent moving and apartment-living, Mr. Laude, who works in the field for the U.S. Geological Survey, was transferred to the office at Menlo Park. The Laudes planned to buy a home. But to get their child in a good school district, and "because it was available," they rented a Pomeroy West apartment and enjoyed it tremendously.

"It wasn't like living in an apartment; it was living independently, and yet there was action going on—the pool, the availability of the schools, the shopping center. The geography of the thing was delightful," Mrs. Laude says.

When the units came up for sale, the Laudes did not consider buying one, and started serious house-hunting instead. They found prices high, and a friend who had purchased a condominium in Palo Alto through William H. Young Co., suggested that they at least consider doing it.

Then the Laudes learned that their Pomeroy West apartment had just been sold. "All of a sudden we felt insecure," Mrs. Laude says. So the Laudes decided to stay in Po roy West. They bought a three-bedro house built around an atrium for \$24, Other houses which they had seen, pr about the same, were at least 15 y old, with "antiquated fixtures," accordin Mrs. Laude.

The Laudes say they find exterior m tenance, the care given the grounds pool, and the general atmosphere all v pleasing. The only disappointment is noise from adjoining units, a prob which hadn't occurred in their prev two-bedroom apartment. But they are h ful the management can solve this probl

Mrs. Dianne O'Hearn learned al Pomeroy West at a real estate office wil she worked, and while she wasn't in ested for herself at the time, she wan to look at the units for clients. She her architect husband, Michael, also w searching for "just a typical house." A they saw the condominiums, they bec quite intrigued, "because they had so m more amenities—the pool, no garder and yet there's a lot more land for the o dren to play in," Mrs. O'Hearn says.

The family lived in an apartment withere was a swimming pool, and "Wikind of spoiled ... we didn't think we cateford a house with a pool, and this one way of getting one," says Mrs. O'He

The O'Hearns bought a \$24,300 f bed-room, two-story house on a cul de street, and their unit overlooks a area. They have no complaints at all al their purchase. At first they consid that buying a unit would be a good vestment because FHA was selling ther such a fair price. But now, says b O'Hearn, "We're looking at it not so m as an investment as a very enjoy place to live. You can't find anyt this big in such a nice area of S Clara for this amount of money."

Other conversions we just as successful

The other two projects FHA conv were small investor-sponsored cooperaalso built by Eichler. The first version involved the 36-unit Grant Apartments in Palo Alto; they were within two months. A 12-unit buil called Laguna Heights, in San Franc sold out in a week, at \$33,000 per uni a three-bedroom, two-bath condomin with fireplace.

Tuggle notes that on the sale of Po

West, more than the original mortamount will be recovered, but that will not make a profit. Nevertheless, he ks it's a function of government to e trails that others can follow.

t's remarkable that we could market reclosed project and break even, since t of these projects show a substantial when they go into foreclosure. But greatest thing of all is that we're king the ice and showing how we can the home ownership in this country in tiple structures. The only way we're g to house this nation is to have ter density. And actually, for many le, it's a better way of life."

aggle thinks one answer to low-cost sing will be to use the 235 program er the Housing Act to convert buildinto condominiums, turning renters home owners, and giving them, he , a piece of the action.

A was able to help one young woman e her housing problem by selling her ur-bedroom condominium at Pomeroy t under Section 235. The girl, who is rced, has multiple sclerosis, six chilfrom 6 to 14 years of age, and an ear-old dependent mother living with In addition, she needed to be near ford University Hospital where one d will have open heart surgery. The ernment trained her to become a comr programmer, and she has employt in San Francisco and is able to come by train.

ith an income of about \$6000 a year, e aid to dependent children, and a gift ne down payment from her employer, was able to move into a unit where at \$158 a month will cover all of her thly payment. Her down payment was to \$600, or about \$200 plus closing s and additions to reserve replacements. So these six kids now have a large area lay in, community house, and a swimg pool, and they're all within walking ance of grade, junior high, and high pols," says Tuggle.

A generally will insure a condominium version project if the building was inally built under FHA. It will ina non-FHA buildings if they are 11 s or less; if they are larger, 20% of mortgage amount must be put into rbishing and improving the building. n the West Coast at least, only builda less than 30 years old can be ecotically rehabilitated, Tuggle says. Builda 12, 15, and even 20 years old are olete, but can easily be updated. These changes can be made with 20% of the loan proceeds, making the buildings eligible for FHA mortgage insurance.

Here's advice to would-be converters

At a recent condominium conference sponsored by the Associated Home Builders of the Greater Eastbay, Inc., Young outlined some of the factors in condominium conversion.

"I'd strongly urge that if you are planning your first condominium, you hire an experienced attorney to prepare the enabling declarations, covenants, restrictions, dialogues, and certificate of consent. Then go over these papers yourself to determine if they truly set forth what you're going to sell, and if your buyer can live with the requirements that are set down. Most important of all, pass them through the title insurance legal department, and give them to the civil engineer who prepares your survey map. Selection of the civil engineer who is to do the subdivision map and work with the city and county officials, is most important. An engineer who has appreciation for the sales job that follows the map recording is a splendid asset."

The engineers are responsible for preparing the condominium map, which is based on a survey of the property and the architectural plans, if available. If the owner has a copy of the original plans, it will save him both time and money, since the engineer can verify that the plans are correct and work from them in making the map.

Young warns against extensive remodelling of buildings to be converted to condominiums.

"If you paint, clean, put the garden landscaping in order, clearly define the garage spaces, and tend the common facilities, you will recover the expense," he says.

In selling a condominium, his company does not use furnished models, but simply shows vacant, clean apartments. If a building has been very well-managed, it may be sold "as is."

Young says that owners converting to condominiums will have to weather a period in which the vacancy factor is high because sales are being made. When tenants find that the building is being sold, many of them will move, and Young attempts to refill those apartments immediately with people who have been screened and are interested in buying. "Nevertheless, there is a shaky period when you have perhaps up to 50% vacancy. But if you get 10% to 30% more for the building, the vacancy factor is quite well worth it."

Describing the potential of the real estate market for condominium sales, Young says, "There are literally thousands of duplexes, triplexes, fourplexes, fivesix-, seven-, eight-, nineplexes, up to highrise buildings containing hundreds of units, now on the market waiting for buyers that are actually living in them. There are lots of hurdles, and don't let me make this sound easy. It isn't. The California Real Estate Commissioner wants \$500 plus \$3 per unit regardless of the size of the project. The banker wants to be paid a pre-payment penalty even though you may be bailing him out from a low interest loan. The documents are cumbersome. Talented salesmen are scarce.

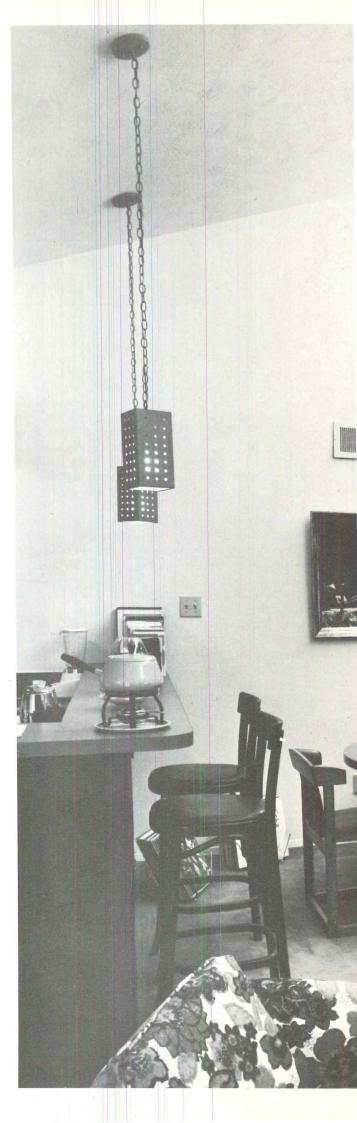
"But the rewards are great."

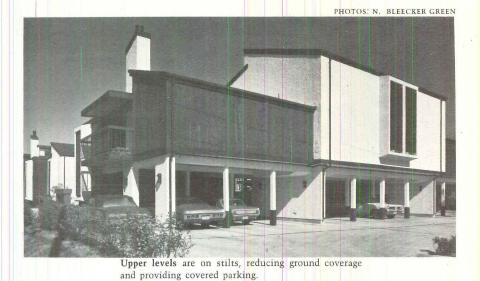
—Jenness Keene McGraw-Hill News San Frañcisco

FOUR SPECIAL PROJECTS

for special multifamily markets

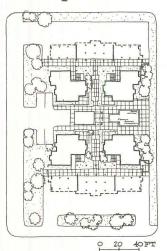
As the experienced apartment or townhouse developer knows, this is the age of specialization. Tenants and buyers no longer can be satisfied with just the right number of rooms and the right priced rental range. As multifamily living has burgeoned, distinctly different markets have appeared, each with its own background, tastes, desires, and needs. The art of appealing successfully to four of these different markets—ranging from young single adults to retirees—is reflected in the four projects shown at right and on the next six pages.





FOR YOUNG WORKING ADULTS:

Apartments that stress smart living

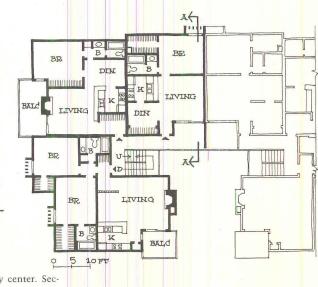


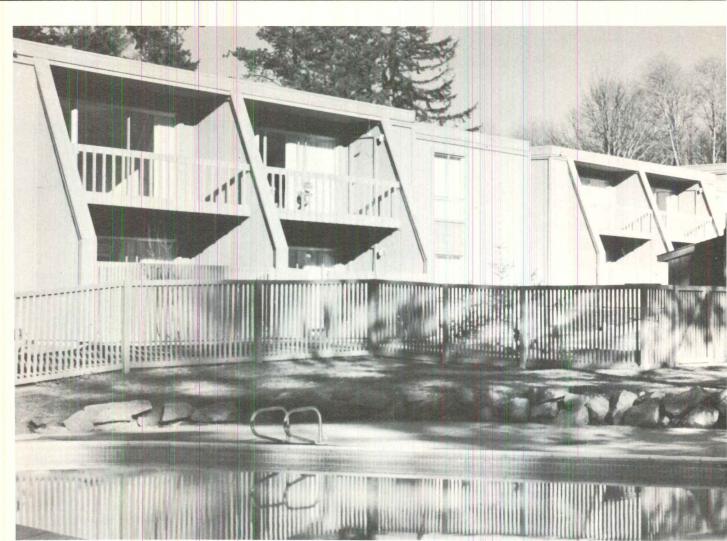
The young singles market in Dallas is a highly competitive one. To meet it, this 20-unit apartment project, The Arrangement West, has such sophisticated apppeals as kitchen-living areas with wrap-around bars, high ceilings with clerestories, and contemporary decor. Other features include covered parking, private entrances, a swimming pool, and nearness to downtown Dallas.

Eight units have one bedroom, 12 units have two bedrooms. (The owner now feels that a few three-bedroom units would have improved the mix.) Rentals are from \$180 to \$265. Builder/owner: Reata Land Co.; architect: Craycroft/Lacy & Partners.



Site plan (top) includes pool, community center. Section and typical unit plans are at bottom.

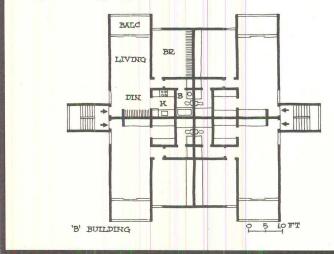


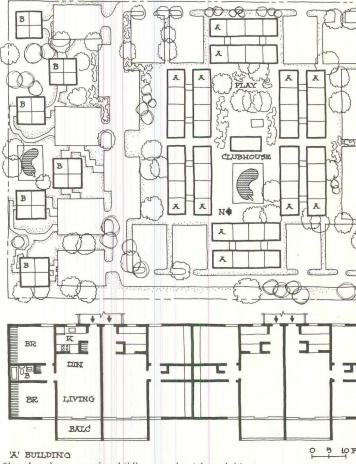


Pool, club house, and play yard serve families with children. Couples have own pool (plan, right).

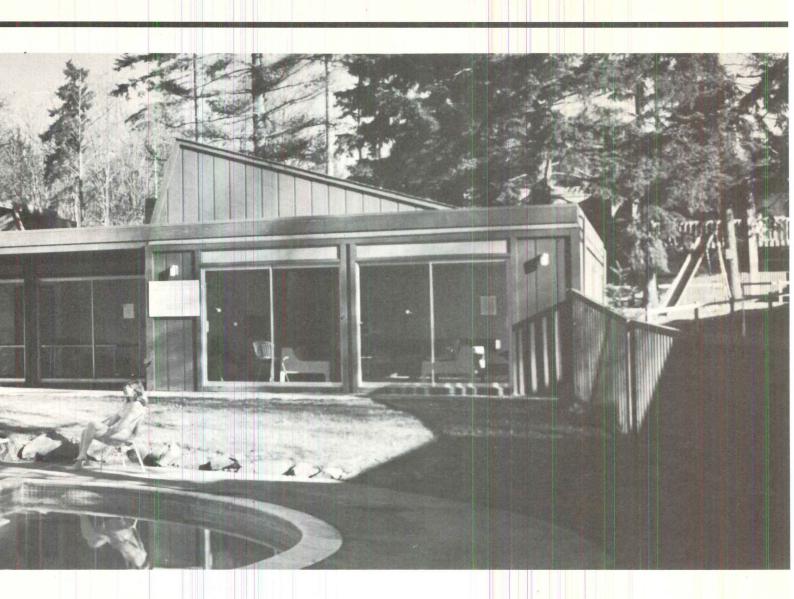


Childless couples are housed in detached, two-story fourplex units. Typical plan is shown below.



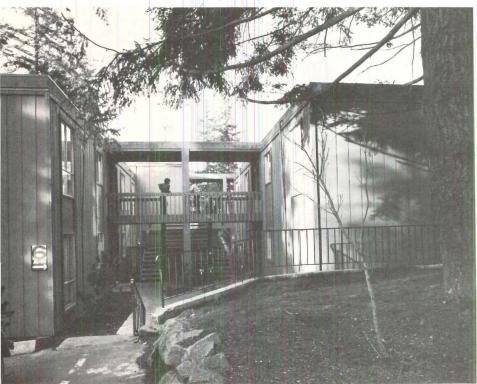


Site plan shows area for childless couples (above left). Typical plan is for families with children.



FOR YOUNG MARRIEDS:





This 144-unit project consists of two groups of apartments: 96 units for families with children (at right in site plan, facing page), and 48 units for families without children (at left in land plan). Both groups share some facilities—the community building, small kitchen, and laundry. But families with children, who are bound to be noisy, have their own separate play area and pool. The project has a relatively high density -20 units per acre. Its apartment mix is 48 one-bedroom units, 80 two-bedroom units, and 16 three-bedroom units. Rentals are from \$140 to \$180. Builder/owner: Environmental Properties; architect: Zaik/Miller; location: Lynwood, Wash.

Private entrances are provided for each apartment. Covered stairs have outside storage cabinets.



Furnishings and decorating reflect the elegant style of living that tenants are accustomed to.



Parking spaces in project average over two per unit. At far right is pool and club house.



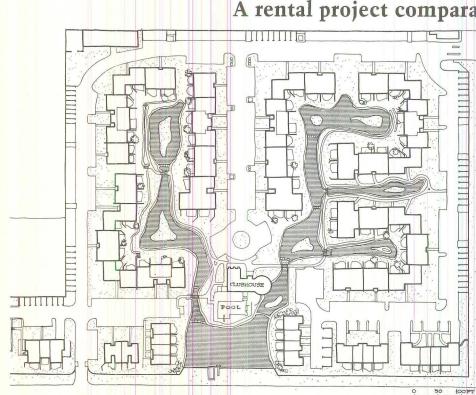
Artificial lake system, part of the project's extensive landscaping, supports ducks and swans.

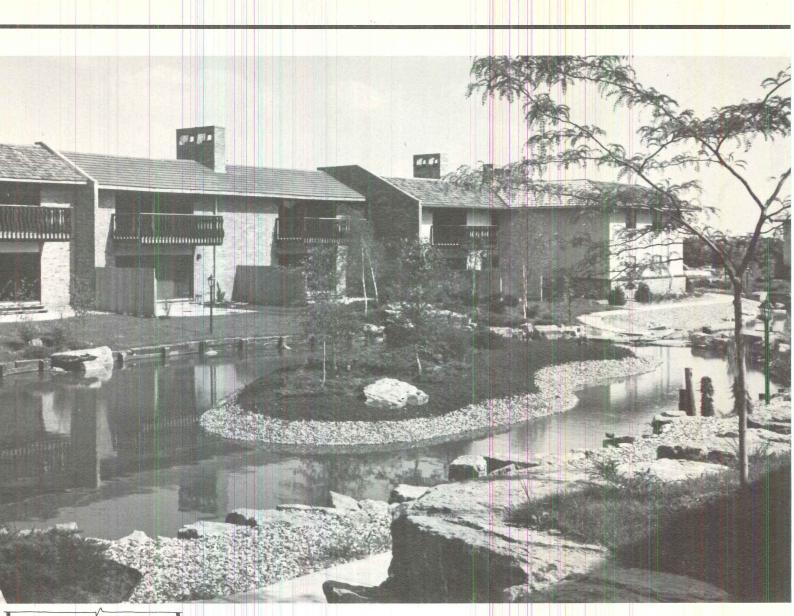
FOR EMPTY NESTERS:

A rental project comparable to the homes they so

Most of the prospects for these apartm and townhouses were upper-income ples, a few with children, who had form owned large homes. So the developer off them larger-than-average units of 1,44 2,888 sq. ft., with extra large bedrooms dressing rooms, balconies off living-dir areas, and such security measures as a house with closed-circuit TV, and a surrounding the property. And there i attractive landscaping scheme that feat five man-made lakes stocked with t waterfowl. A clubhouse overlooks lakes—and a swimming pool.

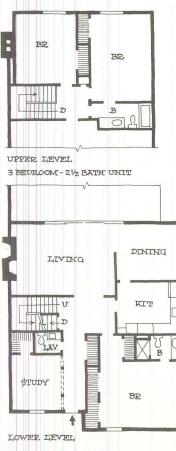
Of 165 units, 140 are two- and th bedroom apartments arranged in six to story buildings. The remainder are to houses. Rentals range from \$290 to \$ (the latter for two two-bedroom units c bined). Owner: J. C. Nichols Co.; buil Max Okun; architect: McArthur-Jarcho Assoc.; location: Shawnee Mission, I



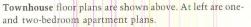


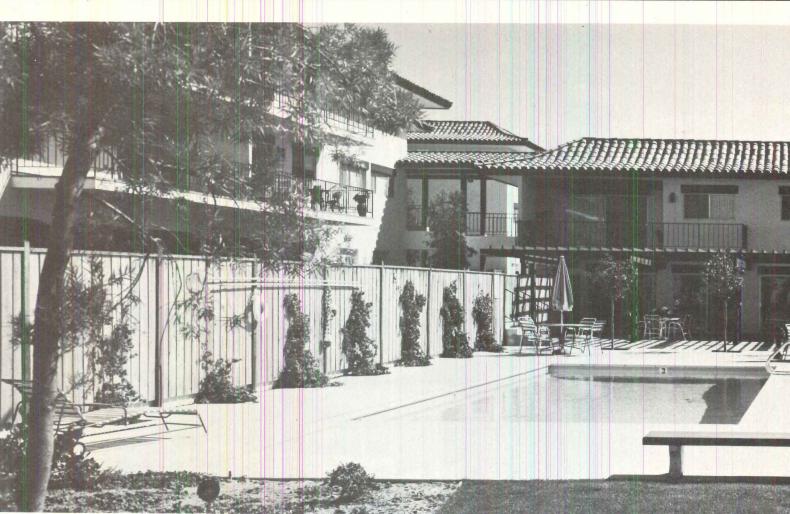


N









Pool is on the small side—but ample for few who use it. Pool patio is popular for lounging.

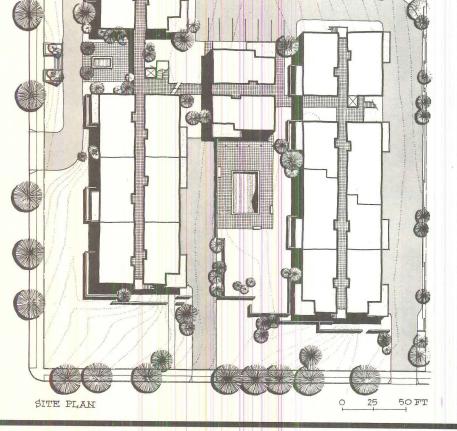


Condominiums with all the extras

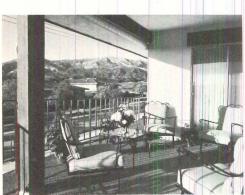
In an area already full of condominium apartments, the developer of this project found a hole at the top of the luxury market and filled it with units shown here. His buyers were upper-income retirees looking for privacy, luxury, and a feeling of security.

Features which appealed to them were units that look—and live—more like houses than condominiums (plans, far right); bedrooms with separate dressing areas; kitchens with space for eating; a choice of bath-and-a-half and two-bath units; walkin closets; and living-dining areas opening onto broad balconies. All upper floors are reached by elevators.

The six one-bedroom units (two have extra dens), 23 two-bedroom units, and four three-bedroom units are priced at \$26,950 to \$44,950. Builder/owner: Michael Towbes; architect: Charles Schmandt; location: Santa Barbara, Calif.





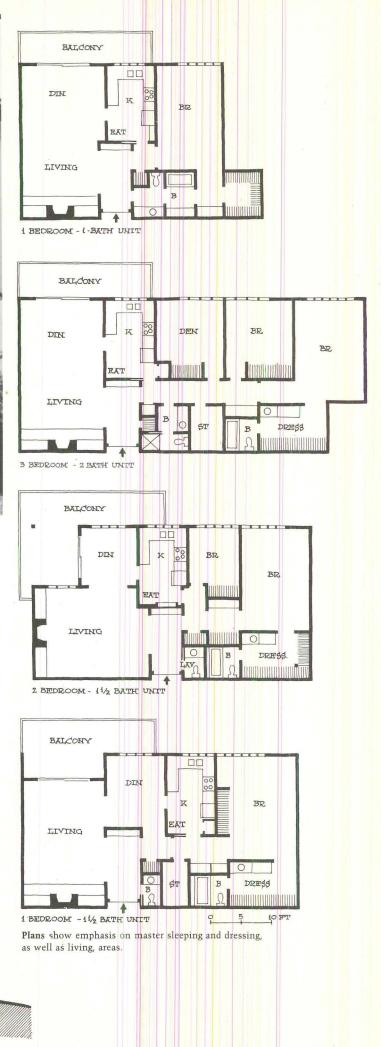


Balconies are of better-than-average size. Over half of them offer views of distant hillsides.



Main entrance to project is at uphill end of site, which slopes gently and has wall around it.





New information on building products and systems for the seventies.

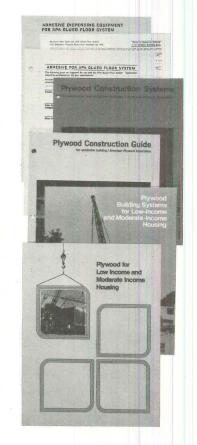
For free copies, use Circle Service Card at back of magazine.

The housing revolution is here. Read all about it.



APA Glued Floor System Package. Includes a step-by-step application sequence manual, with how-to photos and information on the new no-squeak, no nail pop, no callback floor. Tells how to produce a quality floor at minimum cost. 8 pages of case histories. Lists of glue manufacturers and equipment suppliers.

Circle 180 on Reader Service Card



Plywood Building Systems for Low-income and Moderate-income Housing. Includes 20 downto-earth approaches to low-income housing. Plywood Construction Guide for residential building. Plywood Construction Systems for commercial and industrial buildings.

Circle 181 on Reader Service Card



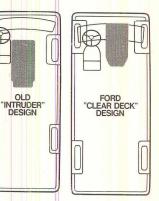
Industrialized Housing Portfolio. Six new case histories on plywood in industrialized housing construction. For example: Stacked up student housing. Glued components on an assembly line. Post and plywood panel components around a utility core. Data sheets on roof joist and truss assemblies.

Circle 182 on Reader Service Card

Only one van gives you all these better ideas. **Ford Econoline**



The engine is moved forward in Ford's clear-deck van—all the way out of the cargo area. Clear floor space behind driver's seat measures over 81/2 ft. in Econoline Van . . . over 10 ft. in the Supervan.



Sales leader for 10 straight years.

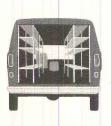
Easy, out-front servicing.

Simply raise the convenient outside hood and your routine service points are right at hand: radiator, oil level, battery, windshield washer reservoir, voltage regulator, wiper motor, brake master cylinder. Better ideas make servicing fast, easy.

Shorter outside, easier to park. Overall length of Econoline Vans is significantly shorter than other makes. This means



easier parking and better maneuverability in city delivery operations-time saved on every trip.



Wider at top for built-ins

Body sides are more vertical, wider apart at top than other vans. So built-in units fit better and leave more aisle. Modular units, designed to fit and work together allow you to custom design almost any interior you need. Job packages, such as insulated florist's van, are also available.

Strong, smooth-riding Twin-I-Beam

The independent front suspension that has revolutionized truck rid-

ing qualities. Two forged steel I-beam axles give it strength . . . big coil springs give it a smoother ride.

Biggest payload of all

Husky construction and high capacity axles al-

low you to carry a heavier load than any other van. Maximum payload of 4320 lbs. is largest in industry.

Model	Max. Payload
E-300	4320 lbs.
E-200	1800 lbs.
E-100	1120 lbs.
	L

Max. GVW
8300 lbs.
5400 lbs.
4500 lbs.

Driver's "walk-thru" to rear

Econoline's forward engine position clears the deck

for the driver, too. He can easily step from his seat into the rear load area and exit through side or rear doors.

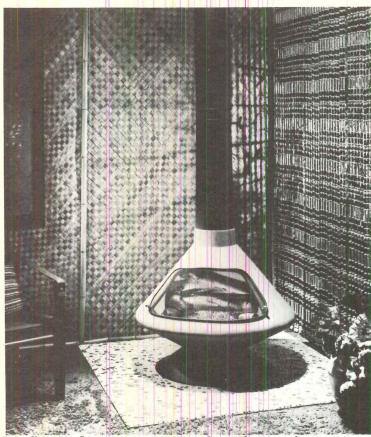
See your Ford Dealer and see all the better ideas in America's best-selling van-Ford Econoline.







FRUDUCIS/INLIAD IINLILACUS



Woodburning firepot comes in 32" or 36" dia., 27" or 34" high. Its bright porcelain finish contrasts with black steel base and chimney. Hearth opening is 22" or 24" wide, has a removable screen. Standard

colors: Chinese red, spicy orange, bronze green, gold, white, or black. Special colors: apple red, blue, bluegreen, copper, and ebony black. Majestic, Huntington, Ind. CIRCLE 301 ON READER SERVICE CARD



Circular unit, through baffles in hood, spins flame around and up the flue with a strong draft that lifts 90% of ashes up and out. Hearth rarely needs cleaning. Intensity of flame efficiently burns

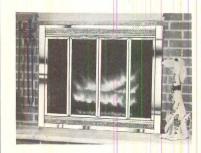
even coal and can be adjusted opening or closing door of g enclosure. Unit comes in 32' 42" dia., with 161/2" high open Malm, Santa Rosa, Calif. CIRCLE 304 ON READER SERVICE C.



Freestanding model can be se close as 7" to combustible wall is 42¼" wide, 41¼" high, 281/2" deep. Unit burns coal, c coal, gas or electric logs. Porce finish, like that on jet engine hausts, is red, green, or bl Ornament is solid brass. Prev Wisconsin Rapids, Wis. CIRCLE 305 ON READER SERVICE C



Built-in fireplace burns either gas or wood, can be used in single- or multifamily construction. It is fully insulated so it can be set directly on wood floor or into wall or corner. Components twist and lock



together in seconds. It is backed by 20-year warranty and smoke-free guarantee. It also comes in freestanding or wall-hung models. Vega, Syracuse, N.Y.

CIRCLE 302 ON READER SERVICE CARD

Hearth enclosure of tempered glass comes with bifold doors in 57 sizes or twin doors in 42 sizes. Glass doors provide more even heat. Push-pull controls, to regulate both upper and lower draft, can now be adjusted from a standing position. Four finishes available. Thermo-Rite, Akron, Ohio. CIRCLE 303 ON READER SERVICE CARD



Wall-mounted heater, for apartments and mobile homes, hangs on wall like a picture, plugs into standard outlet. Thermostatically controlled heating element. Size: 50" high, 321/2" wide, 121/2" deep. Weight: 50 lbs. Simulated stone base and logs are of fiberglass. Royal-DeSoto, Chattanooga, Tenn. CIRCLE 306 ON READER SERVICE CARD





Franklin stove burns wood, charcoal, or gas or electric log is hand-poured of cast iron, co equipped with basket screen ducer with damper, brass kr Optionals: andirons, grate bas elbow. Width is 331/2", height (legs) 371/2", depth 131/2". Black of U.S. Stove, South Pittsburg, T CIRCLE 307 ON READER SERVICE O

Pushbutton gas heater, rated 21,000 Btuh, installs in less an hour in apartment, house vacation home, needs no heart special construction. Three siz 36", 54", or 60" wide- can be with any face panel such as s lated rock shown, wood, b marble, mirror. Dyna, Los Ang CIRCLE 308 ON READER SERVICE O

The electric climate is for builders who want a faster return on their investment.

Read how it helped the Roffino brothers maintain their 100-150 unit-a-year average sales in a tight-money market.

While some builders faced rough going during a three-year building slump, Dallas, Texas builders Charles and Tony Roffino of Roffino Homes were selling strong. How did they do it? "Faster sales of all-electric homes played a large part in keeping us liquid," declares Charles Roffino.

The Roffinos made faster profits because homes with *the electric climate* (which means that everything is electric, including the heat) sell faster. They have



exclusive consumer benefits like roomby-room temperature control, unbeatable cleanliness, and steady, even heat. There's every convenience for modern comfort and carefree living, too.

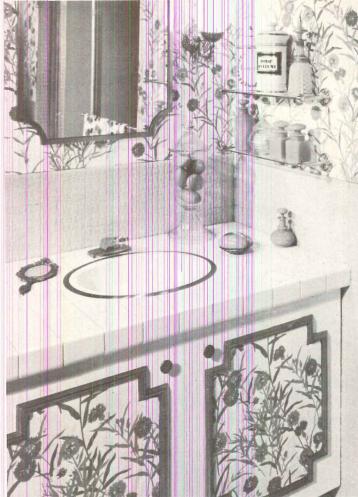
The electric climate also slashed building costs for the Roffinos. For example, lower time and labor costs, fewer parts to install, and faster, easier installation.

Call your electric utility company today and find out how having *the electric climate* can improve *your* profit picture.

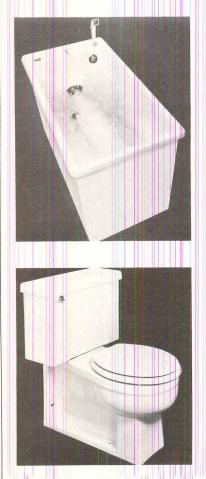
Live better electrically

Edison Electric Institute, 750 Third Avenue, New York, N.Y. 10017

"Awarded to homes exemplifying electrical excellence"



Ceramic tiles protect the wall and countertop in this bathroom corner. Large $4\frac{1}{4}$ "-sq. tiles in plain white cover the vanity top. The same size tiles in a woven pattern in blue form the backsplash and wall



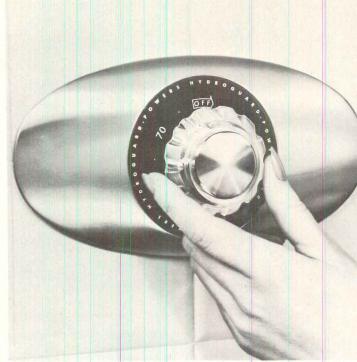
covering and are grouted in matching blue. The coordinated tiles come in eleven colors and also in hexagonal and octagonal shapes. Wenczel Tile, Trenton, N.J.

CIRCLE 328 ON READER SERVICE CARD

Whirlpool bath, designed to fit into the standard tub or shower opening, is 53" long, 30" wide, and 34" deep. It is a self-contained unit that is pre-plumbed and ready to install, above or below level, with an optional matching skirt or with any custom skirt. It holds 90 gal., has a single contoured seat, two air inlets that can be adjusted to direct aerated water wherever it is needed, and a builtin flexible hand showerhead. The fiberglass unit comes in white or custom colors of blue, gold, beige, and olive. Jacuzzi, Berkeley, Calif. CIRCLE 329 ON READER SERVICE CARD

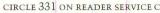
Back-outlet water closet completely eliminates the troublesome, timeconsuming, and expensive job of cutting through floor or ceiling. Its straight-out-the-back design provides through-the-wall connection to all the water supply and sewage discharge lines. It was engineered especially for use in modular plumbing cores for prefabricated buildings and high-rise reinforced concrete structures, and is also practical in renovations. Norris Industries, City of Industry, Calif.

CIRCLE 330 ON READER SERVICE CARD



Shower/bath mixing valve has a liquid-filled thermostatic element that senses—and corrects—changes in supply line temperature and pressure. Once set, it provides water at a constant temperature anywhere from 65° to 115°F. It has only one moving part, needs only one hole

cut in wall, has non-corrosive ternal parts. It comes with Lucite handle shown or a le handle. Available in polish chrome or in custom polished satin brass or gold. Powers Re lator, Skokie, Ill.





Tub/shower door, for fiberglass bathing modules, comes in sizes to fit all the standard sizes on those tub and shower units. Both its panels and its hinges are made of highimpact-resistant styrene, so they won't break, shatter, or even splinter, meet all building and s codes. The door folds back to 8" wide to permit full use of the or shower. And it can be inst in about 20 minutes. Tub-Ma Orlando, Fla. CIRCLE 332 ON READER SERVICE O

144 H&H JANUARY 1971

If you build any or all of these, the only real choice in windows is Rimco









Only with RIMCO wood window units do you have so much going for you. In apartments, homes, townhouses, and every imaginable form of commercial and industrial building. In everything you build, RIMCO has a style that fits. There are the exciting Tilt double-hung, Casement, Casement Bow, Vent, View, Vuevent and Horizontal Slide units. All come in a vast choice of sizes, including the ones you need. All are classically clean lined (we want your designs to show, not ours). All are manufactured from select kiln dried Ponderosa Pine that has been treated with a long life wood preservative through our Dri-Vac vacuum process. All are made to exceed FHA

and Commercial Standards requirements. All

are factory primed on the outside. And all embody a superb level of craftsmanship developed through 103 conscientious years of woodworking experience. RIMCO windows are the most talented in the business with the most up-to-date convenience features that today's home buyer demands. Features like: divided lite grilles and sash that

are removable for cleaning and painting, and built-in storms and screens that eliminate outside combinations. For your next project, specify the windows that make sales easier for you. RIMCO wood window units.



rodman industries, inc. • rimco division • p.o. box 97 • rock island, illinois 61201 • distributorships available in select areas

We pre-fab apartment buildings for apartment builders



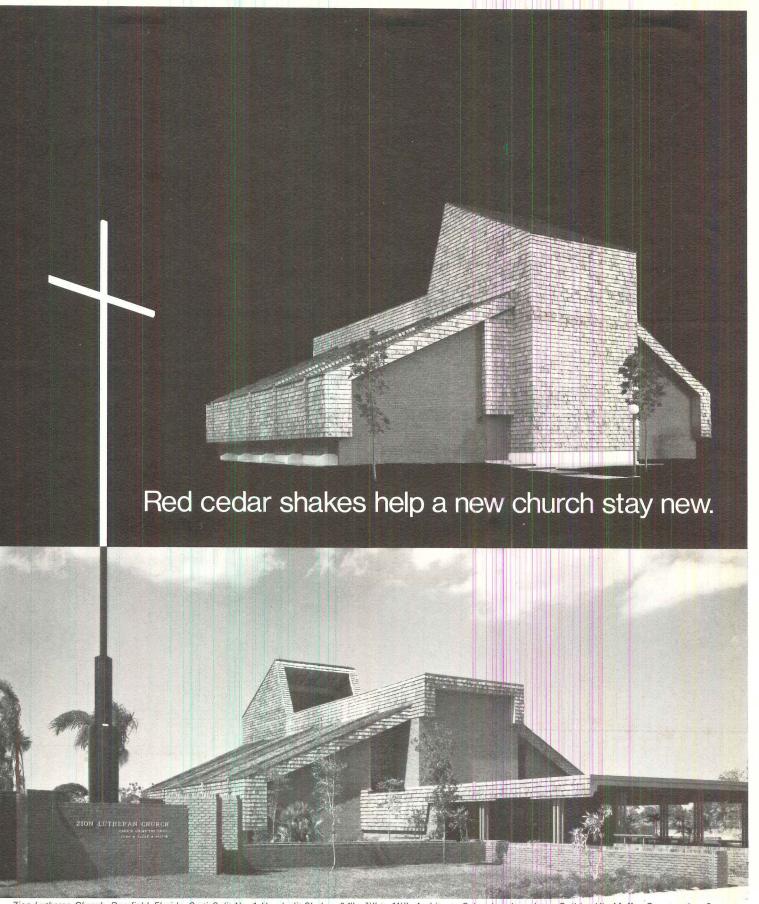
We pre-fab apartments well. We pre-fab them economically. We pre-fab them fast. For over 78 years Hodgson has been improving the methods and techniques of manufacturing housing. We pre-fab single family, duplex, motels, commercial buildings, townhouses . . . and apartments, public or private. And we've been successful because we know how to produce both quality and increased profits for the builder.

As a builder, you manage the basic elements of money, land, materials and construction. Hodgson manufactured packages lets you manage them better, faster and more profitably. Tight purchasing, low overhead, and efficient manufacturing are the reasons.

Months of labor and overhead become weeks. When you do business with Hodgson that's exactly what it is; no romancing, no frills, no extras. We price the job to your specifications, deliver the package, and are responsible for it. And, our Regional Managers are on the job to make sure. Call us.



Hodgson Houses, Inc., 1073 Main Street, Millis, MA. 02054 617-522-6744 (Boston)



Zion Lutheran Church, Deerfield, Florida, Certi-Split No. 1 Handsplit Shakes, 24" x 3" to 1 %". Architects: Schweizer Associates. Builder: Vic Maffey Construction Company.

Lutheran Church at Deerfield, a, will retain its contemporary feel viting look for years to come. edar shakes play a big part in it. are natural. Warm-looking. They out to the eye and to the nation. Their beauty is timeless. earance is one thing, protection

another. This church faces torrential rainstorms, palm-bending winds, a hot and humid climate. But the building's shake exterior is well suited to the challenge of environment.

Red cedar shakes last for decades without maintenance. They withstand even hurricane



winds. And they are naturally insulative. For your next church project, insist on the real thing : Certi-Split shakes or Certigrade shingles. For details and ME TOUCH OF MONEY-saving application tips, write: 5510 White Bldg., Seattle, Wa. 98101. (In Canada: 1055 West Hastings St., Vancouver 1, B.C.)

Red Cedar Shingle & Handsplit Shake Bureau One of a series presented by members of the American Wood Council

This advertisement appears as a matter of record and no public offering is being made of these securities. \$75,000,000 **8% Mortgage-Backed Securities** Series 2000-A Guaranteed by the Government National Mortgage Association

Guaranteed by the Government National Mortgage Association (Backed by the full faith and credit of the United States)

The undersigned purchased an aggregate amount of \$75,000,000 from 17 issuers. These securities have been placed with 102 institutional investors.

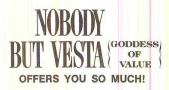
HUBBARD, WESTERVELT & MOTTELAY, INC.

a wholly-owned subsidiary of

Merrill Lynch, Pierce, Fenner & Smith



30" BUFFET MODEL 1659 (ALSO AVAILABLE IN 36" WIDTH, BOTH GAS AND ELECTRIC)



We took the most-wanted features of every competitive range — and put all sixteen of them in every model of our all-new Vesta line. No other manufacturer offers all these features on every model. Vesta is your best buy! Send for a catalog—gas or electric.

ATHENS STOVE WORKS, INC., ATHENS, TENNESSEE 37303 148 H&H january 1971 Circle 148 on reader service card

PRODUCTS/BATHS



Marble-like substance on vanity top and in shower is really a methacrylate material that resists stains, burns, chips, and scratches. The subtle veined color patterns make the surface appropriate for countertops and desks throughout the house. In the bath, the integr vanity top and bowl eliminate seams which accumulate dirt. D Pont, Wilmington, Del. CIRCLE 359 ON READER SERVICE CAR



Vanity cabinets with the appearance of handcarved Italian craftsmanship feature antique brassfinished hardware and wood grains finished in a subtle Mediterranean olive. For the bath or kitchen these cabinets come with trays, doors,

clothes hamper, but can also used to add distinctive cabir styling to bedrooms, dressing room hall. In widths from 12" to 48". Lo Bell Div., International Paper, Po land, Ore.

CIRCLE 360 ON READER SERVICE CA

on't have to know anything about shingles to this one's exceptional.

icker. Heavier. Looks like a wood shake. It's m-edged like a wood shake. Has character like of shake. But it isn't wood.

od shake can't begin to protect like this one. st hurricane winds. Fire. Rain, snow and ig ice.

e taken the best protection features of highest y asphalt. And added the heart warming look of al wood. The result is a distinguished shake shin-

asphalt random shake shingles

uncommon beauty, ideal for gamr mansard roofs on traditional or rn homes.

use it's thicker, heavier again as heavy as an ordihingle) and embellished umbo granules, the Bird

tect 70 brings ve dimension and cter to your roof.

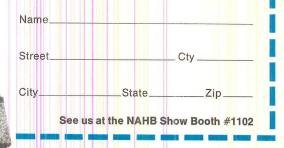
ne random edging, as with al wood shakes, gives a sculptured shadow line ook of strength and sube. Warm nature tones of

esswood, Oakwood and Ebonywood enhance more the captivating good looks of the Bird tect 70.

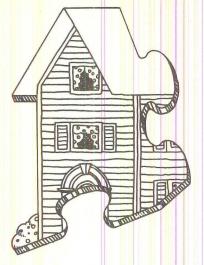
22

rd BIRD

Bird & Son, Inc. Box HH1, Walpole, Mass. Please send me all the facts on the bold, brawny, beautiful one – Bird Architect[®] 70 asphalt random shake shingle.



ing to build or re-roof? Look into the bold, ny, beautiful one. See your Bird dealer or send on now. See our catalog in Sweets.



Briggs puts part of it together

with distinctive plumbing ware that adds beauty, comfort and practicality to your bathrooms and powder rooms. Porcelain-on-steel and vitreous china plumbing ware that bears the respected Briggs and Case labels.

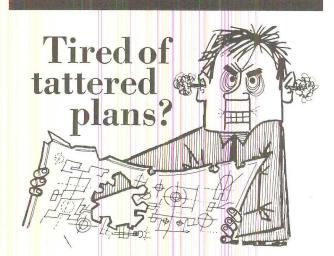
Panacon puts it <u>all</u> together.

Now, Panacon — a new name in the building field brings together six well-known companies, like Briggs, to provide builders with one reliable source for everything from foundation to rooftop.

Panacon Corporation, Cincinnati, Ohio 45215



See Panacon products in Booths 2212-14-16-18 and 3300 CIRCLE 435 ON READER SERVICE CARD



Keep them neat... the PLAN HOLD WAY!

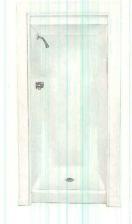
Original drawings should be filed, not defiled! PLAN HOLD Square Tube Files are the answer! Completely enclosed rolled plans stay neat and clean in square tubes indexed for easy retrieval. Square corner spaces let you grasp the roll. No binding against sides as in round tube files. Choose from 3 tube sizes for rolled plans up to 60" wide, in steel cabinet styles for any need you have. WRITE FOR CATALOG

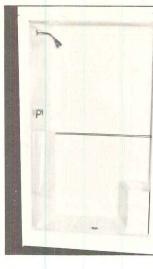




I RODOCIS/DAIIIO







One-piece shower stalls in a 32" model (*left*) with two ledges, optional recessed top rounded corners; a 36" unit *left*) with these features p safety bar and patterned back and a 48" unit (*above*) with dish, grab bar, patterned plus seat. The fiberglass units a high-gloss finish that is ea maintain under normal use an ideal for tall people (up t without top). Universal-Ru New Castle, Pa.

CIRCLE 361 ON READER SERVICE



Vanity cabinet with polyurethane door in a Spanish motif is complete with spindles and three different colored plastic laminate inserts. Available in oak or white, the cabinets now come in 24" and 30"

sizes only. Another similar (not shown) has cultured m top and routed design on the in white with gold and oak pewter. Villa, Rochester, N.Y CIRCLE 362 ON READER SERVICE

meet the door that meets every need.

Here's the do-everything door that fits in everywhere. Whether you're building a home or a high rise, conventional or manufactured units, or remodeling for urban renewal. And it fits in more economically, more effectively than any other closet system you can buy.

Here's how:

Only Float-Away gives you doors to fit any height, any width. Even oddball sizes are no problem. Float-Away delivers the door you need—where you need it, when you need it. You're assured of easy installation and top quality. Plus a choice of five different styles.

Interested?

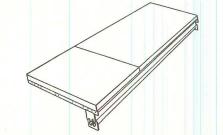
Send for complete details on your letterhead or use the coupon below.

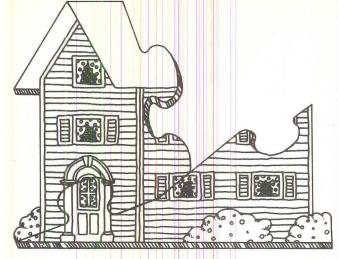
Attention Building Material Distributors: Float-Away is now adding distributors in certain protected areas. It's a good time for you to think about adding the complete line of Float-Away closet systems. Good profit. Proven dependability. Just drop us a line. We'll be glad to send you further information.

shelves. Check one: Builder	Building	Material Distributor	
Name			
Company			
Address			
City		State	Zip
FLC	DAT.		

Dept. HH-36, 1123 Zonolite Road, NE, Atlanta, Georgia 30306 (404) 875-7986







Miami-Carey puts part of it together

with beautiful, easy-to-install bathroom and kitchen products that will help sell your homes. Bathroom cabinets, lights and accessories and kitchen range hoods. Door chimes, decorator mirrors, radio-intercoms, apartment mail boxes and washroom equipment too.

Panacon puts it <u>all</u> together.

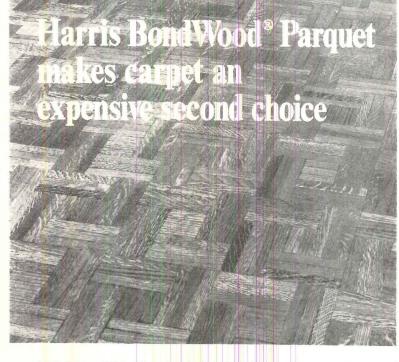
Now, Panacon — a new name in the building field brings together six well-known companies, like Miami-Carey, to provide builders with one reliable source

for everything from foundation to rooftop. Panacon Corporation, Cincinnati, Ohio 45215



See Panacon products in Booths 2212-14-16-18 and 3300

CIRCLE 436 ON READER SERVICE CARD



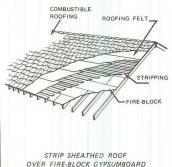
install BondWood[®] and cut your flooring costs up to 50%

Harris BondWood Parquet, the finest quality domestic and imported hardwood flooring available, actually costs up to 50% less to install and up to 70% less to maintain than carpeting. That's a fact. And Harris offers the widest variety of patterns and finishes including the beautiful Haddon Hall shown here. Eleven exciting and versatile decorator designs. 50% more variety than our nearest competitor. For further information on Haddon Hall and other Harris custom designed wood floors write to:

DEPT. HH-11, HARRIS MANUFACTURING CO., JOHNSON CITY, TENN. 37601 CIRCLE 152 ON READER SERVICE CARD

IRODUCIO/SIROCIORIE MITIERITES

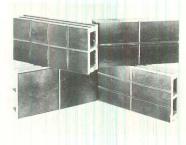




Non-combustible gypsumboard prevents fire from spreading upward or downward. Standard roof with plywood or stripping, felt, and shingles burned through in three minutes (*top*, left). Roof with plywood or stripping over gypsumboard (*drawings*) had no burnCOMBUSTIBLE ROOFING PLYWOOI FIRE BLOC

PLYWOOD SHEATHED ROOF OVER FIRE-BLOCK GYPSUMBOARD through (top, right). Gypsumb similar to other wallboards, is water repellent and fungus r ant. Installation of 2' x 8' or 2' boards ¹/₂" thick is the same a other roofing materials. GyJ Assn., Chicago. CIRCLE 353 ON READER SERVICE

Parabolt has low head profile for use in intermediate $\frac{1}{4}$ " and $\frac{3}{8}$ " holes anchoring sills, door bucks, stair railings, plus pipe hangers, air conditioners, light fixtures, etc.



Same features as standard para parabolic clip permanently atta to shank that digs into con Molly Div., USM, Temple, Pa CIRCLE 354 ON READER SERVICE

Structural glazed tiles—in 8" modules—come in two colors a the four designs shown (*left to r* 4" x 4", 4" x 8", 8" x 8", and brick style. Tiles will take h duty use, need little or no r tenance, and are fireproof. The be used as accent walls. Ar Ceramic, Brazil, Ind. CIRCLE 355 ON READER SERVICE

It's time to be narrow-minded about electric heat

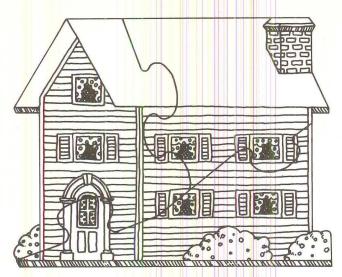
Insist on the unit that fits between standard wall studs

Don't prejudge. The narrow Hunter Hide-Away is bigger than it looks. It pours out plenty of heat for most rooms. It gives a choice of three wattages (1500, 2000, 2500) in one size. It keeps a cool grille at high heat, sells at budget prices, installs easily, works with unit or wall thermostat. It also comes with chrome grille (as well as standard beige) in 1250 and 1500 watts for bathrooms. Can be surface-mounted in mobile and modular homes using accessory kit. So down with prejudice! Be narrowminded . . . by keeping the Hunter Hide-Away on your mind.

•						
Hunter						
and the main for the second second				- Constitution - Sec. 10	des carta sono	

Mail today for further data: Hunter Division, Robbins & Myers, Inc. 2837 Frisco Ave., Memphis, Tenn. 38114 Please send full information on Hunter Hide-Away Heaters. Name_	
Company	
Street	
City	
StateZip	





Philip Carey puts part of it together

with a complete line of exterior products for homes, apartments and commercial buildings. Shingles in various colors, styles and weights; maintenance-free solid vinyl siding and soffits; new decorative shutters; and dampproofing products.

Panacon puts it all together.

Now, Panacon — a new name in the building field brings together six well-known companies, like Philip Carey, to provide builders with one reliable source

for everything from foundation to rooftop. Panacon Corporation, Cincinnati, Ohio 45215



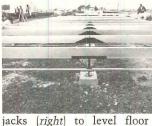
See Panacon products in Booths 2212-14-16-18 and 3300.

CIRCLE 437 ON READER SERVICE CARD





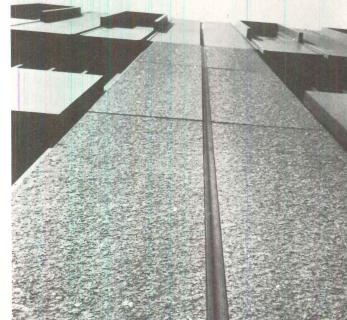
Steel floor-framing system includes 16-gauge joists nested in pairs to form perimeter beams and inserted (*left*) in corner and perimeter jack saddles. Non-sagging, non-warping joists adjust up or down on seismic



Jacks (*right*) to level floor earth movements frequent or west coast. Three men can semble floor in half a day. Steel, Pittsburgh, Pa. CIRCLE 356 ON READER SERVICE



Aluminum framing system includes trusses that weigh only 30 lbs. so they can be handed up from ground level as shown. Other components: main beams, joists, studs, plates. All are pre-cut, painted, punched to let pipes and wiring through equipped with patented sl fastening system that speed stallation, requires no special s Alcoa, Pittsburgh, Pa. CIRCLE 357 ON READER SERVICE



Permanent seal insures waterproof, maintenance-free expansion joints in pavements or sidewalks, swimming pools, parking structures, roofs, or between pre-formed wall sections. Neoprene extrusions are

inserted under compressionizontally or vertically—in j from ¹/₈" to 2¹/₂". They even sea corrosive saltwater or sand. A Highway Products, Buffalo, N CIRCLE 358 ON READER SERVICE

sections. Neoprene

what is the aesthetic range in carpet for a **bank** clinic restaurant motel?

BERVEN OF CALIFORNIA'S

newly published color catalog and specifications guide details the beautiful way to be practical

8 pages of textural/color recommendations highlighting the broad range of the Berven Of California line. Select from tight weaves, provocative textures and imaginative color theming for both residential and commercial installations.



Crocker-Citizens Bank, Fresno



Send for this free 8-page library reference Catalog

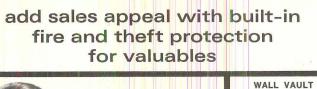
General and Administrative Offices: 2600 Ventura Ave., Fresno, CA 93717.

Chicago (312) 644-9110; Cincinnati (513) 721-4462; Dallas (214) 742-6231; Denver (303) 255-2066; Detroit (Ferndale) (313) 546-8846; Fresno (209) 268-0771; Honolulu (808) 946-5071; Houston (713) JA 6-1331; Los Angeles (213) 749-7641; Miami (305) 759-4649; Minneapolis (612) 339-7195; Verona, N.J. (201) 239-8602; Orange, CA (714) 835-8505; Phoenix (602) 266-3100; Portland (503) 235-8471; Sacramento (916) 452-4385; San Francisco (415) 421-5001; Seattle

Dept. HH	2600	Ventura	Ave.,	Fresno,	CA 93717

Please send ____ copies of your free color catalog.

YOUR NAME:	
TITLE:	
FIRM:	
туре: 🗌 Architect	Builder
Interior Designer	Building Management.
Other	
(PLEASE SPECIFY)	
ADDRESS:	
CITY:	





MEILINK WALL AND CLOSET VAULTS®

Install easily in wall or closet to provide security for wills, deeds, bonds, stock certificates, and other valuables. Built just like their "big brothers", the Meilink Record Safes used by business and industry everywhere. Combination lock. Official Safe Manufacturers Ass'n Label. A quality touch that will add value and appeal to your homes. Write us today for complete details.



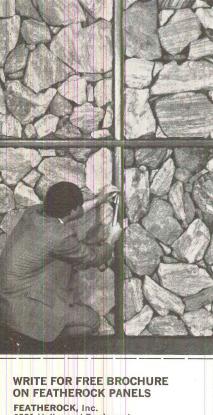
CIRCLE 438 ON READER SERVICE CARD

stone panels that can be applied like plywood.

Natural lightweight stone panels by Featherock, Inc.

Natural stone panels weighing 3½ lbs. to 5 lbs. per sq. ft.—nail or screw on like plywood—the ultimate in ease of installation. For complete information write or call:





To install wall vault, make opening in joists large enough to insert unit.

Steel flanges are pre-drilled for screws on 16" centers. Fasten into joists and grout into place.

When installed, unit is flush with wall and easily hidden by picture or mirror.

FEATHEROCK, Inc. 6331 Hollywood Boulevard Los Angeles, California 90028

Address		
City		
State	Zip	

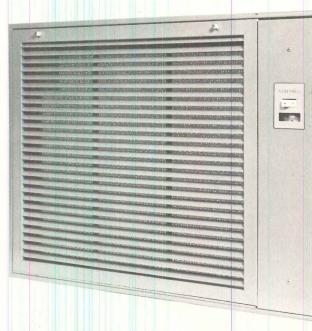
CIRCLE 156 ON READER SERVICE CARD

PRODUCTS/HEATING & AIR CONDITIONIN

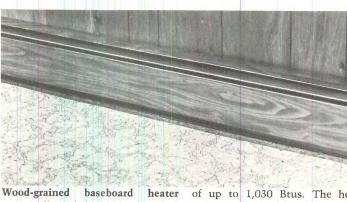


Appliance-styled condenser has a gold weatherproof enamel finish and compact size: $25\frac{1}{2}$ " x $35\frac{1}{2}$ " x $16\frac{1}{2}$ " high. Aluminum condenser, in black, wraps around three sides for maximum efficiency. Top cover can

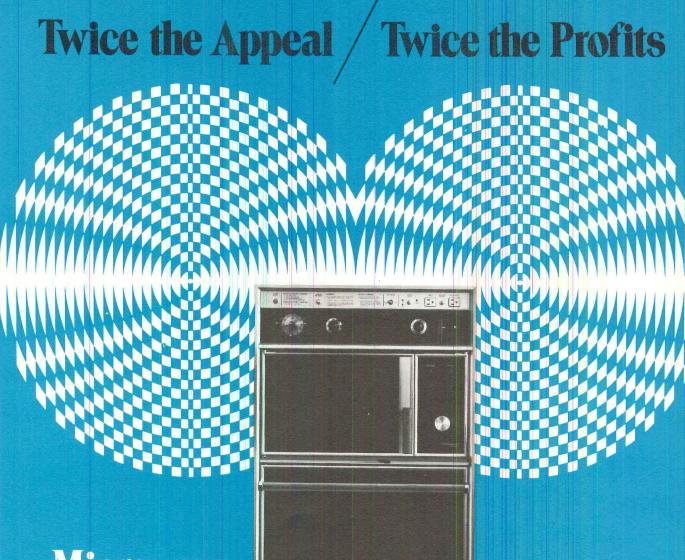
be removed quickly for easy set ing. To minimize sound, comp sor is isolated in insulated comp ing. Fan has both high and low sp Addison, Addison, Mich. CIRCLE 346 ON READER SERVICE C



Electronic air cleaner is meant to be installed in place of return grille in a single-return air-handling system. It collects up to 95% of dust, soot, and pollen particles. It mounts on the wall or ceiling. Two mo measure 16" x 25" and 20" x 25". cleaning cell is removable for w ing. Honeywell, Minneapolis, M RCLE 347 ON READER SERVICE C



Wood-grained baseboard heater goes well with rooms paneled or trimmed in wood. The fin-tube radiation heating system incorporates a ³/₄" copper element with outputs of up to 1,030 Btus. The hicomes in pre-cut lengths of 6' 8' with matching end caps, to etc. Slant/Fin, Greenvale, N.Y CIRCLE 348 ON READER SERVICE OF



Microwave Magic-

Self-Cleaning Convenience

The appeal of the quick cooking Thermador Thermatronic Microwave Range added to the convenience of Thermador's Self-Cleaning Oven is the easiest way to a double dividend. Two ovens in one installation.

The Thermatronic *really* cooks and *really* browns. The Self-Cleaning Oven is completely equipped for programmed oven cooking. It does everything you'd expect.

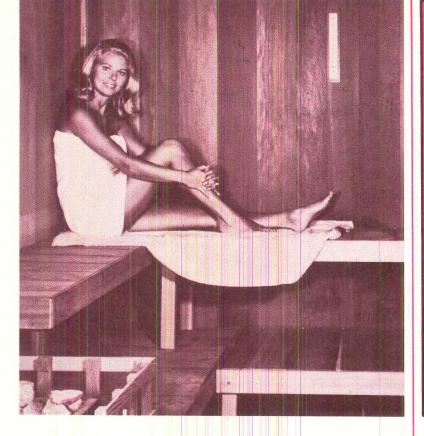
Combine all this with Thermador quality and elegant design and your customers will have the best of everything.

The Thermatronic Range also comes in single Models – 120 Volt or 240 Volt. All for built-in installation.

For complete details, write Thermador



The Elegant Difference 5119 District Boulevard, Los Angeles, California 90022, Department HH





when your plans specify the best save a little space for... Am-Finn Jauna

Fitting neatly into your plans whether it be inside or out, a little space is all we need. Am-Finn Sauna, a totally pre-engineered facility, creates a new dimension in saunas featuring...

- pre-fabricated construction which cuts job labor costs
- pre-wired rooms . . . the only requirement is connection to the power source
- an electric heater design which requires only a minimum of space, leaving more room for bathers
- foamed-in-place polyurethane insulation for walls, door, floor and ceiling...K-Factor-12
- Urethane insulated rooms which require 30% less heating to cut heating costs by 50%
- a steel reinforced no-warp door
- and many other added conveniences

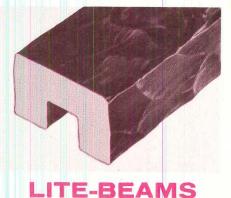
Am-Finn Sauna ... now you know why we're best.



You may not take our word for it, but you can't argue with facts. LITE-BEAMS are best because ...

- they cut labor costs by being made of light weight polyurethane.
- they're easily installed with adhesive.
- they're durable which minimizes repairs and replacements.
- they can be mounted on any surface—vertically, horizontally, overhead.
- they come in a variety of sizes to fit into any architectural design.
- they are authentic reproductions of exposed hand hewn wood beams which add rustic beauty to any interior.
- they're available in Dark Walnut, Medium Mahogany and Light Oak.
- they cost less, suggested list 4" x 6"-\$1.69 per ft. f.o.b. factory.

Like we said, facts are facts . . . LITE-BEAMS are best!





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

ve the homes you build all the comforts home. With Bryant's totally integrated stem of heating, cooling, air cleaning d humidification.

It will make your homes more saleable. Start with a Bryant Quietline[®] gas, oil, electric furnace, and you're on your ay to The Great Indoors.

Ådd on a Bryant gas or electric air nditioning system. Bryant dealers offer th options. In Quietline[®] models.

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

And a Bryant power humidifier for

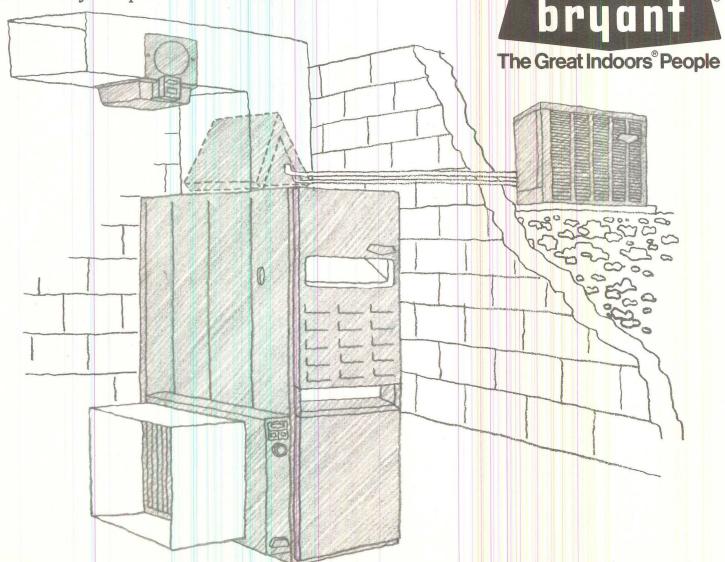
a more comfortable, static-free heating season.

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

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

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

Bryant Air Conditioning Company, 7310 West Morris Street, Indianapolis, Indiana 46231.



PRODUCTS/HEATING & AIR CONDITIONI

Make your bathrooms luxuriously modern and excitingly feminine with Alsons Personal Showers. Capitalize on today's bright new bathroom trends. No special rough-in required. 22 models to choose from. Alsons... America's freshest new bathroom ideas.

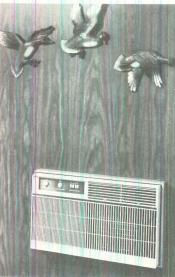
> The Alsons

Personal

Shower

Total home system combines compact electric furnace with electronic air cleaner, low-profile condenser and matching evaporator, and electronic humidifier. Plastic circuit board on furnace contains all connections for thermostat and f cooling blower. Heating: 20,0 112,600 Btuh. Cooling: 18,00 58,000 Btuh. Lennox, Martown, Ia.

CIRCLE 349 ON READER SERVICE



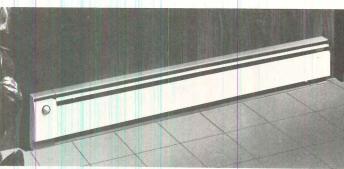
Through-the-wall conditioner is part of a nine-model line for use in apartments, motels, and light commercial construction and one of three heat/cool units with 10,000 to 18,500 Btuh cooling and 3-kw to 4.5-kw heating. Grille is of offwhite polystyrene with dark bronze trim. Hotpoint, Louisville, Ky.

CIRCLE 350 ON READER SERVICE CARD



Packaged gas boiler for all ins tions—from gravity to multizu —is cast iron, has up-to-date exchanger. Deep iron ribs, at angle to rising gases, cause was travel zig-zag from section to tion for uniform heat transfer out hot spots. Hydrotherm, N vale, N.J.

CIRCLE 351 ON READER SERVICE



Two-tone baseboard heater comes in beige and brown, has full-length snap-off front panel for easy servicing. Aluminum-sheathed heating element has 488 sq. in. of fin surface per lineal ft. and full-length overheating cutout. Carpet can run up to unit without blocking air diverter sends air out into r Floorlevel Comfort Systems, 1 more, Md.

CIRCLE 352 ON READER SERVICE





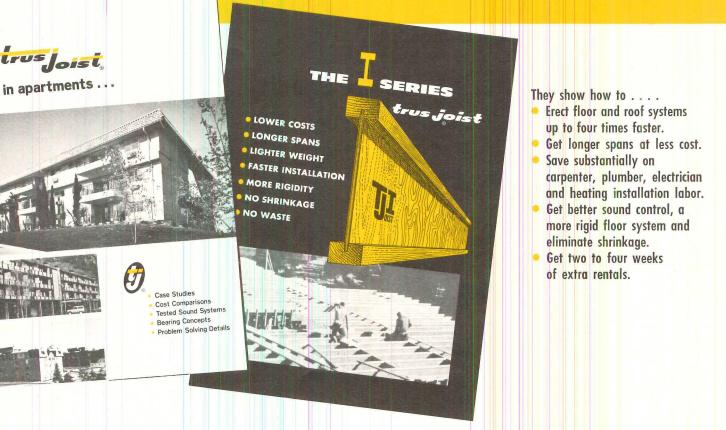
...a plus value comfort conditioning feature!

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. Qualitybuilt 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 Kool-O-Matic. I am a Builder Architect	Dept. 75 Name	 	R EATELC conp es, Mich. 49120
Other	City	State	Zip

CIRCLE 160 ON READER SERVICE CARD

No apartment builder who is interested in quality construction, faster occupancy and lower costs can afford to be without these two books.



Two important books.

They're yours for the asking. "TRUS JOIST In Apartments" features the wood and steel open web TRUS JOIST, while the second book gives details about the extremely economical I Series. Both are far superior to ordinary frame construction and both provide far faster construction and significant labor savings. In each book you'll read actual case studies which document the savings made in apartment projects of all sizes, savings which in some projects have totalled \$200 or more *per unit*.

Plants in: 📒 ARIZONA 📒 CALIFORNIA 📒 IDAHO 📒 IOWA 📒 OHIO

You will also find cost comparison sheets which you can use to figure your own savings on any upcoming project.

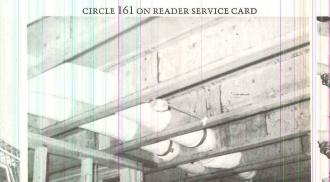
You'll want all the details on how to get quality construction and real savings. Write today for your free copies.

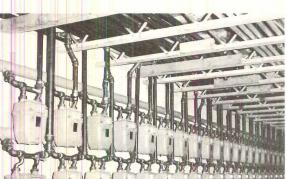


9777 CHINDEN BOULEVARD

BOISE, IDAHO 83702

OREGON CANADA (Alberta)







STUDIO STAIRS make a dramatic difference in homes, professional buildings, apartments and lodges. For new construction or remodeling, they add elegance and save usable space. Competitively priced, STUDIO STAIR units are factory built to exact specifications and shipped anywhere, K.D., for easy job site assembly. Write for brochures describing many variations.

AMERICAN PANEL PRODUCTS, INC. 1735 HOLMES RD., YPSILANTI, MICH. 48197

CIRCLE 440 ON READER SERVICE CARD

changing your address?	your new address below. If you have any question about your subscription, include address label with your letter.				
your name					
your mailing addres	38				
city		zip code			
your firm name					
firm address					
city		zip code			
type of business					
your title or positio	n				
CHECK HERE: D NEW RENEWAL MAIL House & Home, I	TEND YOUR SUBSCRIPTION, ONE YEAR \$8.00 THREE YEARS \$16.00 REMITTANCE TO O. Box 430, Hightstown, N.J. by to U.S. & Canada Only-	want your own subscription?			

PRODUCIS/DOOKS AND WINDOWS



Folding doors have an insulating core and heavy-duty vinyl surface in walnut or fruitwood grain or an embossed lace-like pattern in blue, gold, beige, ivory, or white. Spanish style handles have antique brass

finish. Doors, from 2' to 6' wide 6'8" to 8' high, can be paired shown, or used singly as door as room dividers. Clopay, Cin nati, Ohio.

CIRCLE 340 ON READER SERVICE (

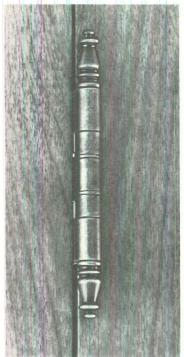


Rolling windows ride on cased nylon wheels. Re-engineered to better resist air and water infiltration: sill pitch was increased from 5° to 14° as a frost barrier and for better drainage; pvc foam-insulated head

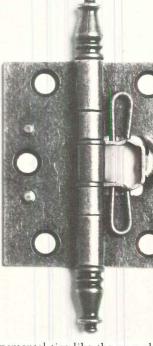


track won't conduct cold; there's double weatherstrip throughout. Aluminum sill white enamel finish. Wabash, M phis, Tenn.

CIRCLE 341 ON READER SERVICE C

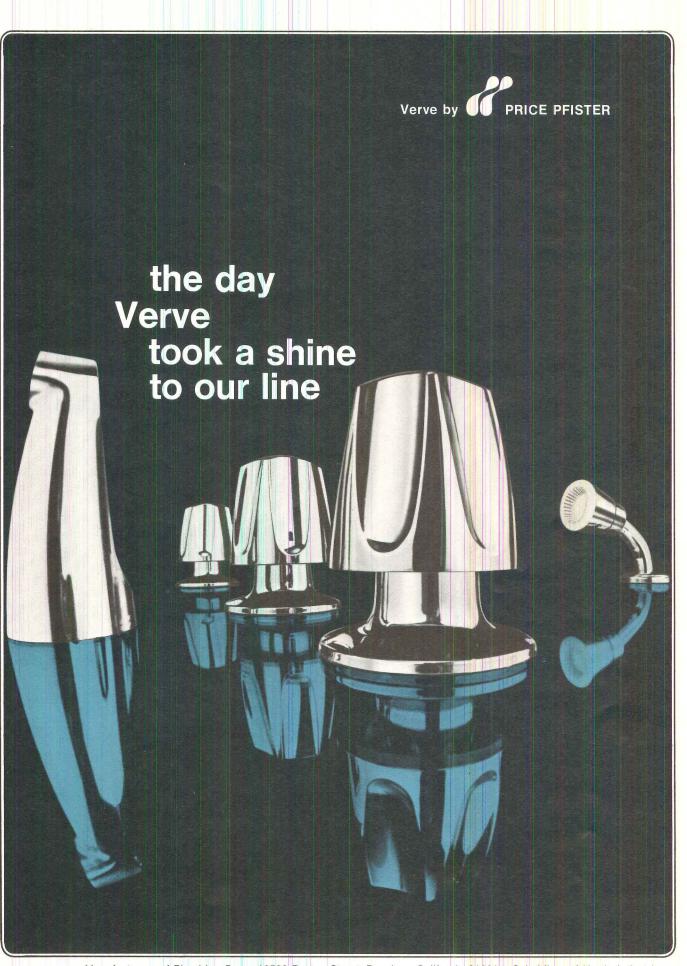


Self-closing butt hinge for cabinets and furniture, eliminates need for door catch. Its cost, plus labor, is less than the combined costs of conventional butt hinge, catch, and labor. The equal wing unit comes with or-



namental tips like the ones sh and also with flat button tip $1\frac{3}{4}$ " or $2\frac{1}{4}$ " joint lengths, and full open or 105° stop. Ajax, Ci Industry, Calif.

CIRCLE 342 ON READER SERVICE O



Manufacturers of Plumbing Brass 13500 Paxton Street, Pacoima, California 91331 • Subsidiary of Norris Industries

510 NAILS A MINUTE: THE KLINCHER GOES AT A FAST CLIP

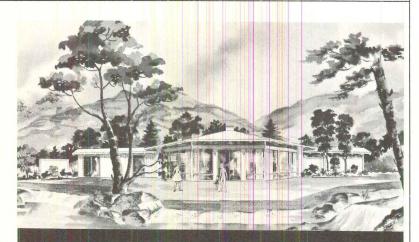
Panel-Clip's Klincher Truss Press and Clips are the most economical fastening system for trusses on the market today. The lease cost of the Klincher and Jig is less than \$2.00 a day, and that includes our free design service (Klincher and Jig can be leased for just \$37.88 per month or purchased for \$1,114.00).

If you're a growing truss fabricator, you'll appreciate MAXIMUM SPEED—MAXIMUM PROFIT — MINIMUM INVESTMENT.

For complete information, write:



CIRCLE 441 ON READER SERVICE CARD



ATTENTION BUILDERS!

The entire Richmond Leisure Line has been designed and engineered to take full advantage of the LESS-THAN-PERFECT labor conditions usually found in the remote resort areas.

These ALL CEDAR maintenance free Richmond Leisure Homes have extremely low build-out costs and feature speed of completion with minimum crew and maximum cost control.

- All major components are pre-assembled.
- Wall sections are pre-built and pre-insulated.
- All windows installed and door units pre-hung.
- All wall panels are finished both sides.
- Interior and exterior walls are pre-drilled and engineered for electrical installation.

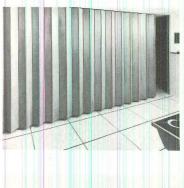
Are you getting YOUR SHARE of the BIG PROFIT leisure market? **RICHMOND LEISURE DEALERS ARE!! W**rite today for details.



FRODUCIS/DOORS AND WINDOWS

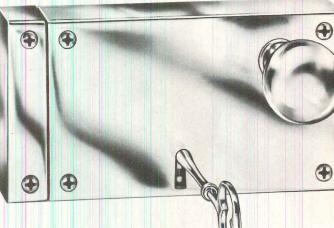


Vinyl-clad insulating doors need no on-site finishing, are easy to install, and help cut maintenance costs. Rigid PVC sheath (like plastic pipe) won't rust, corrode, or pit in the worst weather. Cladding is applied to 8' doors (shown), to new tr 9' sliding door, and to manu turer's complete line of windo Welded insulating glass is stand Andersen, Bayport, Minn. CIRCLE 343 ON READER SERVICE C



Accordion door stacks down to per lineal ft. Deluxe grade rider ball bearing wheels, has wood as gals. Standard grade has ny wheels, shows vinyl connect Closet grade, with imperfection back, is same as standard. Up to high and 50' wide in five hardw finishes. Woodfold-Marco, Fo Grove, Ore.

CIRCLE 344 ON READER SERVICE C



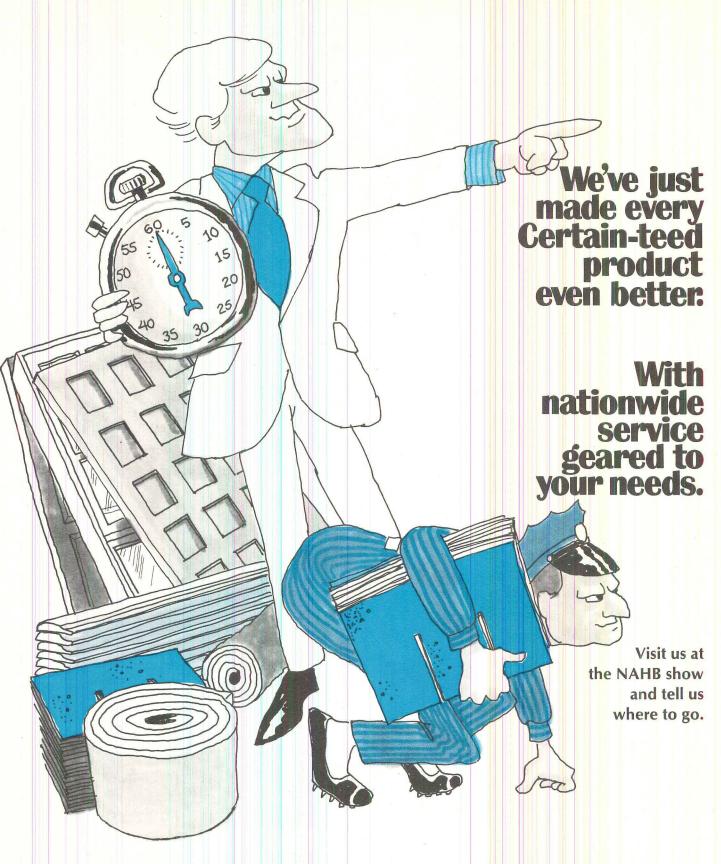
Colonial rim lock is authentic reproduction except for adaptation to use with modern cylinder lock. This design, plus many other colonial reproductions, is available in polished brass, antique brass, or

black. Polished surfaces are tected by special baked-on ena and all component parts are of cision brass forgings. Baldwin H ware, Reading, Pa.

CIRCLE 345 ON READER SERVICE O

164 H&H JANUARY 1971

CIRCLE 164 ON READER SERVICE CARD



Get the full story about our new order handling system at Booth 2522 at the NAHB show. The right information. The right product, in the right quantity, on site, on time. Because we realize that the best products you can get aren't worth a bag of wet cement if you can't get them when you need them.

To save you time and money, we have a nationwide network of distributors. We stock distributors, not sample-case salesmen. We back them with still more stock at all Certain-teed plants and warehouses. And tie everything together with an electronic communications network. So that when your order comes in, we know what to move and when. Roofing, vinyl siding, building insulation, millwork, and carpeting—everything arrives on site as needed.

Is this the kind of service you've been looking for? Then visit us at the NAHB show. Or write and we'll put you in touch with the Certain-teed distributor nearest you. Give him the business. Certain-teed will save you. Time and time again. Certain-teed Products Corporation, Valley Forge, Pa. 19481.



If you want your overseas staff to understand the American way, don't go tell them about it.

Bring them here to see it.

In the first place, your overseas employees will learn a lot more from seeing you in action, than from hearing you talk about it. And they'll learn more willingly. (Nobody likes a lecture.)

In the second place, they'll have an extra incentive to work more efficiently throughout the year, knowing their reward is a trip to the U.S.A.!

And in the third place, you'll be doing the

government and every taxpayer a favor. If you go over there, you'll be adding your bit to the gold drain. If you can bring some visitors in, you'll improve our balance of payments.

Think about it and if it seems a good idea, call us for advice about tours and reductions on travel expenses.

United States Travel Service, Department of Commerce, Washington D.C. 20230.





Grant 1260. Hardware that makes light of heavy folding doors.

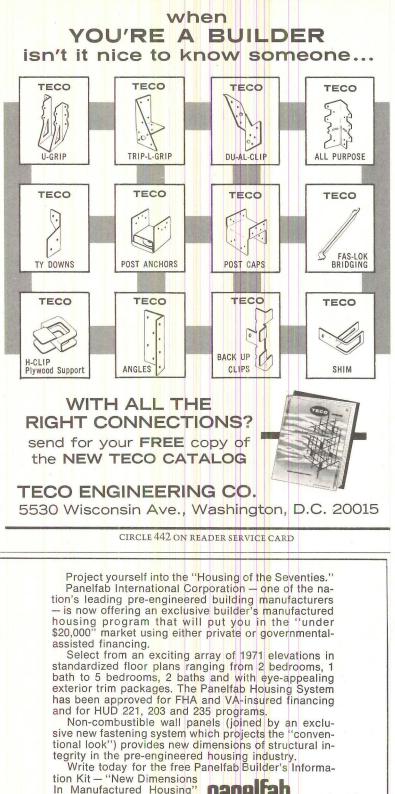
Strong, silent and sinewy, the 1260 series keeps folding doors weighing up to 125 lbs. each under complete control. Two door bi-fold sets or four door bi-parting (closet) units are easily installed and require little or no maintenance. The hardware has a number of incomparable features. These include 4 wheel "rocker arm" carriers, brawny aluminum T track and large nylon ball bearing wheels.

> Grant's 1260 has become the prime architectural hardware choice for moving heavy folding doors in all types of construction. Our literature will help you see why. It's yours for the asking.

> > WE KEEP THINGS MOVING

Grant Pulley and Hardware Co., div. of Instrument Systems Corp.,

orp., 31 High Street, West Nyack, New York 10994/City of Industry, California 91747



tion Kit — "New Dimensions In Manufactured Housing" and learn how your company can be an important profit-making influence in the 1971 housing market, Write or call HOUSING SALES DEPARTMENT.

anelfab 1600 N.W. LeJeune Road Miami, Florida 33126 Tel: (305) 633-3266

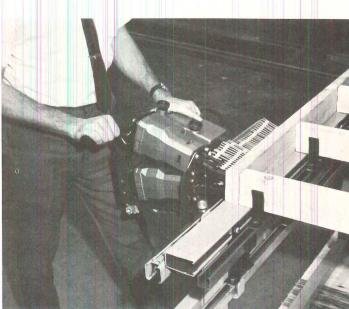


Lightweight chain saw can be used at any angle to trim trees, make rustic fencing, or remove stormdamaged trees. It weighs only 6 lbs. 7 oz. but holds 10 oz. of fuel and has 12" bar so it can cut a 24"-

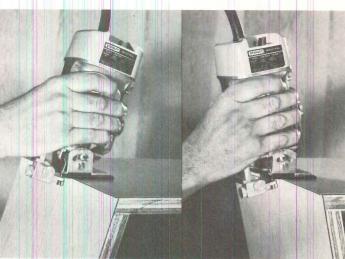
PRODUCTS/TOOLS & EQUIPMENT

dia. log. For safety, its design quires two-handed operation. In manual choke with automatic th tle advance for easy startups. Chicago.

CIRCLE 369 ON READER SERVICE C



Belt-fed nailers, for use on panel machines, drive 1,000 16d nails before they must be reloaded—directly from carton. Used in tandem as shown, they drive nails into plate and stud simultaneously at arranged angles. Nails are long with full-round head. Fast Corp., Franklin Park, Ill. CIRCLE 370 ON READER SERVICE OF



Laminate trimmer has a base that tilts up to 45° in two directions for obtuse (*left*) or acute (*right*) angle cuts and for cutting into corners. As shown, it can be used with one hand. A ledge guide attachment makes it easy to trim laminate glued

to ¾" plywood mounted verti as in backsplashes. The ¾-hp m develops 30,000 rpm. It has bination flush and bevel solid bide bit. Kit converts it to a ro Stanley Works, New Britain, C CIRCLE 371 ON READER SERVICE OF

CIRCLE 168 ON READER SERVICE CARD

new dimensions in manufactured housing

MAN... THAT'S A MANSARD!





H SAWN SHINGLES

THE NEW SHAKERTOWN 7-INCH EXPOSURE SHAKES OR SHINGLES IN 8-FOOT PANELS

You just can't beat cedar shingles and shakes for outstanding Mansards. The Mansard is for design emphasis on apartments, homes or office buildings...so why settle for less than the best, use only Shakertown Shakes and Shingles in the new 7-inch weather exposure. Now they are available in the popular Barn Shake texture along with the effective Shingle and Rough Sawn Shingle textures. Panels are 8 feet long for convenient application on the Mansard or sidewalls, nailed direct to the studs. Self-aligning panels and matching color, annular-threaded nails *speed* application. Choice of natural cedar or eight semi-transparent finishes for the *distinctive appearance*. Panels are also available with 14-inch exposure.

I SHAKES



VISIT SHAKERTOWN BOOTH NO. 2371 AT THE NAHB SHOW

Write for detailed brochure SHAKERTOWN CORPORATION DEPT. HH-1 4416 LEE ROAD CLEVELAND, OHIO 44128 In Canada BESTWOOD INDUSTRIES, LTD. P. O. BOX 2042 VANCOUVER 3, B.C.

Some people get Social Security before they retire.

All it takes is one slip and you're out of work. Flat on your back. Without any income.

But, that's where you're wrong.

Social security covers accidents like this with disability benefits. Accidents of any kind, that will keep you from working for a year or longer. The same goes for a serious illness. Any illness.

A young disabled worker, who earned \$100 a week on the average, for example, and who has a wife and two children, receives \$348.80 a month in social security benefits.

Or, suppose you die. From a bad fall. Or any reason. Your social security survivors benefits may provide your family with a steady income. Regular monthly checks until your children are 18. And on to 22, if they're in school.

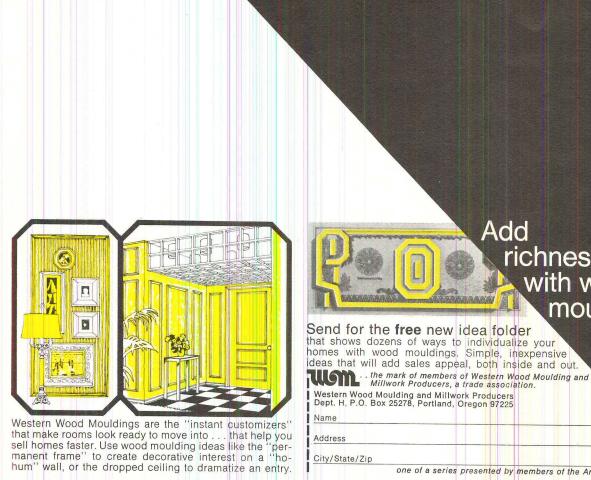
If you think social security helps when you retire,

you're right. But it's also something you can depend on *now.* Whenever you need information, contact any

Whenever you need information, contact any social security office.

8	ACCOUNT NUMBER 987-65-4320	r TT
	HAS BEEN ESTABLISHED FOR Lee Thomas	
FO	SIGNATURE Lee Thomas R SOCIAL SECURITY PURPOSES . NOT FOR IDENTIFICATION	DN I

Social security pays four benefits: survivors, disability, retirement, and Medicare. U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • Social Security Administration

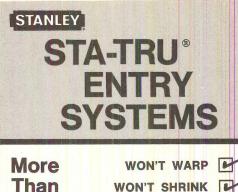


City/State/Zip

one of a series presented by members of the American Wood Council

richness

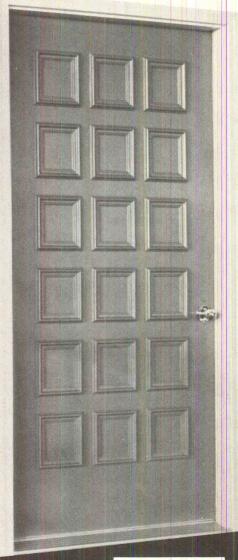
with wood mouldings



		5d
Than	WON'T SHRINK	P
Just a	WON'T CRACK	P
Door	WON'T TWIST	
	WON'T SWELL	P

Engineered, manufactured and tested to eliminate door problems. Steel panels with polyurethane foamed-in-place core provides all-weather protection. Pre-hung and assembled for fast, cost reducing installations. Available with sidelights and in 30 beautiful styles.

It's an Entry System!





PRODUCTS/TOOLS AND EQUIPMENT



Lightweight tool box can be carried by two men more easily than steel boxes: it's fiberglass and weighs only 100 lbs. Yet it will take heavy duty, won't dent easily, can't warp, rust, corrode, or rot, is verminproof, and has rainproof top. It is 30" wide, 25" deep, and 62" long for long tools and comes in white or safety orange. Cromaglass, Williamsport, Pa.

CIRCLE 363 ON READER SERVICE CARD



Pickup truck has front disc brakes that are smoother, more precise, provide balanced braking between front and rear wheels. Other Cheyenne model features: an engine for lower-lead fuels, double-walled box and cab, fender liners, one-hand



tailgate, more comfortable seating, better cab ventilation, more powerful sealed-beam headlamps. Optional: white two-tone side panel, chrome bumper. Chevrolet, General Motors, Detroit, Mich.

CIRCLE 364 ON READER SERVICE CARD

Vibrating plate compactor is small enough to get into tight places, yet produces 3,350 lbs. of impact-4,600 times a minute. Heavy gauge steel plate is 17"x20". It is powered by a 5-hp engine (a 6-hp engine isolated from vibration is optional), has a centrifugal clutch and recoil starter for easy startups. For longer bearing life and less maintenance, it has a new oil bath eccentric in which oil can be changed without disassembling unit. Optional equipment: two-wheel cart and water tank for use on asphalt. Stow, Binghamton, N.Y.

CIRCLE 365 ON READER SERVICE CARD

Genie® AUTOMATIC GARAGE DOOR OPENER SYSTEM BY ALLIANCE THE SALES CLOSER

THE EXTRA TOUCH THAT CLOSES HOME SALES FASTER!

名[[集]]] [[集]] [[集]] [[集]]

MANCE GENIE

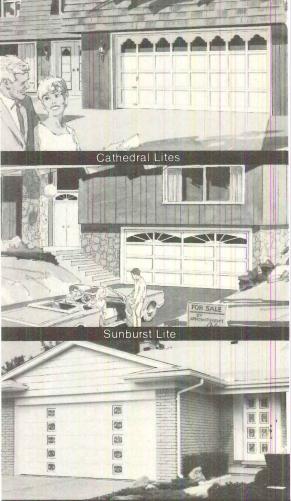
GENIE! Instantly recognized for quality by new home prospects. GENIE! Pre-sold through national advertising and local promotion. GENIE! Backed by a nation-wide network of reliable dealer service outlets. GENIE! Performance-proved by satisfied users everywhere.

Call your local dealer or write today and find out how the GENIE Automatic Garage Door Opener System by ALLIANCE merchandising program can help you sell more homes! GENIE—"The Garage Door Picker Upper!" Opens the garage door ... turns on the light ... closes the door ... then locks up tight. Booth 2040 National Home Builders Show, Houston

The ALLIANCE Manufacturing Co., Inc. Alliance, Ohio 44601 A NORTH AMERICAN PHILIPS COMPANY HH-1

Maker of the famous Antenna Rotator ... Alliance Tenna-Rotor®..."TV's Better Color Getter!"

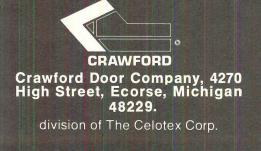
residential garage doors that harmonize



Custom Co-ordinated Panels

From the Crawford Design Team

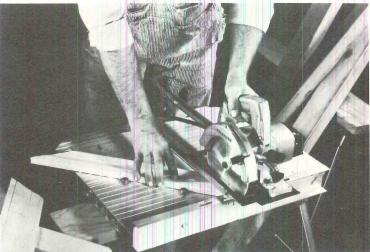
The ideal way to *add buyer appeal* to any home . . . garage doors that harmonize with your entrance doors . . . *the costs are low* and any or all of these ideas are *available now*. You can order one, today, or get full details from your local Crawford distributor or write.



PRODUCIS/ TOOLS & EQUIPMENT

Rust removing attachment, for use on $\frac{3}{6}$ " and $\frac{1}{2}$ " drills or disc sanders and grinders, has 21 hardened steel teeth that whirl away heavy rust, scale, barnacles, or mineral deposits from steel, concrete, or any hard surface with little or no dust. Surface is clean and ready for painting. Attachment is 4½" in diameter, weighs 2 lbs., needs no lubrication. M&F Sales, Miami, Fla.

circle 366 on reader service card



Mitre table is a portable 14 lbs., at 24" wide, fits in trunk or truck, uses any portable electric saw, produces cross-cuts to 2"x19". One piece of extruded aluminum for rigidity, it has sawguide rails, a 24"

recessed steel tape rule, a pull-out extension for cuts of almost 3', and quarterturn pop-up guides for hairline 45° mitres. Porta-Table, Highland Park, Ill.

circle 367 on reader service card

Variable speed ¼" drill is one of five new models with fastback-designed, double-insulated handles. Balanced for comfortable use, it weighs only 1¾ lbs. (the ⅔" drill weighs 1% lbs.) and measures just 7¾", so it can fit in hip pockets while climbing ladders. Thor Power Tool, Aurora, Ill. CIRCLE 368 ON READER SERVICE CARD

 \leftarrow circle 174 on reader service card



Dear House & Home Reader:

We manufacture a product which should definitely interest you: Built-In Cleaning Systems. VACUFLO is our name. We claim many firsts. Principally that our system has no bag or filters. That's important.

No doubt you've been approached about built-in cleaning before and perhaps have evaluated or even used a few systems. Whether you are involved in the construction of 10 homes a year or 3,000; townhouses or garden apartments; modulars or mobiles, we know that built-in cleaning is important to you because it has become as much a part of the home building scene as plumbing and central heating.

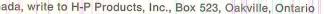
Why not have the appropriate people in your organization talk with us to discuss not only built-in cleaning, but how VACUFLO specifically can add a new dimension to your homes? We think you'll find VACUFLO has a lot going for it.

Sincerely, H-P PRODUCTS, INC.

aul K. Dus

Paul R. Bishop Asst. to the President









Cover 1500 more square feet per hour!

One man with a Paslode Gun-Nailer® drives 8d nails like five men using hammers! And he'll do a better job. On roof decking or sub-flooring, the Gun-Nailer pulls boards tight, with one blow. No wasted nails. Drives 7,000 nails per hour, including reloading time. Men like to use the Gun-Nailer. And you'll like the way it cuts costs. The



Drives 16d (3½") nails—box, sinker, common, ringshank, screw-type. Cartridge loading. Weighs 11 pounds.

The Gun-Nailer Drives all types of 8d ½") and 6d

(2½") and 6d nails. Sturdy strip loading. Weighs under 8 pounds.

same is true of the Stallion[®] power nailer. It'll drive 4,000 to 5,000 16d nails per hour, including reloading time. Great for framing of all kinds!

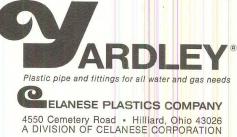
Write for free nailing cost calculator. See how much you can cut your nailing costs. We'll include details on Paslode power nailers and heavy-duty staplers.



Yardley Plastic DVV Pipe & Fittings: Going in-and up-all over!

From single-family to multi-story housing, Yardley ABS plastic drain/waste/vent pipe and fittings...accepted by all major model codes ... carry a 50-year guarantee, strongest in the industry. This durable material... providing lower installed cost... is available through a rapidly growing chain of distribution centers throughout the U.S. Call the Yardley distributor near you. Ask for new Yardley ABS/DWV catalog. Stop and see us at the NAHB Show, Booths 2544 and 2645





THAITEAK helps sell homes ...and apartments, too!

Thai-Teak makes a prestige floor with rich, full lifetime beauty that sells itself. It costs no more than many custom vinyls, many wood floors, many wall-to-wall carpetings ... in large installations.

Competitively priced quality that is unique and praiseworthy. Installation is quick, easy, precise and maintained at low cost. Keeps labor prices right down on the floor.

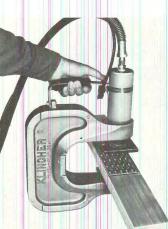
Thai-Teak resists termites, rot, decay. It helps you make more permanently satisfied clients and customers. Isn't that what you really want?

Send for FREE brochures on 150 patterns and technical data.



PRODUCTS/ TOOLS AND EQUIPMENT





Truss plate clincher eliminates all hand nailing, increases speed. The heavy-duty unit squeezes clips on both sides at the same time so the truss need not be turned over and the job is reduced to a one-man, one-handed operation. Clincher operates on 115-v. current. Newest model, which manufacturers claim is improved for speed and dependability, is also offered for a lower price than earlier models. Panel-Clip, Farmington, Mich.

CIRCLE 373 ON READER SERVICE CARD

Backhoe/loader digs 17' 6" dee sewer or pipelines. It can reach ' so it digs more trench at one set It has more than 11' loading h to clear high-sided trucks. A takes less time to swing from c to side or extend or retract s lizers. Ford Motor, Birming Mich.

CIRCLE 372 ON READER SERVICE



Compact trim saw is $10\frac{1}{2}$ " weighs just 7 lbs. and, becau balanced top handle, may be with only one hand. The $4\frac{1}{2}$ " l turning at 3,800 rpm, cuts promaterials such as plexiglass, p laminates, trim, plywood, position boards, or thin (no rous) metals. At 90° it can cut up to 1 15/16". At 45° it cuts 1 1/16". Built-in trigger switch on-off control. Rockwell, burgh, Pa.

CIRCLE 374 ON READER SERVICE



steel plate, as shown, weigl lbs., has a 3/6" bit, 1/2 -hp reve motor, and a variable speed a ment on the trigger that c locked in at any speed up to rpm. The newly designed in resistant bright red handle is c insulated. Motor is a unitize struction so pieces drop into reducing cost and making s easy. Wen Products, Chicago. CIRCLE 375 ON READER SERVICE



Delta faucet: the versatile valve. Fits virtually any installation.

You just can't find a more accommodating valve than Delta.

All Delta faucets exhibit our original concept of one single handle operated with only one moving part. Which means easy operation for your customers. And fewer costly return trips for you.

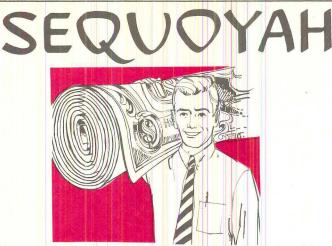
But there the similarity between Delta faucets ends. We've taken the trouble to design separate lines to handle any installation you may come up against.

Got a customer who wants widespread bathroom beauty and single handle efficiency in the same faucet? We've got the new Delta Fjord. How about the customer who simply wants a great-looking, hard-working kitchen faucet? Give her a Delta 100. Or how about a mother concerned about her children turning on the hot water by mistake? Show her the Delta-Temp pressure-balanced shower valve.

The point is this. We make faucets for kitchen sinks, lavatories, tubs and showers. In finishes from chrome to brushed gold. In models with the widest variances in the industry. To fit almost any application known today. How about tomorrow when new applications are discovered? We're not worried . . . our versatile valve will evolve.



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



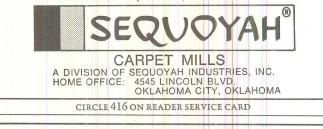
Creators of the 2 new chapters in the Home Builders Profit book. Sequoyah® Carpet Mills builds new home builder profits by the square yard. It's like finding money on the floor. This is . . . and always has been . . . our edge.

Sequoyah Carpets are created to be the BEST BUY in a price range. That's what made us grow.

Today Sequoyah is stronger in the BEST BUY field than ever before.

The latest chapters in your new profit story include decorator styles . . and foam backed carpet in two forms — carpet tiles and rolls of Carpet 'N Cushion.

Get the full Sequoyah Carpet story. Call (405) 528-7821 — or visit our booth at the National Association of Home Builders Convention Exposition, Houston.



She works for you; gets paid by us.

a Warte King Universal Home Service Consultant

There are a number of reasons why you should install Waste King Universal stainless steel dishwashers in your new kitchens: dependability, longevity, and most important, the added value of the home in the eyes of your customer.

But there's another bonus feature when you install our stain-less steel dishwasher. A lady. A trained Home Service Consultant. She works for you but gets paid by us.

Use our 700 and 900 series dishwashers and we include a home demonstration by our girl. She'll check out your new customer on how best to use the new machine, make sure it's working properly and in that rare, rare



instance when service is necessary, she'll arrange for it. This kind of service takes a load off your salesmen. And makes your new homeowner feel kinda' warm inside.

One more thing. We also build the world's quietest and most dependable waste disposer. So if you want to make your customers doubly impressed, give them one of each — Waste King's stainless steel dishwasher and a Waste King Universal disposer. Both top of the line...like your product.

For further information drop.a postcard to: Dick Schaub, VP Marketing, Waste King Universal, 3300 E. 50th Street, Los Angeles, California 90058.



PRODUCTS/PREFAB STAIRWAYS



Spiral stairs with oak or redwood handrails, treads, platforms, and brass-topped balusters are of lightweight yet strong construction that eliminates special bracing, underpinning, or welding-pieces fit easily into pre-drilled center co Custom fitted to specifications are ideal spacesavers for indo out. American Panel, Yps Mich.

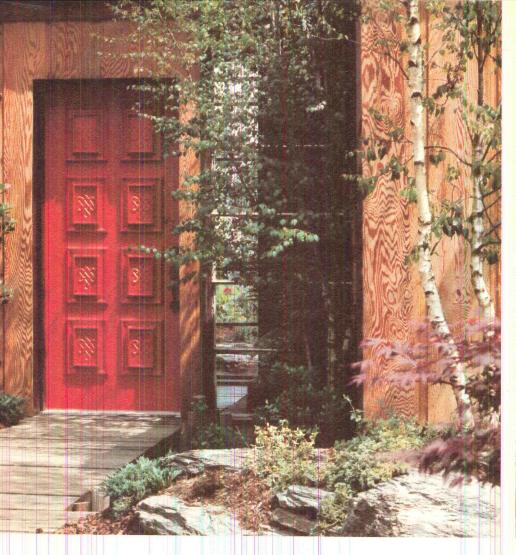
CIRCLE 385 ON READER SERVICE

Steel stairs are easy to install field welding is required. Can treads are already welded to which are made to exact height and slip easily over a center pipe column 4" o.d. A able to any height, the stair be constructed for right- or left approach (counterclockwi clockwise). 60°, 90°, or square ing platforms are available. Industries, Carmichael, Calif CIRCLE 386 ON READER SERVIC



Cyprus treads (right) are recommended for exterior applications of these stairs in steel, aluminum, cast iron, cast aluminum. Exactly finished and contoured to fit

smoothly and afford easy asse Treads also in wood, wood carpeted, metal, and rubber co Duvinage, Hagerstown, Md. CIRCLE 387 ON READER SERVICE





Detailing from The Ever-Strait collection.



The Ever-Strait Door by Pease. Never needs attention. Just attracts it.

purposely photographed five of our t door styles in the same setting. To istrate how versatile and totally dise Ever-Strait Doors really are.

nd since pictures of Ever-Strait Doors your attention, imagine what the real will do for the homes and apartments esign and build. No matter what the g. No matter what the architecture. Ind nothing can ever detract from the good looks of an Ever-Strait. Because it's been proven trouble free over the years. It can't warp or twist. One-piece molding can't crack. No veneers to peel. And there's never any need to hide the beauty of an Ever-Strait behind a storm door.

There are 30 beautiful Ever-Strait Door designs to choose from. In sizes up to an extra-wide 3'6" x 6'8" for added elegance. All available with compatible toplights, sidelights and ventilating sidelights. Now you have a choice. There's an Ever-Strait Door for every doorway.



U.S. Patents No. 3,153,817; 3,273,287; 3,238,573; 3,426,479. Patented in Canada 1965, 1966; and in United Kingdom 1962. Other patents pending. © Pease Company 1970 CIRCLE 418 ON READER SERVICE CARD

Discover what's new in doors. See the Ever-Strait exhibit at the NAHB Show. Booth 3418.







the LITTER KING

for every facet of your building project—residential, commercial, or institutional—solve the ever-present problem of litter and eliminate the necessity of using unattractive litter receptacles



the Litter King is made on a horizontally and vertically reinforced steel frame... using rot-resistant cypress wood ...

dip-coated to prevent rust and to provide a uniform and beautiful finish, the Litter King provides beauty and durability and actually serves to complement the area into which it is placed

The Litter King is priced at \$39.95, complete with 22 gallon container and two foot galvanized installation pipe. It is available with optional top and pedestal to fit any specific need.

The greatest care has been taken in the selection of materials and in our craftsmanship to assure the strength and continuing attractiveness of our product.

For further information write: Victor Stanley, Inc., Dunkirk, Maryland 20754 (telephone: A.C. 301, 257-7578)

CIRCLE 419 ON READER SERVICE CARD

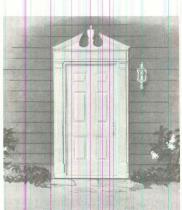


PRODUCTS/DOORS AND WINDOWS



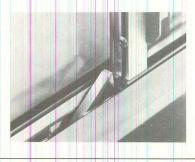
Tilt-in window is available as a double-hung unit or as a picture window center unit. Wood sash is treated with preservative, then primed on the exterior and protected by a three-step finish coat that prevents cracking or wrin Exterior frame is clad in rigid Inside finish is left natural for ing or painting. Malta, Gah Ohio.

CIRCLE 381 ON READER SERVICE

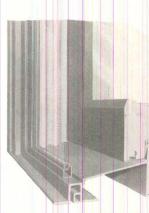


Molded door looks, feels, sounds, and handles like traditional doors, but is made of FRP, won't warp or shrink, is priced like flush door. Prehung unit fits 36" x 80" opening, takes standard hardware, also comes in crossbuck and Spanish styles. Urethane foam core insulates. Owens-Corning Fiberglas, Toledo, Ohio.

CIRCLE 382 ON READER SERVICE CARD



- CIRCLE 420 ON READER SERVICE CARD



Low-maintenance window is a aluminum. Baked-on acrylic comes in ten colors and Aluminum overlaps at corne expansion. Wood frame and sa natural inside. Vinyl weather ping at head, check, and b rails. Polypropylene pile and at side stiles. Glass rests in bed. Rolscreen, Pella, Iowa. CIRCLE 383 ON READER SERVICE

Low-cost sliding windows haversible panels, locks on either of mullion. Night lock wor two positions. Screens can moved from inside; windows be removed from outside. Sil treated polypropylene pile we stripping. Northrop Archite Systems, City of Industry, C CIRCLE 384 ON READER SERVICE

The products help you sell!



took Leigh to take the "cold" out of cold steel and offer closet doors with warmth and beauty. The essert white prime finish can be the perfect base for decorator and antiquing treatments. ONLY LEIGH FFERS . . . trouble-free, low-priced closet doors, deep formed from heavy gauge steel* in nine diferent styles, plus wood-grained vinyl clad and versatile white painted hardboard. All bi-fold doors eature Leigh's exclusive balanced suspension system— that never jumps the track. Can't sag, bind or cick. Leigh doors operate smoothly, silently, and effortlessly, install in minutes— even in out-ofquare openings. Saves call-backs. *Also available in zinc electro-plated steel on special order only.

ircle 176 on Reader Service Card



Prefinished wood-grained vinyl clad closet doors available in medium maple and dark walnut, provide a look of luxury and a lifetime of wear. *Circle 177 on Reader Service Card*



Williams, a subsidiary of Leigh and a leading creator of fine bathroom furnishings offers the SCANDIA. Now available in the cabinet makers latest finish—flaxen ash.

Circle 178 on Reader Service Card



Leigh's easy to install, suspended ceiling systems feature an exclusive grid connection system which allows cross tees to lock into the ends of main tees. This means less scrap and more profit to you.

Circle 179 on Reader Service Card



ok manufactures more than 200 building products

LEIGH PRODUCTS, INC. MAIN OFFICE: COOPERSVILLE, MICHIGAN 49404 Manufacturing plants in eleven locations: East Coast Warehouse: Edison, New Jersey. West Coast Warehouse: City of Commerce, California

PRODUCTS/COATINGS AND ADHESIVES



Acrylic-based stain, said to last up to 50% longer than oil-based stains, is odorless, won't oxidize, can be cleaned up with water. A wide variety of contemporary colors and neutral tones in solid or semitransparent stains provide matte finish on rough-sawn cedar or wood exteriors or interiors. Ca applied overold stain or new wo even damp wood—and won't ter, crack, chip, or peel. F Paint, Emeryville, Calif. CIRCLE 388 ON READER SERVICE



Investing primarily for highest possible **Current Income** without imprudently risking capital.

That's what sells housing today. To parents, the right environment means well designed outdoor play areas for their children. It means playground equipment that's built solidly, safely. Playground equipment

that encourages creativity and body-building activity.

That's the kind of environment GAME

REE 80 page full color GAME TIME, catalog.

See us at the Houston NAHB Show - Booths 2636-2642

CIRCLE 447 ON READER SERVICE CARD

magineers" for youngsters. It's the environment that sells parents on your housing.

Write today for the

itchfield, Michigan 49252

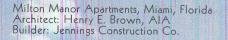
For Prospectus: Contact

			ment C phia, Pa.				15/10	1 055
/ renn	Center,	Finauen	onia, Pa.	19103	• PI	ione z	215/LU	4-255
Gentlen out obli	en: Plea gation.	se mail n	ne a Dec	atur Inc	ome Fi	und Pr	ospectu	s with
name								
name address								



Drywall finishing system uses a wide glass fiber mesh tape c with a thermosetting adhe When activated by a hot iron it adheres firmly to wall joints. Seconds later joint comp is applied over tape (above, Before compound even dries, can be sprayed on to form tes walls (above, right). The sys designed for industrialized cons tion, speeds joint treatment can be applied at about the sp man walks. Is useful for inte other than in modular hou National Gypsum, Buffalo, N CIRCLE 389 ON READER SERVICE

184 H&H JANUARY 1971



"For decorative effect and durability, I'll take Reynolds Aluminum Shingle-Shakes," says Miami builder.

219 squares of gleaming white Shingle-Shakes were used to top the mansard roof of this 61-unit apartment complex, as well as its bath house. Listen to what Mr. M. S. Jennings, Jennings Construction Company, has to say about his experience with Shingle-Shakes.

"Both the architect and I wanted a good-looking material with low upkeep. We picked Reynolds Aluminum Shingle-Shakes because of what our climate does to ordinary materials and finishes. We were very pleased, too, with their ease and economy of installation."

Mr. Jennings and his architect were also well aware of other Shingle-Shake features: 4-way interlocking design to withstand hurricane-force winds (approved by Florida's demanding Dade County Code); a high degree of heat reflectivity; a siliconized, baked acrylic enamel finish that lasts years longer than ordinary painted surfaces.

Architects, builders, and owners will appreciate the effects possible with thick-butt, heavily-textured Shingle-Shakes, as well as color treatments possible with a choice of Polar White, Terrace Green, Autumn Brown, Charcoal, Hunter Red, and natural aluminum.

See Sweets Architectural File 21d/Rey, or use coupon below for more information.

See us at Builder's Show, Booth 2126, 2227.



Reynolds Metals Company Building Products and Supply Division 325 West Touhy Avenue, Dept. HH-11 Park Ridge, Illinois 60068

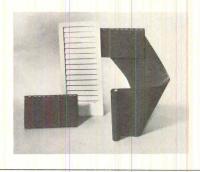
Yes, send full information on Reynolds Aluminum Shingle-Shakes and other residential building products.

NAME	
COMPANY	
ADDRESS	
CITY	
STATE	ZIP

PRODUCTS/EXTERIORS

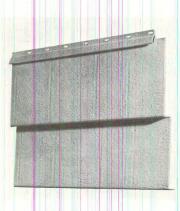


Asphalt shingles with extra-thick, extra-heavy shadow lines give the deep sculptured look of hand-split shake. Each shingle has a thick overlay of colored ceramic rock



granules for durability and colorfastness. Extra asphalt coating gives superior wind and fire resistance. Certain-teed, Ardmore, Pa. CIRCLE 393 ON READER SERVICE CARD

Acrylic film is factory bonded to plastic, metal, or wood (like the plastic shutter and siding shown) before the building products are shaped. Film becomes an integral part of the products adding the strength and durability of acrylics plus long-life finishes, non-chalking colors, and minimal maintenance. Rohm and Haas, Philadelphia, Pa. CIRCLE 394 ON READER SERVICE CARD Laminated strip shingles are formed by a 12" x 36" granule-surfaced asphalt shingle under an apron shingle with cut-out tabs of various shapes. This varying pattern adds



to the random, rustic appeal of finished roof. Heavier, this shingle has the look of wood sha Philip Carey, Cincinnati, Ohio CIRCLE 395 ON READER SERVICE C

Aluminum siding combines look of rough-sawn lumber and durability of vinyl-clad alumin Two patterns look like traditio 4" horizontal lapped siding or bo and battens. Both are designed easy, water-tight installation are guaranteed against crack peeling, chipping, or blistering der normal wear. In a variety colors including white, green, be gold, and brown. Crown Alumin Pittsburgh, Pa.

CIRCLE 396 ON READER SERVICE C



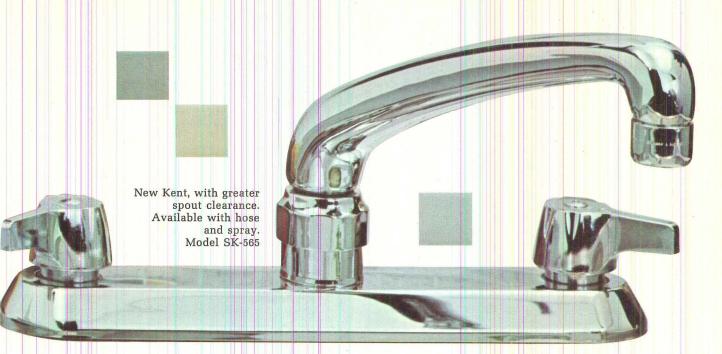


The Soss Invisibles—for a custom look for any room! These and hinges hide when closed, eliminating unsightly gaps, hinge door jambs. They're the perfect hidden touch for doors, door storage cabinets, built-in bars, stereos, and TV's. Specify the Invisibles wherever looks matter. See listing in Sweet's or w

catalog: Soss Manufacturing Co., Division of SOS Consolidated, Inc., P.O. Box 8200, Detroit, Mich. 48213.



CIRCLE 471 ON READER SERVICE CARD



SPEAKMAN

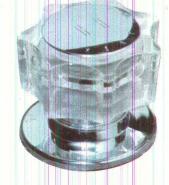
Kent, designed and engineered to answer your two most important requirements: elegance that sells and economy that saves. All backed by an unsurpassed tradition of Speakman quality.

Each Kent fitting stands uniquely apart. A gleaming example of today's distinctive styling captured in luxurious chrome-plated brass, and priced for projects where first cost is vital.

So if you're concerned about pleasing your prospects, while holding the line on costs, put Kent in your next project. Because that's where it belongs.

Speakman Kent: An eloquent expression of your ideas.

Available with beautiful acrylic or metal handles. Model SK-551-A



Over 100 years of service to the nation's builders.



LILLICALURE

Power tools. A complete catalog of power tools for all uses in industry and construction is now available. Included are saws of all kinds, drills, drill accessories, hammers, planes, routers, sanders, drivers, and many more. The twocolor catalog is extensively illustrated and contains specifications, dimension drawings, and outlines of work appropriate to each tool. Skil, Chicago, Ill.

CIRCLE 450 ON READER SERVICE CARD

High-density housing-a new lifestyle. One of the most informative of the new publications is a fullcolor booklet dealing with the need for attractive high-density housing and with 23 successful projects. The use of glass is especially important in increasing the illusion of space and openness in high-density projects by opening units up to beautiful natural or man-made environments. A glossary contains terms associated with high-density building and with glass manufacture and use. The projects illustrated, with full-color photographs, renderings, and floor and site plans, include some of the most successful apartment, townhouse, condominium, and PUD projects across the country. In each, glass was used to great advantage in interior clerestories and mirrors to make rooms seem larger, and as window-walls, doors, and double-story windows to lessen the division between living units and the surrounding environments. Also included are explanations of the different types of glass available and discussion of ways in which glass was used to enhance the beauty and saleability of these outstanding high-density projects. PPG Industries, Pittsburgh, Pa.

CIRCLE 451 ON READER SERVICE CARD

Tandem powered scrapers. A fourcolor catalog illustrates the last four in a series of tandem powered scrapers. Along with illustrations are included tabulations of machine specifications for easy comparison and job selection. A brief discussion of push-pull conversions describes the benefits of self-loading equipment, and a productivity chart section makes direct comparisons of single engine as opposed to tandem powered scrapers. A list of options available is also included. See your dealer or write Caterpillar, Peoria, Ill. 61602

Safety gratings. Industrial steel, aluminum, and stainless steel gratings, floor treads, stairs, and loading platforms are the subject of a fully illustrated technical catalog. Included along with extensive photographs and illustrations are detailed charts and tables showing measurements, prices, and loadbearing strength of numerous safety gratings for all industrial uses. Bustin Industrial Products, Dover, N.J.

circle 452 on reader service card

Entrance handlesets. A new line of handlesets, including knobs, levers, bell buttons, and one-piece entrance handlesets is introduced in a full-color catalog which also includes diagrams of the measurements of the fixtures when installed, specification information, and descriptions of a variety of types of locks available in the new styles. The five new designs-Diplomat, Coventry, Tampico, Malta, and Eden-designed for specific architectural or stylistic periods, can also be used distinctively with nearly all residential decors. Kwikset Locksets, Anaheim, Calif. CIRCLE 453 ON READER SERVICE CARD

Softwood lumber grading rules. A new national softwood lumber standard has gone into effect, and a booklet is available to list and clarify these rules. The tables and rules deal with standards for 11 western commercial species. Widths and thicknesses of lumber w change slightly, based on moistu content. All lumber will be sort by the same restrictions. Ne span tables are also available a will be essential to builder, e signer, and engineer, as they ma use of the new grading rules. per copy. Western Wood Produ-Assn., Yeon Building, Portlai Ore. 97204

Steel building systems. Four nubrochures in full color highlight t quality, economy, fast construction clean and modern appearance, f protection, and design flexibil of steel systems in all types building. Separate high-gloss, fu color brochures are devoted to st building systems in restauran banks, churches, and interion American Iron and Steel Institu New York City. CIRCLE 454 ON READER SERVICE CA

Wood windows. A new catalog h

been released which covers doub hung, casement, casement be vent, view, vuevent, and sl windows. The fully illustrated ca log also includes diagrams, spe fications and construction deta. Rodman, Rock Island, Ill. CIRCLE 455 ON READER SERVICE CA

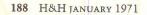
TO PAGE 1

Air King introduces Sauna-onthe Authentic Finnish Sauna! Rooms, heaters and accessories – all pre-packaged for easy installation!



The first complete Sauna package distributed and serviced by a leading national building products name! Including the finest Finnish-made electric Sauna heaters sold in America... using imported Finnish rocks — for heat, not decoration! Plus a complete selection of modu-

lar sauna rooms with super-insulated "sandwich" construction . . . and genuine Finnish accessories. Want to get steamed up? Write for new catalog: Air King Corp., 3057 N. Rockwell, Chicago, III. 60618.



THE NEW MALT-A-TILT WINDOW

STANDOUT versatile window on the market today. Tilts

inward for cleaning. Each sash is completely removable if you want that. Outside screens installed from roomside. And it's airtight with ratings far better than commercial standards. Perfectly balanced. Simple to take care of. Frame vinyl clad on outside with exterior of sash finish coated; natural wood inside. Malta Manufacturing Company, Inc., 261 Johnstown Road, Gahanna (Columbus) Ohio 43230.

