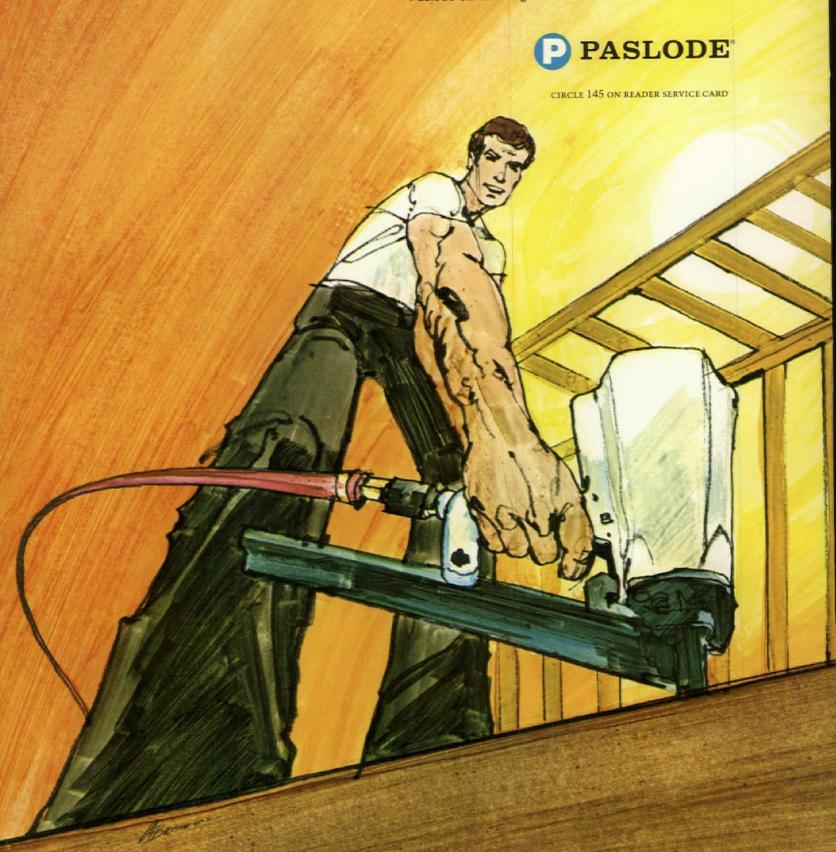
McGraw-Hill's marketing and management publication of housing and light construction House&Home EPTEMBER 1971 oaring cost of housing subsidies—Romney sounds a warning Canwe keep the price lid on the under \$25,000 single family house? roject Portfolio: West Coast echo of a European village traw in the wind? Rich suburb insists on housing for the poor

## Nail off roof sheathing jobs six times faster

How? Use a Paslode Gun-Nailer®. This pneumatic nailer drives 7,000 nails an hour, drives 'em straight home, hard enough to pull loose boards tight. No wasted nails. With the Gun-Nailer's speed—like six men with hammers—and its builder-proved dependability, you finish faster, you can handle more jobs, and net more profit per job. Drives 8d (2½") or 6d commons or coolers. Nails come in sturdy strips. Magazine loads in seconds. Other Paslode power nailers drive nails in lengths from 1½" to 3½", including ring shank nails and screw-type nails. Write for nearest distributor's name and free nailing cost calculator.

Paslode Company (Division of Signode), 8080 McCormick Blvd., Dept. HH, Skokie, III. 60076. In Canada, Paslode Canada Reg'd.



EDITOR
John F. Goldsmith

SENIOR EDITORS

Maxwell C. Huntoon Jr.

Edwin W. Rochon

ASSOCIATE EDITORS William J. Dukes John Kirk June R. Vollman Jenepher Walker

ART DEPARTMENT Russell Etter, director Jan V. White, consultant

EDITORIAL ASSISTANTS Nancy Jane Davis Ellin Kaknes Peggy Stevely

CONTRIBUTING EDITOR
Andrew R. Mandala, Washington

BOARD OF CONTRIBUTORS
Carole Eichen
Joseph C. Grasso
Robert W. Hayes
John Rahenkamp
Walter S. Sachs Jr.
H. Clarke Wells
Lenard L. Wolffe

CONSULTING ECONOMIST George A. Christie

MCGRAW-HILL WORLD NEWS Walter Stanbury, *director* 20 domestic and international news bureaus

ADVERTISING SALES MANAGER John S. Renouard

BUSINESS MANAGER Vito De Stefano

MARKETING SERVICES MANAGER Henry G. Hardwick

CIRCULATION MANAGER Joseph D. Holbrook

PUBLISHER
James E. Boddorf







House & Home, September 1971, Vol. 40 No. 3. Published monthly by McGraw-Hill Inc. Founder: James H. McGraw (1860-1948). Subscription rates, U.S. and possessions and Canada: for individuals within circulation specifications, \$9 per year, for others, \$15 per year. All other countries, \$30 per year. Single copy, if available, \$2. The publisher reserves the right to accept or reject any subscription.

Executive, Editorial, Circulation, and Advertising offices: McGraw-Hill, 330 West 42nd Street, New York, N.Y. 10036. Telephone: 971-3333. Second class postage paid at Washington, D.C. and at additional mailing offices. Published at 1500 Eckington Place, N.E., Washington, D.C. 20002. Title \* in U.S. Patent Office. Copyright 1971 by McGraw-Hill Inc. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without consent of copyright owner.

Officers of the McGraw-Hill Publications Company: John R. Emery, President; J. Elton Tuohig, Senior Vice President; David J. McGrath, Group Vice President; Vice Presidents: Ralph Blackburn, Circulation, John R. Callaham, Editorial; David G. Jensen, Manufacturing; Jerome D. Luntz, Planning & Development, Joseph C. Page, Marketing; Robert M. Wilhelmy, Finance.

Officers of the Corporation: Shelton Fisher, president, Joseph H. Allen, group vice president, publications and business services; John J. Cooke, senior vice president and secretary; Ralph J. Webb, treasurer.

This issue of House & Home is published in national and separate editions noted or allowed for as follows: Western WA-WB, Eastern E1-E2B, Midwest M1-M2, North Central N1-N2, Southern S1-S6, Swing SW1-SW2.

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

#### House&Home

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

Volume 40 Number 3 / September 1971

#### **FEATURES**

- 59 New safety rules—an editorial
  They're good for everybody—except the homebuilder and his customers
- 60 La Costa Village: West Coast echo of a European village The first in House & Home's new Project Portfolio series
- 66 Can we keep the price lid on the under-\$25,000 single-family house? How five builders battle skyrocketing building costs
- 78 3 Homes for Better Living remodeling winners A new lease on life for an old barn and two houses

#### NEWS

- 4 Romney's warning: housing subsidies could ultimately top \$2 billion
- 8 Rich Washington suburb insists on housing for low-income families
- 10 Stiff new rules direct apartment owners to integrate the races
- 10 Chicago's apartment builders fight new restrictions on construction
- 12 Luxury apartment tenants complain to builder: the place leaks
- 16 Don Scholz in eclipse? Old pro has 15 building projects ready to go
- 16 The latest in credit cards—the charge-a-house plan
- 18 A bonanza: \$2 billion in mortgage supports for middle-income homebuyers
- 24 St. Louis builder Al Mayer fights to stave off bankruptcy
- 26 For sale soon—the Levitt building organization
- 32 Housing execs on the move: Ray Niblack and Ed Kromer take new posts
- 36 Crash program: from ground breaking to model apartments in 10 weeks
- 40 There are no inside streets in this 17-acre condominium
- 44 New "stitch" wall system ties together a precast concrete shell
- 48 Industrial waste: a new source of low-cost bricks and blocks

#### DEPARTMENTS

- 28 Housing stock prices
- 50 The planning scene

  Man and his car are not soon parted. So parking layout is vital
- 52 The zoning scene
  Strip zoning on highway frontage is unsafe and impractical
- 56 The modular scene
  Will new state factory housing laws be a help—or just another hindrance?
- 88 Products
- 101 Reader service card
- 119 Literature
- 120 Advertisers index
- 121 Personal business

#### Romney cries a warning: housing subsidies could eventually top \$200 billion

The government's fastest-growing housing programs are so popular-with both builders and their customers-that Housing Secretary George Romney is sounding the alarm and scrambling for a way to change or replace them.

The programs provide mortgage-payment subsidies under FHA sections 235 and 236 for home owners and renters. The sections were written into the Housing Act of 1968 for families earning \$3,600 to \$7,200

Romney-and some Congressmen who must vote the subsidies-are now aghast at the skyrocketing costs. The Secretary predicts the outlay for all housing subsidies will hit \$7.5 billion a year in 1978, when the 10-year housing goals programs are completed, and that the cumulative costs could top \$200 billion. Much of that will be accounted for by 235 and 236.

The National Association of Home Builders projects a subsidy of perhaps \$4.6 billion, but it takes Romney's warning seriously. "He'll scare some of the appropriations people," says an NAHB source, "and we won't get the money we need."

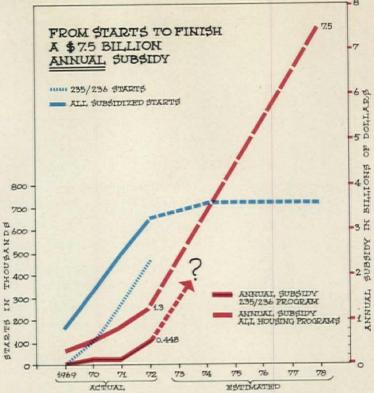
25% of starts. In fiscal 1972, the 235 and 236 units will account for 450,000 of the 1.8 million housing starts that Romney forecasts-\$8 billion in business for homebuilders.

In fiscal 1969, the two programs logged 9,000 starts and the subsidies (which cover all but 1% of the mortgage payments) increased the HUD budget and the U.S. Treasury's deficit by only \$800,000. This fiscal year, the subsidy is \$488 million. And it will head up from there (see chart).

The \$200 billion. The annual outlay for all subsidized housing is the figure on the red flag that Romney is waving. In the housing goals report in June, he told Congress:

"Assuming completion of six million subsidized units . . . by 1978, estimates suggest the government will be paying at least \$7.5 billion annually in subsidies. Over the life of the mortgages, this could amount to the staggering total of more than \$200 billion."

Romney's projection covers all subsidized housing, not just



235 and 236. Other programs add 184,000 subsidized starts in fiscal 1972, bringing HUD's subsidy to \$1.3 billion—three times what it was three years ago.

This year's 235 and 236 units account for two-thirds of all subsidized starts, and that ratio is expected to persist.

The attractions. What makes the 235 and 236 programs attractive is simple-the low monthly payment that the builder can offer buyer or tenant.

On an \$18,500 house with a 7% mortgage running 30 years, the owner's payment is \$96 a month, with HUD paying a maximum of \$71 a month or \$852 a year. If the mortgage is at 8.5%, the subsidy rises to \$90 a month, or \$1,080 a year.

In a section 236 project, a renter's payment is around \$140 a month, and the government pays about \$67 a unit.

Added funding. There is no question about the popularity of both programs. The Senate Appropriations Committee has actually increased funds for the 236 program to \$200 million for fiscal 1972-some \$35 million more than the House votedand has "urged" that the \$35 million be used for housing for the elderly. Since the special section 202 program for the elderly is now being phased out, a 'compromise" with the House kept the \$35 million in the legislation.

The moneymakers. Romney says of the 235 program: "The builders like to build them and the real estate people like to sell them. Sure, it's a great program for them." But the Secretary describes his concern:

"I find no real incentive in there for anybody to see that this program is going to operate on the soundest possible basis other than those of us in the federal department. Everybody is out there to take advantage of the situation."

Assistant Secretary Eugene Gulledge told Congress that the high-volume 235 program "has brought us more than our share of people who did not have high business ethics or scruples and who are deliberately taking advantage of people."

Scandal. The adverse publicity on the 235 program, sparked by a House Banking Committee investigation, centered on existing homes (News, Feb. et seg.). Some homes were remodeled to some degree and sold at inflated prices; low-in-

new construction part of the Harold B. Finger. program." And Gulledge agreed.

'Not best way.' Gulledge stresses the positive side of the

program in providing housing for people who might otherwise be unable to buy. But when asked by Boland, "Is section 235 a good program? Is there a better way?" Gulledge replied: "It is both my personal conviction and the department's that the 235 program is certainly not the best way." He added, however: "It is the best way on the books at the moment."

Inequities. Besides the cost of subsidies, Romney declared, the government can't afford to provide the same kind of housing and subsidies to all who are eligible-and shouldn't have the responsibility for choosing the lucky beneficiaries.

"If you take 235 and 236 and the subsidized programs as a whole." Romney told the House Appropriations Committee, there are about 23 or 24 million families that would be eligible on income." But by 1978 and under the existing 10-year program, he said, "only about one-fourth are going to be subsidized." Romney went on:

"We are getting letters in which families say so-and-so moved next door in a new home. They are subsidized. My income is what theirs is. I bought my home. Why should I help pay for this family?"

Divided purpose. Under-Secretary Richard Van Dusen says that "part of our problem is that this program . . . attempts to accomplish two objectives at once: to add to the housing supply and to house low-income families," with the result that "you are putting low-income families into brand new hous-

Van Dusen suggests as a solution a program that would "subsidize producers to produce more," and then "take care of the shelter need through some other form of program."

Better approach? That other form of program is the housing allowance, already regarded come families were victimized. with favor by the House Bank-Rep. Edward P. Boland (D., ing Committee and HUD. The Mass.], chairman of the House Housing Act of 1970 directed Appropriations subcommittee HUD to experiment with alon HUD, told Gulledge during lowances, and the Urban Ina hearing that "there are con-stitute is designing such an exsiderable complaints, too, in the periment for Assistant Secretary

> -Don Loomis McGraw-Hill News, Washington

### with Thermador's Thermatronic

It's short on the time it takes her...but it's long on what it gives her!



- A browning element in all models.
- Cooks in shallow metal pans (5%" deep)
- Stainless steel interior
- Black glass doors

The magic of microwaves lets you cook a meal or a snack in a fraction of the usual time. It can mean a whole new lifestyle for today's family. Thermador Microwave Ranges in combination with the self-cleaning oven (shown) and singly for built-in installation or portable use.

Model MC11 is Thermador's handy portable Microwave Range. It's the *only one* with a browning element. Move it easily to any room in the house... or patio... wherever there's an electrical outlet. 120 Volts.



For complete details write:



The Elegant Difference



5123 District Blvd., Los Angeles, California 90040

#### Rich Washington suburb rules building projects must include units for poor

Washington's most affluent suburb has decided to require builders to include a percentage of units for low- and moderateincome families in most of their apartment and row-house developments.

The board of supervisors of Fairfax County, Va., has adopted ordinances-believed to be the first in the country-that require projects having 50 or more units to include at least 15% for low- and moderateincome families. Otherwise, the development doesn't get ap-

Top officials of Secretary George Romney's Department of Housing and Urban Development came out publicly for the plan before the board voted.

The new ordinances apply to nine major zoning categories. They exempt developments of single-family houses, even if they have 50 or more units, and certain high-rise apartments. About 75% of all housing starts are in the categories covered, and there is speculation that the board may bring under the ordinance the 50-unit singlefamily and high-rise projects now excluded.

Court test. The ordinances were to become effective September 1, but builders planned to test them in the state courts. Grayson Haynes, attorney for several builders, said they would challenge them as violative of the state constitution.

Builders said they opposed the ordinances as an imposition of new restrictions on building. Some builders also held that such housing was still being supplied in the free market.

Before the final vote of the county board on June 30, Under-Secretary Richard Van Dusen of the Department of Housing wrote that the department "welcomes the initiative."

Building boom. Fairfax County is in the throes of a housing boom. Permits for 7,000 to 8,000 units were issued in 1969 and again in 1970. More than 10,000 have been issued in the first half of 1971.

The new ordinances still may not increase the number of subsidized housing starts in the county much above the 1970 level of 1,500 a year, according to Roy O. Beckner Jr., executive vice president of the

MONTGOMERY COUNTY LOUDOUN SPRINGS BETHESD KE TON ALEXANDRIA FAIRFAX COUNTY SPRINGFIELD

#### Profile of an affluent suburb

The 1970 census shows that Fairfax County, Va., has topped Montgomery County, Md., to become the wealthiest of Washington's suburbs and one of the wealthiest in the nation.

The county's 410 square miles hold 477,000 people with an average family income of \$15,933, up from \$11,060 in 1960. The median price of a new single-family home is \$35,000 to \$40,000. Only about half the county's land is developed.

'Out of sight.' In this rich economy, the swift rise in housing costs has taken the single-family dwelling beyond the reach of county employees-policemen, teachers, and nurses.

The apartment market has spurted as a result. Builders

Assn. Projects have ranged from

Suburban

Virginia Builders

have been switching to multifamily projects from the single-family houses they had been putting up, but the multiples are expensive.

The argument that employees can't afford shelter helped win support for the mandatory construction of housing for low- and moderate-income families.

Public housing. The county has about 200 units of public housing, with another 50 approved for Reston, the well publicized new town that is the most notable housing project in Fairfax. However, there are 750 units of subsidized housing completed (under FHA sections 221d3 and 236), another 400 under construction, about 900 "firmly committed," and 1,000 more in process.-D.L.

moderate-income families.

Most of the required units are expected to be built under sections 235 and 236. The ordinances allow a builder to qualify by building the required number of units without subsidy, but he has to commit himself to building housing for the same number of families at the same income levels and for the same rentals or prices that would prevail under the subsidized program.

Controversy. The ordinance

the supervisors after a whirlwind campaign by church groups organized by a Fairfax clergyman, the Rev. Jerry Hopkins. The eight-week drive produced a petition with 34,000 signatures. Supervisor Harold O. Miller, a Democrat who lost to incumbent Republican Joel Broyhill (of the Broyhill family of builders) for the Congressional seat for the District of Columbia last year, spearheaded the campaign. Proponents had legal advice from attorney John Ferren of Hogan & Hartson, one of Washington's largest and most prestigious law firms.

Builders' side. One building industry spokesman, who didn't want to be quoted, admitted that a major political factor was the pressure on county supervisors whenever they had to vote on subsidized housing for a given neighborhood.

"The supervisors always got the heat, and they don't like it," he explained. "This way it gets the monkey off their back. Now they can blame the builders."

The 60-day postponement of the effective date, from June 30 to September 1, eased the pressure on builders. The supervisors followed up by adopting a new housing code to help builders cut costs and by creating a \$750,000 subsidy fund from which the county would pay builders \$1,000 for each lowincome unit they are required to build and \$500 for each middle-income unit. The fund is calculated on the assumption that 1,000 units will require subsidy, 400 of them low-income and 600 moderate-income.

Liberalized code. The code amendments permit frame construction on the front and rear of townhouses; liberalize rules for condominiums; allow sewer contractors, as well as plumbers, to install sewer laterals; permit use of materials other than cast iron for sanitary sewers; and liberalize other requirements.

Proponents estimate that the changes could cut costs as much as \$3,000 to \$4,000 per house. Builders question the figures but agree that county officials have made many significant moves to help them meet the requirement of the new ordinances.

> -Don Loomis McGraw-Hill News, Washington

least 6% of a project's units be built for low-income families and the balance up to 15% for was adopted by a 6-to-2 vote of

# There's only one.

One handle. One quality. One-of-akind. That's Chateau by Moen. Chateau's kitchen faucet may not belong in the Museum of Modern Art -but it does belong in your kitchens. That's where its fingertip operation really shines.

Nonstop. That's the kind of built-in performance Chateau offers. That means reduced maintenance and fewer callbacks keep your costs from soaring.

Chateau towers above the rest in quality, convenience and performance. You can't top that.

There's one sure way to control water volume and temperature. Just rely on this simple cartridge. It's unique. And because it fits every Moen and Chateau faucet it's the only part needed for repairs. How's that for simplifying inventory!

Chateau by Moen faucets and shower valves put luxury in your homes—singlehandledly. Get Chateau by Moen. From your local plumbing contractor.

MOEN, A DIVISION OF Standage . ELYRIA, OHIO 44035

#### New anti-bias rules direct owners: integrate races in your apartments

The state of New Jersey and the city of Philadelphia have each passed regulations making apartment owners responsible for ending de facto segregation.

Their action has aroused interest throughout the country. Twenty-one cities or states, including San Francisco, Massachusetts, and Nebraska, have written to New Jersey for data on its rules. Philadelphia has received similar inquiries.

Both based their rules on a plan developed by Prof. Alfred W. Blumrosen of the Rutgers University Law School in Newark, N.J., but Philadelphia adopted the whole plan and New Jersey adopted only half.

Tenants: Who-why? Under the new rules, owners of buildings with 25 or more apartments must file an annual report answering questions on race of tenants, apartment sizes, turnover, and rental rates. Philadelphia's questionnaire also includes questions on minimum income requirements, processing procedures, credit standards, special rules, and advertising media.

The New Jersey Division on Civil Rights and the Philadelphia Commission on Human Relations then analyze the completed reports.

New Jersey. If discrimination is found in New Jersey, the state's civil rights law is invoked. This law specifies a series of complaints, investigations, and attempts at conciliation, which may culminate in a public hearing and an examiner's report. The director of the rights division then issues an order that has the force of a New Jersey Superior Court order; refusal to comply is considered contempt.

Court test. The Jersey rules are being challenged in court by the N.J. Builders, Owners, and Managers Assn., the N.J. Association of Realtor Boards, and the N.J. Builders Assn. Their request to stay and remand the order was denied by the Superior Court's appellate division in Trenton, but they have appealed to the state Supreme Court. No decision is expected until fall, and in the interim the state is delaying all prosections under the new

Philadelphia. In addition to the provisions in force in New Jersey, Philadelphia adopted the affirmative action procedures of the Blumrosen plan.

The initial legal steps are similar to New Jersey's. But after a public hearing, the commission may order recalcitrant landlords to take any of the following actions: mount an advertising campaign in minority media, notify the commission's housing division of all vacancies, make monthly reports to the commission, offer all va-



RUTGERS' BLUMROSEN Author of integration plan

cancies exclusively to minority persons, or find minority tenants for the first two apartments that become vacant and, after that, for every second vacancy.

The commission may also forbid the landlord to ask for more than one month's security or to specify that the applicant's monthly income be more than three times the rental.

There is a certain amount of muscle behind the commission's orders. If a landlord does not comply, the commission can ask the courts to fine him. imprison him, or both. The maximum penalty is \$300 a count-the average discrimination complaint has three or more counts-and 90 days in

Anti-solicitation. In another move to promote integration, the Philadelphia commission teamed with the Board of Real-

tors to limit real estate solicitation in southwest Philadelphia, where scare tactics have persuaded white families to move

The board has instructed Realtors to stop soliciting sales and to remove "For Sale" signs from any block where three or more appear. The commission will apply pressure on non-Realtors by enforcing the federal antiblockbusting law and city ordinances on solicitation.

Results. So far, there has been no way to tell how well the New Jersey and Philadelphia programs are working. Both regulatory bodies have sent out questionnaires and are analyzing returns.

Neither the city nor the state has defined "properly integrated," although Philadelphia is trying to draft such a defini-

The city has so far been concerned mainly with changing the mix in projects that had little or no integration.

New Jersey's aim is to bring enough minority dwellers into segregated buildings so that the processes that formerly kept them out, such as word of mouth, will act to bring them in instead. Blumrosen describes this as "getting the situation to the take-off point," and he feels that when this is achieved, the government bodies should move out of the process.

#### Chicago apartment builders battle costly new construction requirements

Chicago's city council has eased the severe new apartment construction requirements it imposed in March, but building industry representatives say the rules are still too harsh.

The earlier regulations limited the number of efficiency apartments to 30% in any building, specified that side yards must be 40 feet wide, and required a parking space for each of the first 100 units (News, Aug. 1. The rules were drafted to curtail construction of fourplus-ones, the low-cost fourstory buildings with parking below street level. But the rules also covered other projects.

The changes. The council has now adopted zoning changes raising the limit on efficiency apartments to 40%, eliminating the side-yard requirement, and reducing parking requirements to one space for each of the first 50 units.

But the councilmen added a new rule that no residential floor can be larger than 50% of the lot area. Furthermore, several restrictions that had applied only to residential zones-the limitations on efficiency units, the parking space requirements, and the 50% maximum lot area usage-were extended to apartment houses built in business and commercial districts.

Amended lawsuit. Albert C. Hanna, a real estate dealer who had sued to have the earlier regulations voided on the ground that they discriminate against middle- and low-income residents, said he would amend



PLAINTIFF HANNA Maintaining the pressure

his suit to challenge some of the subsequent regulations.

Hanna contends that the old 50% limit on efficiency apartments had worked well for 12 years, and he argues:

"This is Chicago's most vital

market because of the demand among single persons who can't afford one-bedroom units.

"The problem with the latest regulations is that they provide a city-wide approach to a density problem that is largely confined to one area.

No four-plus-ones. About \$30 million of the \$50 million worth of projects halted by the March amendments could proceed under the recent changes, according to Hanna, but four-plus-ones would still be unfeasible. They are usually buildings with around 60 apartments, and both the parking space requirements and the 50% lot usage rule would make them uneconomi--GORDON WRIGHT

McGraw-Hill World News, Chicago

While everybody else is busy raising their prices, we've actually reduced the price on some of our GAF Flooring.

Now you can get the top designs in our indexed tile for 20% less than you paid last year. And there are over thirteen designs

All this means that you can offer your customers the customdesigned look of premium tile at regular flooring prices.

In addition, we're introducing a new economy sheet vinyl flooring at a price 20% lower than a similar product sold for last

ing some money, wny not start at the bottom - with your floors?

For more information contact: GAF Floor Products Division Dept. HH-9, 140 W. 51 Street, New York, N.Y. 10020.





The luxury apartments leak, the tenants say, suring bunder for \$1 million

His tenants are suing the builder of a luxury apartment complex in Chicago's suburban Cook County for \$1 million in dam-

The tenants association at Glenview Mall, where rents range from \$215 to \$350, charge that structural defects have sprung leaks in ceilings, flooded basements, and left apartments unheated. They also charge poor maintenance, failure to live up to advertised claims, and several other deficiencies.

Robert Krilich, president of Riverwoods Development Corp. and of Krilich Builders, considers the tenants a "handful of troublemakers" who want to avoid paying rent. (About thirty families stopped paying in July.) Krilich admits that some ceilings have leaked and that some basements have been flooded, but he says these are "minor defects" typical of new buildings. Subcontractors repaired the defects without charge to him, Krilich says, and he insists that the buildings are well-constructed and that most tenants are living there without complaints.

Accusations. Glenview Mall, which consists of 266 units in 10 buildings, has been occupied



Stagnant water collects at Glenview Mall Building. Poor landscaping is blamed.

for nearly two years, and the Cook County building and zoning department, which entered the case because of tenant complaints, has been involved for well over a year.

The tenants' suit accuses the county's building and zoning commissioner, William F. Harris, of failing to enforce compliance. Although Harris has given Krilich 60 days to make about a dozen structural changes, tenants contend that the department found violations in July 1970, and did nothing about them.

Tenants' side. Carol Sheidlower, the peppery president of the tenants association, says the storage rooms in several basements have been continually flooded and that only recent

publicity has led to their being waterproofed.

"We were breeding mosquitos in our basements!" she cries.

During rainstorms, water would gush into her storage locker from a window well above it, she says, and the management finally dug up her front yard to put in a drain pipe that had never been laid.

Mrs. Sheidlower contends that sections of apartment ceilings have fallen because of leaks. One tenant recalls that the management brought in space heaters last winter when apartment temperatures fell to 40 degrees and no one could explain the loss of heat. At least one tenant believes his apartment has no insulation.

The buildings lack the re-

quired number of fire extinguishers, tenants say, and the only reason there are any at all. contends Mrs. Sheidlower, is that the tenants insisted the fire department inspect the place.

Non-luxuries. Beyond these concerns, the tenants are dissatisfied because of management's promise that there would be croquet and tennis courts and a putting green at the Mall. Only the putting green is there, says Mrs. Sheidlower, and until recently it was unmown, lacked a hole, and couldn't be used.

Newspaper advertisements have also promised such features as self-cleaning ovens and ceiling-to-floor glass doors, but Mrs. Sheidlower says these pledges are either false or misleading. Krilich disclaims any responsibility for errors in advertising.

Krilich is taking a firm stance. When he heard that tenants would withhold rent in July, he distributed eviction warnings. He says he may reduce the number of maintenance people and take away the lifeguards at the swimming pool.

-JANE SHAW McGraw-Hill News, Chicago

#### Grand jury indicts five plastic pipe makers on price-fixing charges

A federal grand jury in Los Angeles has just indicted five corporations and two executives on criminal charges of conspiring to fix the price of plastic pipe fittings since 1966.

The fittings are widely used in homebuilding.

The defendants are R&G Sloane Manufacturing Co. Inc., Sun Valley, Calif., and its parent, Susquehanna Corp., Alexandria, Va.; Celanese Corp., New York City; Borg-Warner Corp., Chicago; Plastiline Inc., Pompano Beach, Fla.; Thomas L. Rourke, former vice-president of Celanese Plastics Co., a division of Celanese; and Glenn L. Sloane, president of Sloane.

Others accused. The indictment said Atlantic Research Corp., set up in Virginia in 1949, and other companies and individuals not made defendants, participated as co-conspirators. Susquehanna merged with Atlantic Research in 1967.

acquiring its business in DWV (damage, waste, and vent) fittings made of plastic. In 1969, Susquehanna organized R&G Sloane as a subsidiary, assigning the fittings operation to it.

If found guilty of the criminal charges, Rourke and Sloane could each be fined \$50,000 "totally unfounded and without and sentenced to one year in jail. The maximum penalty for each corporate defendant is also \$50,000.

Denials. All defendants have denied the charges. Glenn Sloane said the allegations are merit."

Borg-Warner pointed out that it had discontinued its DWV operations in March 1971.

Thomas L. Rourke, the Celanese vice president named in the indictment, left the company in May 1970 to start his own business.

The charges. The indictment and a companion civil complaint were filed in U.S. District Court in Los Angeles by the Justice Department's antitrust division.

The fittings provide turns, connections, branches, traps and splits in drainage, waste, or vent systems in houses. modular and mobile homes, and other structures.

The Justice Department estimates that U.S. manufacturers sold about \$32 million worth of the fittings during 1970. The defendants accounted for about 54%. -B.L.

#### Latest data: the urge to buy homes persists

American consumers have not changed their minds about buying homes although they are backing away from other large purchases.

The May-June Conference Board\* survey of 10,000 families finds that consumer optimism has slipped after four months of steady improvement. Yet 3.1% of those polled still expect to buy homes in the next half year, the same percentage as in the March-April survey. Home buying was the only major area surveyed that did not show a decline in the May-June report.

Interest in car-buying, for example was down to 7.8%, a drop of 1%. And only 36% of those interviewed said that they planned to purchase major appliances as opposed to 40% in the previous report. The sharpest drops in this category were in air conditioners, which fell from 3.7 to 2.9%, and washing machines, which dipped from 6 to 5.2%.

\*The Conference Board Inc., formerly the National Industrial Conference Roard

## GO GSR FITTINGS ALL THE WAY!

ALL-PLASTIC plumbing is here - with two great new GSR® systems! For plastic hot and cold water lines, install all-new GSR Hi-Temp CPVC pipe and fittings—designed to operate at 100 psi at temperatures up to 180°F. Scale build-up is eliminated and pipe sweating is greatly reduced. The complete GSR system includes pipe and fittings in 1/2" and 3/4" copper tube sizes - plus all necessary accessories.

Install modern wall-discharge closets, tubs, and showers with all-new GSR Above/Floor DWV fittings in ABS or PVC. This exclusive new line simplifies the DWV system. Fewer floor penetrations are required. Floor slab and rough walls can be completed before the plumbing is installed.

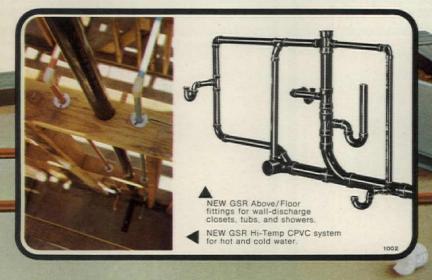
With these new GSR systems - plus the most complete line of standard DWV fittings, sewer fittings, pressure fittings, sprinkler fittings, etc. - you can enjoy the convenience, economy, and extra profitability of plastic piping . . . all the way! See your GSR fittings distributor or write for complete information.

#### R & G SLOANE MANUFACTURING COMPANY, INC.

7606 N. Clybourn Ave., Sun Valley, Calif. 91352

Plant, Warehouse and Sales Office: 6100 Hillcrest Dr., Cleveland, Ohio 44125 • Tel. (216) 524-8600

Warehouse and Sales Offices: 3126 Brinkerhoff Road, Kansas City, Kan. 66115 • Tel. (913) 371-0412 1669 Litton Dr., Stone Mountain, Ga. 30093 • Tel. (404) 939-6644 8041 S. 198th Street, Kent, Washington 98031 • Tel. (206) 854-2324

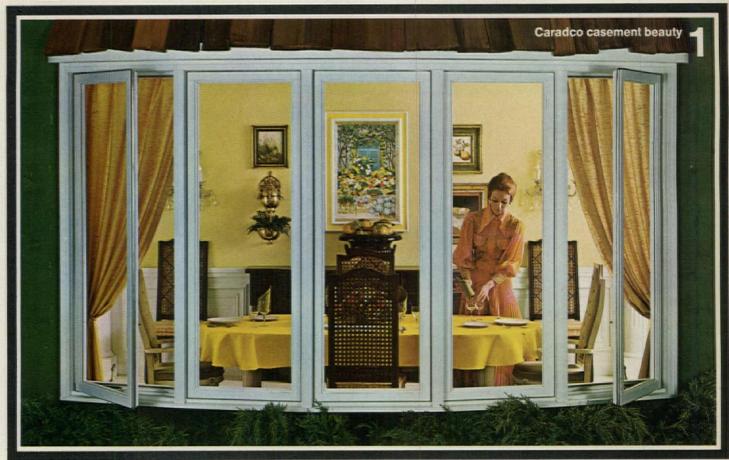


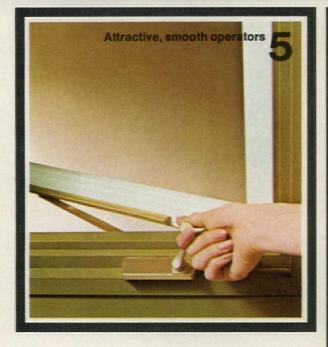


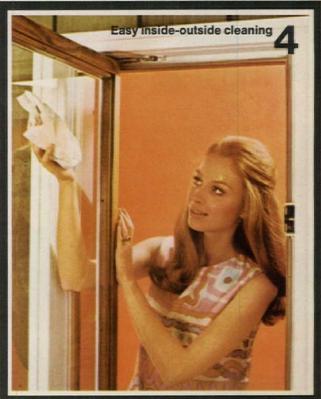


World's most complete line of plastic pipe fittings

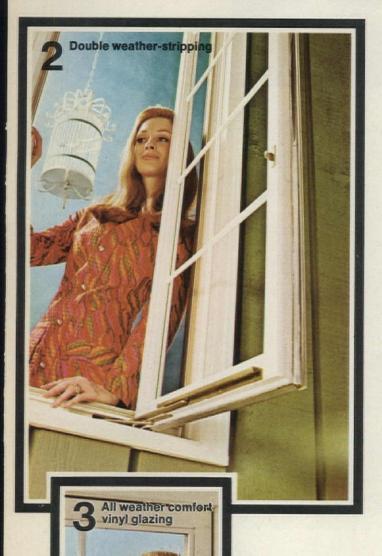
# Caradco... puts buyer excitement in







## wood casement windows



Exciting charm, exciting versatility. The Caradco C-200' casement makes any home or apartment noticeably better. Unique modular system permits arrangements that complement any exterior (1).

Of course, there's total practicality. Like double weather-stripping so you have a perfect seal against heat, cold, dirt. Tubular vinyl on inside frame; stainless steel on sash perimeter (2). Then, there's Caradco insulating glass with vinyl glazing. Permanent, leakproof (3). And washing is a snap. The Caradco C-200' opens a full 90° so the housewife can clean the outside from inside (4). And the gold-tone hardware adds the final touch of excellence (5).

Concealed hinges, factory-primed outside, screens, grilles (storm panel version), all add to the Caradco package at prices you can afford. Excitement! To make it happen in your home, see your Caradco dealer.

#### Caradco Window and Door Division Scovill

Main Office & Plant Dubuque, Iowa 52001 Eastern Assembly Plant Hainesport, New Jersey Ohio Assembly Plant Columbus, Ohio

#### Don Scholz in eclipse? Well, hardly-He has 15 projects going

"Through expertise gained in past experience—also mergers, investments, acquisitions and employment of key personnel—it's our intention to become the General Motors of the housing field."

An old remark by Donald Scholz?

No, a new one.

He's back in business with a bang, as Donald J. Scholz & Co., based in the Toledo suburb of Sylvania. And he's still chasing the dream of building houses nationwide for every pocket-book.

For a start, Scholz has 15 projects either under construction or on the verge. They add to 1,650 acres and 13,000 units with a value of \$396.6 million.

Four projects are in Toledo. The others are in Chicago, Cleveland, Detroit, New York City, and Washington, and in Buffalo and Syracuse, N.Y., Newport and Santa Ana, Calif., and Charlotte, N.C.

Some projects are joint ventures. But Scholz, the operating company, has the building and developing responsibility.

The breakup. It's about a year since Scholz walked away from the presidency of Scholz Homes Inc. ("I have no incentive to stay.") It had merged into Inland Steel Co. late in 1969 for just under \$90 million in cash and Inland stock-not bad for a company founded in 1946 on \$15,000. But what Scholz had wanted was to stay in the driver's seat and expand the company by buying up other builders (H&H, Oct. '70). When he left, many felt he was strolling resignedly into obscurity.

Not at all.

In his new company, Scholz is both president and board chairman. His key associates, who share in project investments, are industry men he's worked with or known for a long time. One is Chet Stare, a 20-year Scholz Homes man who as senior vice president and a director heads West Coast activities.

But Scholz is not raiding Inland for talent. "We cannot and will not do that," says Stare. "Don obviously has a very large interest in the success of Inland Steel as a stockholder, and we would no more raid it than the man in the moon."



Versailles on the Bluffs in Newport Beach, Calif., is newest Don Scholz project.

(Although four key positions in the new company are held by old Scholz hands, that's about all. Both Scholz and Stare are emphatic in stating that they are not trying to revive the former Scholz Homes staff.)

Money and land. Says Stare of the Scholz program:

"We're doing the same things we did—only more so, and one of the nice things is having money to do them. We've never been in this position before."

Before he left Inland, Scholz had lined up much of the land he's using today for his 15 projects. His old contract with Scholz Homes, now an Inland subsidiary, permitted him to deal in properties as an individual, and he also came to an amiable agreement with Inland that let him pick up some properties it didn't want.

Says Stare: "When Don decided to leave, Inland felt it would be better for it to stick

closer to Chicago and Toledo. So we took over most of the projects outside the Midwest."

Luxury project. One of these is Versailles on the Bluffs, a 1,000-unit enclosed community on the Bluffs of Newport, Calif., due to open its models this month. They're luxury apartments, a market Scholz pioneered. Rentals range from \$240 to \$700 a month; size runs from singles to three bedrooms and up to 2,000 sq. ft. Amenities are many: solar glass on ocean exposures, radiant heat, oversized terraces, closed-circuit security television, extensive (and mature landscaping. And-a swimming pool bar where people can get orders filled without leaving the water.

Says Stare: "I've never had as much enthusiasm about any one project. It's romantic and delightful—and it has a lot of class."

Back in action. For Scholz

#### Now: the charge-a-house credit card

A California builder has now made it so easy to buy a new home that the mere flick of a strip of plastic and the stroke of a pen will do it.

Grant Corp., the homebuilding and land development division of Santa Anita Consolidated, is accepting Master Charge for deposits of up to \$250 on its new houses in Stanton, Irvine, Cerritos, and Santa Ana, Calif. And credit cards may be used to pay for such options as special grades of tile and carpeting or mirrored wardrobe doors.

Good response. Homebuyers seem to like the new convenience. Grant announced that the very first weekend the plan was in effect, three purchasers used their Master Charge for deposits and one even charged some \$500 worth of options.

What happens if they change their minds and refuse to pay? "That's up to the individual bank," said a spokesman for Master Charge. "Each bank sets its own policy."

A departure. For the moment, at least, such credit-card homebuying is scarcely a trend. Leading banks admit that it is fairly common for apartment dwellers to charge monthly rent, but the banks say they know of only two other companies that will accept credit cards for deposits on homes: McNerney-Talmo Realty in Teaneck, N.J., and U.S. Homes in Riverside, Calif.

himself, it's just like old times. He personally directed environmental planning and design, something that's particularly important this time. The 28-acre property, which overlooks both Newport Harbor and the Pacific, is one of the area's last undeveloped sites. And the owners, movie star James Cagney and his brother William, wouldn't sell it without the promise that it would be properly developed.

There'll be interlacing gardens, reflective ponds, fountains, cobblestone lanes, plus recreational facilities such as saunas and exercise rooms. And -if this project is any indication -Scholz still has his touch for intricate architectural detailing. The three-story units (over subterranean parking) are of traditional instead of California architecture. Some exteriors resemble Loire Valley chateaux; others are Georgian or southern colonial. The houses come complete with pediments, cartouches, and custom moldingplus a gendarme at the gate.

The first 255-unit phase will be finished early in January, along with a clubhouse and the swimming pool. And Scholz has already sold it to Pacific Plan Inc. for \$8.5 million. Scholz will rent and manage the apartments until they are 95% occupied.

Again—the dream. Meanwhile, in the next six to eight months—just as soon as market conditions improve—Scholz plans to go public. (He was among the industry's first to take this route with his old company, back in 1955, with a \$1 million stock offering).

Just as in the old days, Scholz is planning to buy up other companies and move into new fields. After September 1972, the agreement with Inland even allows him to return to pre-fabrication, the process on which he built Scholz Homes. He also expects to head into condominiums and townhouses in California. And fourplexes—which, he feels, have a bright future.

Stare sums it up: "Don is absolutely dedicated to being bigger and better than ever before. The General Motors of housing—that's still what he wants to be." —BARBARA LAMB

McGraw-Hill World News,

Los Angeles

## Who's helping you put an end to the dull roof?

## Philip Carey.

You don't have to put a dull, unimaginative roof on your imaginatively-designed houses and apartment buildings.

Philip Carey 250 Rustic shingles give you a roof that's distinctively different.

Rustic shingles let your imagination soar to new heights without pricing yourself out of the picture. The random pattern design of Rustic shingles gives your roof the rugged, natural look of wood shingles at a reasonable cost. And, they're available in three harmonious colors that blend well with

any architectural styling and surrounding landscape. Our Rustic Tan, Rustic Brown and Rustic Gray simulate the appearance of natural wood at various stages of weathering.

Naturally, they're wind and fire resistant, UL approved and backed by a wind warranty.

Bring your imagination to your building materials supplier and try it on our 250 Rustic shingles. Or return the coupon for our catalog. Philip Carey Company, Division of Panacon Corporation, Cincinnati, Ohio 45215.

CIRCLE 17 ON READER SERVICE CARD

Please send me more information on your 250 Rustic shingles.

Name\_\_\_\_\_\_\_

Company\_\_\_\_\_\_

Address\_\_\_\_\_\_

City\_\_\_\_\_\_

State\_\_\_\_\_Zip\_\_\_\_\_



Dept. HH-971 Philip Carey Company A Division of Panacon Corporation Cincinnati, Ohio 45215





#### Bonanza-\$2 billion in mortgage supports for middle-income homebuyers

Price supports have come to the mortgage market.

In an unprecedented move to keep the FHA and VA mortgage interest ceiling at 7%, the Nixon administration has released \$2 billion in special-assistance housing funds to subsidize low- to middle-income housing.

The action, which has pushed the Government National Mortgage Assn. into a role as the government's chief home-finance support agency, is aimed at putting a floor under mortgage prices for government-backed mortgage loans.

Holding at 7%. With mortgage prices in a steady nosedive since late in April, increasing pressure had mounted on the administration to lift the FHA-VA rate to 7½% or 7¾%. Housing Secretary George Romney had indicated earlier, however, that the underlying factors in the economy were strong—and did not warrant an increase in the rate.

Still discounts on home loans fell—in some instances to as much as 12 points (12%) in the Federal National Mortgage Association's May auctions.

The administration remained adamant about holding mort-gage rates down, however, and after numerous high level meetings—including some with White House aides—the government elected to okay a sharply revised Ginny May program to prop mortgage prices on unsubsidized FHA and VA loans.

Buying at 96. Under the program, which is similar to the GNMA-FNMA tandem plan for low-income subsidized mortgages, Ginny May stands ready to buy FHA and VA home and multifamily loans at prices of 96 cents on the dollar for new homes and at 95 for existing structures.

The special assistance money will be allocated to several programs, Romney said in announcing the plan. Some \$800 million will be used to buy unsubsidized FHA multifamily mortgages under Sections 207, 213, 221d4 and 220 at 96. Another \$1.2 billion will be used to buy unsubsidized single-family FHA or VA mortgages under Sections 203 and 221d3 at 96 on new construction and 95 on



GNMA'S KINGMAN
Man with \$2 billion to spend

existing homes. Another \$30 million will be spent to purchase mortgages on low-income housing rehabilitated with federal assistance under Section 235j at a price of par.

Reselling. The inflated purchase prices provided by Ginny May represent a conscious effort on the part of the administration to bolster prices. This done, GNMA will then seek to sell its mortgages at market prices—and primarily to the same firms that sold them to GNMA in the first place. The only difference is: GNMA's sales price will be—at least in today's market—far lower than the level at which it bought the loans.

Benefit for buyer. President Woodward Kingman of GNMA says that once the loans are resold by GNMA, the purchaser can then package the mortgages into a GNMA mortgage backed security.

The GNMA president was quick to point out that "the program provides no windfall for either the lenders or the builders."

"The real beneficiary," he says, "is the homebuyer, who otherwise would have been faced with either increased prices on his home due to a high amount of points, or a much higher rate of interest."

No mark-up. Kingman made it clear that while Ginny May will buy a new home at 96, the seller must certify to Ginny May "that he has charged no more than 96 in originating the loan. He originates and sells to Ginny May at the same price."

Once the seller unloads the mortgages on Ginny May at 96—or 95 for existing home loans—he can either be divorced from the loan and make only his origination fee, or the lender can bid in a new GNMA auction against other investors and buy back the same loan.

The bidding would be done



Hud's Romney No raising of 7% rate

at market prices, currently running at 90 to 91. What it amounts to is that, in keeping the rate at 7%, Ginny May is effectively splitting the discount charges with the homebuyer.

Kingman notes this fact when he says, "The homebuyer benefits from the subsidy of points but the builders and lenders benefit indirectly by an increase in housing starts and a high volume of mortgaging."

Builders' gain. Homebuilders will stand to benefit materially. While there is a restriction on the program in that the top loan limit to qualify for the subsidy is \$22,000 (or \$24,500 if the unit has four or more bedrooms), the discounts that had prevailed in the FHA and VA market until the inception of the program were making it difficult, if not impossible for builders to continue their high level of activity.

The National Association of Home Builders, in fact, had remained the only major trade group related to housing and home finance that had urged against any change in the interest rate.

Stastny gratified. After the housing department announced the new program, NAHB President John A. Stastny stated that the homebuilders "are gratified that the administration is standing fast on the interest rate ceiling. It was a courageous move."

Most lender groups were calling for a hike in the rate in order to reduce the level of points being charged on mortgage loans.

While the new program will substantially reduce the level of points in the price range affected by the unsubsidized tandem plan, criticism of the program ran high from the time it was announced.

'Inadequate.' "The program is

inadequate with a \$22,000 limit," one West Coast lender said. "It discriminates against high cost areas such as California and Texas."

While HUD has taken no official position with respect to this question, Kingman points out that the \$22,000 limitation is statutory. He notes, too, that the law provides an exception for Alaska and Hawaii, where the limitations are 45% higher than elsewhere.

That Coast lender pointed out that those builders who are in the market for housing above the \$22,000 limit still face huge discounts on FHA and VA loans. "It's going to push builders to construction of cheaper housing. The pressure will be on to cut corners and for FHA to lower its own standards in order to qualify more housing for the program."

Another noted that the \$22,-000 limitation will force higher priced homes into the conventional mortgage market, where the interest rate will be what the market says it should be.

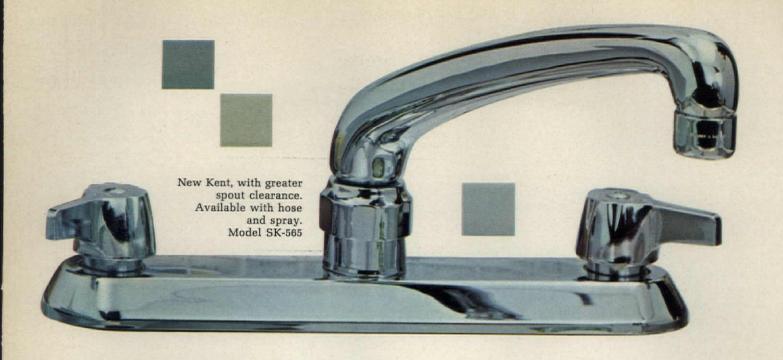
Still a third mortgage official complained that "it's a throwback to the old Fanny May days." He was talking about the time when FNMA was still a part of government, setting mortgage prices and having as a restriction a loan limitation.

FNMA reaction. "What the administration has done," one mortgage broker said, "is to create a new Fanny May within the government."

For its part, Fanny May reacted to the government move by cancelling two previously scheduled mortgage auctions. President Oakley Hunter of FNMA said, "The new program substantially affects the market conditions under which participants bid in the FNMA auction... We want to give auction participants an opportunity to assess their options under the new program."

Martin's plans. Preston Martin, chairman of the Federal Home Loan Mortgage Corp., which will be one of the investors to which GNMA seeks to sell its mortgages, indicated the FHLMC will try "to work out a way of participating in this operation."

—Andrew R. Mandala Washington



## SPEAKMAN H

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.



SPEAKMAN® COMPANY • Wilmington, Delaware 19899 • In Canada—Cuthbert-Speakman, Quebec

#### HUD survey finds home seller pays four times as much closing cost as buyer

Settlement costs on home loans insured or guaranteed by the FHA or VA add 10% or more to the cost of buying a house.

A study just published by the Department of Housing and Urban Development indicates that total costs at settlement averaged nearly \$1,800 for FHAinsured houses surveyed, and more than \$2,300 for va-guaranteed homes.

The survey also found that the seller of a house pays almost four times as much in closing costs as does the buyer-an average of \$1,590 as compared to \$417 for the buyer on an average settlement of \$2,007.

Proposals due. The HUD study, was based on a March 1971 poll of 12 metropolitan areas, consists of preliminary findings for a report called for by Congress in the Emergency Home Finance Act of 1970. A final report, with recommendations for legislative and administrative action, is due by Dec. 31.

Findings. Some of the pre-

Essex County, N.J., which inliminary findings were these: · Of the 12 areas surveyed, -cludes Newark, had the highest

#### **Average Settlement and Closing Costs** Nation and Selected Metropolitan Areas-March 1971

Area and Type	Total S	ettleme	nt Costs	Total (	Closing	Costs
	Buy &	Buyer	Seller			
	Seller	Only	Only	Seller	Only	Only
FHA/VA Total	\$1,962	\$458	\$1,504	\$567	\$248	\$319
VA-Guaranteed U.S. Total	2,422	\$541	1,881	643	326	317
FHA-U.S. Total	1,783	425	1,358	537	218	319
12 Metro Counties	2,007	417	1,590	538	244	294

#### Average Total Settlement-\$16,000-\$20,000 Price Range

	VA/FHA	VA	FH	A-Insured
Type of Cost	Total	Guaranteed	Total	12 Counties
Total Settlement Costs	\$1,696	\$2,044	\$1,608	\$2,017
Total Closing Costs	511	522	508	543
Credit Report	11	10	11	13
Survey	41	40	41	37
Title Examination	109	126	104	38
Titile Insurance	117	119	117	151
Attorney Fees	102	59	114	112
Origination Fee	177	175	178	175
Document preparation	27	21	29	16
Closing Fee	44	41	45	83
Recording Fee	19	18	19	15
Transfer Taxes	58	57	58	57
Escrow Fee	69	64	71	130
Loan Discount Payment	533	537	532	553
Total Prepaid Items	264	304	254	250
Sales Commission	917	986	892	996

settlement costs-up to \$2,845. Bexar County, Texas, which includes San Antonio, had the lowest-around \$1,320.

· Excluding prepaid expenses, loan discounts, and sales commissions, total closing costs for appraisal reports, title searches, attorney's fees, etc. averaged \$538, of which the buyer paid \$244 and the seller \$294.

· Loan discounts for \$16-\$20,000 homes averaged \$553; sales commissions, \$996.

· Loan origination made up the largest bite of closing costs in the \$16-\$20,000 range-an average of \$175. Title insurance averaged \$151, attorney fees \$112, and escrow fees \$130. Escrow fees varied widely, however. For example, in San Antonio, Tex., where minimum services were provided, the average fee was just \$6. In Los Angeles County, Calif., where escrow agents provide most of the closing services, the average fee ran to \$184.

## AirKing

## Sauna-onthe-Rocks!

The 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.



## No matter what they say, there's nothing like the real thing.

Authentic The texture of real wood.

The texture of real wood.

The look and the feel of real wood.

The look and the feel of real wood.



# Textured

The one all the others are trying to be.



Islandia townhouses, Alameda, California / Fisher-Friedman Associates, Architects / Braddock and Logan, Contractor

#### **American Plywood Association** Dept. H-091 Tacoma, Washington 98401

You don't have to convince me about plywood's beauty. But what I could use is some new information on: 1. How to save up to 40% on siding-sheathing costs. 2. Plywood siding applications, including APA® single wall. 3. Two dozen good ideas on siding and paneling. Please send a free copy of Plywood for Siding and Ideas for Textured Plywood.

Name State (USA only) AMERICAN PLYWOOD ASSOCIATION

#### The Al Mayer story: St. Louis builder sells off land to avoid bankruptcy

Early in July, the public became aware of something most people in the St. Louis homebuilding industry had suspected for some time: Alfred H. Mayer Co., one of the area's largest and most innovative homebuilders, was in deep financial trouble.

More than 135 mechanics' liens had been filed in Circuit Court against Mayer homes. Four lots had been auctioned on the courthouse steps because the builder was unable to make payments to parties holding deeds of trust. Numerous other foreclosures had been filed or threatened. Prospective buyers were clamoring for their deposits back on unbuilt houses.

When the story surfaced in local newspapers, Mayer admitted that "bankruptcy is a possibility."

Behind the rally. Now Mayer senses a chance for a comeback. Surprisingly, he credits the newspaper publicity.

"The press stories convinced many smaller creditors, particularly subcontractors, that I wasn't just stalling and that we are really trying to find a way out," he explained.

"Headlines like 'Mayer Deep In Debt; Homeowners May Be Sued," aren't likely to help matters any, but oddly enough they haven't really hurt."

Mayer, 41, has spent 23 years in the building industry, having started with his father's company while still in college. Ten years ago he began his own business with an initial investment of \$200,000. By building 400 houses a year—he hit 800 during the 1964-65 boom—he parlayed this investment into assets of \$2.5 to \$3 million. Annual sales reached as high as \$15 million, yielding 4% to 5% profit.

Output—4,000 houses. The company built its success on contemporary, ranch-style homes with a clean, traditional look, first in the \$16,000 to \$22,500 price range, and later, because of inflation and skyrocketing costs, in the \$25,000 to \$35,000 bracket. Nearly 4,000 homes in suburban St. Louis County are Mayer homes.

Mayer received many citations for service to the homebuilding industry. He was the first in the St. Louis area to cluster all display houses around a mall. He also attracted prospective buyers with jazz concerts, late-night tours of model homes, and even snacks.

First troubles. How, then did Mayer land in the financial soup?

Trouble had been building for some time. There was, of course, the constant rise in building and land costs. At the same time, Mayer was finding it harder to obtain medium- or high-density zoning for his land. This typical suburban problem is particularly severe in St. Louis County, where population jumped by nearly a half million between 1960 and 1970.

Nevertheless, Mayer invested heavily in land as a hedge against inflation. By 1970, he was paying interest on \$8 million in land alone. The cost: \$100,000 a month.

So long as sales held up, the cash flow covered this interest and everything else, including the expense of a 100-man sales, marketing, and engineering organization.

Credit crises. Then came the tight-money markets of 1966

and 1970. And in between, one of St. Louis' biggest employers, McDonnell Douglas, began trimming its 44,000-man payroll to the current 30,000. There has been little new industry to pick up the slack, and unemployment in the area now stands at 6%.

Mayer failed, meanwhile, to get his land rezoned from two families an acre to four, so he began to build \$40,000 to \$70,000 houses.

The timing couldn't have been worse. He ran smack into the tight money and plunging stock market of early 1970.

That spring Mayer, who normally built up an inventory of about 75 homes during a winter, found himself with 125 unsold units worth \$4 million. Worse, he sold only 200 houses that whole year. He not only had to bear high carrying costs; new sales never reached a breakeven level.

Low point. "You can guess the rest," he says.

"We couldn't pay the interest on the land, and since then we have worked hard to cut our holdings back to a few choice pieces on which we hope to make a comeback."

He has stopped construction in the four subdivisions he had started, limiting work to finishing homes already begun.

He has reduced his \$4 million housing inventory to an estimated \$500,000, about 20 homes.

Title guarantee firms are clearing up the mechanics' liens and then they will come back to Mayer to try to obtain repayment.

Mayer's biggest problem—other than convincing creditors to withhold legal action—is to attract new capital so that he can take advantage of today's improved housing market. This would make it possible to sell homes in his well-placed subdivisions.

For reasons that have gone unexplained, Mayer is no longer a member of the Home Builders Association of Greater St. Louis. Its leading members have been concerned about him, according to the St. Louis papers, and have held unofficial meetings to discuss his situation.

Survival. "What we really need is recapitalization. But I guess that will have to wait until liquidation has run its course. The housing market is picking up again and should be good for a number of years. If our firm can survive, we could repay everything we owe," said Mayer.

A spark of the old Mayer surfaced as he talked of the future: "Right now we're trying to save the pieces. Next, we'll do a lot of soul-searching on where we're going. We won't put all of our eggs in one basket, such as St. Louis County, again."

"We" is now just a 20-man organization, but they are confident that Mayer can do it again.

The risks. Local bankers are less optimistic about Mayer's chances. Asked if he thought Mayer could pull through without a reorganization or voluntary bankruptcy, one banker replied: "It will take a miracle, which seems impossible even for Al Mayer."

Time will tell. Meanwhile,
Mayer is still in there, fighting. —Ted Schafers
McGraw-Hill News

St. Louis

#### Mayer provoked rights ruling

Builder Al Mayer of St. Louis was the defendant in a case that produced a civil rights landmark—the 1968 U.S. Supreme Court decision banning racial discrimination in the sale of all housing.

But even before the court ruled, Mayer had made it clear that he was on the plaintiff's side and that he hoped the suit's result would be "an open-housing law that would be applicable to all."

Some of Mayer's builder competitors were selling houses to whites only. The builders could do this by using conventional financing rather than the FHA or VA mortgaging that barred racial discrimination.

Mayer decided to follow suit in his Paddock Woods development. An interracial couple sued.

Two lower courts ruled in Mayer's favor. The Supreme Court made its decision on



BUILDER MAYER

A man in the middle

the basis of an 1866 law that gave to all citizens the same right "to inherit, purchase, lease, sell, hold and convey real and personal property."

-T. S.

Never underestimate the power of charm. And what it can do to sell your houses.

Imagine the warm glow of solid brass on the handles, hinges and locksets of outside doors.

And inside, the durable richness of copper alloys, brass and bronze, makes a model house warmer, more desirable. On interior doors, in

lighting fixtures, lamps, bathroom fixtures.
Quality counts. Because a prospective customer recognizes value. He knows if you take the trouble to use solid brass, you take the trouble to build solid houses.

Copper Development Association Inc. 405 Lexington Avenue, New York, N.Y. 10017

## Solid Brass. A beautiful first impression.



#### Going on sale—the Levitt building combine; but who could qualify to buy?

The nation's largest homebuilder, ITT Levitt & Sons Inc., may soon be up for sale again, less than four years after ITT bought it for \$92 million.

Under terms of an antitrust settlement with the Justice Department, the giant conglomerate has just agreed to divest itself of Canteen Corp. and the fire protection division of Grinnel Corp., plus either Hartford Fire Insurance Co. or a group of Companies consisting of ITT Levitt & Sons Inc. and its subsidiaries, Avis Rent-a-Car, ITT Hamilton Life Insurance Co. and ITT Life Insurance Co. of New York.

Three years' grace. The parent company has already indicated it will keep Hartford and sell the group of companies including Levitt. Under the settlement, which is still subject to court approval in New Haven and Chicago, where the original suits were filed, ITT has three years to divest of these holdings.

The agreement also prohibits ITT from acquiring any domestic company with assets of more than \$100 million or "leading firms in concentrated U.S. markets" without Justice Department approval.

**Problem for buyers.** Many businessmen see these terms and other recent antitrust set-



tlements as attacks on bigness itself; in other words, they feel that a large concern can now make a large acquisition only by divesting itself of something else so that it will remain the same size.

This feeling could complicate the question of who will buy Levitt, for the very companies that could afford the housing giant would themselves be likely targets for Justice Department action. In short, if a company is big enough to buy Levitt, it is probably too big to be allowed to buy Levitt.

Most major homebuilders view Levitt as too big for them to acquire or join by merger.

"It would take another company of the size of ITT to buy and operate Levitt," says Michael Tenzer, vice president of the Larwin Group of building companies in Beverly Hills, Calif. Larwin was the largest privately owned building operation in the country before its sale into CNA Financial of Chicago in 1969.

Other prospects. Acquisition by another conglomerate is not, of course, Levitt's only prospect. After a three-year absence, William J. Levitt himself is again at the helm and would certainly be in a position to take over an independent company. The main question is whether he would want to (News, June). Levitt's office in Lake Success, N.Y., answered all questions with a "no comment" from the boss.

Some people are betting on Richard M. Wasserman, who quit as Levitt president in May, to come back into the picture, either by raising the cash himself or by getting someone else to buy Levitt. Wasserman, who was vacationing in Europe, could not be reached for comment.

Plus and minus. The years at ITT have not been an unmixed blessing for the Levitt organization. On the plus side, Levitt realized some of its expansion plans, starting new subsidiaries for building modular and mobile-modular homes, apartment communities, and for developing 20,000 acres of land on Florida's east coast. The organization also weathered the 1969 housing slump better than most builders. Sales are expected to top \$300 million for fiscal 1971, which ended Feb. 1. Profits. which have not been announced since Levitt's merger with ITT, are also expected to reach a new

But Levitt has lost its two top men, Wasserman and Richard P. Bernhard, who quit in reported frustration over working within the ITT framework. Bill Levitt came out of retirement to fill the void, but that's probably just an interim solution.

Few observers know just how to assess the company's prospects right now. But the industry will be watching every move to see who walks off with the prize—or tries to.

#### New government mortgage security comes riding in on the mobile homes

The Government National Mortgage Association's mortgage-backed securities program is about to be used to boost the FHA mobile-home loan program.

A plan for Ginny May to guarantee securities backed by FHA mobile-home loans was readied last month, and the Department of Housing hoped the scheme would arouse new investor interest in mobile-home mortgages insured by the agency.

The government has been pushing mobile homes to the forefront as possibly the only way the Congressionally set goal of 26 million housing units in 10 years can be met. Moving GNMA into the picture, to guarantee the securities backed by these loans, will doubtless aid the federal effort to increase sales in the mobile home sector.

GNMA at \$3 billion. The

GNMA mobile-home securities procedure would resemble the successful mortgage-backed securities program that Ginny May has been running for a year. That program has produced sales of more than \$3 billion in securities and financing for the purchase of some 155,000 homes.

The FHA's regulations on mobile-home loans were to be changed for the new program, to permit simple-interest rather than add-on type loans. The simple interest would be about 7.97%.

Insurance fee. The FHA insurance premium on the loans would also change under the program, to 50 basis points, or 0.5%—but at simple interest. The present premium for mobile-home loans is 50 points, but at an add-on interest rate, and that comes to about 75

points when figured as simple interest.

Ginny May would allow issuers of the new securities a servicing fee of 125 basis points for each loan backing the security. The loans backing ordinary GNMA mortgage securities rate a service fee of only 50 points, but the servicing of mobile-home loans is expected to be more difficult.

Guaranty charge. Because of higher risk on the loans, Ginny May is requiring a guaranty fee of 22 basis points on each package of securities. It receives only six points on each package under its existing program, but agency officials explain that a higher fee will be required on mobile-home loan securities because of Ginny May's greater exposure. The FHA's insurance covers only 90% of a mobile-home loan as against about 97%

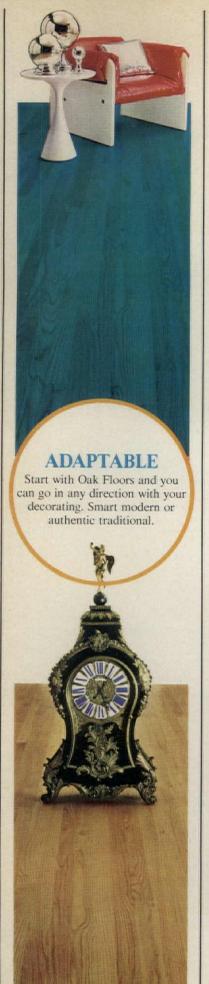
of a mortgage on a conventional new house.

After taking out the guaranty and servicing fees as well as the insurance premium, the mortgage security would carry a coupon rate of only about 6% if sold at face value. But GNMA indicates that the securities can be discounted so as to make the actual yield competitive with 8% securities being offered in the capital markets.

Lower charges. The discount is likely to be absorbed by the manufacturer of the mobile home, who would then pass it along to the buyer as a price increase.

The buyer would still save money, for he would make lower monthly payments than he now makes on the mortgages provided by finance companies at 13% to 14% interest.

—A. M.





#### **DURABLE**

Oak keeps all its beauty a half-century or longer with simple care. That's five to ten times the life of carpeting.



#### LIVABLE

The warm look and feel of Oak Floors create a homelike atmosphere. There's practical charm for family or guests.

#### NATURAL

The varied grain and coloring of Oak give each floor a personality all its own. You get



The floor

Ask home owners why they prefer Oak Floors in their new homes, and you'll get different answers. That's because Oak has many appeals, as pictured here, and combines the qualities needed for complete floor satisfaction. In your homes, be sure to use the floor that's America's favorite for lasting beauty and economy. For added value, specify Oak flooring with the N.O.F.M.A. stamp. It's certified to meet strict standards for milling and grading.

NATIONAL OAK FLOORING MANUFACTURERS ASSOCIATION 814 Sterick Building Memphis, Tennessee 38103



#### TIMELESS

Always in good taste, Oak Floors have the lasting appeal of fine furniture or art. They



#### VERSATILE

For a striking effect, have your Oak Floors color-stained to match your room decor. It enhances the natural wood grain.

## 96160

#### NEWS/FINANCE

#### Housing stocks in wide decline

Housing stocks broke sharply downward with the general market in the month ended Aug. 6.

House & Home's composite index of 25 issues fell to 400.69 from 428.55. All five sections of the index lost ground.

Here's the composite trace:



How top 5 did in each group:

	Aug.'70	July'71	Aug.'7
Builders	351	536	477
Land develop.	329	556	492
Mortgage cos.	449	801	776
Mobile homes	487	1026	991
S&Ls	133	165	156

The stocks that figure in the index are indicated by dots (•) in the tables below and are overprinted in red.

Company	Aug. 6	Chn
Company	Bid/	Prev
BUILDING	Close	Mont
Alodex	. 91/2	- 36
AVCO Community Devel	47/8	- 3/4
American Urban Corp	. 4	- 5/8
Behring Corp.b	91/2	- 31/2
Bramalea Cons (Can.)	31/8	- 1/2
Capital Divers. (Can.)	70	+ .07
Centex Corp.	. 25¾	- 71/8
Christiana Cos."	. 83/4	- 31/2
Cone Blde (Can)	1.65	+0.15
Dev. Corp. Amer. <sup>h</sup> Dev. Int. Corp. <sup>d</sup>	. 40	- 3%
Dev. Int. Corp.d	141/4	- 434
Edwards Indus.	. 9	0
First Nat. Rltv. <sup>h</sup>	196	- 3/8
FPA Corp.	81/2	- 136
First Nat. Rity. <sup>b</sup> FPA Corp. Frouge Corp. <sup>d</sup>	35/8	+ 7/8
•General Builders <sup>b</sup>	43/4	- 3/8
Gil Development <sup>d</sup>	. 11/4	- 56
Hallcraft Homes*	3234	- 31/4
Hoffman Rosner Corp. ad	. 111/2	- 2
Hunt Building Marts d	. 7	- 134
•Kaufman & Broad"	5834	- 43%
«General Builders." Gil Development." Halicraft Homes." Hoffman Rosner Corp. ad. Hunt Building Marts." «Kaufman & Broad" Key Co." Leisure Technology.	. 10	- 21/2
Leisure Technology <sup>h</sup>	. 221/2	+ 1/2
McCarthy Co.*	51/4	- 21/4
McGrath Corp.		- 11/2
McKeon Const.	2134	- 91/4
H. Miller & Sons	135/8	- 1%
National Environment	31/2	- 7/8
(Sproul Homes)		
Presidential Realty Ah	121/2	+ 1/2
Presley Development		- 51/2
Pulte Home Corp		- 21/8
Robino-Ladd Co		- 5
Ryan Homes <sup>b</sup>		-121/2
Shapell Industries	273/4	- 31/8
Shelter Corp. of America	175/8	- 2
Standard Pacifich	53/4	+ 36
Standard Pacific <sup>h</sup>	101/4	- 334
U.S. Financial	36	-1634
U.S. Home Corp.**		- 53/8
U.S. Home Corp.**	35%	- 51/8
Washington Homes	17	- 53/8
•Del E. Webb'	73/4	- 194
Western Orbis*		- 5/8
Wyandotte Indus.h	51/8	- 5/4
(First Hartford)	378	70
SAVINGS & LOAN AS		
American Fin		- 4%
Calif. Fin.		- 1/2
Empire Fin.h	133/4	- 1/2

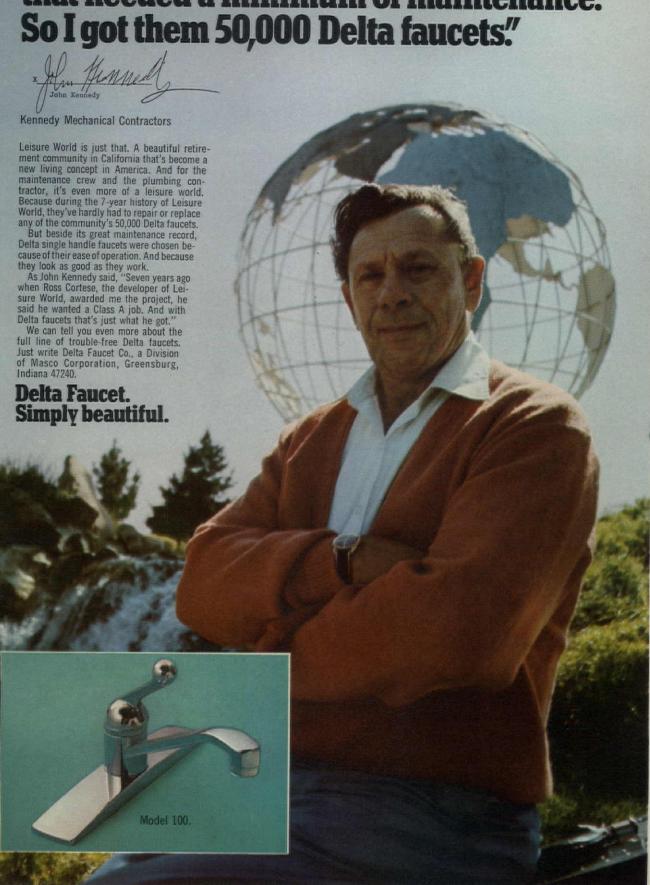
		G1
	Aug. 6 Bid/	Chng. Prev.
	Close	Month
First S&L Shares	17%	- 2
First Surety	2	- 1/8
Gilbraltar Fin.  Great West Fin.	1834	- 7/a - 1/2
Hawthorne Fin	131/4	+ 11/4
*Imperial Corp.*	12%	- 1/4 - 5/8
Trans-Coast Inv. Trans World Fin.	11%	- 1/2
Union Fin. <sup>h</sup> . United Fin. Cal. <sup>c</sup>	11¼ 7¾	- 1½ - 2¼
Wesco Fin.	16	- 21/2
MORTGAGE INV. TRUST	rs	
Alison Mto b	221/4	+ 136
American Century"	24 18¾	- 1% - %
BankAmerica Rity	24%	- 21/8
Barnett Mtg. Tr	25¼ 19¾	+ 11/4
Barnett Mtg. Tr. Beneficial Standard Mtg. <sup>b</sup> . Cameron Brown Capital Mortgage SBI	291/2	-1
Capital Mortgage SBI	26 481/2	- 23/8 - 5/8
Chase Manhattan®	221/8	+ 11/2
Citizens Mtg.	14%	- 1/8 - 1/8
CleveTrust Rity Investors	1838	- 3/6 + 1/8
Colwell Mtg, Trust <sup>h</sup>	26% 301/4	+ 1/8
*Cont. Mtg. Investors*	19% 221/4	- 130
Cousins Mtg, & Eq. Inv.h. Diversified Mtg. Inv.* Equitable Life	261/2	- 21/4
Equitable Life*	26% 27%	- 13/4 - 3/4
Fidelico Growth Inv. <sup>b</sup>	20%	+ 1/8
First Memphis Realty	21%	+ 34 + 158
First Mtg. Ins. Co	221/4	+ 3/4
First Pennsylvania	23% 9%	- 21/8 - 1/8
Franklin Realty"	275/8	+ 11/8
Galbreath Mtg. Great Amer. Mtge.	26 28%	- 2
Guardian Mtg. <sup>11</sup> Gulf Mtg. & Rity.	341/2	0
Gulf Mtg. & Rity	19% 12%	+ 1 + 11/2
Hubbard R F Investments	20¾	- 7/8
Larwin Mtge. <sup>b</sup> Lincoln Mtge.	27 8¾	+ 4 + 1/4
MassMutual Mtg. & Realty Median Mtg. Investors	241/4	- 13/4
Median Mtg. Investors Medical Mtge	111/2	- 1/a
Mony Mtg. Inv.	121/2	+ 1/8
Mortg. Associates	24 247/8	+ 56 - 156
Mony Mtg. Inv.  Mortg. Associates  Mongage Trust of Amer.  North Amer. Mtg. Inv.	26%	- 56
Northwestern Mutual Mtg. &	211/4	- 3%
PNB Mtg. & Rlty. Investors Palomar Mtg. Inv	231/4	+ 3/8
Palomar Mtg. Inv. b	151/8	0 + 3/a
Penn. R. E. Inv. Tr.h	15%	- 11/4
Republic Mtg."	181/a 187/a	- 7/8 + 17/8
Republic Mtg. <sup>h</sup> B. F. Saul, R.E.I.T. Security Mtg. Investors <sup>h</sup> Stadium Realty Tr.	17%	- 3/8
Stadium Realty Tr. State Mutual SBI <sup>b</sup>	10 211/4	- 11/4 - 15/8
Sutro Mtg. <sup>h</sup> Unionamerica Mtg. & Eq. <sup>h</sup>	193/8	+ 1/4
U.S. Realty Invest."	273/s 183/4	- 134 - 38
U.S. Realty Invest." Wachovia Realty Inv." Wells Fargo Mtg.	303/s 191/4	- 31/s
	1000	+ 1
MORTGAGE BANKERS Charter Co	351/4	- 21/4
CMI Investment Corp.h	31%	- 11/8
CMI Investment Corp.h	28¼ 33¼	- 5¾ - 2½
Cont. Illinois Rity <sup>c</sup> Cont. Mtg. Investors <sup>ca</sup>	19%	- 136
Excel Investment	9¾ 57%	+ 1 - 41/4
First Mtg. Ins. Co	131/8	+ 15%
First Mtg. Investors     Lomas & Net. Fin.	281/s 159/s	- 194
MGIC Invest Corp.	641/4	+ 1/4
Midwestern Fin. <sup>b</sup>	201/2	- 11/2
UPI Corp. <sup>b</sup> (United Imp. & Inv.)	2%	- 1/4
All-State Properties	11/8	- 1/4
American Land	1/16	0
AMREP Corp.  Anvida Corp.	18½ 10%	- 4 - 21/8
Arvida Corp. Atlantic Imp. Canaveral Int. <sup>b</sup> Crawford Corp.	5	0
Crawford Corp.	41/4	- 1/2
Deltona Corp."	26%	- 3%
Disc Inc.  Don the Beachcomber	2%	- 36
Ent (Garden Land)	5	- 11/2
Guif State Land and Ind."  Holly Corp. Horizon Corp.	26¼ 4¼	- 51/a - 5/a
•Holly Corp.h	138	- 14
Land Hesources	378	- 4½ - ¾
Major Realty	95/8	- 1/4
McCulloch Oith     So. Rity, & Util.h	241/2	- 11/4
MOBILE HOMES & MOI		
Conchemco b	131/2	- 11/4
Champion Home Bldrs.	261/2	- 1/2
Commodore Corp. <sup>h</sup> DeRose Industries <sup>h</sup>	9% 10	- 31/a - 11/2
•Fleetwood* Golden West Mobile Homes*	45% 14%	- 21/2
•Guerdon <sup>b</sup>	27%	+ 1/4
Mobile Americana	846	- 74

		Aug. 6	Chng.
		Bid/ Close	Prev. Month
Mobile Home Ind.		18%	- 21/8
Monarch Ind •Redman Indus		5 18	- 1½ - 2¾
Rex-Noreco <sup>h</sup>		191/2	- 5%
Town & Country Mob	iloh	81/8	- 11/2
Triangle Mobile Zimmer Homes h		51/8 18	+ ½ - 5¼
		3%	- Ve
AABCO Industries		1	- 5%
Brigadier Indust Building Systems Inc.	A	41/8	- 1/4 - 71/4
Environmental Syste	ms	13	- 1 - 134
Hodgson Houses Liberty Homes Modular Dynamics	*********	251/2	+ 15/8
Modular Housing Sys	stems		
Inc		10¾ 28¼	- 4 - 6%
Nationwide Homes <sup>d</sup> . Shelter Resources <sup>b</sup>		934	+ 1/8 - 17/8
Nationwide Homes <sup>d</sup> Shelter Resources <sup>h</sup> Stirling Homex Swift Industries		121/8	- 6½ + ½
DIVERSIFIED CO			+ 78
Amer. Standard		211/2	- 1/2
(Wm. Lyon) AVCO Corp.		135%	0
Bethlehem Steel Boise Cascade		22 221/4	- 11/a
CNA Financial (Larw Castle & Cooke	in)*	211/2	- 5% - 1%
		16%	- 2
CBS <sup>r</sup> (Klingbeil) Christiana Securities		43% 124	- 136 - 3
Citizens Financial hy	********	123/4	- 7/8
City Investing (Sterling Forest)		19	- 3
(Sterling Forest) Corning Glass Cousins Properties		251/2	-27¼ - 4¼
		28%	- 1/a
Dreytus Corp.  (Bert Smokler)  Evans Products  Ferro Corp.  First Gen. Resources  Fischback & More  Forest City Ent.		421/2	- 1
First Gen. Resources	a .	22¼ 7⅓	- 3 + 3/8
Fischback & More		33½ 25	- 4
Forest City Ent. <sup>b</sup> Fruehauf Corp. <sup>c</sup> Fuqua Indus. <sup>c</sup>	*********	3234	- 5
Georgia Pacific		21 1/a 515/a	- 3¾ + 3%
Glasrock Products b Great Southwest Cor		7% 2%	- 194 - 1/2
Gulf Oil (Gulf Regton	16	207/6	- 11/2
INA Corp. (M. J. Bro Inland Steel (Schol	z)	. 27	- 1/2 - 11/2 + 1 - 21/4 - 13/8
International Basic E	con	6% 33	- 2
International Papers Internat. Tel. & Tel.s (Levitt)		561/a	- 6
Investors Funding <sup>b</sup> . Leroy Corp.		101/4	- 134
Monogram Industrie:	S	2½ 9	- 1¾
Occidental Petroleum	( ved 3	16%	- 17/8
Pacific Coast Prop.h Perini Corp.h Philip Morris*		3¾ 5%	- 1/8 - 11/8
Philip Morris*		611/4	- 2
Prosher Corp. <sup>a</sup> Rouse Co.		6½ 41½	+ 2¾ - 9⅓
Santa Anita Consol.	orn )	51/4	+ 13/4
Savre & Fisher"		3½ 23%	- % - 1%
Tishman Realty Titan Group Inc		31/2	- 3/8
U.S. Ply - Champion* (Lewers & Cooke)	**********	17%	- 3% + ¾
(Lewers & Cooke)		19%	- 1/8
Weil McLain* Westinghouse* (Coral Ridge Prop		821/4	- 8%
Weverhaeuser		521/8	+ 3/8
(Weyer, Real Est. Whittaker (Vector Co Wickes Corp."	orp.) °	91/4	- 2½
		39%	- 41/8
BUILDING PRO		20	- 2
(Alcan Design Ho	mes)	1536	- 31/4
Automated Bldg. Co ponents b Bird & Son	m-	. 1378	
Bird & Son		95s 50	- 23/8 + 1
DIOUNS SCAINOIL		1078	- 21/8 - 41/2
Ceco Corp. Certain-teed (Realtec Inc.)		28%	- ¾
Clow		201/4	- 1/4
Colonial Sand* Consolidated Rock		26	- 1
Flintkote Co."		26 201/8	- 1 + 3/8
Glen Gery Corp.h	********	9	+ ½ - 2½
			- 1
Keene Corp. Kirsch Co.'		. 934	- 11/8 - 31/4
Knape & Vogt	*****	401/2	+ 1 - 51/4
Masonite Corp. Mouldings Inc.	**********	. 62 . 56	+ 1/2
Mouldings Inc. <sup>h</sup>		9%	- 2½ - 2½
National Gypsum  NL Industries  Owens Corning Fibe glass	if-	1734	- 17%
glass"		44%	+ 4%
			+ 17/8 - 17/8 - 1/2
Permaneer Corp. <sup>b</sup> . Philips Industries <sup>c</sup> . Pioneer Plastics <sup>b</sup> . Ply Gem Industries <sup>c</sup>		. 18%	- 21/4
Ply Gem Industries		81/8	- 134

	Aug. 6 Bid/ Close	Chng. Prev. Month
Potlatch Forests*	271/4	+ 5%
Pratt & Lamberth	16% 31%	- ½ - 3½
Reliance Universal	9	- 11/a
Robertson (H H)s	211/2	+ 1/8
Scotty's Home Builders  Sherwin Williams	281/2	- 23/4
Sherwin Williams' Southwest Forest Indus.	45¾	- 4
Standard Brands Paint®	62%	- 234
Supercrete Ltd. <sup>b</sup>	33/8	- 1/8
	61/4	- 3/8
U.S. Gypsum	65 47/8	+ 43/8
Vulcan Material	227/8	- 11/4
U.S. Ceramic Tile*  U.S. Gypsum*  Valspar Corp. <sup>h</sup> Vulcan Material*  Warner Co.*	42	+ 3/4
APPLIANCES		
Bernz-O-Matic	91/2	- 21/4
Hobart Manufacturing <sup>e</sup> Hoover Co.	501/2	- 65%
Hoover Co.	54%	+ 21/8 - 21/2
Magic Uner	351/4	- 1/8
Tappan Co."	22	- 11/8
Welbilt Corp.	31/8	- 11/8
Magic Chef* Maytag Co.* Tappan Co.* Weibilt Corp.* Whiripool Corp.*	87%	- 1/4
CEMENT PRODUCERS		
Alpha Portland	13%	- 3%
American Cement*	71/s	- ½
California Portland <sup>b</sup>	36	- 11/4 - 11/2
General Portlands	301/2	- 1½ - ¼
Ideal Residentias	17	- 11/8
Kaiser Cement & Gvp.	191/8	- 36
Lehigh Portland®	141/8	- %
Louisville Compath	261/4	- 374 + 3/8
Louisville Cement <sup>h</sup>	123%	- 234
Marquette Cement'	191/8	- 238
Medusa Portland Missouri Portland	401/4	- 134
Missouri Portland* Penn Dixie Cement*	291/4	+ 134
Puerto Rican Cement	121/2	- 134
CONSTRUCTION MACH		
American Hoist & Derrick*	111/2	0
Caterpillar Tractor	47	- 134
Caterpillar Tractor*	421/4	- 434
Harnischfeger Corp.h Kaiser Industries h Deere & Co.	2234	- 11/8 - 5/8
Raiser Industries"	101/2	- 21/2
Pettibone	131/2	+ 11/8
HEATING-AIR CONDITIO	ONING	
Borg Warner	251/8	- 31/8
	403/4	- 1/2
Carrier Corp.	33	- 31/2
Buffalo Forge Carrier Corp. Coleman Co." Copeland Refrig. Crane Corp.	321/a	- 58
Cranes	58 431/8	- 2 - 1/8
Culligane	151/2	- 1%
Culligan <sup>c</sup> Fedders <sup>c</sup>	44	- 21/4
Intertherm Inc.	8	- 3/4 + 1/2
Masco Corp.*	59¾ 164	+ 1/2 -22
Trane Co.	6434	+ 3/4
HOME FURNISHINGS		
American Furniture Co	8	- 3/4
American Seating		- 31/4
Armstrong Cork Co.	331/8	- 11/8
Bassett Furniture		- 17/8
Bath Industries'	315/8 227/8	- 27/8 - 37/8
General Firentonfing	83/4	- 3/8
General Housewares	10	+ 2
Giffen Industries	41/4	- 1
Hamilton Cosco h	6¾ 36	- 1/2
Hickory Furniture	81/4	-1
Kroehler Mfg."	20	- 33/4
Levitz Furniture "	651/2	- 6 - 21/4
Lightolier Corp.	8 21	- 244 + 1/4
Ludlow Corp.*  Mohasco Industries*	331/2	- 13/8
Ozite Corp.	13	- 31/2
Simmons Co.	331/e	- 36
TOOLS & HARDWARE		
Black & Decker	72%	- 43/4
Bliss & Laughlin*	2034	- 2 - 6½
Kliklok Corp.h	111/8	- 6½ - 2½
Scovill Mfg.	435/8	- 1/a
Emhart Corp. <sup>6</sup> Kliklok Corp. <sup>6</sup> Scovill Mfg. <sup>6</sup> Skil Corp. <sup>5</sup>	25	+ 1%
Snap-On-Tools	52	+ 34 + 11/2
Stanley Worls* Tool Research*	221/2	+ 1½ - 51/8
	- City	No.
	071	
MISCELLANEOUS		+ 1/2 + 1/4
MISCELLANEOUS Butler Mig.		+ 1
MISCELLANEOUS Butler Mfg Dorr-Oliver*		+ 3/4
MISCELLANEOUS Butler Mfg. Dorr-Oliver* Foster Wheeler* Morrison Knudsen	17%	
MISCELLANEOUS Butler Mig. Dorr-Oliver* Foster Wheeler* Morrison Knudsen Neptune Meter*	. 17¾ 16	- 2
MISCELLANEOUS Butler Mrg. Dorr-Oliver' Foster Wheeler' Morrison Knudsen Neptune Meter' Otis Elevator'	. 17% . 16 . 40	- 2 + ½
MISCELLANEOUS Butler Mig. Dorr-Oliver' Foster Wheeler' Morrison Knudsen Neptune Meter'	. 17% . 16 . 40	- 2 + ½ - 2%
MISCELLANEOUS Butler Mrg. Dorr-Oliver' Foster Wheeler' Morrison Knudsen Neptune Meter' Otis Elevator'	173/8 16 40 101/2	- 2 + ½ - 2%

PCSE. —Computed in HOUSE & HOME's 25-stock value index. y—adjusted for 2-for-1. Sources: Standard & Poor's, New York City; N.Y. Hanseatic Corp., Gairdner & Co., National Assn. of Securities Dealers, Philip Beer of Russell & Saxe, American Stock Exchange, New York Stock Exchange, Midwest Stock Exchange, Pacific Coast Stock Exchange.

## "Leisure World wanted a quality faucet that needed a minimum of maintenance. So I got them 50,000 Delta faucets."



### Seven ways to get your prospects inside with

You see, the outdoors is what makes the indoors so great.

And bringing the outdoors in is what brings the prospects into your homes; and that's where glass comes in. Glass can open up every room in your homes. Let the sunshine in, but keep the weather out. Interior decorating becomes interior-exterior decorating. Rooms become part of the total landscape, and look many times larger.

Use glass to open up the wide open spaces for the people who buy your homes. Use glass to open up your potential for sales

Here are just a few ideas for building "now" homes with glass. Look into them.

PPG: a Concern for the Future



Wm. F. Cody & Assoc., Archit

1 This kitchen has a sunny disposition because the cabinets are positioned to hang in front of the sunlit glass wall. Beautiful idea, and in cold climates PPG Twindow® insulating glass makes it even more practical.



Wm. F. Cody & Assoc., Architects

Deane Brothers, Builder

The garden bath, which uses a picture window overlooking a private court, lets the ladies bathe in Roman splendor. But in privacy. In an area like this PPG Herculite® K safety glass lets them move about in safety.



3 Mirrored wardrobe doors introduce glamor, a feeling of spaciousness, more light and beautiful practicality to the master bedroom in your homes. Or use this idea in a guest room to give it importance. Look into PPG High-Fidelity® mirrors for this idea.

4 Now the outlook for your kitchens can be exciting, as well as practical. Sliding glass windows with a wrap-around, pass-through serving counter make this kitchen and the great outdoors one big happy unit.





### PPG glass (by bringing the outdoors indoors).





Charles B. Wills & Co., Build by Mho says attics have to be dull, dark and dismal places. Gable end windows in this colonial create a cheerful upstairs rumpus room. It means more usable floor space, more salable floor space.



Robert Andrews, Builder window

A two-story fixed-glass window wall overlooking a private court gives this dining area light, excitement and a real outdoors flavor.



7 For leisure living, here's the updated sun porch. PPG Herculite K safety glass in glass walls and sliding glass doors make it possible, practical and safe. The idea itself is one that helps build quality-builder reputations.

If you'd like hundreds of other innovative ideas with glass, send the coupon for PPG's full-color brochure, "Open House/USA." It's yours, free.

PPG Industries, Inc., Dept. HH-1-8 One Gateway Center Pittsburgh, Pa. 15222

Gentlemen

Please send me a free copy of PPG's "Open House /USA" at the following address:

Name:\_\_\_\_\_

Address

City\_\_\_\_State\_\_\_Zip\_



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.



The ALLIANCE Manufacturing Co., Inc.

Alliance, Ohio 44601 Dept.

A NORTH AMERICAN PHILIPS COMPANY

Maker of the famous Antenna Rotator . . . Alliance Tenna-Rotor . . . "TV's Better Color Getter!"

#### NEWS/PEOPLE



New team at Leon N. Weiner & Associates includes (I. to r./ M. Ray Niblack, v.p. for operations, Leon N. Weiner, president, and Marvin S. Gilman, executive v.p.

#### Niblack and Kromer in new jobs

M. Ray Niblack is finally getting down to the brass tacks of homebuilding after ten years in the Washington policy mills. The former NAHB administrator has moved to Wilmington, Del., to tackle the newly created post of vice president for operations of Leon N. Weiner & Associates. This makes him No. 3 man in the fast-growing building and development company headed by the former NAHB president.

Niblack's job is to help mastermind the Weiner expansion program and represent the company in the communities and before government bodies.

"In a sense, it's the same kind of thing I've been doing all along." Niblack explained, "except I'll be looking at matters from a different point of view-not representing builders, but being one of them. And in free enterprise, there's added interest and excitement in what you're doing."

Expansion. In the last three years. Weiner has grown from a Delaware-area builder into a national builder with projects in the East, Midwest, and Southwest. Weiner is now working on the \$100-million, 160-acre Camden, N.J., center city urban renewal project together with RCA, Campbell Soup, and Boise Cascade. The company builds houses in all price ranges, but is particularly active in turnkey, urban renewal, and other low-income programs.

Publicity to policy. Niblack, a former newsman, started in housing ten years ago as FHA director of public information. He later directed the agency's administrative activities.

In 1966, he moved to the 54,000-member NAHB as a staff vice president. He was deputy to executive vice president Nat Rogg when he joined Weiner.

Kromer's move. N. Edgar Kromer has left McKeon Construction of Sacramento, Calif., to become vice president of internal development of U.S. Home Corp. in Clearwater, Fla. Kromer, who was president of McKeon Development Co. and an officer of the parent McKeon Construction, will help the various U.S. Home divisions expand into new housing

The divisions build and sell 14 different types of housing, including single-family homes, apartments, leisure homes, and condominiums designed for retired persons. All divisions build more than one type, but none offers all 14.

Career. Before joining Mc-Keon, Kromer was president and chairman of the board of Northern California Developers. He has been active in local builders' associations and NAHB -he ran unsuccessfully for NAHB's third vice presidency in Houston in 1970-and has lately served on Governor Reagan's Task Force on Housing in

Charles Rutenberg, president of U.S. Home, said Kromer's appointment is part of a program of building a central consulting



#### how this ad in House & Home paid for itself 52 times over in actual sales

\$158,427 in sales have been traced directly to readers who used House & Home's reader service card to request more information on Formica products.

Not counting action taken by an equal number of readers who requested information directly from Formica, actual sales triggered by the ad totaled 52 times the cost of the ad.

In addition to actual sales, the Formica ad resulted in \$100,632 in specifications . . . \$112,945 in approvals . . . \$84,590 in recommendations . . . and \$22,700 in products readers are still investigating for specific projects.

Why does advertising in House & Home pay its way many times over? Largely because House & Home shows your product to everybody who is anybody in housing & light construction.

For example, your story goes to the 50,000 builders who account for 9 out of 10 contractor-built apartment and single-family units, as well as extensive remodeling and non-residential building activity.

Then going beyond the builder, House & Home takes your story to the 50,000 specialists who work with builders and for builders in selecting building products, materials and equipment — specialists including architects, realtors, lenders and distributors.

Full documentation on how the Formica ad paid for itself 52 times over is readily available from

McGraw-Hill's marketing and management publication

of housing and House&Home
light construction House&Home
330 West 42nd Street, New York, N.Y. 10036



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

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

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

or insulating glass are available.

High-rise, low-rise or no-rise—the Wabash Tilt-Take Out serves your building and remodeling needs with the greatest in window efficiency. See your Wabash dealer or distributor



#### FILL OUT AND MAIL THIS COUPON TODAY!

Quality Wood Products Since 1884

1217 FLORIDA ST. • MEMPHIS, TENN. 38106 • PH. 901/946-1671

Please send me the name and address of my nearest Wabash

Dealer or Distributor.

I would like more information on ready-to-install Wabash all-wood Window Units, Patio Doors, and quality Louvered Products.

YOUR NAME

COMPANY

ADDRESS

**34** H&H SEPTEMBER 1971

CIRCLE 34 ON READER SERVICE CARD

#### NEWS/MARKETING

#### Ray Watt gets Home Loan Bank post

One of the nation's leading homebuilders of years past, Raymond A. Watt of Los Angeles, is the new chairman of the Federal Home Loan Bank of San Francisco.

The bank is the credit pool for savings and loan associations in Arizona, California, and Nevada. Chairman Preston Martin of the parent Home Loan Bank Board in Washington, himself a Californian, announced Watt's appointment as successor to Anthony M. Frank, who had resigned from the bank to become head of San Francisco's First Federal S&L (News, Aug.).

Watt merged his \$52-million homebuilding operation, the R. A. Watt Co., into Boise Cascade Corp. in 1967 and left Boise a year later. He became president of the National Corpora-



BUILDER WATT Into a banker's chair

tion for Housing Partnerships in June 1969 but resigned six months later to return to realty development in California. He is currently chairman of the corporation's executive committee, and the president is George W. DeFranceaux, former president of Frederick W. Berens Inc., the Washington mortgage banking company.

#### 2-car families now want 2 homes

Changing work patterns are swelling the demand for vacation homes to the point where they will account for one of every ten housing starts in 1971-a total of nearly 200,-000 houses plus some 45,000 mobile homes. What's more, we shall build over twice as many vacation homes during the 1970s as during the 1960s.

These are the conclusions of Karl G. Pearson, director of the program in real estate education at the University of Michigan.

Time to enjoy. Pearson sees the demand for second homes as coming chiefly from the middle class. He cites longer vacations, the new three-day holiday-weekends, and increasing acceptance of a four-day work week as some of the causes. There are also the economic advantages: tax breaks, extra income from renting, and appreciation on the investment.

Easy living. What do people want in vacation homes?

First, a good location, which usually means within four hours travel time from the permanent home and not more than a half hour's drive from beaches, lakes, or other recreational facilities.

Pearson sums up: "The ultimate in good living is not just a second car in the garage, but a second home in a resort location. This has resulted in vacation homes becoming one of our most rapidly growing industries."

#### Peter Heintz leaves Levitt for Detroit builder

Peter S. Heintz has been named executive vice president of Forest City Inc., the Detroit homebuilding subsidiary of Forest City Enterprises.

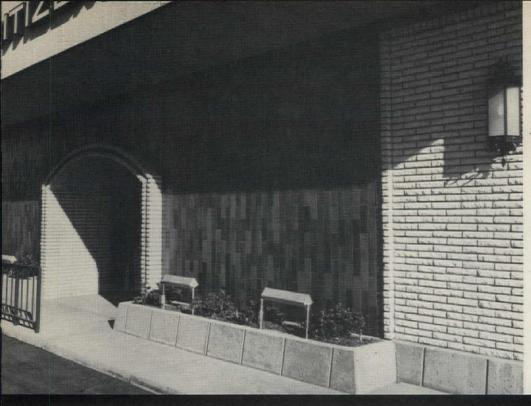
For five years, Heintz, 40, has been with ITT Levitt & Sons, the nation's largest homebuilder. He was an assistant project manager at the time of his move to Detroit.

Forest City Inc. builds medium-priced housing in several Detroit suburbs, including Westland and Trenton,



BUILDER HEINTZ Moving to Detroit

where 330 homes have been



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.



# B E R V E N OF CALIFORNIA

#### 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 (206) 682-7196; Spokane (509) MA 4-4118.

12-101	
N. Es	
	Builder
	Building Management.
Del Vol	
ZIP:	PHONE:

#### Crash program: from ground breaking to model apartments in 10 weeks

Why the rush?

"By getting the model units open so fast, we were able to more than double our rental pace," says H. Clarke Wells, marketing vice president, L. B. Nelson Corp.

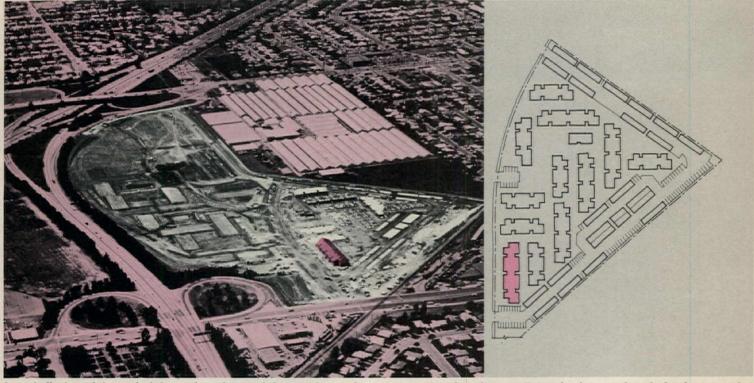
In mid-April ground was broken for Lakeside Village at San Leandro, Calif. On June 19, the model apartment merchandising center opened; and by July 18, half of the 232 units in the project's first section were rented.

To get models ready in a hurry, Nelson modified its usual construction schedule.

- · The most strategically located building-right inside the entrance of the project-was chosen to house the rental office and furnished model un-
- · This building was taken out of normal construction sequence, and work was accelerated by using Nelson's own construction company rather than a general contractor.
- · The building was landscaped ahead of the remainder of the project.
- · Work on the model units was pushed, and rental agents moved in weeks before the building was ready for occu-

Why this approach? Why not rent from the resident manager's permanent office, using nearby apartments as mod-

Wells sees two drawbacks. "First," he says, "you'll us-PHOTOS: BEN WILDMAN



Strategically situated site (unshaded area, photo above) includes A-one location for model apartment merchandising center-at entrance to the project, adjacent to the

intersection of two freeways. Ten weeks after ground was broken for project's first section (plan), model units (red areas, photo and plan) were open.





Project entrance offers immediate view of model-apartment building which was landscaped (photo, right) even before final water and power hookups were in

ually find the manager's office in the center of the project. And, that's about the worst spot for selling during construction, what with the mud and dirt that prospects have to drive through.

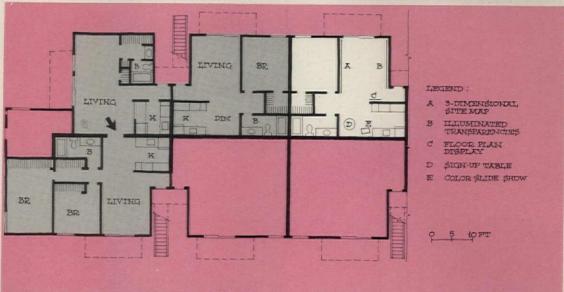
"But, even more important, is the danger of having a prospect overhear a tenant sound off about how bad his apartment is-just after you've sold the prospect on how great the project is."

As for the common method of renting during construction -using a trailer with displays and floor plans-Wells believes there's a definite drawback in not having a model to show prospects what they're really getting.

Lakeside Village will consist of 840 apartments when completed next June. Architect: Morris Lohrbach Associates Inc.







Apartment merchandising center comprises a rental office (top photo and white in plan) and three model units (gray in plan, and photo, right). Model apartments are part of a 24-unit building; so, to make it easier for prospects to view them, a temporary opening (arrow on plan, and wall opening at right in photo. right) was cut between back-to-back units that open onto opposite corridors. Use of special-feature signs like those on stove and cabinet door (photo, above) is a merchandising device more usually found in for-sale model homes.



## Off to a good start?



## **Certain-teed**



1 Fiber glass building insulation. Space-saving, color-coded handle paks are easier to store, easier to pick out, easier to open, and easier to carry to the job. New basket-weave-patterned facings look more attractive during installation, help sell prospects visiting unfinished homes.

The Hallmark "Shangle."
The style and texture of hand-split wood shakes in a beautiful, fire-resistant, heavy-weight asphalt shingle. Five earth-tone colors. Guaranteed not to warp, shrink, split, or fade for a full 25 years! Made to last much longer.

CIRCLE 36 ON
READER SERVICE CARD

CIRCLE 37 ON
READER SERVICE CARD

# lets you finish in style.



Hollybrook carpeting. Deep-pile shags, elegant scrolls, and long-wearing levelloop styles. Some available with deepfoam backing. Most meet or exceed FHA carpeting requirements. All the most wanted colors and durable man-made fibers.

CIRCLE 38 ON READER SERVICE CARD Ideal interior and exterior doors.

Spanish, Mediterranean, French Provincial, Colonial, and contemporary styles-all made of selected Western Ponderosa Pine, sanded satin-smooth, ready for finishing. They make every entrance a grand opening and add a true touch of elegance to every home.

CIRCLE 39 ON READER SERVICE CARD

Solid vinyl siding. Truly the superior exterior. Available in both horizontal and vertical styles, in four never-fade colorspastel green, yellow, gray, and popular white. Backed with an industry-leading 40-year guarantee against chipping, denting, peeling,

CIRCLE 40 ON READER SERVICE CARD

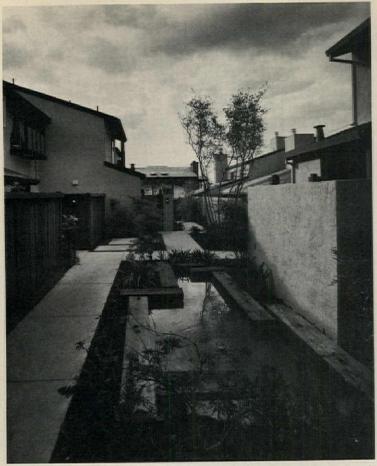
flaking, or corroding!

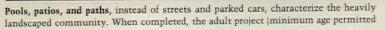
Easy to install.

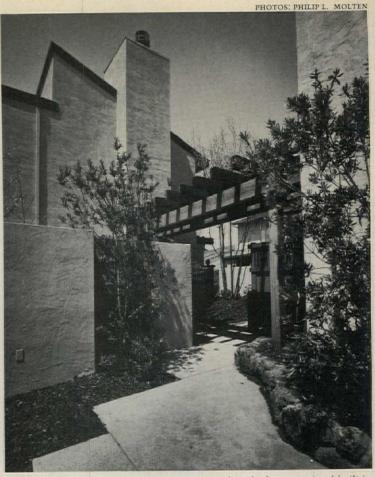
Ideal Qualitybilt windows. Doublehung, casement, and picture window styles made of selected Western Ponderosa Pine. Preservativetreated to last a "housetime." Optional welded insulating glass, double glazing panels, and bronze finish aluminum screens available. Fully sealed and weather-stripped.

CIRCLE 44 ON READER SERVICE CARD









is 16) will have 200 units as well as swimming pools and other recreational facilities. Architect: Callister and Payne.

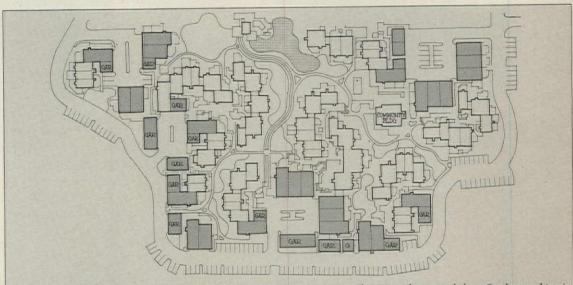
### There are no inside streets in this 17-acre condominium

In fact, the only time a vehicle can drive beyond the perimeter of the northern California project is on moving day.

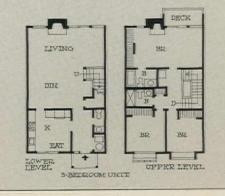
What's more, buyers like it that way, says Al Ceresa, vice president, Cal-West Communities Inc., adding that owners never question the fact that their two car spaces (one in a garage, one outdoors) can only be reached by walking to the outer edges of the project.

The reason: in lieu of the convenience of front-door parking (see p. 50), the Vineyards of Saratoga provides a series of landscaped courtyards and winding paths surrounding the villa-style homes. One doublewide path serves moving vans or emergency vehicles.

So far, most buyers are schoolteachers, widows or widowers, and retirees-people attracted by the non-maintenance aspect of condominium ownership, as well as by the price. Units sell for \$25,900 to \$43,-500, compared with \$55,000 to \$100,000 for single-family detached housing in the area. Eventually, the 17-acre community will contain 200 units.

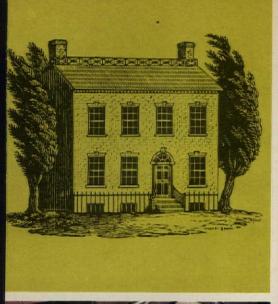


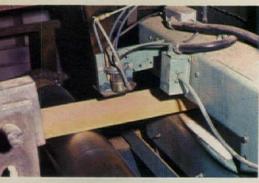
First section of 110 units (above) opened in February. The are garages and units with garages below. Outdoor parking is balance will be built north of the lake (top of plan). Shaded areas at the perimeter of the project. Below: three of six floor plans.





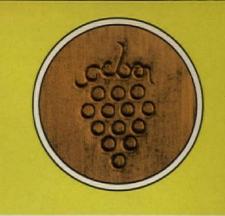














# Portrait of a better door

You wouldn't know this is a better door, just to look at it. Of course, Nord's exclusive, authentic Colonial design carved into its panels is something new, but that alone can't make it a better door.

Most of the 33 reasons it is a better door are not visible. In fact, only seven of them are. You can see the better design, for example; but you can't see the care to control moisture content that makes it more trouble-free. You can see the rich beauty of straight grain, old-growth solid wood; but you can't see the precision machinery that assures perfect fit of parts.

All of the 33 reasons-visible and invisible-are illustrated and described in a new brochure you should have. It's free

to any builder who will simply send his name on his business letterhead to the E.A. Nord Company, Everett, Washington, 98201. It will tell you "Thirty-Three Ways Nord Makes It Better."

With the help of NORD, you can put better doors into better entrances that help sell your better homes faster!

Illustrated is one of Nord's better ideas-COLONIAL CREST, a new series of eight designs carved into six-panel Colonial doors that lets you put carved beauty on the entrance door of even the most modest home, for its price is as low as or lower than virtually every other design of stile and rail door without carving . . . ours or anybody's!



NORD makes it better... naturally



# The Electric Door. It'll supercharge your customers' interest.

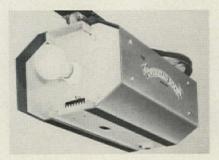
The word is convenience. We can help you deliver it.

The Electric Door offers your customers the ultimate convenience in garage door operation. They press a button on a tiny transmitter and the garage door opens. An inside light flashes on. They drive in, touch the button again, the door closes and locks. Fast. Simple. And very, very safe. The ladies in particular will appreciate that aspect.

The Electric Door concept is based on a brand new automatic garage door opener we created especially for you — the Builder Model 85 Electric Opener. Its low price will surprise you. And as you know, your local factory-trained Overhead Door distributor will install the opener and warrant it for a full year.

Another reason The Electric Door can help you sell your homes: your customers know us - they know we've been building the finest garage doors in America for 50 years. They trust us. So can you.

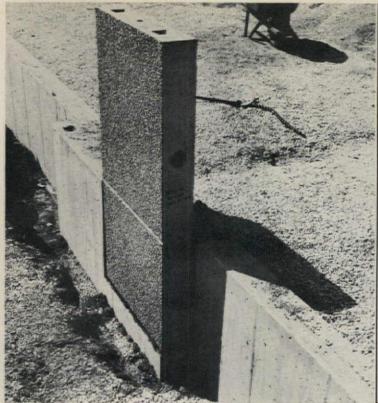
Put The Electric Door in your homes. You'll soon see how it can be a "super closer" in more ways than one.

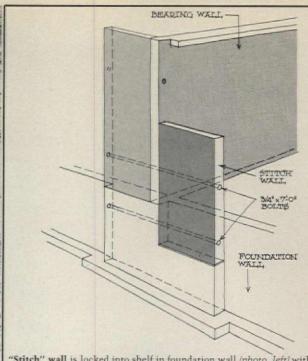












"Stitch" wall is locked into shelf in foundation wall (photo, left) with 7' annular-ring bolt (drawing, above). Bearing wall is then crane-lifted into place, leveled and secured between two "stitch" walls with another cross-bolt. The system can be used in buildings up to 16 stories high.

### New "stitch" wall system ties together a precast concrete shell

Using the system shown in the photo and drawing above, seven men and a crane completed the shell of a 120,000 sq. ft. apartment building (bottom, right) in 29 working days.

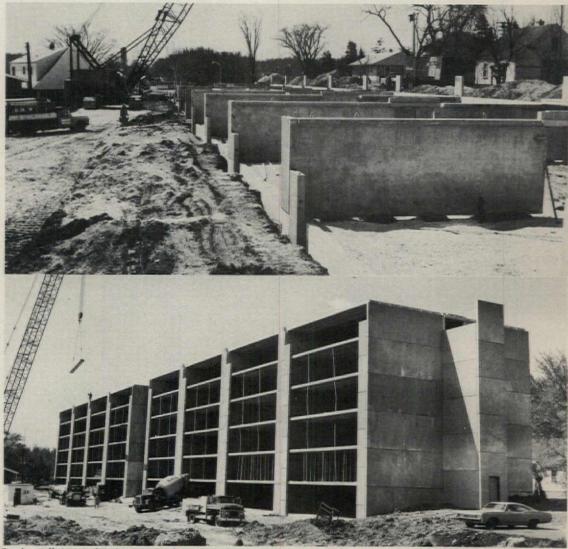
Costs are comparable to those of other recently developed precast systems: \$4 per sq. ft. for the shell; \$13 per sq. ft. for the finished building.

But unlike the other systems, this method does not require vertical post-tensioning rods. Instead, the building is tied together by half-story and fullstory "stitch" walls-3' 4"-wide vertical concrete slabs that stack alternately (drawing, above right.) They are locked to the bearing walls and each other with long bolts-and are the key elements in the system.

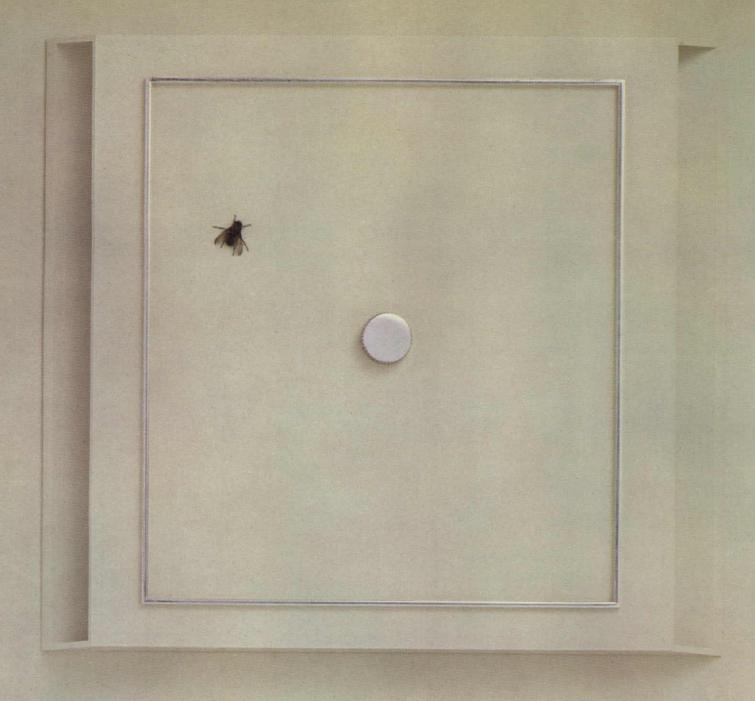
Bearing walls, floor and roof planks are tied together with 40" rods, grouted in place. A curtain-wall facade is installed in the conventional manner.

The system, developed by Spancrete Industries, Inc., has very critical tolerances. Walls are precast to ±1/16". The foundation, which has a series of shelves for the "stitch" walls (photo, above) has to be poured to a tolerance ±1/4" in 400 ft.

The building, in West Allis, Wis., is a joint venture of John Mathews and Ray Stanley. Architect: Howard Lorenz.



Bearing walls (upper photo) are supported at each end by a pair of "stitch" walls (only one end shown). Maximum wall height is 10' and all walls are 8" thick; maximum span for 8" floor and roof planks is 30'. Elevator shafts and stairwells also consist of precast units that are bolted together horizontally



# If the first thing you noticed was the fly, our new exhaust fan design is a big success. painted or page 18 april 18 ap

Introducing Front-Liners . . . the first decorator-oriented kitchen and bath exhaust fans. No garish metal grill, no exposed fan and motor, no ear-splitting whine.

Solid fronts of alloy-reinforced polymeric material suppress sound, can be painted or papered to blend with walls or ceiling. They're easily removed for cleaning, and so tough even a trip through

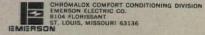
the dishwasher won't phase them. With higher CFM's and unique side openings, Front-Liners pull lots more air with far less noise . . . can even fill the bill as kitchen exhaust fans to eliminate the cost of traditional range hoods.

Your distributor's "MIP" Plan assures you of a full range of easy-to-install models, including light and heater combinations.

For more information, write for Catalog DCP-100.

The Front-Liners.

A brand new exhaust fan idea from Chromalox/Pryne.

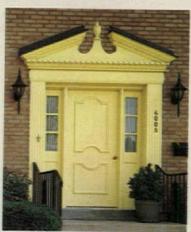




# Look at the edge you get with an Ever-Strait door.

We build a "crack" into the Ever-Strait door to keep the weather out. Of course, the correct term is *thermal break*, and it extends all the way around the door's edge so heat or cold isn't transmitted from the outdoor side to the indoor side.

That's an important consideration when you buy a steel door, or any door for that matter. And since the thermal break is a patented, exclusive feature of the Ever-Strait door, you can tell when you've got the genuine article.



Ever-Strait doors come factory primed and pre-hung, in a wide range of decorator styles, with a variety of doorlight, sidelight and toplight options available.

There are other good reasons to prefer the Ever-Strait door by Pease. It's made with strong, zinc-coated steel panels and insulated with a solid core of polystyrene foam—so it can't warp, bow in, bow out, shrink or swell. Ever.

How's that for an edge, when you're demonstrating value to a prospect? Write us for complete information and the name of your nearest Ever-Strait distributor.

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 1971

CIRCLE 49 ON READER SERVICE CARD

Make a grand entrance

Ever Ever

Strait Doors

MPANY 900 FOREST AVENUE . HAMILTON, OHIO 450



### "Man and his car are not soon parted. So parking layout is a vital element in development planning"

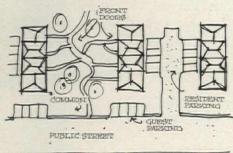
Planners and architects have long felt that the ideal community would be one where automobiles were completely separated from people—for safety reasons as well as for a more attractive design.

But the psychological attachment that most people have to their cars (in terms of security and convenience) often dictates planning that not only leads to inefficient land use, but also to undesirable aesthetic effects. And, local governments have added to the problem by enforcing dogmatic regulations that lead to the same ends.

The standard subdivision—without provisions for guest parking or for increased family needs—is the result of these regulations. Cars are parked in the garages, on the ramps, and in the streets.

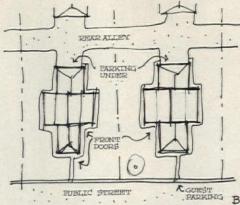
Why is this so bad? First, it uses up about 10% more land than need be and keeps the city in the free-parking-lot business. Secondly, a 40-ft.-wide street encourages fast through traffic, resulting in many anguished complaints from residents concerned with their children's safety.

In recent low-priced planned unit developments, the rear-parking type of car/house relationship has become common (Figure A). One space is provided for every unit, along with one guest parking space. This is a simple and economic solution and leaves the front of the house a pleasant,



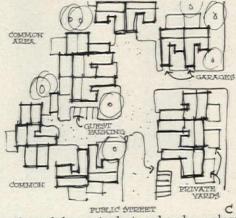
landscaped area free of cars. It would appear that this is an ideal solution, but we discover that the resident must walk entirely around his house to get to the front door, while guests often are understandably confused. A further disadvantage is that this arrangement dictates the use of the common area as a formal one, since it's the front door to all the units.

Another current solution involves the low-cost fourplex on a series of standard single lots (Figure B). In this arrangement one-to-one parking is provided underneath the rear units, with additional parking allocated on the public street in front. It appears



to be simple and certainly involves less cost in construction of the building. Yet, we find it demands dual street frontage for all of the units: an alley in the rear and the public street, both of which may well become havens for parked cars. Another drawback is that residents must walk from the carport, completely around to the front entrance.

A better answer. If these solutions are not working very well in terms of economics, convenience, and safety, what will? For low-cost townhouses, it might be done with resident parking provided as part of the residence, right at the front door, and guest parking in or near the cluster (Figure C). One big advantage to this solution is that it permits the common area to the rear of the unit to be used for any appropriate purpose—such as tot lot, small pool or play area—rather than just a formal entry area.

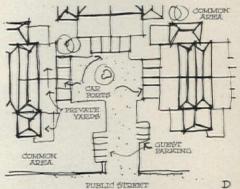


The cul-de-sac is designed to be a place both for cars and people. With cars kept to a minimum and landscaping to a maximum, it seems possible for people and cars to co-exist happily. Since the small cul-de-sac will serve only the people living there, hazard to children is minimal.

In addition, the public street is freed of all parking and used only for traffic circulation, thus eliminating the need for a wide street—

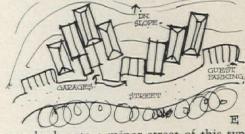
and curbs and gutters if drainage can be handled another way.

In another arrangement (Figure D), where high density and low cost are desirable, even smaller cul-de-sacs can be developed to provide for parking. The private outdoor



space on the street side provides a front door to the unit's own parking. This solution results in a multiplicity of small common areas throughout the development, in and near the residences. Most importantly, it is an extremely simple and economical solution offering a high degree of privacy and convenience.

What about hillside housing? Clustering is often impossible if the natural contour of the hillside terrain is considered. Thus a linear parking arrangement is necessary (Figure E). The great advantage to this concept is the creation of a small country lane, effected by keeping the street narrow and the parking considerably varied. Parking



can back onto a minor street of this type without hazard.

In conclusion, cars and people can live together successfully, if handled carefully. If, however, too many cars are gathered in one spot, there is a supermarket parking lot effect. If too many are parked at individual homes, considerable land is wasted, and a stereotyped effect is created. There is a balance possible between the two. With this balance, the maximum aesthetic effect can be obtained for the minimum investment.

Many a project has failed financially because the parking scheme was not coped with realistically.

ROBERT W. HAYES, PRESIDENT, THE COMPLA CORP., SAN FRANCISCO, CALIF.



# Showing off new Sanspray stone-on-plywood siding.

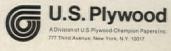
Smart rockhound that he is, he's gone right to the source. Because Sanspray® is a natural stone aggregate, bonded to plywood. We think it's the most exciting thing to happen to exteriors in a long, long time.

First of all, Sanspray is beautiful. And durable. As beautiful and durable as the rocks it's made of. It comes in a large aggregate and a small aggregate. In such delectable colors as Tangerine, Pearl Gray, Gaelic Green, Monterey Sand ... and more.

But. Sanspray costs far less than most stone and masonry wall claddings. It is also one of the easiest to install. Saw it. Drill it. Glue it. Nail it direct to framing members. And then

forget it. Because Sanspray is virtually maintenance free, in all climates. If your market is garden apartments, or supermarkets, or shopping centers, or banks, or stores, or motels, or other light commercial/industrial buildings — you should find out more about Sanspray. By talking to our Builder Service Representative.

When it comes to creative ideas on new products, market research, merchandising, advertising . . . he knows it all. Give him a call. He's at your local U. S. Plywood Branch Office.







# "Strip zoning on highway frontage is unsafe and impractical. It should be eliminated"

Traditional strip zoning—the old technique of permitting commercial and residential projects directly along main roads—leads to accidents and contributes to overburdened highways. So we recommend to clients that this type of zoning be outlawed on main roads.

Such a recommendation may be anathema to those who speculate in roadside strips. But the builder or developer who favors cluster planning should find that supporting such a proposal works to his advantage—both in enhancing his public image and financially.

Statistics clearly show what happens on main roads—those that not only connect towns, but also serve through traffic—when unregulated curb cuts and indiscriminate highway access exist.

Facts and figures. Simply stated, distances between intersections (or access points to shops and homes) should be seven to 10 times the posted speed limit, i.e., for a road with a 50 mph speed, minimum distances between curb cuts should be 350 ft. to provide proper sight lines.

Let's take a look at figures supplied by the New Jersey Bureau of Motor Vehicles which show the distances required for driver reaction and braking at various speeds.

Speed MPH	Reaction Distance ft.	Braking Distance ft.	Min. Distance between access points/ft.	
20	22	25	47	
40	44	105	149	
50	55	188	243	
60	66	300	366	

Further substantiation comes from a study we made of accident statistics for the New Jersey Turnpike.

Even after allowing for variable traffic volumes, we found that on stretches of road with five or more miles between exits the accident rate was close to half of that for areas with shorter stretches between exits.

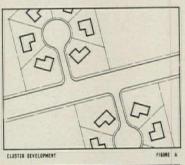
Other statistics show that while twolane local or state highways can carry some 8,-10,000 freely moving vehicles per day, this capacity can easily be halved by indiscriminate breaks which force traffic to slow down as cars enter or leave the road. This, in turn, creates traffic jams, leading to a need for costly new expressways.

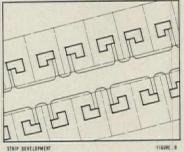
For these reasons, builders and developers should work with local authorities to main-

tain the largest justified distances between intersections.

We feel that no residential units should be constructed on main roads unless they feed from loops or cul-de-sacs. Certainly no homes should be exposed to more than 500-700 slow car movements. (Each singlefamily dwelling typically generates eight to 12 car movements—or trips—per day, including service operations.)

Clustering is the answer. It's the prime control for both residential and commercial developments. The best way to protect the flow of traffic is to cluster buildings around a common access road. Figure A





shows two typical residential clusters of six homes each. The alternative, pictured in Figure B, is the typical strip zoning plan.

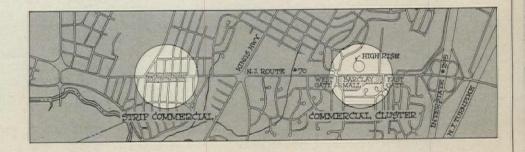
The strip plan shows 12 breaks in the highway, representing 12 sources of delay or accident. The clusters show just two breaks. The strip pattern may also require additional center cuts in the road medial. Each of these also presents a hazard.

To substantiate this analysis we compared accident rates along two 1,200 ft. commercial frontages on New Jersey Route 70 in Cherry Hill Township. (See Figure C.) The first area was a strip-zoned section between Cooper Landing Road and Harrison Avenue; the second was a commercial cluster—The Barclay Mall—one mile east of the strip along the same road.

Strip and mall are similar: both include clothing shops, laundries, realtors, hardware stores, and small restaurants. Both back up to single-family housing. The mall is opposite a high-rise apartment cluster. Over a three-year period (1967-69) the commercial strip produced 79% more accidents than the mall, while traffic counts showed only a 14% higher traffic volume for the strip. Clearly, clustering produces a safer, more efficient roadway.

Strip zoning hurts the local tax base. Strip patterns are usually defended on the basis of tax rateables. However, rateables in the strip tend to deteriorate in value, while those in clusters tend to increase their value. We checked tax maps in Cherry Hill and found strip uses increased 19% in tax assessments (based on true value) over 1960-70. This increase did not even keep pace with inflation, which was 30% over that 10-year period. We then checked on assessments in the mall and found they increased 45% in the same period, easily out-distancing inflation.

In summary, local roads can be protected and preserved by logically controlling land use patterns. Strip zoning should be eliminated and subdivision regulations should require some form of tertiary road to collect traffic from driveways. These recommendations will lead to reduced accident rates, stabilized taxes, and elimination of excessive paving. They are, therefore, substantiated in relation to public health, safety, and welfare. Builders working within such a framework should find public agencies more receptive to clustered land use patterns.



JOHN RAHENKAMP, PRESIDENT, RAHENKAMP SACHS WELLS AND ASSOC. INC., PHILADELPHIA, PA.



new in concept to meet the changing needs of today's housing market. Kemper engineering has developed the Villager with more useable storage volume and wider door openings. In addition, a new competitive pricing plan makes it the logical cabinet for the majority of today's kitchens.

new in materials and manufacturing techniques. The Villager cabinet utilizes an extremely tough, long wearing, low maintenance material. Special design and assembly innovations enable Kemper to build this all new cabinet with fewer parts. The result is a unique

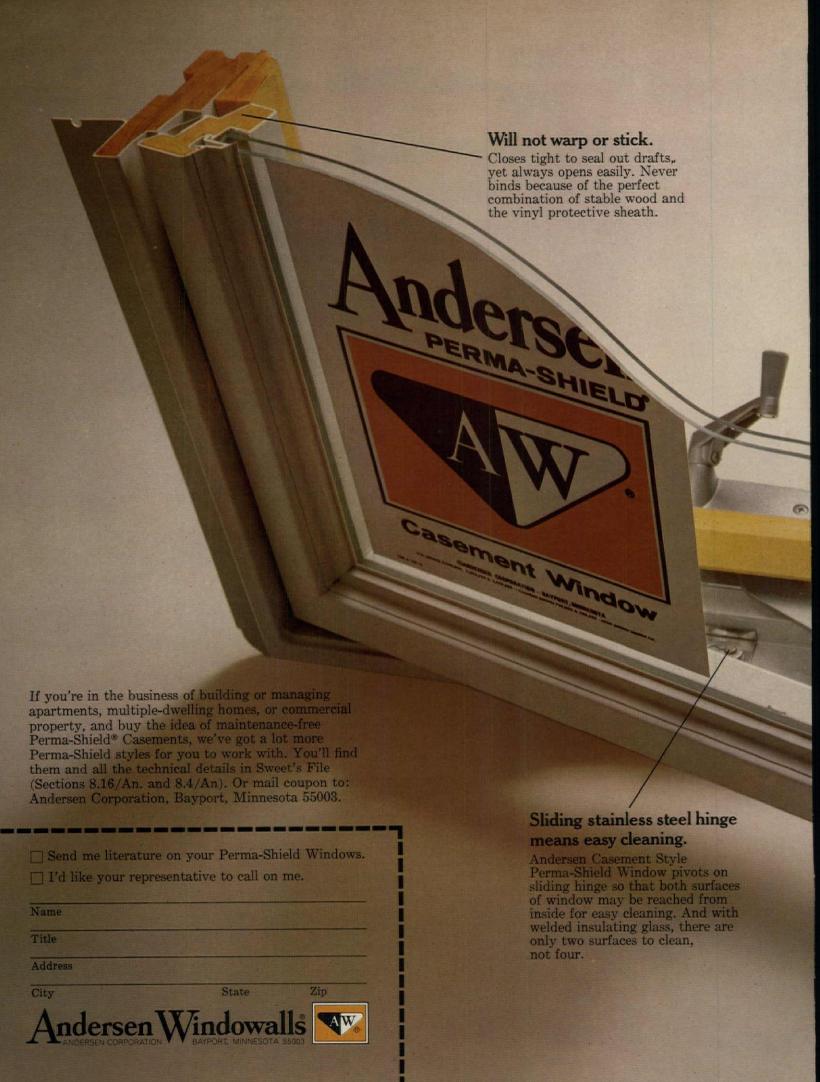
"Pronto" delivery service for you.

new in style to satisfy a wider range of building applications. Garden apartments, high rise, modular and tract housing are all perfect for a Villager installation. See your Kemper Distributor for a first hand

look at 1971's only really new kitchen. A full color catalog sheet is yours for the asking. Please write.



A Division of The Tappan Company Richmond, Indiana 47374



# Perma-Shield. The window that takes care of itself.

#### No need for storm windows.

Double-pane, welded insulating glass provides comfort and saves fuel. Andersen saves you the trouble and expense of changing storm windows. Lightweight Andersen Perma-Clean® screens optional.

### Wood's a natural insulator.

The core of warm, stable wood makes for both comfort and beauty. The inside wood trim can be finished naturally or painted to fit any decor.

# Rigid vinyl shield ends costly maintenance.

This tough, durable white vinyl protective sheath won't need painting or scraping. Won't peel, crack, or blister. Won't rust, pit, or corrode like metal.

## Tenants won't complain about drafts.

Extremely weathertight, it reduces heat loss 15 to 35%. All-around vinyl weather-stripping always keeps its shape. And chemically-treated wood is dimensionally stable.



# "Will new state factory housing laws be a help— or just another hindrance?"

For decades, builders and architects have tolerated confusing, illogical, differing local, state and federal building codes; not without frequent loud complaints, but generally accepting their existence as a political fact of life.

Despite this attitude of resignation, everyone involved in housing agrees that the chaotic code situation desperately needs drastic revision. But until a few years ago, little tangible effort was being directed toward such change, and what was tried met with even less success.

Spurred on by the emergence of the modular housing industry in the past two years, there has finally been some real progress toward the idealistic concept of uniform state-wide building code requirements. Over a third of the states have enacted some form of legislation, most with specific provisions for factory produced housing. Most of the other states have laws under consideration. Such legislation has been hailed as real progress and this can be true if it is properly drafted.

However, a quick analysis indicates that the "sacred cow" of home rule has too often weakened these laws with "local option" conditions. Combined with other deficiencies, it is apparent that such restrictions in the laws can be just one more added hindrance, rather than a help. This is hardly progress.

State-wide codes. In order for these new laws to be effectively meaningful, they must contain certain clear provisions. Otherwise, the situation, bad as it is, might best be left alone. In brief, simple terms here are provisions they should include.

• Preemption of all local codes must be mandatory throughout the state.

• The state code itself, must of course, be performance oriented and in conformance with BOCA, ICBO or SBCC. (Concurrently, these agencies, being regionally dominant, should merge, or, at the least, have simple reciprocity agreements.)

 There should be provisions for reciprocity with states that have similar laws.

 Approval procedures should be on a structural system basis, making it unnecessary for every differing floor-plan layout to be re-submitted as long as the same system is utilized.

 Machinery must be quickly set up to allow for reasonably prompt processing of applications. Otherwise, the effective date of a law should be delayed until such machinery is ready.

• Compliance and quality control should be primarily the responsibility of the manufacturer with routine plant and site inspections by the state agency conducted on a consistent, but unspecified schedule. Full-time inspectors at each plant would be expensive and not as effective.

 Approved independent testing agencies for unique structural and material applications should be listed, generally available, and capable of prompt performance.

• Structural systems that are generally conventional should receive prompt approval from plans alone, without testing, especially where a system has been in production and use for a year or more.

 The additional expense and burden of more stringent requirements should not be placed on factory housing over site-built housing, thereby negating some of the potential economic advantages of industrialized housing.

Without the inclusion of the foregoing provisions into state-wide codes, we will find ourselves only creating numerous new ineffective bureaucratic monsters—the kind that frequently forget their intent and purpose and become just additional regulatory agencies with the usual excessive delays, red tape, and growing personnel lists fed by political patronage. While it is agreed that a properly staffed and capable agency is necessary to implement an effective program, it should always be remembered that the intent is to reduce time and effort, not add more.

Fire and panic requirements. In addition to the above-stated requisites, new state codes must take into consideration current fire and panic laws which affect building codes on multifamily units. Special attention must be directed toward some consistency from state-to-state—not as the rules affect reasonable safety requirements, but as they affect design.

Current drastically contradictory specifications make consistent design duplication extremely difficult. Uniformity is not only desirable, but logical.

For example, in certain states, a threestory multifamily building must be constructed with solid masonry exterior walls, but total frame construction within such walls is permitted; an adjacent state may allow frame exterior walls, but requires party walls to be masonry; a third state allows total frame construction as long as the stairwells are protected by solid masonry; and another state permits complete

frame structures with no masonry requirements.

Fire wall regulations are a particular sore spot to modular housing manufacturers. The "masonry only" requirement is not properly performance oriented, and specifically discriminates against factory-built housing. A performance code will permit frame fire walls if they are so constructed to meet the normal necessary one-hour or two-hour rating.

Other conflicts relate to exit and stair requirements, fire ratings of specific party walls, door openings, heating rooms, balcony construction, and maximum space allowed between fire walls.

Any state-wide uniform code which does not also strive for uniformity with other states in multifamily requirements only does a partial job. It is obvious that this area deserves careful analysis when a new state-wide code is drafted.

A case-in-point. Pennsylvania's proposed House Bill No. 1237 (introduced June 9, 1971), which is enabling legislation toward a state-wide factory housing code, states:

"Nothing in this act shall be construed as amending or repealing any of the provisions to the Fire and Panic Act or its application to building construction or use or occupancy."

This is a mistake, since this new bill provides a natural opportunity to update the Fire and Panic Act provisions for multifamily buildings and to make the law more consistent with those of other states.

I do not mean to single out the current multifamily code in Pennsylvania, which generally is reasonable, and is administered in an efficient manner by a capable staff in Harrisburg. However, in an area like the Northeast, where a manufacturer in one state probably ships his housing units into several states, some uniformity in state-to-state multifamily code requirements is essential.

It is apparent that there has been a definite rash of activity in the various state legislatures these past few years, and some real progress is being achieved. I may be asking too much, but with the current atmosphere of realization that such laws are needed, I would also expect that the job be performed properly and completely.

Those of us close to the industry should be making every effort toward getting this message across to those influencing such decisions.

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



Weiser auxiliary dead bolt locks and deadlocking latches incorporate new features that provide maximum resistance to forced entry.

#### A NEW HIGH SECURITY TRIM

A free-turning, hardened steel ring surrounds the dead bolt cylinder mechanism. Tapered in design, it makes tampering with a pipe wrench or crow bar practically impossible.

#### **FULL 1" PROJECTION DEAD BOLT**

A full 1" projection dead bolt of solid bar brass

with free-turning steel insert makes it impossible to saw through the bolt. The dead bolt is automatically deadlocked against end pressure when fully extended.

#### FULL 1/2" PROJECTION DEADLOCKING LATCH

The latch bolt is deadlocked against end pressure and manipulation by a credit card or other object.

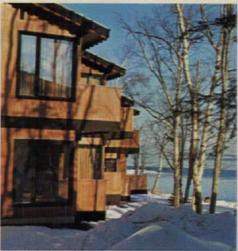
With these security features, every home, office, and commercial building can be effectively protected against illegal entry.

### EISER LOC

EISER COMPANY . SOUTH GATE, CALIF.

BUILDING PRODUCT ANOTHER NORRIS INDUSTRIES









### There's a lot of talk today about environment

Palco's been doing something about it for over 100 years

.. and some of the early structures built with PALCO Redwood still are standing, beautifully blending with their environments, year after year. Through these years, redwood has come to be known as one of nature's most majestic woods.

Now PALCO makes redwood in plywood form. In 4' x 8', 9' and 10' sheets; 3/8" and 5/8" thicknesses; plain or grooved patterns. This gives you the beauty and quality of redwood and the economy of plywood construction. Does redwood plywood cost more

than ordinary plywood? A little. But look what you get to make it worth more:

- ☐ Beautiful natural russet color and interesting grain patterns on clear, knot-free faces.
- ☐ Handsomely saw-textured surface.
- ☐ An ability to hold finishes longer, with minimum maintenance.
- ☐ Unmatched stability, durability and resistance to rot and insects.
- ☐ An established demand among quality-minded consumers.

Think PALCO Redwood Plywood the next time you build homes, singly or in clusters; apartments; stores and shopping centers; light commercial

It's the "worth-more" plywood. The plywood, natural or finished, that blends with any environment, now and in the future.

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



Architectural Quality Redwood THE PACIFIC LUMBER COMPANY

1111 Columbus Avenue, San Francisco 94133 2540 Huntington Drive, San Marino, California 91108

### On-the-job hazards

### Those new construction safety rules are good for everybody except the men who build houses and the people who hope to live in them

Nobody doubts the need for work safety requirements either in a factory or out on a construction site. But the housing industry is rightly concerned about the stiff federal standards that were to be applied to light residential building on August 27.

As they now stand, the new rules, part of the Occupational Safety and Health Act of 1971, could boost housing costs by anywhere from \$300 to \$1,000 per unit.

Eventually, of course, those higher costs will be passed along to the house buyer or the apartment renter. So the upshot could well be less housing built-particularly at the low end of the market where it's needed most-and fewer jobs for construction laborers and craftsmen.

Higher costs might be palatable if the new rules actually eliminated serious job hazards in single-family and low-rise residential building. That, however, is hardly the case—and for a very good reason:

The standards were designed primarily for heavy construction-bridges, dams, high-rise buildings, and the like. As insurance underwriters know only too well, the accident rate on such jobs is much higher, and the safety factor much lower, than in light residential building.

Because the new rules are aimed at heavy construction, they call for safety measures that make little or no sense in building houses, townhouses, and garden apartments. For example, the standards require:

- · Safety platforms with railings around all roofs over 10 ft. off the ground.
  - Guardrails and toeboards on all scaffolding

over 6 ft. off the ground.

- Safety railings around all stairwells.
- · Protective bars across all windows with sills less than 3 ft. above the floor or more than 4 ft. above the ground.
- Chutes to dispose of debris from the second (or higher) floors.

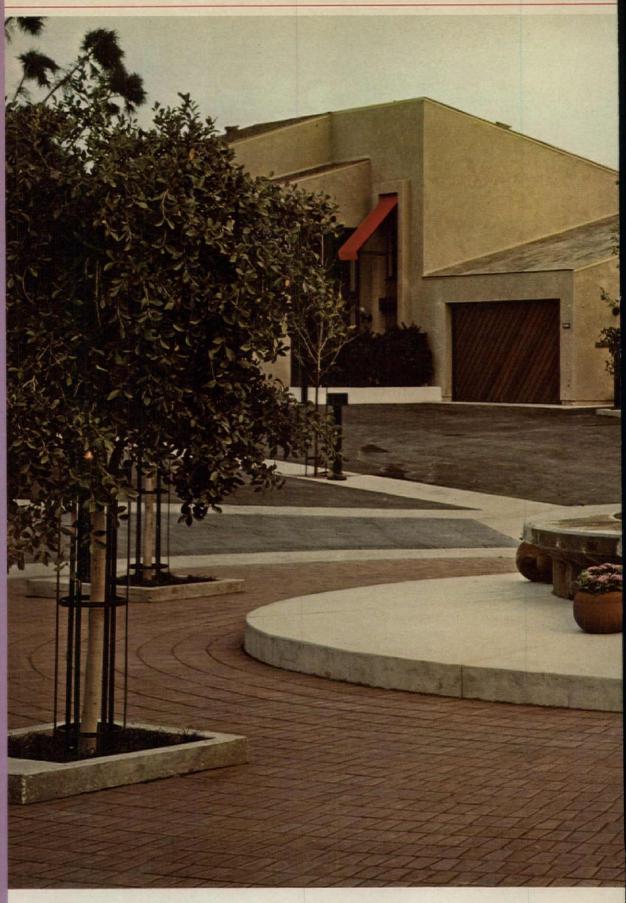
Lumped together, the costs of just those little extras could easily top \$200. Safety platforms alone would probably average \$150 per house, and a rubbish chute for a two-story house would come to roughly \$50.

Now, all this is not to imply that the U.S. Labor Department's Construction Safety Advisory Committee will stand pat on the standards as they're now written. Chances are, it won't. In fact, the committee has been doing a lot of listening lately-mostly to strong criticism of the standards by the NAHB and other housing industry groups.

Meetings of the committee and housing leaders were still going on when this issue of House & Home went to press. It already appeared, however, that at least some of the rules would be revised and that the revisions would be presented at public hearings next month. There was also a possibility that the Labor Department would postpone application of the standards to light construction for 30 days.

In any case, what's needed is either extensive revision of the rules as they apply to light construction or a separate set of light construction standards. If the nation is to meet its housing goals, neither builders nor buyers and renters can afford the extra costs imposed by unrealistic safety requirements.

JOHN F. GOLDSMITH



# PROJECT PORTFOLIO

DEVELOPMENT: La Costa Village LOCATION: San Diego County, Calif.

BUILDER: A.J. Hall Corp.

ARCHITECT: Walter Richardson Associates, AIA LANDSCAPE ARCHITECT: Process Oriented Design

SIZE OF PROJECT: 15 acres

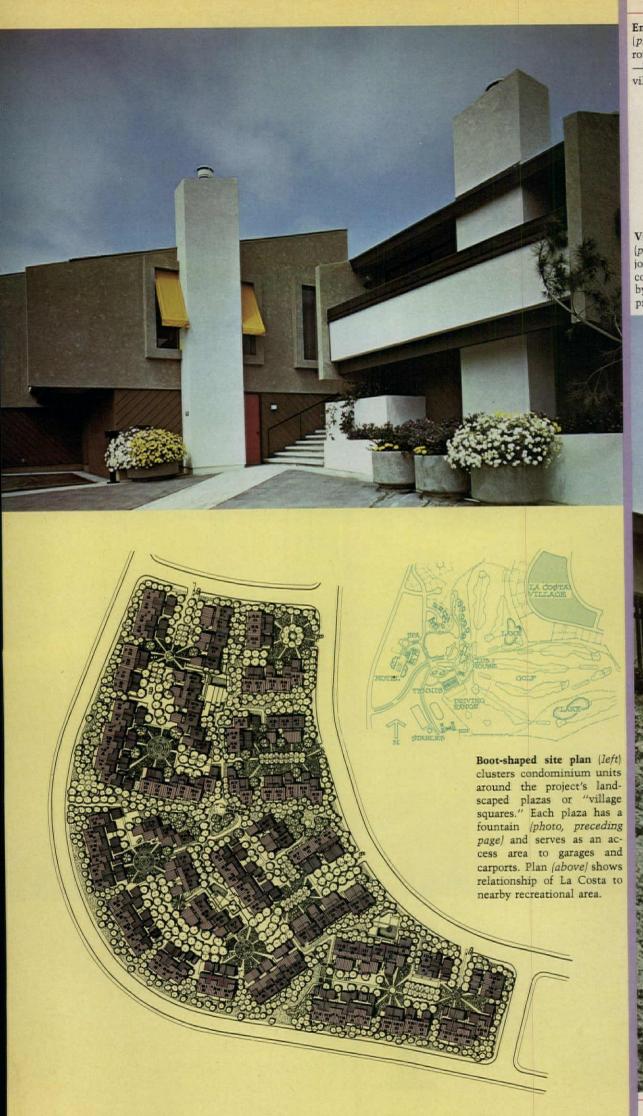
Type of Units: Condominium townhouses

Number of Units: 128 Prices: \$52,000—\$68,000



La Costa, the first community to be shown in H&H's new Project Portfolio series is designed on the lines of the small, picturesque villages seen throughout Spain, Portugal, and Italy. Townhouse owners are eligible for membership in the adjoining country club, spa, racquet and saddle clubs, and soon-to-be-built beach clubs.

TO NEXT PAGE

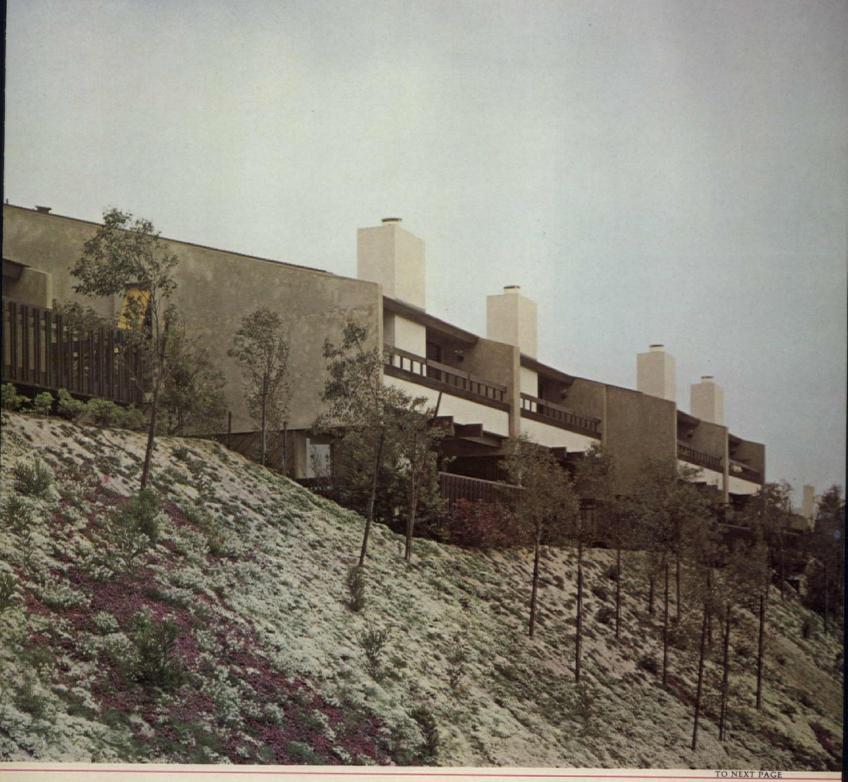


Entrances within plaza (photo, left) are surrounded by tubs of flowers—heightening the European-village effect of La Costa.

View-oriented balconies (photos, right) overlook adjoining country club and golf course. Units are separated by 13"-thick walls to insure privacy.









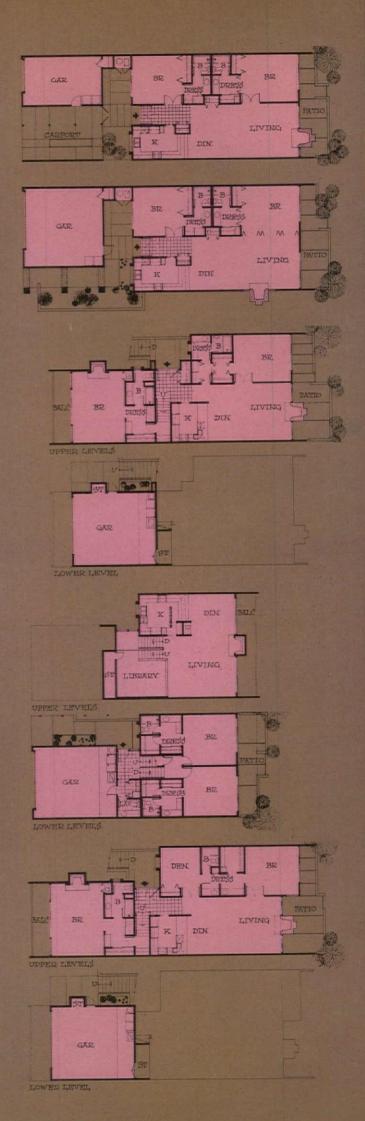


Landscaped entrances (photo, left) are featured in many units.

Angled positioning of units (photo, above) continues to open feeling in plaza area.

Swimming pool (photo, below) is one of three that are planned for La Costa owners. Other on-site amenities include hydrotherapy pools and a putting green.





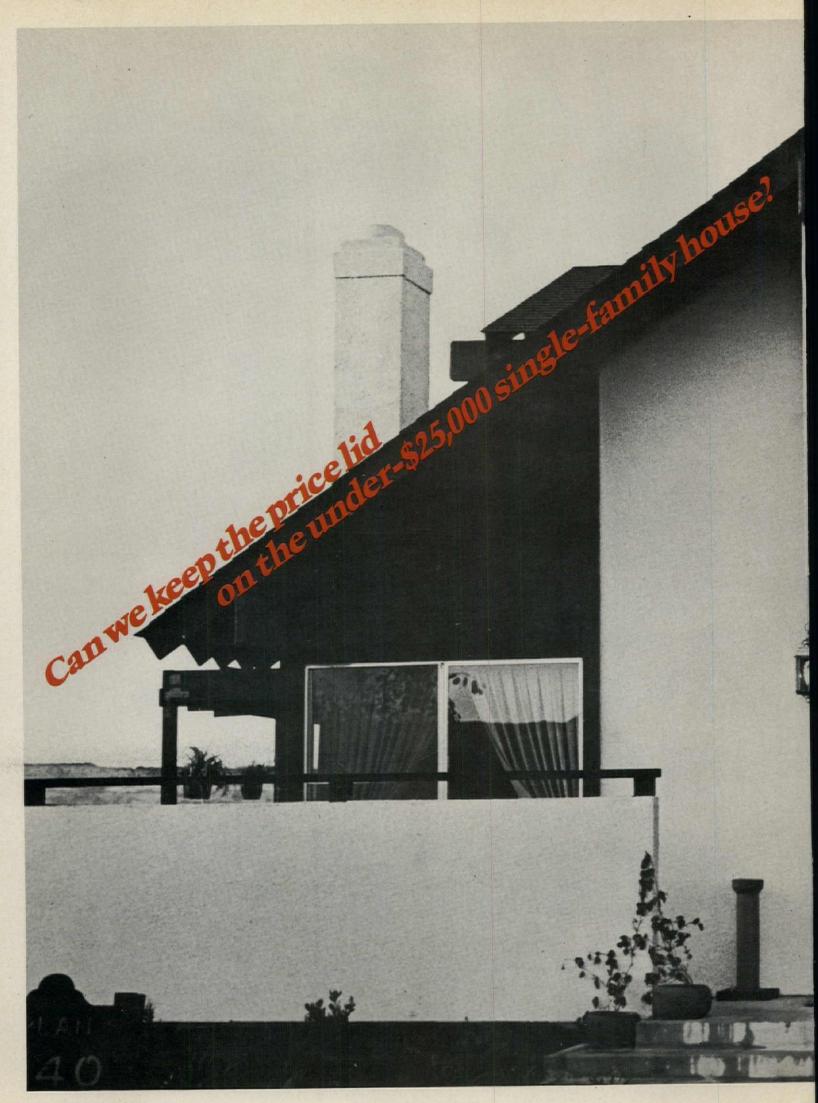
Five basic floor plans (opposite page) are available in single- or multi-level units. Sizes range from 1,417 sq. ft. to 1,836 sq. ft.

Upper-level library looks across the living room out to the balcony through sliding glass doors (see second-from-bottom plan). Door in rear library wall leads to storage space beneath the clerestory windows.

Folding doors, in place of a solid wall, are optional features between bedroom and living room in some units (see second-from-top plan). Louvered doors at left side of bedroom lead to dressing room and bath.









The problem is acute.

At the present rate of price escalation, it won't be long before the \$25,000 house (give or take a couple of thousand) has become the \$30,000 or \$35,000 house, and is priced clear out of the reach of the middle-income family as well as the low-income family.

Of course, all kinds of housing have felt the sting of inflation. While the cost of living has risen roughly 25% since 1965, the selling price of housing has gone up twice as fast -50% -thanks to the skyrocketing cost of building labor, housing money, building materials and land.

But the single-family detached house has problems that multifamily housing doesn't. It uses land much more extravagantly, and thus is hurt more by land costs which are rising more rapidly than other categories. For example, while the cost of the typical small singlefamily house is rising at between 10% and 12% a year, the cost of raw land (according to an Urban Land Institute article to be released this fall) is going up at an annual rate of from 15% to 18%.

Further, the under-\$25,000 single-family market is more vulnerable to rising costs than is the multifamily market. On the whole, it is made up of families with young children and incomes of \$10,000 to \$12,000 -those families who usually are forced to live right up to the limits of their income. And their incomes are rising at only about half the rate of housing prices. By contrast, it is newlyweds, empty nesters, and childless couples who lean to multifamily living. And they are far more liable to have enough income to absorb increased housing costs.

It can be reasonably argued that eventually the pressure of high costs will eliminate the lower-priced singlefamily home, and families who now buy them will be absorbed by either rental or condominium multifamily housing.

But that kind of multifamily housing simply isn't available in sufficient quantities today. What's more, too many builders and developers have too big a stake in the \$25,000 single-family house to give it up without a struggle.

It's just that struggle that is the subject of the next ten pages. The builders whose case studies make up this article have attacked their problem on every conceivable front-land, amenities, construction, and many others-with at least temporary success. And the result is that so far at least, the under-\$25,000 single-family house is still with us.

### Wm. Lyon Development: a new line that starts at \$19,990

The under-\$25,000 house is the bread and butter of Wm. Lyon Development Co. The company has turned out more than 17,000 such units in both northern and southern California in the last 17 years. It has seen the price of its least expensive units rise from roughly \$17,000 in 1967 to over \$23,000 today; and \$25,000 models climb over \$30,000, where sales begin to get sluggish.

So Wm. Lyon Development decided it was time to roll back prices and get back into the market where sales would be stronger.

The result was Brigadoon, a line that starts at \$19,000. It opened in San Jose in January, and is currently rolling along at the rate of four sales a week.

To reach its price range, the Brigadoon line was squeezed about as hard as it could be squeezed. It is interesting to compare a four-bedroom model, selling at \$20,000, with a four-bedroom model priced at \$24,950 in the company's best-selling California Classic line.

Primarily, area has been reduced from 1,376 sq. ft. to 1,027 sq. ft.—about as small as a four-bedroom house can get. Lot frontage has been cut from 60 ft. to 52 ft. and surprisingly, construction costs in the

smaller houses have been dropped from \$11.50 to \$9.50 per square foot. Here are some of the ways it was done:

Designs were simplified and fitted to standard lumber dimensions. Savings: \$250.

A back-to-back plumbing core for the baths was used. Savings: up to \$400.

The entry was eliminated, saving \$40 in construction and \$20 in electrical work.

Wall heaters replaced the warm air heating system. Savings: \$100.

A fiberglass tub and shower unit instead of a steel tub and ceramic tile saved \$70.

A plain bathroom sink in place of a vanity with marble top saved \$65.

The terrace kitchen was made 50% smaller, and the pass-through and sliding doors eliminated. This plus simpler kitchen cabinets saved \$220.

Not all luxury features were removed. The Brigadoon has a shake roof, available only as an option on the more expensive California Classic. Carpeting, also optional in the Classic, is standard in the Brigadoon's living room and master bedroom. And although buyers can save \$250 by leaving the master bath temporarily unfinished, almost all have chosen to have it completed at the time of purchase.



\$20,990 model is one of Wm. Lyon Development's new, low-cost "Brigadoon" line. It is smaller than the model shown below, and designed to sit on a narrower lot. Kitchen is less luxurious, and the family and living rooms have been combined. The floor plan groups both baths and the kitchen into a compact, cost-saving group. A three-bedroom version of the same house sells for \$1,000 less.





BR BR LIVING FAM

BR BR GARAGE

**S24,950** model from the company's best-selling "California Classics" line has four bedrooms, and a so-called California kitchen. The builder decided a low-cost line was necessary, so the Brigadoon series was developed (photos, facing page; plan, above).



DE CARLO STUDIO



## Fox & Jacobs: an old line with a price that's \$2,000 lower

Over the past two decades, nobody has built more under-\$25,000 houses in Dallas than Fox & Jacobs. In fact, few firms in the country will match F&J's anticipated 1971 volume of \$40 million-plus—just upgraded thanks to an \$18 million first quarter.

And since nearly 90% of that volume is in houses that sell for \$25,000 or less, it's not surprising that F&J is very sensitive to price rises. Says Jack Franzen, marketing vice president: "We just flat made up our minds that we weren't going to accept increases."

In fact, F&J has managed to roll back prices on two of its lines, maintain 1970 prices on another, and upgrade all three. Specifically:

The Accent line, portions of which are shown here, has been cut from a range of \$24,950 to \$28,000 to a range of \$23,000 to \$26,000. The line has been completely redesigned, but size and amenities remain at least at the same level. It accounts for 40% of all F&J sales.

The lowest-priced line, Today, which accounts for 50% of the company's sales, remains at \$18,100 for all models. But it includes these things that last year's models did not: patio, dishwasher and disposer, two full baths (rather than 1½ baths), and 50 sq. ft. of additional area.

The top-priced line, Flair, makes up only 10% of F&J sales. It has been cut from a range of \$34,000 to \$38,000 to a range of \$31,000 to \$36,000.

Improved purchasing and production are responsible for F&J's reduced costs.

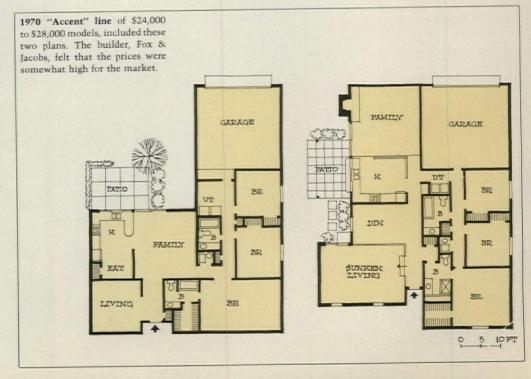
"We're buying both our labor and our materials anywhere from six months to a year ahead", says Franzen. "We're putting our firm contracts for, say, a blanket order of 1,000 cars of lumber and plywood and all the other things that go into the houses. And we're contracting labor ahead too."

F&J's field production, says Franzen, has been increased through better training, supervision, and scheduling. And it is doing more of the work in the company's component plant.

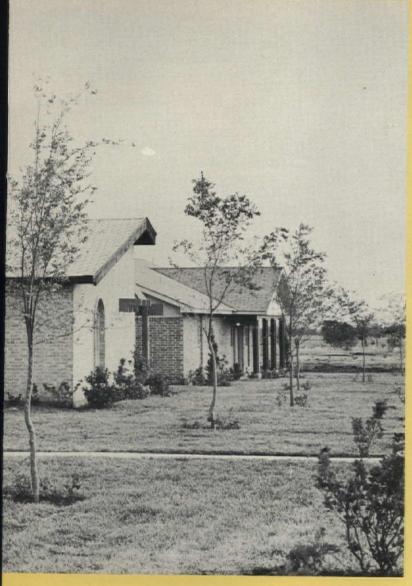
"We're more sophisticated in our plant operation," says Franzen. "We now do all our interior partitions there, plus ornamental items like wall arches, screening, and detailing.

"The result is that we're building more houses with fewer people."





PHOTOS: WALT McDONALD.



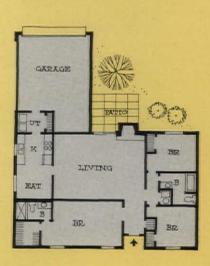


1971 "Accent" line has had its prices cut \$2,000, but there is no cut in size. Lowest priced model in the line is shown at left; it features a large family kitchen (photo, above, plan right). Plan below shows one of several other varieties of living styles available in the line.

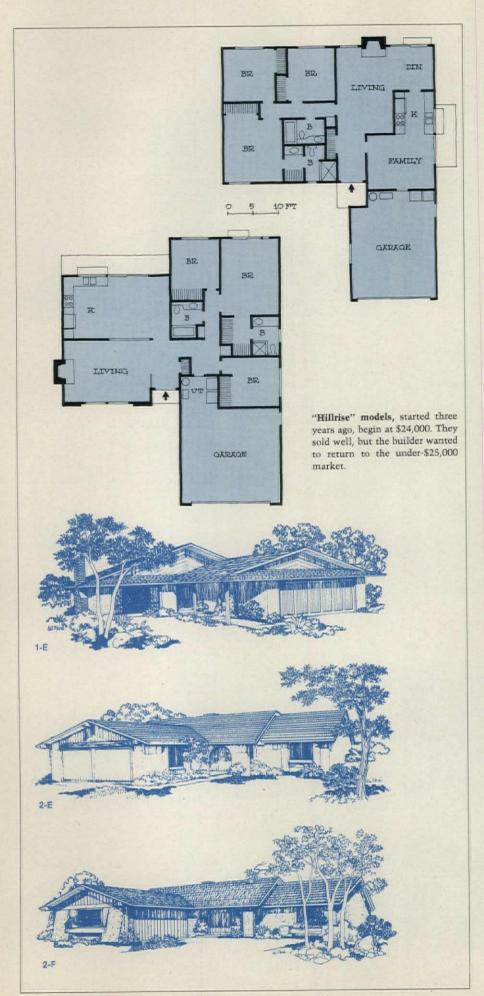




Component factory turns out walls and partitions as well as millwork items like cabinets, railings, etc. Company has recently put greater stress on such pre-site fabrication.



### Barclay Hollander Curci: a new line that starts at \$17,950



A little more than three years ago, BHC Inc. opened a 400-unit project called Hillrise in the Los Angeles suburbs. Prices started at \$24,000, and buyers were offered a choice of five different floor plans, plus a variety of elevations for each plan. And sales went well.

Today, the remaining houses at Hillrise start at \$28,400. But BHC Inc. has returned to the under-\$25,000 market with Venture, a 213-unit project in Saugus, also a Los Angeles suburb. Prices for Venture homes (photos right and below) start at a remarkable \$17,950 and go up to \$22,100. And in the first two months that the project was open, 40 units were sold.

There are two keys to the new low prices: land, and a vastly simplified floor-plan system.

The land situation can best be classified as good fortune. The company was able to buy the lots, fully improved, five years ago. Today, according to vice president Mike Hollander, the lot costs are somewhere between \$3,000 and \$4,000 under the market.



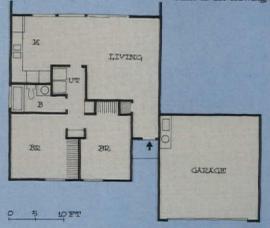
"There will probably never again be a single-family house in the Los Angeles area at this price," says Hollander. "If we were building on lots at current market value, the Venture house prices would have to start above \$21,000."

Even at \$21,000 and up, the Venture program would represent substantial savings. And the chief reason for the savings, as compared to the older Hillside program, is a flexible floor plan that permits one basic layout to become a two-, three- or four-bedroom house. Additional bedrooms are added behind the living room, and only the garage needs to be shifted slightly to accommodate the changes.



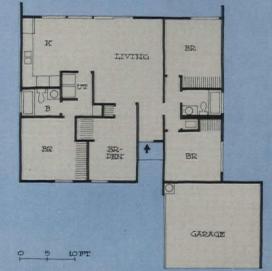


"Venture" models, started early this year, begin at \$17,950. There are two-, three- or four-bedroom models, which are variations of the same basic plan. Different exterior styles are available; one is shown in the photo above; another in the drawing, below, left.



VANGUARD PHOTOGRAPHY





## Centennial Homes: an old line with a price that's \$4,000 lower

The concern that Centennial Homes has for holding as closely as possible to the \$25,000 mark is apparent in the Dallas firm's top-priced "Encore" line. In 1970, the line ranged from \$28,950 to \$32,000; this year it has been pulled back to \$24,950 to \$26,450.

Meanwhile, the company's other two lines, both below \$25,000 last year, have been held at practically their same price levels —"Tomorrow", \$19,950 to \$23,950, and "Tempo," \$18,100. As a result, Centennial expects an excellent 1971 in terms of single-family sales—more than 1,000 houses and close to \$25 million in volume.

Centennial's war on costs is being waged chiefly on two fronts: simplification and increased efficiency. The simplification starts with size: the "Encore" line has been made smaller by from 300 to 400 sq. ft. the other two lines by up to 100 sq. ft.

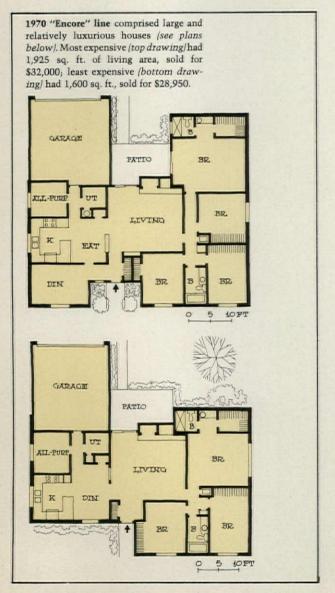
Special architectural trimmings have gone by the board; wingwalls, arches, and various gingerbread items like ornamental iron, turned wood posts, columns, etc.

Wherever possible, materials have been standardized. For example, Centennial now buys only one type of bifold closet door and one type of bathroom hardware for all of its models. In the same vein, fewer colors and finish choices are offered both inside and out. Result: larger purchases of fewer products, hence better prices.

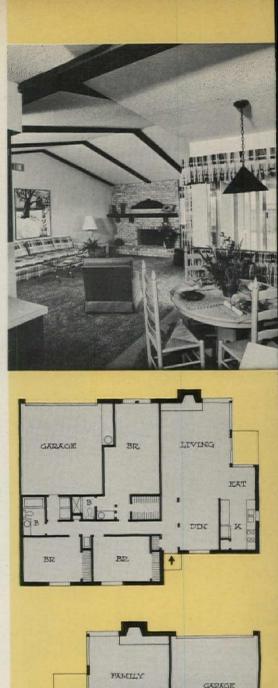
Many luxury items have disappeared. For example, metal doors and windows no longer have gold anodized finishes. Besides dropping material costs, this particular saving also eliminates the masking that goes with special finishes, cutting both labor costs and construction time.

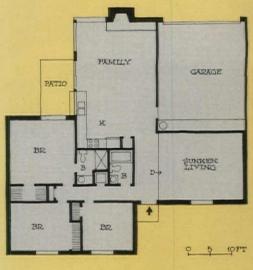
Floor plans have been reworked so that plumbing is more tightly grouped.

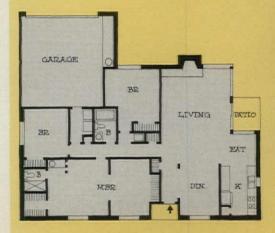
Construction technology has been updated. This year the company is using prestressed slabs rather than poured-in place slabs.



Three of six 1971 "Encore" plans indicate variety of arrangements that are available. Top plan is that of model shown above and on facing page.





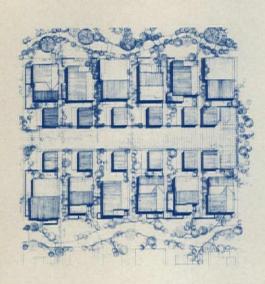




1971 "Encore" line has much smaller, simpler houses, all selling below \$25,000. The model shown here is the top-of-theline, priced at \$24,950.



# Christiana Community Builders: a new line that starts at \$22,900



San Diego is currently one of the hottest housing markets not just in California, but in the whole country, and the houses shown here are just about the hottest items in San Diego.

The line is called Villa Portofino, and it is part of Tierrasanta, a 2,600-acre project that Christiana Community Builders opened in November, 1970. Since then, 320 Villa Portofino units—half of the entire program—have been sold, and there is a waiting list for the second half.

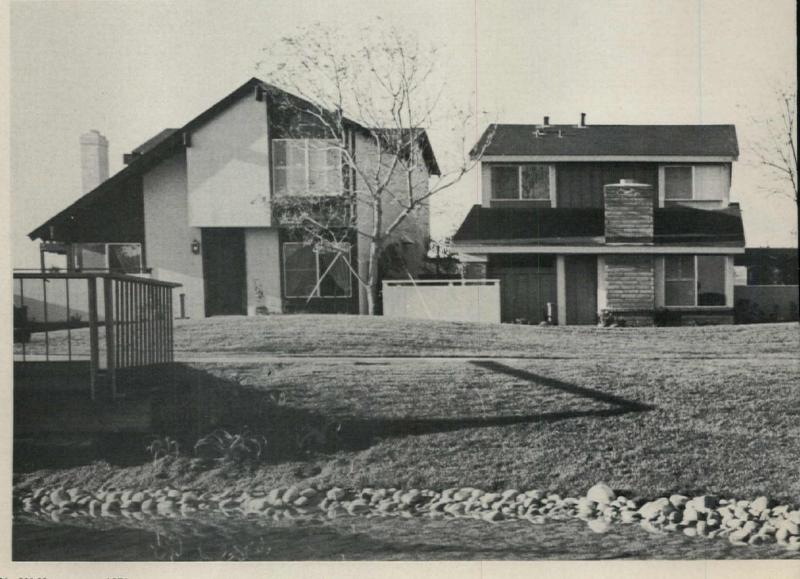
The boom in San Diego has, however, been a mixed blessing for CCB. It has certainly created a volume market, and president Byron Lasky credits this volume with keeping one end of the Villa Portofino line below \$25,000 (the top is currently around \$28,000). On the other hand, demand for labor in San Diego has created a scarcity, so costs—especially framing costs—are rising. CCB has already been forced into one price rise—an average of about \$1,000—since the program opened.

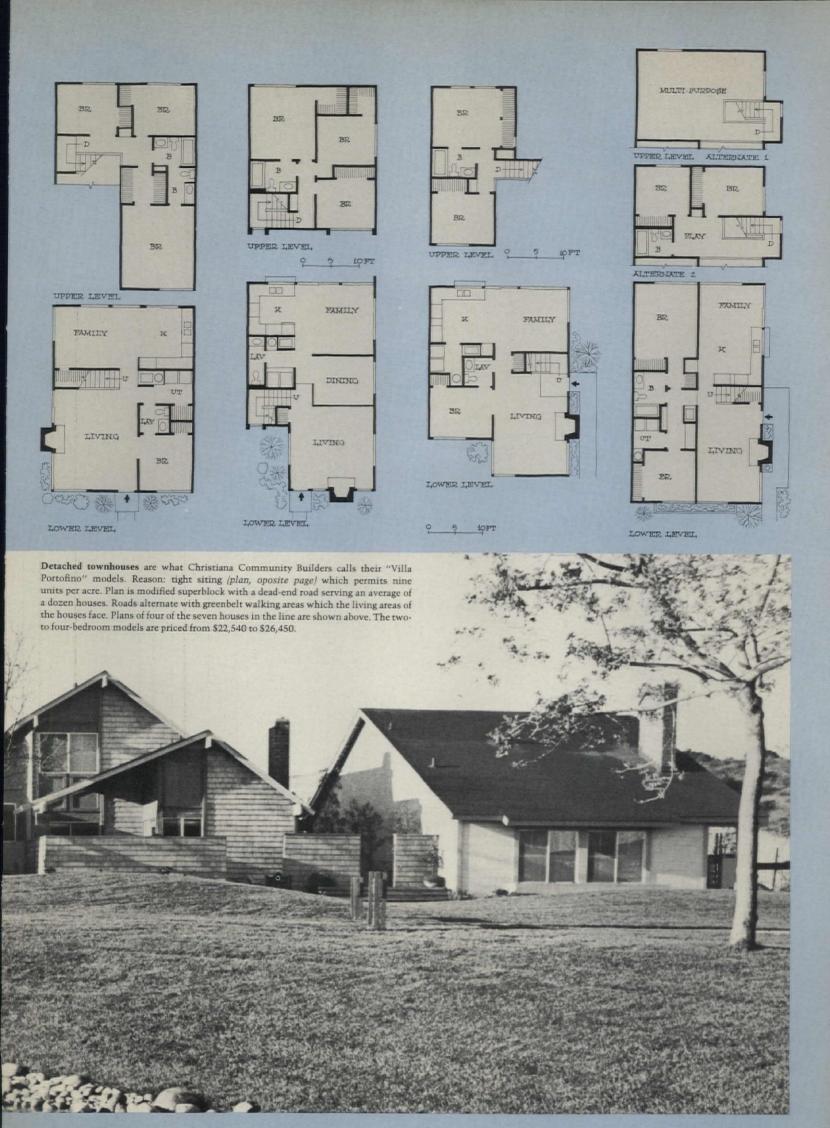
"Contracts are our protection for at least the immediate future," says Lasky. Like Fox & Jacobs, CCB has both labor and materials contracts for 12 months.

On the other hand, the boom has created a high-volume operation at Tierrasanta. Heavy preselling has helped keep advertising and marketing costs down and reduced sales attrition ("you don't have to sell two units to sell one," says Lasky) and made possible larger increments of construction, which also cuts costs. It has also made it possible for CCB to safely cut their profit margin ("We could easily be priced higher," says Lasky).

Villa Portofino's high density—nine per acre—also contributes to the program's low cost, but not to the degree one might imagine.

"Sure, we save on raw land and on road and utility costs," says Lasky. "But a lot of that saving has to go back into landscaping, community parks, and outdoor privacy areas for the houses."





## Remodeling: 3 winners winners

Each one is a problemsolver: how to remodel in stages; how to keep a major renovation in character with an old neighborhood; how to expand on a steep, tight site. And all three won awards in the remodeling category of the 1971 Homes for Better Living program.\*

## Award of Merit

Jones, Peacock, Garn & Partners with William Schickel, designer

Builder/owner:

Jerry Schickel

Location:

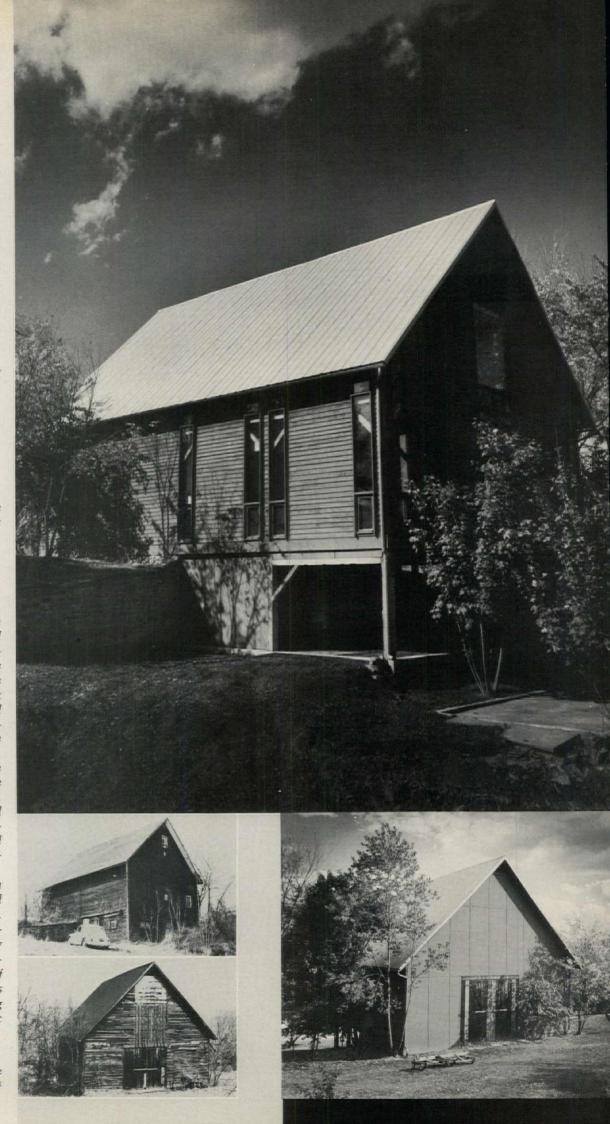
Ithaca, N.Y.

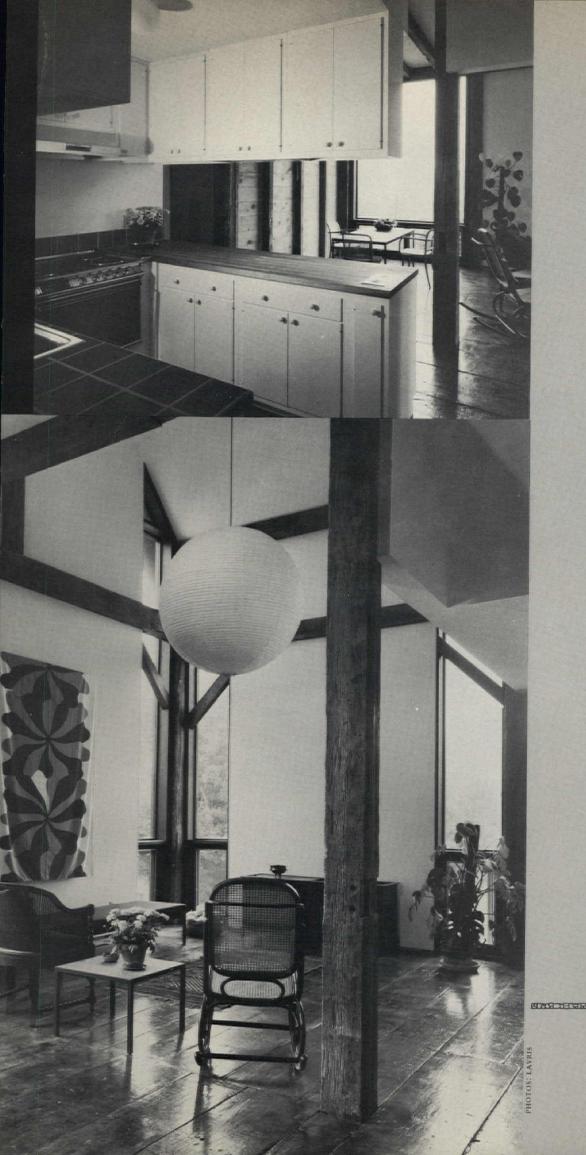
Set into a one-acre hillside site, this partly-remodeled barn overlooks the city of Ithaca and Cornell University. To capitalize on the view, walls were opened by two-story windows -mostly narrow strips that serve both living levels-and by a wide, two-and-one-halfstory window set into the downhill end.

Inside, the loft atmosphere was preserved by opening the living room to the upper level. Framing is exposed and original details highlighted. New construction, such as drywall and kitchen cabinets, was not disguised or made old-looking.

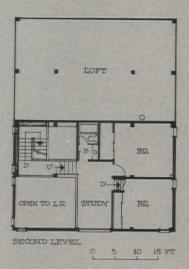
Outside, original siding on three exposures was patched and treated with preservative. The fourth elevation—at the uphill end-has been temporarily enclosed with hardboard (photo, right) until the next phase of building. The owner, acting as general contractor, is working in stages to keep costs down: so far about \$10 persq. ft.

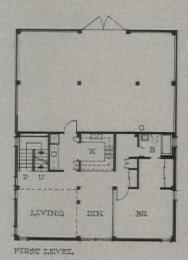
\*Sponsored by The American Institute of Architects in cooperation with House AND HOME and American Home





Three-story plan puts covered entrance patio on the lowest level (bottom), living area and a bedroom at mid-level (center), two bedrooms above (top). Plan shows present use of about one-half of total 2,230 sq. ft. Unused and unheated portion now serves for storage and work space. As family grows and construction proceeds, the empty portions will be converted into sleeping areas.





EAR DECEMBER OF PATION

GROUND LEVEL



## Award of Merit

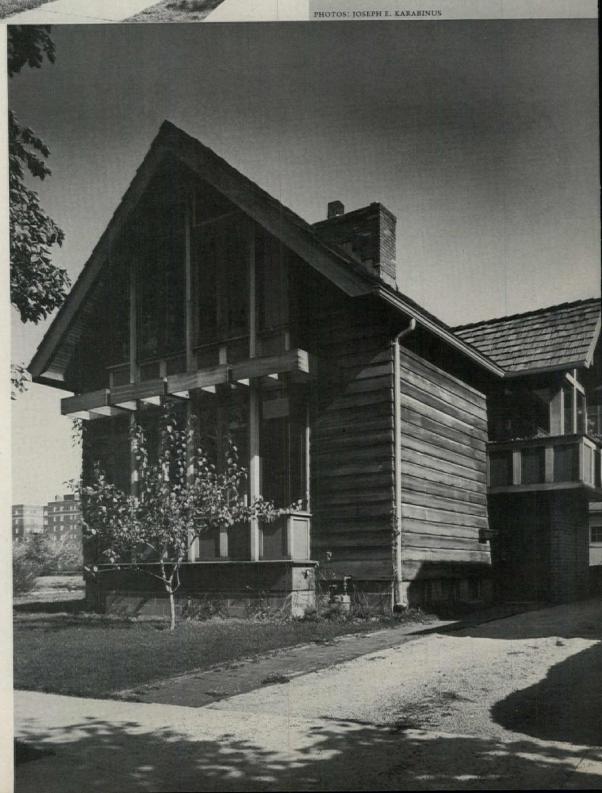
Architect: William D. Koster Builder/owner: R. J. Russell Location: Cleveland

To keep this home in the same scale as its neighbors, the original setback and roof pitch were retained (photos, above center). Otherwise it is a complete transformation.

Glass walls, front and back, bring in daylight; a rear deck provides outdoor living; the entrance is moved to the side and up to the second level; and the exterior has been re-sided in cedar with redwood trim.

The remodeled house is a rarity among HFBL winners—a doit-yourself job by the owners. They opted for the slowly deteriorating neighborhood because of emotional ties and because of its convenience to shopping and transportation.

Working closely with their architect (he provided special easy-to-follow plans) they accomplished the transformation in two-and-one-half years. Because they purchased materials and contracted for outside labor solely as necessary, they only required an initial loan to buy the \$13,000 house. It is now worth \$31,000, and has spurred renovation of another home on the same block.





Two-story plan turns the rear half of house into living areas, up and down, the front half into sleeping rooms, upstairs and down. Master bedroom windows (above right) are sheltered by overhang; rear wall (right) is all glass, looks out on deck

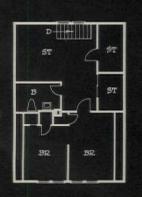


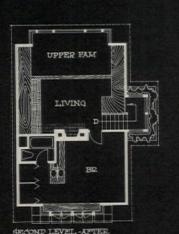


FIRST LEVEL - BEFORE



FIRST LEVEL -AFTER





## Award of Merit

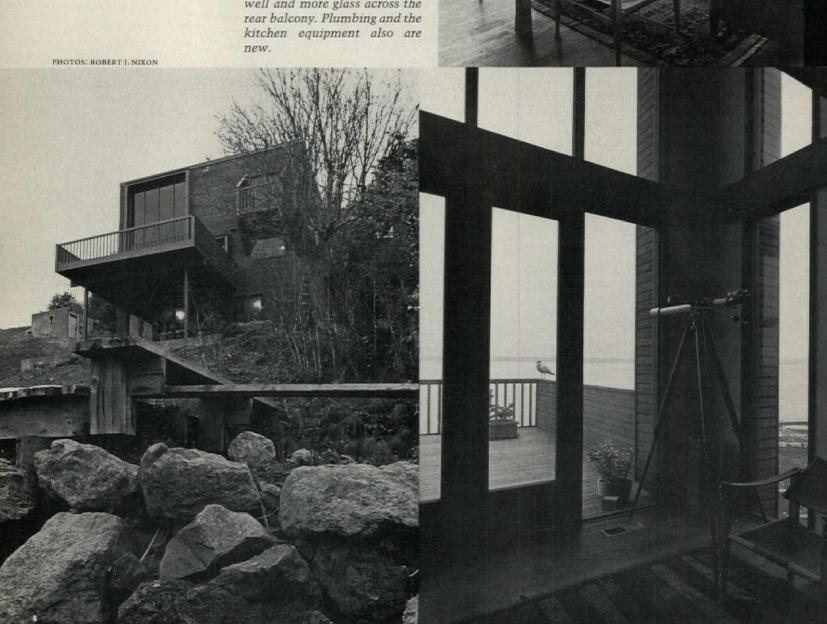
Architect: L. Jane Hastings Builder: Ray Roberts Location: Seattle

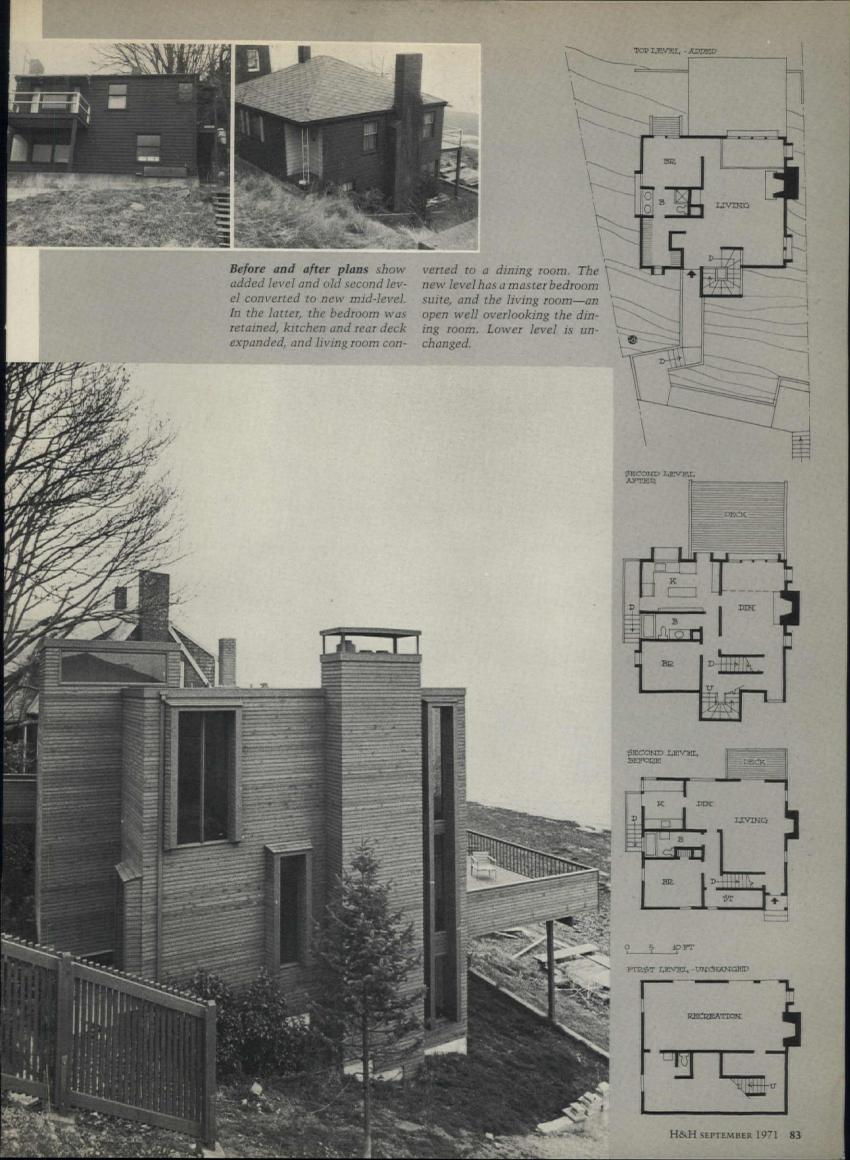
The upward expansion of a rather nondescript two-story house into this striking contemporary was dictated by site problems-clay soil in a slide area and side lot minimum restrictions. Despite these drawbacks, it was worth doing because the beach lot is choice waterfront property.

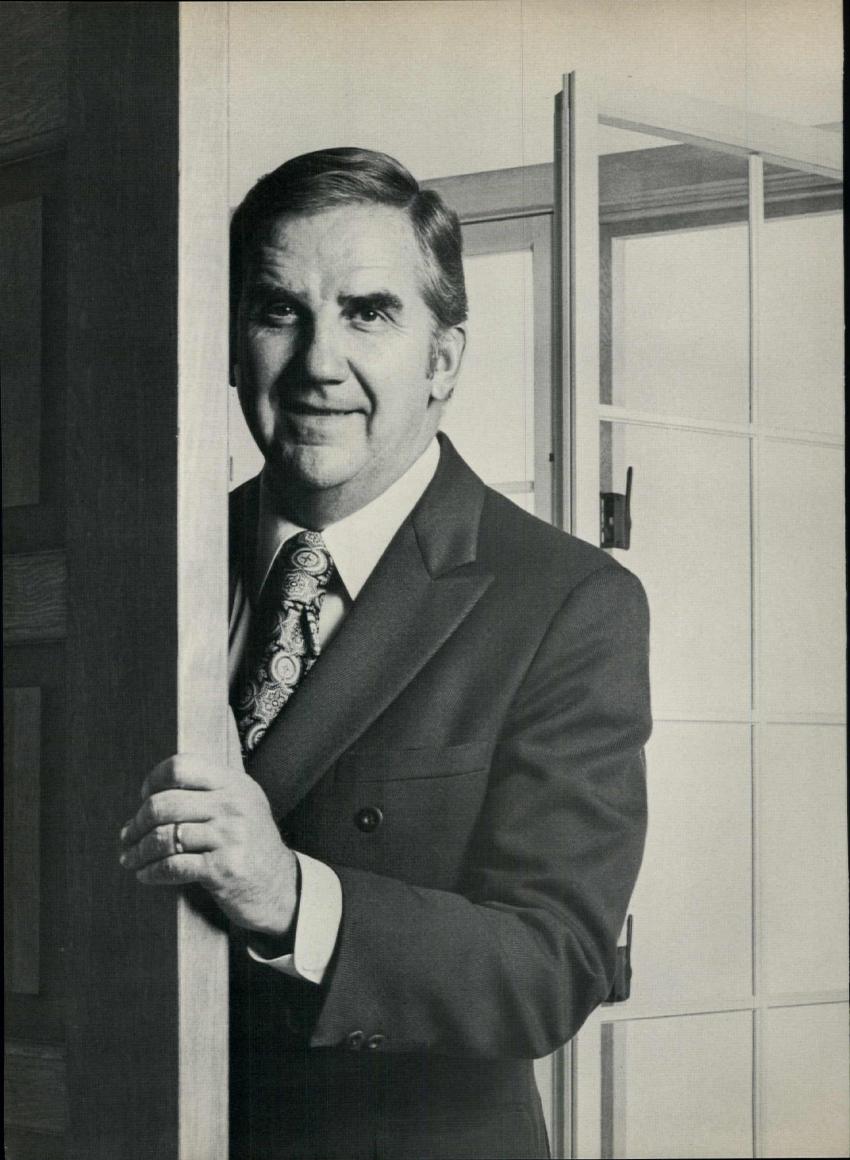
A new floor was added at the former roof height, and a sloped ramp approach was substituted for the former steep trail and steps which led to the entrance. The only horizontal work required was the space allocated for a new stair tower to connect new and existing levels.

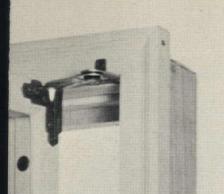
Although the house was resided with cedar, exterior openings remain in the same locations. New sash framing was installed and eyebrows and blinders added for privacy.

The all-new interiors have been opened up by a two-story well and more glass across the









# Ed's working for you again this fall.

Ed McMahon is back on NBC Weekend Monitor to help you by pre-selling your customers on the quality features in today's new homes.

He's hosting a new fall series of "Celebrity Homes" guest interviews sponsored by the members of Ponderosa Pine Woodwork. Every Saturday and Sunday, from September 4 through October 10, millions of listeners will hear Ed's guests talk about homes and home decorating ideas—the things that interest your customers.

Along with each interview, he'll be giving prospective homeowners useful tips that'll help them see the quality in the houses and apartments you build. Among the most important things he'll talk about are the benefits of wood windows and wood panel doors.

#### Wood windows help control condensation.

Homeowners know that modern wood windows help prevent heat loss. With insulating glass, wood windows control temperature so well that no storm windows are needed. And when it's cold outside, the wood sash stays dry on the inside. This helps reduce condensation that can mess up walls and drapes.

#### Wood windows make living easier.

Modern wood windows are precision fitted so they open and close easily. They're chemically treated to last a housetime. And they're fully weather-stripped to prevent annoying drafts. They're even designed to make window washing a lot quicker and easier. These are benefits that home buyers understand—and look for.

#### Wood panel doors add character.

Homeowners consider wood panel doors a sign of taste and individuality. Interior panel doors can carry a single design theme from the entrance, throughout the home. The distinctive beauty of a panel door gives each room a lot more character. And panel doors are durable, too.

#### There's a lot to choose from.

It's easy to use doors to create interest, because there's a beautiful wood panel door to complement any home design. Spanish, modern, traditional, contemporary, colonial—even louvered doors and Dutch doors. There are 65 different choices for exterior panel doors, and dozens more for interiors. This means you can vary your door designs from home to home to give each home its own individuality.

#### Tune in with your customers.

Be listening when "Celebrity Homes", introduced by Ponderosa Pine Woodwork last April and May, returns to NBC Weekend Monitor this fall. Ed McMahon will be reminding your customers why they should insist on wood windows and wood panel doors.

Stay tuned to NBC Weekend Monitor. You'll see what we mean.



39 S. La Salle Chicago, III, 60603

A member of the American Wood Council

## massive study of 184,122 sales leads from House & Home readers confirms that sales action in housing & light construction comes from every segment of the industry

To identify all the important people in housing and light construction who are active in the selection of building products, materials, and equipment, House & Home followed up 184,122 advertising inquiries from its reader service cards and received a 31 % return involving 57,327 inquiries.

Survey questions were designed to determine what, if any, "sales actions" were taken as a result of readers having seen advertisements in several issues of House & Home.

SALES ACTIONS TRICGERED BY ADVERTISING

For the purpose of this study, "sales actions"that is, those actions bringing products and prospects closer to a sale-have been defined as specifying, recommending, approving, purchasing, and still investigating further.

Results indicate in the clearest possible manner that sales action comes from every segment of the industry, as shown in the table below.

Literature Requested by Readers Surveyed 37,609	Literature Requested by Survey Respondents	Literature Received by Survey Respondents	Specified Product	Recom- mended Product	Approved Product	Purchased Product	Still Investigat- ing Product	Total Sales Actions	Sales Actions as % of Literature Received
	13,073	11 584							Actions as % of Literature
70 270		11,004	1,940	1,917	1,321	397	3,039	8,614	74.4%
10,219	23,001	19,939	1,781	2,251	2,069	2,518	6,604	15,223	76.3%
3,269	1,071	934	74	105	54	57	334	624	66.8%
5,908	2,254	1,959	151	237	118	105	627	1,238	63.2%
2,976	1,165	1,051	57	115	48	57	364	641	61.0%
3,643	1,645	1,432	69	146	87	60	411	773	54.0%
7,616	2,514	2,262	152	249	207	147	850	1,605	71.0%
3,689	889	752	80	92	64	97	221	554	73.7%
6,520	1,811	1,574	132	178	141	203	490	1,144	72.7%
2,071	658	564	32	64	40	40	189	365	64.7%
32,542	9,246	8,013	555	870	560	434	2,536	4,955	61.8%
184,122	57,327	50,064	5,023	6,224	4,709	4,115	15,665	35,736	71.4%
	5,908 2,976 3,643 7,616 3,689 6,520 2,071 32,542	3,269 1,071 5,908 2,254 2,976 1,165 3,643 1,645 7,616 2,514 3,689 889 6,520 1,811 2,071 658 32,542 9,246	3,269     1,071     934       5,908     2,254     1,959       2,976     1,165     1,051       3,643     1,645     1,432       7,616     2,514     2,262       3,689     889     752       6,520     1,811     1,574       2,071     658     564       32,542     9,246     8,013	3,269     1,071     934     74       5,908     2,254     1,959     151       2,976     1,165     1,051     57       3,643     1,645     1,432     69       7,616     2,514     2,262     152       3,689     889     752     80       6,520     1,811     1,574     132       2,071     658     564     32       32,542     9,246     8,013     555	3,269     1,071     934     74     105       5,908     2,254     1,959     151     237       2,976     1,165     1,051     57     115       3,643     1,645     1,432     69     146       7,616     2,514     2,262     152     249       3,689     889     752     80     92       6,520     1,811     1,574     132     178       2,071     658     564     32     64       32,542     9,246     8,013     555     870	3,269     1,071     934     74     105     54       5,908     2,254     1,959     151     237     118       2,976     1,165     1,051     57     115     48       3,643     1,645     1,432     69     146     87       7,616     2,514     2,262     152     249     207       3,689     889     752     80     92     64       6,520     1,811     1,574     132     178     141       2,071     658     564     32     64     40       32,542     9,246     8,013     555     870     560	3,269       1,071       934       74       105       54       57         5,908       2,254       1,959       151       237       118       105         2,976       1,165       1,051       57       115       48       57         3,643       1,645       1,432       69       146       87       60         7,616       2,514       2,262       152       249       207       147         3,689       889       752       80       92       64       97         6,520       1,811       1,574       132       178       141       203         2,071       658       564       32       64       40       40         32,542       9,246       8,013       555       870       560       434	3,269       1,071       934       74       105       54       57       334         5,908       2,254       1,959       151       237       118       105       627         2,976       1,165       1,051       57       115       48       57       364         3,643       1,645       1,432       69       146       87       60       411         7,616       2,514       2,262       152       249       207       147       850         3,689       889       752       80       92       64       97       221         6,520       1,811       1,574       132       178       141       203       490         2,071       658       564       32       64       40       40       189         32,542       9,246       8,013       555       870       560       434       2,536	3,269     1,071     934     74     105     54     57     334     624       5,908     2,254     1,959     151     237     118     105     627     1,238       2,976     1,165     1,051     57     115     48     57     364     641       3,643     1,645     1,432     69     146     87     60     411     773       7,616     2,514     2,262     152     249     207     147     850     1,605       3,689     889     752     80     92     64     97     221     554       6,520     1,811     1,574     132     178     141     203     490     1,144       2,071     658     564     32     64     40     40     189     365       32,542     9,246     8,013     555     870     560     434     2,536     4,955

McGraw-Hill's marketing and management publication of housing and House&F 330 West 42nd Street, New York, N.Y. 10036



That's why John Hall, big builder in four hot housing markets, has installed 17,000 U/R fiberglass baths in his Hallcraft Homes.

"In Phoenix, Denver, San Diego and the San Francisco Bay area, we face heavy competition. U/R fiberglass units help keep us competitive, for they provide a luxury look, are easy to install, and save on labor costs." John Hall, Chairman of the Board, Hallcraft Homes, Inc., Phoenix, Arizona.

Fifty-nine other big builders agree with John Hall! Universal-Rundle fiberglass

baths, color matched to the complete U/R bathroom fixture line, help sell homes.

Cuts installation costs. Just set the lightweight one-piece fiberglass tub/ shower unit into framing, nail the flanges, and it's ready for plumbing hook-up. Slashes time and cost of installation. No tiles, no grouting, no callbacks! U/R gloss-finished fiberglass baths are leakproof, stainproof, chip-resistant-all salable features in any new home.

Scrubless/scourless cleanability. The clean sweep of fiberglass that cleans in one sweep presents powerful sales appeal to the prospective lady of the

house. The man who pays the bills picks up his ears at "maintenance-free." And everybody loves a tub that's warm to the touch year 'round!

No wonder big builders across the country are finding these and other U/R features persuasive factors in selling new homes.

Go with the leader. Go U/R. We ship promptly anywhere. Pack carefully for damage-free delivery on site. Get full information, promotional sales tools and much more. Check your Yellow Pages for your

nearest U/R dealer, or write Universal-Rundle Corporation, New Castle, Pa. 16103.

## Universal-Rundle







## A play system that respects design, environment, and children

The designs of TimberForm play units are based on the premise that the child is the ultimate appraiser of quality in a play facility. Therefore, the play units and stepping columns allow the child maximum

freedom within the play environment, while at the same time offering a safe, flexible, and adaptable play area. The units shown are made of 12" x 12" Douglas fir timbers rounded, sanded, and finished for safety. The thoughts and movements of the child dictate the design of TimberForm play areas. For instance, units are designed to eliminate the unnatural and often dangerous contortions children go

through on ordinary play apparatus. Many designs are available in this modular system. There is also a custom design service. Timber-Form, Portland, Ore.

CIRCLE 260 ON READER SERVICE CARD



Ceramic tiles have a glazed rustic finish and feature non-identical color tones in a variety of warm, natural colors. The tiles-which measure 8" x 4" x 1/2"—are part of CIRCLE 261 ON READER SERVICE CARD

the "Life Style" series and offer beauty as well as easy maintenance. Distributed in U.S. for Buchtal by Amsterdam Corp., New York City.

Factory-assembled plumbing units

come ready for installation by simple hook-ups. "Redi-Walls" contain all drain, waste, vent piping, water distribution lines, shower head supply pipe, main stack and vent stack connecting pieces preconnected and mounted in a selfcontained wall frame. In single full-bath, back-to-back with second bath, kitchen or laundry. Centaur Plumbing, Wickliffe, Ohio.

CIRCLE 262 ON READER SERVICE CARD

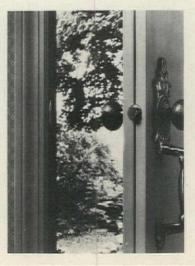


Fiberglass bath module comes in two sizes: 5'4" x 6' or 5' x 8' inside dimension. No on-site finishing is required for wall, ceiling, or floor surfaces. The modules come with or without plumbing, electrical units, mirrors, and rugs. The units were designed for the Omniform total building system, but can also be used in conventional construction. Omniform, Hartford, Conn.

CIRCLE 263 ON READER SERVICE CARD



Insulated double-hung window ends moisture formation and eliminates the need for a storm sash. Instead of ropes or chains, a concealed sash balance keeps the window tight and free of rattles. Rigid vinyl parts prevent condensation by separating outside and inside aluminum members. Sashes can be removed from inside for cleaning. Grilles and screens are available. Alcoa, Pittsburgh, Pa. CIRCLE 264 ON READER SERVICE CARD



Thermal break is a built-in slot between the interior and exterior faces of this foam-core steel door that insures that no temperature transfer can take place between the two faces of the door. The door also has magnetic weatherstripping (similar to a refrigerator's) and an adjustable sill and is warp-, sag-, and swellproof. Ever/Strait, Hamilton, Ohio.

CIRCLE 265 ON READER SERVICE CARD

## Skil's Kimosabe Sale.



Buy a Skil power tool and get the tool's faithful companion free-the accessories especially designed for these tools. Includes blades with saws, carbide bits with Roto-Hammers, and lots more. But look over the list and see for yourself.

Notice, too, these tools are right out of Skil's regular catalog, the models you need the most and use the hardest. And every one comes with a big companion bonus that costs you nothing extra.

#### Saws.

Free with the purchase of any of the Skilsaw power saws listed below, your choice of \$10 worth of these accessories:

Alloy steel saw Carrying cases. blades. Rip fences. Teflon coated saw Miter guides. blades. Jig saw blades. Diamond grit blades. Recipro saw Safety cut-off wheels. blades.

Circular saws. Recipro Saws. Model 700. Model 700-1 kit. Model 367. Model 77. Model 825. Model 701-1 kit. Model 107. Model 703-1 kit. Model 856. Model 474. Model 857. Model 472. Model 858. Model 72883 kit. Model 860.

Jig Saw. Model 160.

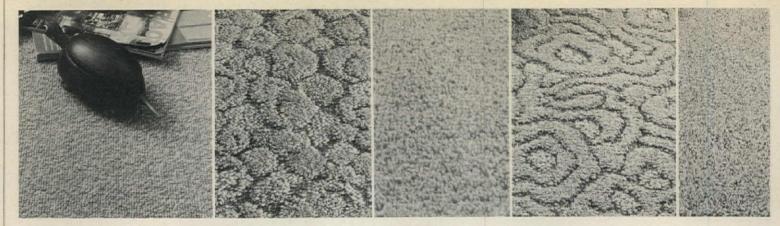
#### Roto-Hammers.

Free carbide bits, with full performance guarantee, with these Roto-Hammers.

Model 706. Free! \$25 in carbide bits. Model 726. Free! \$40 in carbide bits. Model 728. Free! \$60 in carbide bits. Model 736. Free! \$80 in carbide bits.

> Nobody was ever sorry he bought the best there is.

#### PRODUCTS/FLOORING



## Carpets to order: any fiber in any construction for any use

As an example of the wide variety of carpets now available, the five carpets shown above are from just one manufacturer's new lines. They include a polypropylene for commercial use, a high-low pattern in nylon, a thick polyester plush, a multi-level wool, and a nylon twist.

And each is designed for long wear. The (Herculon) polypropylene has colorfast yarn, keeps static down, resists soil, abrasion, mildew. The (Cumuloft) nylon has a swirling pattern that hides dirt, and it is non-allergenic. The (Kodel) polyester has fat yarn that will retain

the pile density. The wool is a longwearing multi-level construction and is treated against moths. The nylon twist looks like a shag but is sturdy enough for hard wear. All are from C. H. Masland, Carlisle. Pa.

CIRCLE 200 ON READER SERVICE CARD



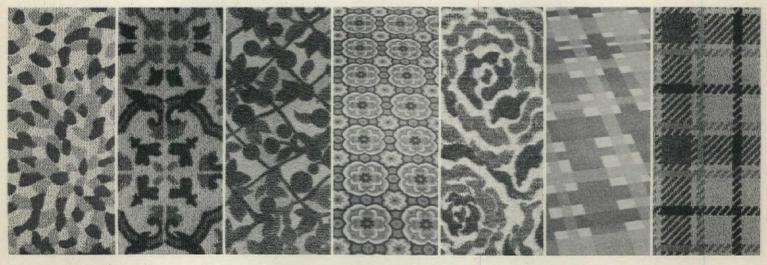


Nylon shags include "Executive Touch" (left) by D&M of Enkaloft; "Overture" (above left) and "Fire and Ice" (above right) by Amtico of Allied Chemical's spun yarn; and "Painted Valley" (right)



by James of Enkaloft. Three come in a dozen four-tone colorations, the fourth is a solid in 20 colors. American Enka, New York City. Amtico, Trenton, N.J. CIRCLE 201 OR 202 ON READER SERVICE CARD





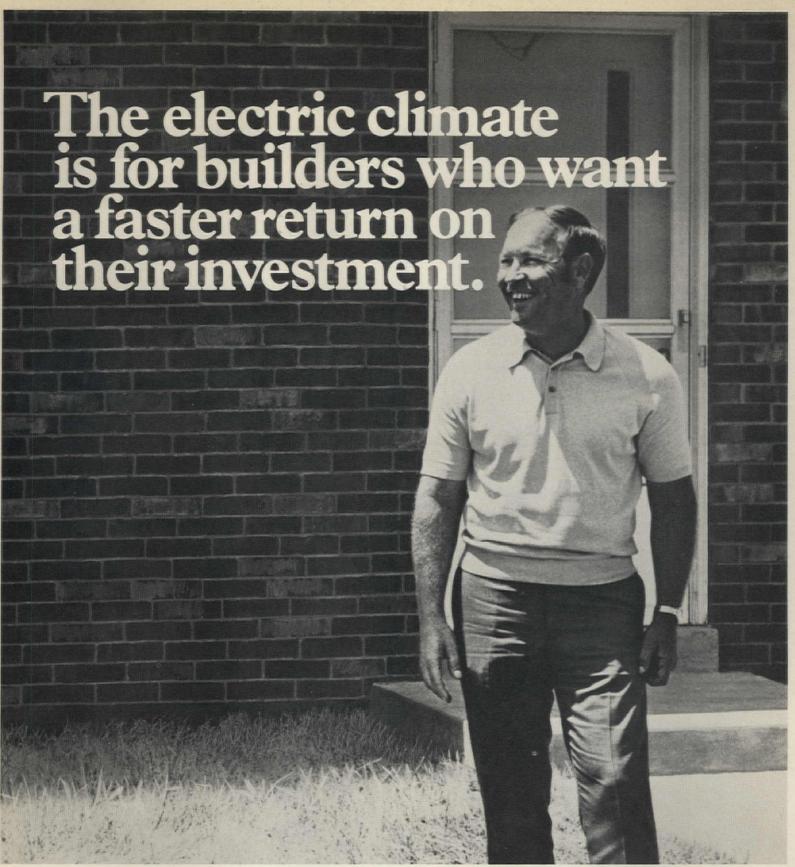
## A passel of prints-all on longwearing tufted nylon carpeting

From traditional to contemporary, the seven designs above are only a minute sampling of the variety of printed nylon carpets that have become available just in the last two or three years.

From left to right are: 1) a leaflike abstract by Walter of DuPont's Antron; 2) a Delft-tile pattern and 3) a floral by Lees of Antron II; 4) floral medallions by Congoleum of Antron II; 5) an abstract floral by Walter of Monsanto's Cadon; and 6, 7) two plaids-one by Congoleum, the other by Lees-both of Antron II.

All are highly resistant to soil. Some have high density foam back-

ing for use in high traffic areas. And most are antistatic, especially those of Antron II which is made with a metal twist. Retail prices are about \$10 psy. Walter Carpet Mills, City of Industry, Calif. Lees Carpets, Norristown, Pa. Congoleum Industries, Kearney, N.J. CIRCLE 203, 204, OR 205 ON READER SERVICE CARD



The electric climate's unique benefits convinced Albert Miller to try it in 16 units-now he's putting it in 50 more!

Those first 16 total-electric units made Albert Miller of Lexington, Ky., a solid believer in the electric climate. Installing everything electric, including the heat, gave him several benefits.

"For one thing," Mr. Miller says, "I discovered that I can build totalelectric houses faster because electric equipment is easier and faster to in-

stall. In fact, it speeds up my construction by two weeks to a month in the winter! So I save time and labor costs. How do they sell? As fast as I can build them! I've got 50 more units going up now!"

Make this your year to discover the exclusive benefits of the electric climate. Talk to your electric utility company today.

"Awarded to homes exemplifying electrical excellence



Live better electrically

## We build a Cargostar the

When you think about it, our trucks and your foundations have a great deal in common.

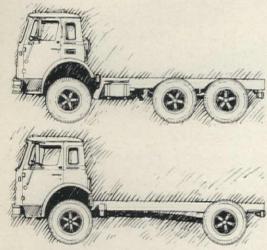
They both have to be the perfect size

for whatever you're planning.

And they both have to be built to carry whatever it pleases you to pile on top of them.



## same way you build a foundation.



That's why the International CARGOSTAR® is so right for your kind of work.

There are ten basic Cargostar models for you to choose from. Their GVW'S go from 19,500 to 46,000 lbs. And their GCW'S range from 30,000 to 65,000 lbs.

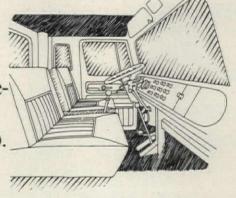
Whichever you choose, its tilt-cab will give you maximum accessibility for quick and easy servicing. It will have a wide-track front axle for better maneuverability. And tremendous cooling capacity. Its engine will be any of our many efficient gas or diesel engines. And it will have what is best in the way of frame, transmission, heavy-duty clutch, single or tandem rear axles and air or hydraulic brakes to meet your job requirements.

So you just go ahead and pile on the

bricks and blocks and mortar and lumber. It can take it.

Take it wherever you want. Down the road and onto the construction site. Or downtown where the traffic is tighter than knotty oak and where maneuverability and visibility pay off like a four-arm carpenter.

The inside of the Cargostar cab is something to behold, too. Flat floor, no engine

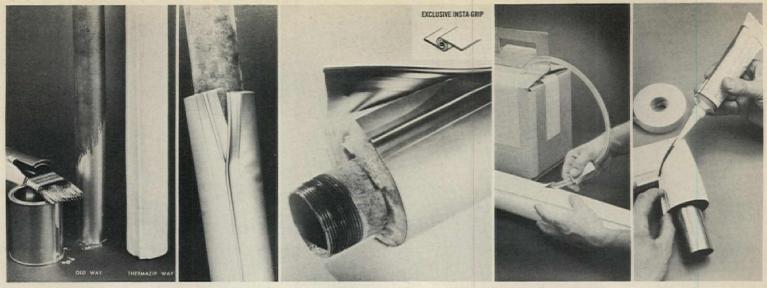


doghouse. Plenty of room for the driver and even a couple of crew people.

The International Cargostar really is a foundation of sorts. After all, when you're trying to keep a going business profitable, trucks that work long and hard can make an important contribution to your margin. The Cargostar might be just what you need to build a dream on.

Your International dealer can help you build the perfect Cargostar.





### Snap-on jacket insulates pipes—thermally and acoustically

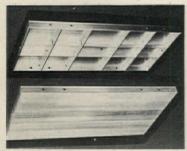
Thermazip does away with messy -and repeated-painting, insulates pipes, and muffles sound. The jacketing, which comes on 25' rolls, can be cut to the right length. It snaps on-instantly-and can

be permanently sealed or left open regularly shaped pipes, additional for future access. It covers up rust or corrosion, and the insulating layer keeps in-or out-temperatures of from zero° to 180° (urethane foam) or 400° (fiberglass). For ir-

urethane foam can be injected to prevent hot or cold spots. And to provide a moisture barrier, a silicone sealant bonds foam insulation at elbows or joints. The vinyl skin

-white for interiors, gray for outside or burial-can be taped closed at joints, never needs painting, can be hosed clean. Fits pipes 3/8" to 12". Thermazip, Los Angeles.

CIRCLE 206 ON READER SERVICE CARD



Concrete forms of aluminum alloy, have tempered surfaces that won't easily scratch or gouge. They leave no imprints-unlike plywood forms except for tiny fin marks where forms butt, and even these are nearly invisible from ten feet away. Lightweight forms-8' x 2" size weighs 50 lbs.-can be handled by one man, will take more than 500 pours. Gorbett, Ft. Worth, Tex. CIRCLE 207 ON READER SERVICE CARD



Extra long insulation panels can be custom-made to any length. At left above is one more than 20' long. They are so lightweight, one man can easily carry three 15' panels as shown at right above. "Superlong" panels, 1/2" to 3" thick,

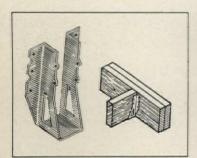


have urethane core bonded to skins of reflective aluminum or heavy duty paper. They reduce joints by two-thirds, can cut heat loss or gain by 90%, and eliminate moisture barriers. Apache, Linden, N.J. CIRCLE 208 ON READER SERVICE CARD



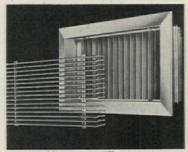
Stainless steel chimney with an insulation layer in the 1" space between inner and outer pipes, can be installed just 2" clear of combustible materials. "Metlvent" sections stack up, are locked together with slip rings. For gas, oil, coal, or wood-fired furnaces, boilers, fireplaces, incinerators, water heaters, or stoves. Hart & Cooley, Holland, Mich.

CIRCLE 209 ON READER SERVICE CARD

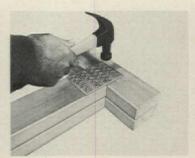


Joist hanger saves time and materials, makes floor and ceiling connections neat and efficient, and eliminates shimming. "Teco-U-Grip" hangers of zinc-coated steel, from 18 to 24 gauge, come in sizes to hold lumber from 2 x 4 to double 2 x 14. Each size is engineered for the load it will carry. Timber Engineering, Washington, D.C.

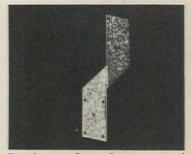
CIRCLE 210 ON READER SERVICE CARD



Removable core grille, easy to attach to duct in wall, sill, or ceiling, can be removed without disturbing paint seal between margin and wall. "Versaflex" grilles have aluminum bars and hidden fastenings. Horizontal face louvers can be reversed. Rear louvers are individually adjustable. Up to 36" x 18". Tuttle & Bailey, New Britain, Conn. CIRCLE 211 ON READER SERVICE CARD



Top plate tie saves time and money, eliminates measuring and cutting. Zinc-coated steel clip is simply laid over the joint and applied with a hammer. It will hold together component panels, partitions, wall and partition intersections, and it takes a heavier load-more than a ton-than conventional nails. Panel-Clip, Farmington, Mich. CIRCLE 212 ON READER SERVICE CARD



Framing anchor of symmetrical design saves time and money: since there is no top or bottom, it can be nailed either way up; and because there are no lefts or rights, stock orders are simplified. Hurricane clip is also long enough to anchor into the bottom wall plate, so it is stronger. Alpine Engineered Products, Pompano Beach, Fla.

CIRCLE 213 ON READER SERVICE CARD

# "You can find a lot of peace and quiet out in Ogden, Utah. Even when the dishwasher's running."

"Our tenants tell us that KitchenAid is the quietest dishwasher. That's important in an apartment," explains Doran Barlow, manager of the Christopher Apartments in Ogden, Utah.

The apartment complex is nestled in the Wasatch Range of the Rocky Mountains. From your patio you can see Mt. Ben Lomond, which rises to 10,900 feet, and beyond that, Mt. Ogden, which is 9,575 feet above sea level. The view is breathtaking. The mood is peaceful.

"My wife and I did quite a bit of personal research to find the appliances we thought the tenants would prefer," says Mr. Barlow. "We wanted the best. So we chose KitchenAid dishwashers for all 112 apartments.

"One lady told me, 'When I saw the apartments with KitchenAid, I said I want that!"

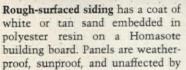
"The countryside, the apartments, the appliances — everything is first class," says Mr. Barlow.

Ask your KitchenAid distributor about his builder plan. Or write KitchenAid Dishwashers, Dept. 1DS-9, The Hobart Manufacturing Company, Troy, Ohio 45373.



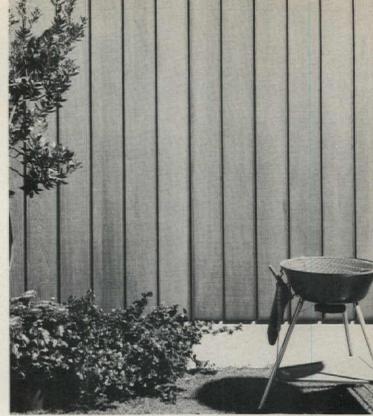
#### PRODUCTS/EXTERIORS





temperature changes. "Sand-A-Sote" panels are 1/2" thick, come 4'x8', 10', or 12'. Homasote, Trenton, N.I.

CIRCLE 214 ON READER SERVICE CARD



Redwood plywood panels are the newest in a line of seven roughsawn patterns. They have an inverted batten, 8" o.c., with deep cut channels 1" wide. Panels are

5/8" thick, come 4'x8', 9', or 10', have shiplap edge for easy installation, and are waterproofed. Simpson Timber, Seattle, Wash.

CIRCLE 217 ON READER SERVICE CARD



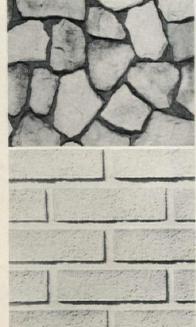
Aluminum strip ventilator does away with hole cutting for individual vents, is installed like a board at the same time as the soffit. "Trimvent" can be used flush or recessed, comes unpainted or prefinished white, is 213/16" wide and 4' or 8' long. Leigh Products, Coopersville, Mich.

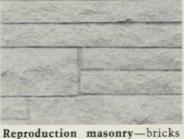
CIRCLE 215 ON READER SERVICE CARD



Wood-textured siding has an embossed surface that looks like woodgrain, but it is solid vinyl for low maintenance. "Weather-Tex" 8" siding comes in standard white, gray, and green, as well as a new lemon yellow. Bird & Son, East Walpole, Mass.

CIRCLE 218 ON READER SERVICE CARD





(left), fieldstone (left above), and Georgian marble (right above) looks and feels like the real thing. But all are lightweight polyester that is fire retardant and colorfast. Suitable for use outdoors or inside, it can be cut to fit, is easily applied with mastic to any dry surfaceeven a concrete block wall-in family rooms and on fireplaces, terraces, or barbecues. Plastronics, West Yarmouth, Mass.

CIRCLE 216 ON READER SERVICE CARD



Aggregate wall surfacing can vary in color and texture. The bedcoat is color-blended on the job and gunapplied in a smooth or rough surface. Then the quartz, granite, marble, or glass aggregate, in a color to complement or contrast with the bedcoat, is sprayed on. Finestone, Detroit, Mich.

CIRCLE 219 ON READER SERVICE CARD





In today's construction-money pinch, Gerber plumbing fixtures can spread your dollars further.

They offer instantly appealing design and the kind of quality features usually found only in far more expensive lines. And sensible prices that mean substantial savings on fixture costs.

Add to this the money you save through ingenious Gerber installation features,

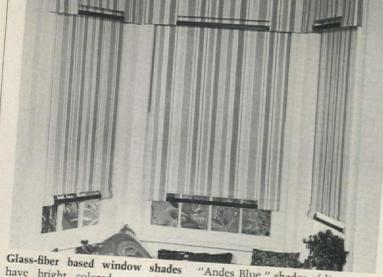
and it can total a hefty bonus. Often enough to provide the fixtures for an extra powder room like the one above (sometimes even more).

Gerber makes a complete line of plumbing fixtures and brass. Compare them feature for feature, dollar for dollar with any others and see the bonus you get. It could help fill a room. Write for information. Gerber Plumbing Fixtures Corp., 4656 W. Touhy Ave., Chicago, 111. 60646.

Spread extra luxury without thinning your profits

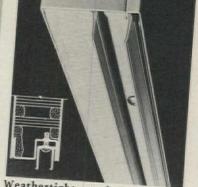


1-2138



have bright colored matte-finish stripes on a white texture. "Peruvian Stripes" comes in three colorways: "Inca Gold," bright yellow with chartreuse, "Lima Tangerine," shades of orange with yellow, and

"Andes Blue," shades of lime with blue. The room darkening shades of "Triglas II" are durable, colorfast, and washable. In widths up to 72"; uniformly white on the outside. Stauffer Chemical, New York City. CIRCLE 220 ON READER SERVICE CARD



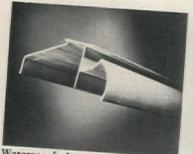
Weathertight steel door has a flexible vinyl extrusion that can be adjusted to conform to varying floor levels to seal gaps between the door and threshold. The weatherseal may be adjusted while the door is on its hinges simply by adjusting three screws (photo and section above), which allow a variance up to 9/16". A variety of steel doors is offered with the built-in weatherseal at no extra cost. Perma-Door, Cincinnati, Ohio.

CIRCLE 224 ON READER SERVICE CARD



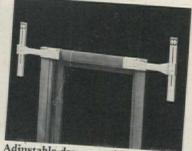
Weatherstripped mullions are extruded aluminum with silicone weatherstrip pile bonded to a polypropylene backing. The pile serves the added purpose of a silencer as the door is closed. Stabilizers are provided to prevent movement of the mullion next to a closed door. "Poly-Pile" weatherstripping will not rot, mildew, or disintegrate in salty or polluted air according to the manufacturer. Von Duprin, Indianapolis, Ind.

CIRCLE 225 ON READER SERVICE CARD



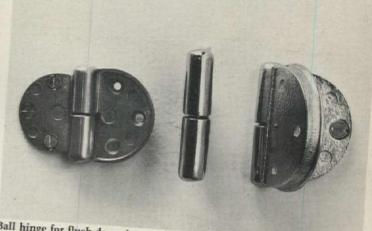
Waterproof threshold is 134" high for use on exterior doors. The added height is for protection of extra deep carpet piles from water seepage around doors. A water seal is formed by hooking the extended lip on the threshold to the j-hook, which is attached to the bottom of the door. A water-drain channel collects water and drains it through interior and exterior weep holes, eliminating flooding. Empire Metal, Los Angeles.

CIRCLE 221 ON READER SERVICE CARD



Adjustable drapery rod bracket permits installation of traverse rods without measuring, boring holes in walls, or using toggle bolts. All standard drapery hardware can be used with "Fit-Right" brackets which install on windows with or without frames. The heavy gauge steel brackets have a white, bakedon enamel finish and adjust up to 8" outward from either side, and up to 10" upward. Convenience, Sum-

CIRCLE 222 ON READER SERVICE CARD



Ball hinge for flush doors has a segmented circular hinge leave that is easily recessed in the jamb. The other leave is flush mounted on the door and fits into the recessed leave when the door is closed. Of brass or

silumin (an aluminum/siliconium/ copper alloy that is corrosion resistant), the imported hinges come in several polished or satin finishes. Solifer, Productsource, Boston. CIRCLE 226 ON READER SERVICE CARD

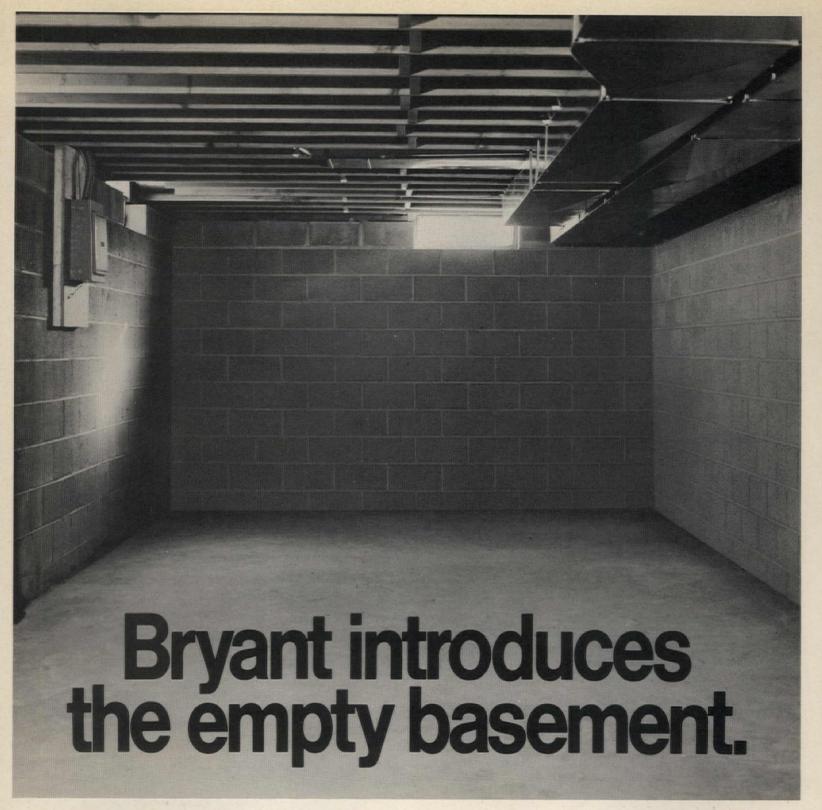


Wood and laminate exterior door combines solid core wood construction with Formica's high pressure exterior laminate. "Exterior Lifeclad" doors come in 9 widths ranging from 2' to 4' and in many solid colors and woodgrains. The laminate on the door will not blister, peel, fade, warp, crack, or discolor, according to the manufacturer. Priced comparably to prefinished birch doors. Simpson Timber, Seattle, Wash.

CIRCLE 223 ON READER SERVICE CARD

Fiberglass window shades block heat build-up, diffuse glare, and maintain privacy while still permitting visibility. "Comfort Shade" is made from fiberglass strands cabled together to form a single filament coated with vinyl and then woven into a horizontal rib pattern and bonded together. The fabrics can be installed on rollers or tension systems or framed; an exterior version is called "Comfort Screen." J. P. Stevens, New York City. CIRCLE 227 ON READER SERVICE CARD





Bryant's new 579 heating and cooling unit doesn't use up valuable space indoors. It installs outdoors.

But empty space isn't all it has to offer.

By going outside, it also simplifies the job inside. And by eliminating things like the furnace flue, it reduces your building costs too. You can even wait until the last minute, because setting the equipment won't interfere with other building trades.

What's more, a clean, low profile lets the 579 blend in with the surroundings. And a rugged steel casing - heavy-gauge, zinc-coated steel helps it keep up appearances.

Then there's one inch of fiberglass insulation throughout the conditioned-air section that keeps it running quietly and efficiently. And a balanced vent system that assures flame stability in bad weather. And automatic, electric-pilot reignition that makes a pilot outage a routine unit function instead of a service call situation.

Of course, the 579 has the range to go in any size home, because it comes with cooling capacities from two to five tons. And heating inputs of 80,000 to 150,000 BTU's.

So check into Bryant's Great Indoors machine that goes outdoors. It's like adding an extra room to a house.

Bryant Air Conditioning Company, 7310 West Morris Street, Indianapolis, Indiana 46231.

The Great Indoors People /

#### **PRODUCTS/HEATING & AIR CONDITIONING**



Compact condenser is 23" square and 33" high. One of six new compact models (four are only 25" high) for home or apartment central air conditioning split systems, they are priced for the builder. "Standard" units range from one to 31/2

tons, from 12,000 to 42,000 Btuh capacity, and feature single-speed fans, compressor, and spine fin coils. All carry new four-year extended service contract. General Electric, Louisville, Ky.

CIRCLE 228 ON READER SERVICE CARD



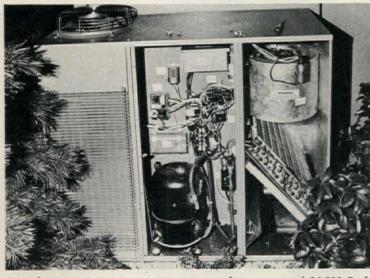
Stackless hydronic boiler is gas fired, needs no venting or tank, goes on the roof or ground when small commercial or residential buildings are short on indoor space. Heavy galvanized steel jacket on "Hurricane-T" has an automotive baked enamel finish, is weatherproof, windproof, debrisproof. Raypak, Westlake Village, Calif.

CIRCLE 231 ON READER SERVICE CARD



Small-sized boiler is only 261/2" high, will fit in utility room or closet, on living level or in basement. Gas-fired GPMX is completely packaged with pre-wired controls, diaphragm expansion tank, and auto air vent. Available in six outputs, from 52,800 to 185,000 Btuh. American-Standard, New Brunswick, N.J.

CIRCLE 232 ON READER SERVICE CARD



Central system is in one compact package-48" wide, 20" deep, and 36" high-ready to mount and simply plug in. Pre-wired unit was designed for Republic Steel's Breakthrough HUD housing, has a cooling capacity of 17,500 Btuh, and a gas heat output of 36,000 Btuh. Automatic controls adjust the air volume when the unit is switched from heating to cooling, or vice versa. Mueller Climatrol, Milwaukee, Wis.

CIRCLE 229 ON READER SERVICE CARD

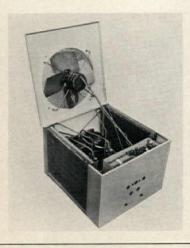






Line voltage thermostats include two with redesigned switches, one with a new case. The two (left above), by Mears and Federal Pacific, are modified so a shield protects the heat sensor from picking up self-generated heat in the switch, making control more nearly accurate and reducing "droop". Both also have increased cycle ratesthe Mears "Super Stat" is rated at 6 cph, the Federal Pacific HPT

at 6 to 9 cph-for more constant comfort levels. The Singer 302 (right above) has a new case that features easy-to-read numerals, easy-to-wire terminals, and a snapin temperature indicator. It can be used for baseboard or radiant ceiling units. Mears Controls, Beaverton, Ore.; Federal Pacific Electric, Newark, N.J.; and Singer, Melrose Park, Ill. CIRCLE 233, 234, OR 235 ON READER SERVICE CARD

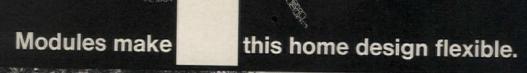


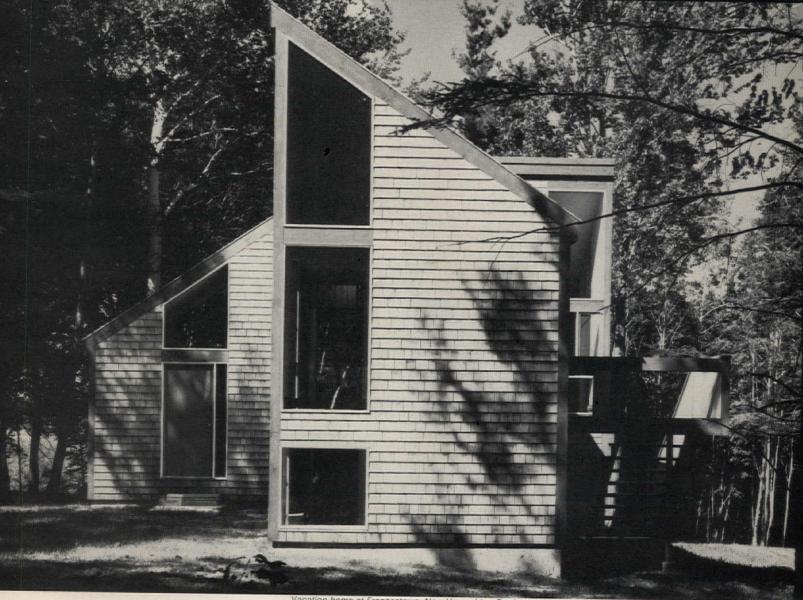
Two-apartment condenser handles both units simultaneously, can be metered separately. One apartment needs no fan motor, both share the larger coil surface for more efficiency, installations and maintenance costs are reduced, and there are fewer units to disguise-on the roof or on slabs. Easy to get at through hinged top for repairs. In 18,000 to 36,000 Btu capacities. Donmark, Dallas,

CIRCLE 230 ON READER SERVICE CARD



Wall fan delivers up to 160 cfm, vents kitchens up to 80 sq. ft., baths to 150, and other rooms to 200. An 8" unit, it fits into 9" dia, opening and has an attached sleeve that adjusts 5" to 10" for thick walls. Cocoa colored anodized aluminum grille is inconspicuous against walls of baths, kitchens, or family rooms. Available with solid state or standard switch, or with nylon pull switch. Broan, Hartford, Wis. CIRCLE 236 ON READER SERVICE CARD





vacation nome at Francestown, New Hampshire. Certigrade Shingles No. 1 Grade 16" Fivex. Architect: Brett Donham

## Red cedar shingles make it beautiful.

This New England vacation home started out as several 20 by 12-foot modules. It ended up just right.

One reason is the versatility of the modular system. It allowed tailoring a design to the specific needs of owner and site without sacrificing economy.

Another reason is the exterior of red cedar shingles. Cedar unifies, helping to

turn a system into a home. Structurally, cedar shingles easily bridge the joint between modules. Visually, their rich texture complements the rustic site and projects a feeling of natural warmth.

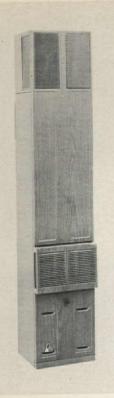
In addition, red cedar remains maintenance-free for decades. It will provide a generation of vacationers with a vacation from upkeep.

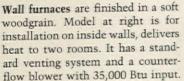
Put the utility and lasting beauty of red cedar to work for you. Specify Certigrade shingles or Certi-Split handsplit shakes. For details and money-saving application tips, write:

5510 White Building, Seattle, Washington 98101. (In Canada: Suite 1500, 1055 West Hastings Street, Vancouver 1, B.C.)

#### Red Cedar Shingle & Handsplit Shake Bureau

One of a series presented by members of the American Wood Council.





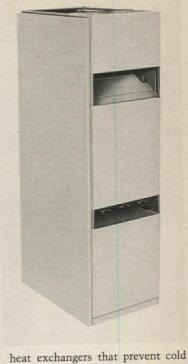


The model at left also has a counterflow blower with 40,000 or 70,000 Btu input, but has a direct venting system, heats just one room. Empire Stove, Belleville, Ill.

CIRCLE 237 ON READER SERVICE CARD



Gas upflow furnaces, because they need no clearance at back or sides and are of a compact size, can be installed in closets, utility rooms, or alcoves. They are completely factory wired and assembled, have knockouts on either side for gas lines, slide-out blower assemblies,



spots, and neoprene-cooled filters that come out for washing. Rust resistant cabinets are lined with insulation that also dampens sound. Armstrong Furnace, Columbus, Ohio.

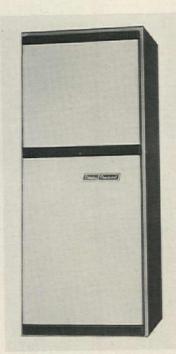
CIRCLE 241 ON READER SERVICE CARD





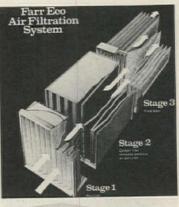
Baseboard heater valves operate on a sensing bulb (top) or a magnetized coil (bottom). The non-electric valve by Danfoss has a small bulb 3" long and 3/16" dia. that is mounted under baseboard heater fins and enclosed by the cover. It controls the temperature of one room or zone, is available in 1/2" or 3/4" models. The magnetic model by Industrial Design is a bypass valve that is closed by heat rise, opened by heat fall. Thus heat from boiler circulates around perimeter past rooms not requiring heat to those zones needing it. And should power fail, the lines remain open. Danfoss, Mahwah, N.J. or Industrial Design, Scranton, Pa.

CIRCLE 238 OR 239 ON READER SERVICE CARD



Forced air electric furnace can be installed for upflow, counterflow, or horizontal air discharge. It is approved for zero clearance and measures only 23" x 19¾" x 49", so it can be installed in closets, utility rooms, etc. It comes in sizes from 10 to 25 KW, with 28,700 to 85,300 Bruh capacities. Cabinets are acoustically as well as thermally insulated. For safe operation, blower remains on as long as one heating element is engaged. Coleman, Wichita. Kans.

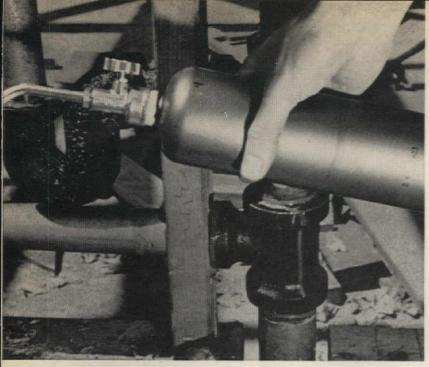
CIRCLE 240 ON READER SERVICE CARD



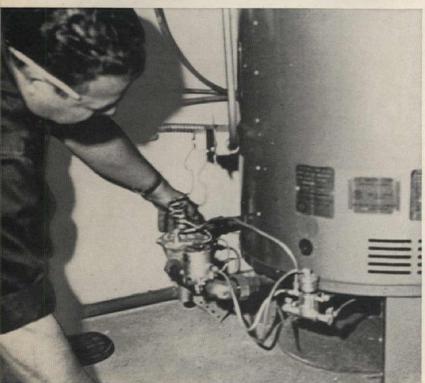




Air cleaning systems installed in ductwork remove from indoor air the dirt left in ordinary heating or cooling systems. One system (top left) by Farr is in three-stages: a pre-filter takes out the largest dirt particles, a carbon filter then removes gasses and odors, and finally an after-filter gets rid of the remaining smallest particles. For small commercial or apartment buildings, it costs about 10¢ per sq. ft. more than conventional air filtration methods, but it reduces cleaning and maintenance costs over the long term. A system (left center) by Heat Controller has a pre-filter for larger particles, an electrically-charged cell for smaller particles, then a final, or back-up, filter. A system (bottom left) by Carrier has a pre-filter for large particles. Smaller particles, given a positive electrical charge in an ionizer section, are trapped in a collector. The Farr "Eco" has removable filters, replaceable charcoal filler panels. The Heat Controller "Comfort-Aire" has removable, washable, filter and electronic cells. The Carrier system has disposable filter pads. Farr, Los Angeles; Heat Controller, Jackson, Mich.; Carrier, Syracuse, N.Y. CIRCLE 242, 243, OR 244 ON READER SERVICE CARD









## From "Melting Pot" to "House Warming" LP-gas serves builders and buyers

From the day you lay the foundation, count on LP-gas to make your job easier-your buyers happier.

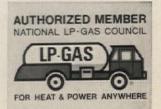
On the job, use versatile LP-gas to melt plumber's lead, generate electrical power, dry plaster, keep house and workers warm and working.

When you sell, LP-gas enables you to offer rural home buyers all the conveniences of city living-economically. Fuel for heating, cooking, hot water, clothes drying, refrigeration, air conditioning and lots more. Gas makes the big difference. LP-gas is clean, economical and so dependable. Put it to work for you.

Of America's great sources of energy, only LP-gas serves in so many ways.

This seal identifies an authorized member NATIONAL LP-GAS MARKET DEVELOPMENT COUNCIL, 79 West Monroe Street, Chicago, Illinois 60603

For LP-gas data, see Sweet's Light Construction File 12a/Na.





"Women's Lib Begins At Home"...
our theme for 1971 which millions of
women will read and heed. Because
In-Sink-Erator disposers ensure
freedom from garbage problems,
they're powerful sales persuaders. Eight models to choose
from; over 800 Service Centers
nationwide. With 50 units or
more you get a free maintenance

program that saves a sinkful of service costs. NK-ERATOR DIVISION SON ELECTRIC CO.

IN-SINK-ERATOR DIVISION
EMERSON ELECTRIC CO.
4700 - 21st STREET, RACINE, WIS. 53406

### IN SINK ERATOR

World's Largest Producer of Garbage Disposers and Trash Compactors

CIRCLE 140 ON READER SERVICE CARD

## How many rings does it take to get your answering service?

Dictaphone has a machine to make sure you never lose another cent through a missed phone call or a garbled message. In fact, we have a whole line of them.

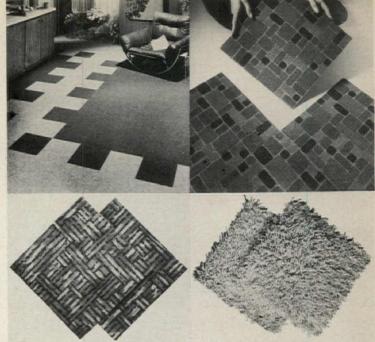
They're called Ansafones. You can buy one outright or possibly lease it for about what you're paying your answering service now. And it works for you 24 hrs. a day, 7 days a week.

For a free brochure describing how much an Ansafone can help you, mail this coupon now.

(	Dictaphon	e
Box F20, 12	20 Old Post Road, Rye.	New York 10580
Please se	end me full details of the	Ansafone line.
A 10000 01	and me ran details or in	, tallourous miles
Name		
Name		Phone

Ansafone and Dictaphone are registered trademarks of Dictaphone Corp.

#### PRODUCTS/FLOORING



Carpet tiles are easily installed and just as easy to take up for special cleaning or replacement. Those at upper left are of Marvess polypropylene by General Felt, have a special vinyl release backing, and need no adhesive strips. The other three are all of Allied Chemical's nylon. The two lower ones—the print and

the shag—are by Tile Council of America. The bricks above by Jonas have a grout line that hides the seam. All are 12" square, have high-density foam backing, run about 70¢ to 90¢ psf retail. GFI/Crown Products or Allied Chemical, New York. CIRCLE 245 OR 246 ON READER SERVICE CARD



Soil resistant carpets include a nylon plush by Dan River (*left*) that has been treated with a new finish by 3M; a three-color Acrilan acrylic by Burke (*below left*); and a densely tufted two-color nylon tweed by Armstrong (*below right*). The "Scotchgard" protector keeps dirt from sticking to fibers, the patterns and fibers of the others—for commercial use—hide the soil, resist staining. 3M, St. Paul, Minn.; Burke, San Jose, Calif.; Armstrong, Lancaster, Pa. CIRCLE 247, 248, OR 249 ON READER SERVICE CARD





Carpet molding is an aluminum base strip attached to the floor with a T-shaped vinyl insert that snaps into it. This permits work on electrical conduits under access panels without leaving edges of carpet sections exposed. Workman simply pulls off insert and lifts up access panel. Can be used with conventionally laid or glued-down carpets. Roberts Consolidated Industries, City of Industry, Calif. CIRCLE 250 ON READER SERVICE CARD

### **MAGNIFICENT CEDAR** WOOD SHAKES OR SHINGLE TEXTURES

## 目:{(o)}; | [



Unlimited design emphasis is possible with the use of the various interesting textures available in Shakertown Shakes and Shingles for use on homes. apartments, or condominiums. First impressions of the exterior and entrance ways will determine customer acceptance and improve occupancy. Cedar is beautiful in either Barn Shake, Rough Sawn Shingles or Shingle textures . . . all now available in convenient eight-foot panels for weather-tight protection and fast application.

Shakertown panels can be applied direct to the studs for unusually attractive Mansards. Complete sidewalls covered with these rustic textures will enhance the building's appearance and give years of lasting beauty. Shakes and shingles are available in 7" or 14" weather exposure to meet your desired effect. The natural cedar or the various transparent color finishes will add to the variety of design emphasis you can build into your buildings. Matching wood corners will give you a truly professional appearance.

## Shakertown

SHAKES AND SHINGLES IN **CONVENIENT 8-FOOT PANELS** 







Write for detailed brochure SHAKERTOWN CORPORATION

DEPT. HH-9 4416 LEE ROAD CLEVELAND, OHIO 44128

In Canada BESTWOOD INDUSTRIES, LTD.

VANCOUVER 3, B.C. P.O. BOX 2042

**EASY-TO-INSTALL** 

# Cedar



#### CEDAR CLOSETS FOR ONLY \$5.00 to \$8.00 OVER YOUR ORDINARY CLOSET COST

CEDARLINE - A dramatically different and easier way to install cedar closet lining made from Tennessee Aromatic Red Cedar processed into large flakes and compressed into an attractively textured pattern. Has the same strong, lasting cedar aroma, so highly valued for generations, that was found in fitted cedar boards. It's all cedarno fillers or other woods added.

CEDARLINE comes in standard 4 ft. x 8 ft. panels and easy-to-handle 16 in. x 48 in. panels. Panels are 1/4 in. thick. Can be cut to fit and nailed directly to studs or over existing walls. Need no finishing. Can also be installed with standard-type panel adhesives.

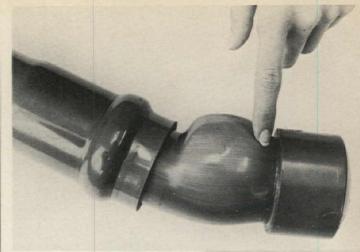
Give your closet that wonderful forest fresh scent. See your Cedarline dealer, or write to us for further information and samples.

## Gedarline.

## **GILES & KENDALI**

P.O. Box 188 Dept. HH, Huntsville, Ala. 35804

#### PRODUCTS/PLUMBING



Self-sealing joints for PVC pipe eliminate adhesive bonding and heat sealing. One pipe section is slipped into the belled end of the next section. A gasket in the belled end seals the joint. "E-Z Seal," a flexible rubber Z-ring with a beaded lip, provides a seal so strong that pipe distends (above) before the seal breaks. A PVC sleeve (right) fits over the belled end, reinforcing the bell and protecting the pipe from impact. Thermo-Plastics, Charlotte, N.C.

CIRCLE 251 ON READER SERVICE CARD





Plastic pipe fittings are for residential hot and cold water lines (left) and distribution systems (right). Integrated system includes metal-to-plastic fittings and through-the-stud inserts, fits 1/2" and 3/4" copper tube sizes. Chlor-



inated polyvinyl chloride (CPVC) withstands 100 psi at 180°. Deep socket pressure fittings of PVC provide larger bonding surfaces, keep pipes from pulling apart during burial. R & G Sloane, Sun Valley, Calif. CIRCLE 252 ON READER SERVICE CARD







Cast iron fittings suit a range of DWV systems. At left above are swivel and flanged and push-in fittings for municipal and watermain use. At left are soil pipe joining systems that include neoprene gaskets, no-hub coupling rings, and joining tools. At right above are cleanouts and drains for floors, roofs, and trenches. Tyler Pipe, Tyler, Tex.

CIRCLE 253 ON READER SERVICE CARD

Bronzeglow® Birch 1954
Royal® Birch 1962
Moonglow® 1964
Autumn Glow® 1969
Gardencourt® 1970
Kingswood® 1970

## = Sustained Excellence



CABINETMAKERS SINCE 1932



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

# Am-Finn Sauna makes buyers out of shoppers

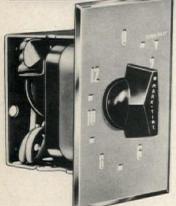


Write today for your copy of our free booklet. See for yourself why Am-Finn Sauna could be the difference you've been looking for. Distributor Inquiries Invited.

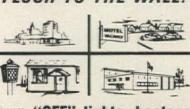
Am-Finn Sauna, Inc., Haddon Ave. & Line St., Camden, N.J. 08103

CIRCLE 141 ON READER SERVICE CARD

## Wall Box Time Switch



THE ONLY TIMER
WITH DIAL FACE PLATE
THAT MOUNTS
FLUSH TO THE WALL!



Turn "OFF" lights, heaters

-automatically - after 3 minutes to 12 hours

Save electricity, add comfort and convenience, extend life of equipment. Easily installed in standard wall boxes. Recommended for hotels, motels, homes, apartment houses, public buildings. Available through wholesalers everywhere. Send for literature.

M. H. RHODES, Inc. AVON, CONN. 06001 In Canada—M. H. Rhodes (Canada) Ltd., Ottawa 5, Ontario

#### PRODUCTS/HEATING & AIR CONDITIONING



Baseboard heater has two complete element circuits: only one operates most of the season; but when weather really turns cold, the second circuit provides the necessary extra heat. Available in two types (250/125 watts per ft. and 200/100 watts per ft.), each of which comes in eight sizes, from 2' to 12' long. Sunwarm, Kingsport, Tenn.

CIRCLE 254 ON READER SERVICE CARD



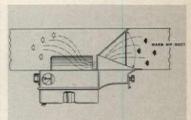


Non-liming humidifier has polypropylene reservoir. Mineral deposits fall off when it's emptied, turned over, and flexed. Air flows through large holes cut in aluminum alloy discs and across mesh surfaces. Sight glass and reservoir windows show automatically controlled water level. Ultimatic, Rosemont, Ill. CIRCLE 255 ON READER SERVICE CARD

Power humidifier for use in air duct has a mounting frame that speeds installation, window that shows water level. Plenum models have automatic control switches and adjustable outside floats. Both types dispense moisture-laden air from slowly rotating perforated bronze discs. Yale, Cleveland, O.

CIRCLE 256 ON READER SERVICE CARD

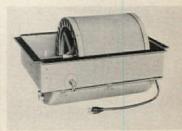




Duct humidifier, designed to catch all the warm air, funnels it through and over an evaporative pad on a rotating drum. Unit delivers up to 24 gals. of vapor a day; controls regulate evaporation rate. Water level is controlled by a float and can be seen through a porthole. Fiberglass reservoir pan won't corrode, is easily removed. Lobb, Detroit, Mich

CIRCLE 257 ON READER SERVICE CARD





Rotating drum humidifiers come with copper element (left) or foam pad (right). Copper model, covered by a five-year warranty, has 10 ft. of evaporative surface. Foam pad offers 230 cu. in. of surface, delivers

up to 18 gals. a day of vapor for a home up to 1,500 sq. ft. Both have drop-away reservoirs, outside adjustable floats, and water-level windows. Walton, Moonachie, N.J. CIRCLE 258 ON READER SERVICE CARD

You don't have to know anything about shingles to know this one's exceptional.

It's thicker. Heavier. Looks like a wood shake. It's random-edged like a wood shake. Has character like a wood shake. But it isn't wood.

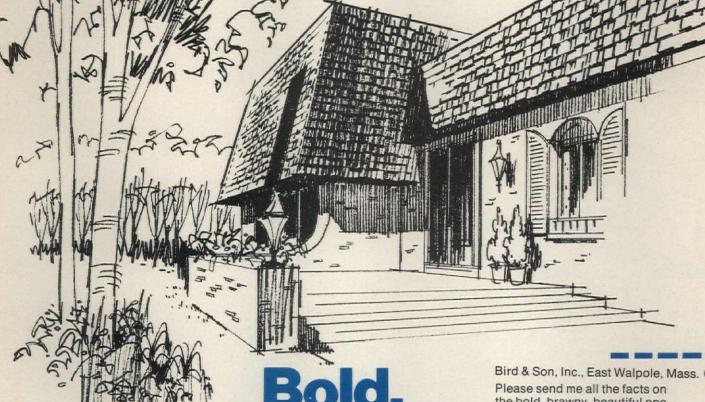
A wood shake can't begin to protect like this one. Against hurricane winds. Fire. Rain, snow and melting ice.

We've taken the best protection features of highest quality asphalt. And added the heart warming look of natural wood. The result is a distinguished shake shingle of uncommon beauty, ideal for gambrel or mansard roofs on traditional or

modern homes.

Because it's thicker, heavier nary shingle) and embellished with jumbo granules, the Bird

(half again as heavy as an ordi- asphalt random shake shingles



Architect 70 brings massive dimension and character to your roof.

And the random edging, as with natural wood shakes, gives a deep, sculptured shadow line for a look of strength and substance. Warm nature tones of

Cypresswood, Oakwood and Ebonywood enhance even more the captivating good looks of the Bird Architect 70.

Planning to build or re-roof? Look into the bold, brawny, beautiful one. See your Bird dealer or send coupon now. See our catalog in Sweets. CIRCLE 115 ON READER SERVICE CARD Bird & Son, Inc., East Walpole, Mass. 02032

the bold, brawny, beautiful one - Bird Architect® 70 asphalt random shake shingle.

Name

House & Home - Sept.



#### "Is there a fire control system that really works for roofs?"

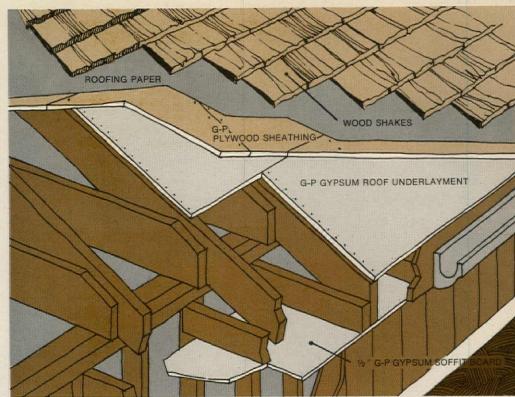


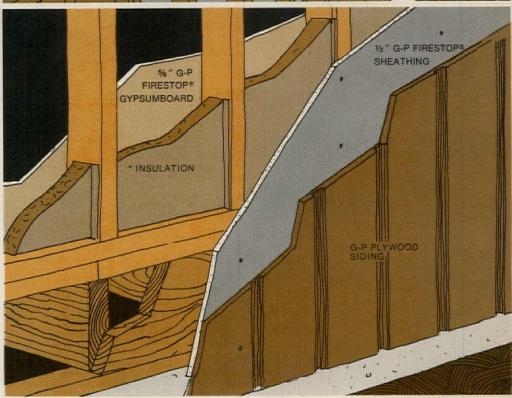
Yes! G-P's new Gypsum Roof Underlayment gives you excellent fire protection for roof construction. It's ½" thick gypsumboard with a fire resistant core and special paper that is easily placed over the rafters. Solid plywood or strip sheathing is laid over it. Then put up a wood shake or any other kind of roof you want. And Gypsum Roof Underlayment will prevent flames from burning through the roof structure.

#### "Why does my fire control system in exterior walls cost so much?"



Fire control doesn't have to be expensive. Not when you use G-P's FIRESTOP®. It gives you a one-hour fire rating in exterior walls. 5/8" FIRESTOP® gypsumboard is applied over wood studs with insulation. And then on the outside wall, 1/2" FIRESTOP® sheathing is attached and covered with 3/8" (or 5/8") G-P plywood siding.





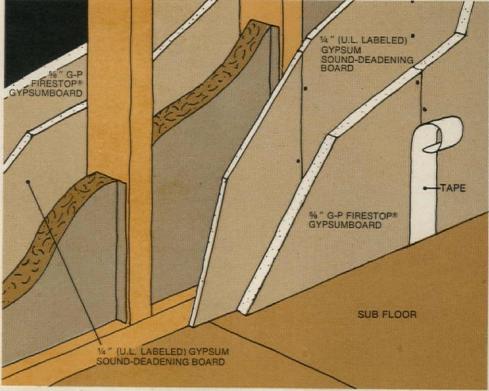
\* INSULATION NOT REQUIRED TO MEET FIRE RATINGS

## G-P has the answer sound control in

#### "How can I get sound control that works in interior walls?"



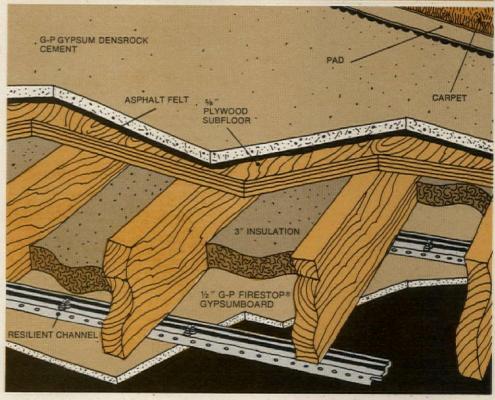
It's easy. Just have wall studs with 11/2" insulation installed. Then over both sides of the studs, have G-P's 1/4" (U.L. labeled) Gypsum Sound-Deadening Board attached and then covered with 5/8" FIRESTOP® gypsumboard. That's it! Gives you an STC of 50 with a one-hour fire rating.



## "Floor and ceiling systems cause me trouble... and cost me money."



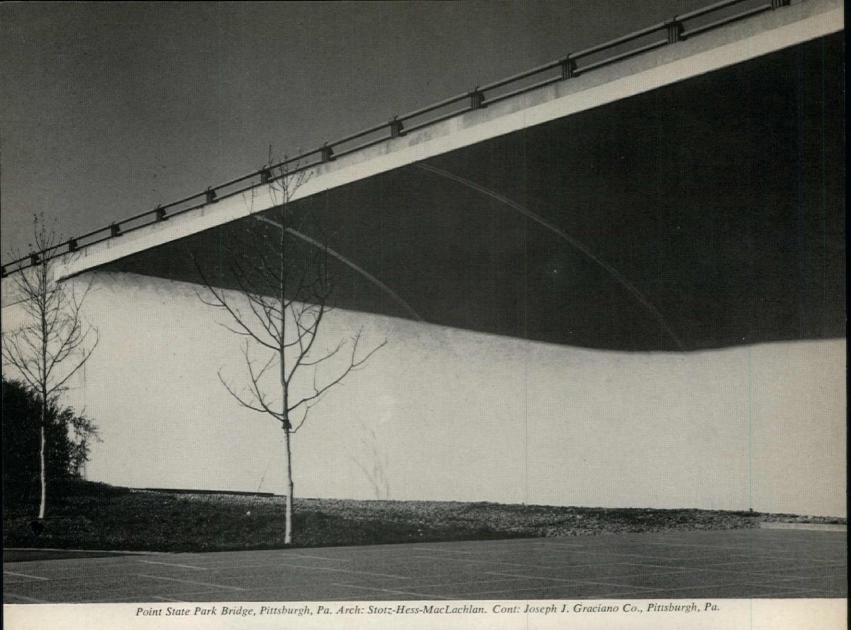
Use Georgia-Pacific's floor/ceiling system and they won't cause you trouble. Or a lot of money. Just have a 5/8" plywood subfloor installed over 2" x 10" wood joists, 16" on center, with 3" of insulation. A layer of asphalt felt is added. Then 5/8" G-P Densrock™ gypsum cement is troweled in. And the pad and carpet can be laid down. For the ceiling of the lower unit, a resilient metal channel is nailed to the joist. And 1/2 G-P FIRESTOP® gypsumboard is applied. This system gives you an STC of 58, an INR of +22, and an IIC of +72.





GEORGIA-PACIFIC GYPSUM DIVISION Portland, Oregon 97204

## to economical fire and low-rise construction.



## WATERPROOF FINISH FOR CONCRETE

difficult problems solved at 1/2 the cost with THORO SYSTEM PRODUCTS

60,000 Sq. Ft. of cracked, rough concrete were saved in this project, waterproofed and attractively finished. The first step was patching with THORITE + ACRYL 60, a fast-setting, non-slump mortar with superior bonding qualities. All surfaces were then coated with THOROSEAL + ACRYL 60—the first coat brushed on, the second brush coat floated. This time-tested, cement-base coating gives lifelong, maintenance-free protection . . . the ideal finish for concrete and limited budgets!





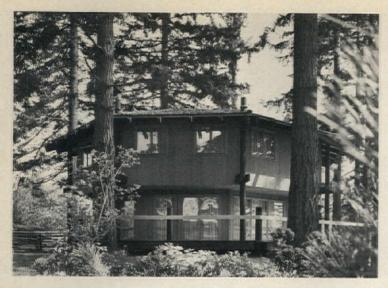


S T A N D A R D D R Y W A L L P R O D U C T S, I N C.
DEPT. 71-HH-2 • 7800 N.W. 38TH ST., MIAMI, FLA. 33166

SDW 134

118 H&H SEPTEMBER 1971

CIRCLE 118 ON READER SERVICE CARD



## Vacation homes to suit every need

The octagonal house shown here is one of 18 basic plans featured in a new idea booklet issued by Western Wood Products Association. Called "The Second Home", the booklet gives plans for all sorts of vacation homes from modest but expandable hide-aways to large, four-bedroom homes. And the materials used-western woods -make the houses not only warm and attractive, but also durable and easy to care for. Many of the plans

shown offer alternates to suit individual needs. The house shown, for instance, can be built with four bedrooms on the upper level or with a deck instead of the fourth bedroom. All upstairs rooms are built off a balcony that overhangs the living area and is lighted by a central sky-light. The range of styles offers something for every taste and locale. Western Wood Products Assn., Portland, Ore. CIRCLE 300 ON READER SERVICE CARD

Wood and vinyl moldings. A fullcolor fact folder includes information on installation, types of moldings available, suitable uses, and a guide to coordinate moldings, colormatched nails, and panels. Photographs and specification drawings are included with charts and text. Masonite, Chicago.

CIRCLE 301 ON READER SERVICE CARD

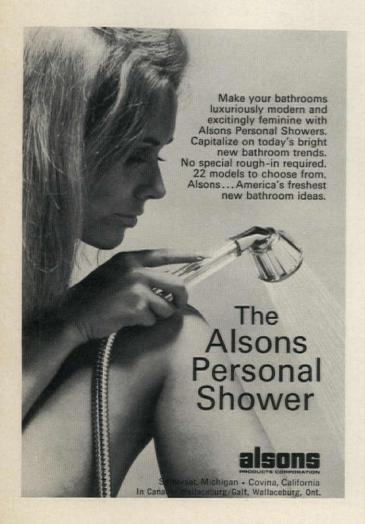
Government housing-on tape. After a spring conference on government housing, the sponsor, the National Association of Building Manufacturers, is making tapes of the conference available to interested parties. There are six cassette tapes, covering the following subjects: HUD and public housing programs, HUD Section 235 and 236, rural housing programs and industrial housing and HUD, tax shelters in federal programs, processing HUD applications, limited partnerships and syndication of equities. Prices are \$10 per tape or \$55 for the entire set. National Association of Building Manufacturers, Department TP, 1619 Massachusetts Ave., N.W., Washington, D.C. 20036.

Kitchen cabinets. Kitchen cabinetry as fine furniture is the subject of this new full-color catalog. Not only are the manufacturer's cabinet

lines shown in attractive room settings (some of which are actually in customers' homes), but also included is interesting information on furniture styles and the people who developed and made them famous. Styles shown range from English Colony through French Country and Pumpkin Orange Colonial and Mediterranean to American Contemporary in dark walnut. The final section of the catalog includes information and photographs of accessories available. Mutschler, Nappanee, Ind.

CIRCLE 302 ON READER SERVICE CARD

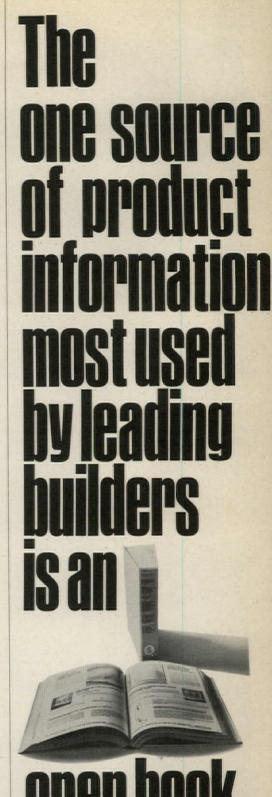
Community and public relations is the title of a guide for builders, architects, and developers that is issued by Associated Home Builders of the Greater Eastbay. Written by John Dengel, a National Real Estate Editors award winner, the book deals with how to win community acceptance for increased density in planned unit developments. Separate sections tell what the individual builder can do, what the industry can do, how to persuade officials and the general public of the advantages of P. U. D. Each copy of the booklet costs \$2.50. Associated Home Builders of the Greater Eastbay Inc., P.O. Box 5008, Elmwood Station, Berkeley, Calif. 94705





ADVI	ERTISERS INDEX
Pre-filed	catalogs of the manufacturers listed below are
A Architec	in the 1971 Sweet's Catalog File as follows.
L Light Co	al Construction File (blue) onstruction File (yellow)
D Interior	Design File (black)
	W Denotes Western edition M denotes Mid-Western edition
	N denotes North Central edition E denotes Eastern edition
	S denotes Southern edition SW denotes Southwest (Swing)
A	
A-L	Air King Corp.       20         Alliance Mfg. Co.       32
	Alsons Products Corp
	American Plywood Assn.         21-23           Andersen Corp.         54, 55
D	
B	Berven of California35
A-D A-L	Bird & Son, Inc115
	Bryant Air Conditioning Co
	m) and Am Committeeining Committee in the Committee in th
_	
A-L	Cabot, Inc., Samuel
A-I-L	Caradco14, 15
A-I-L	Celestron Pacific
	Citizens and Southern National Bank,
	The
ALD	Delta Faucet Co
A-L-D	Dictaphone Corp
E	
	E. A. Nord Sales Co
	Edison Electric Institute91
	Emerson Electric Co. (Chromalox Comfort Conditioning Div.)
	Equitable Insurance Co. of Iowa131
(	G
A-I-L-D	
A-I-L-D	Georgia-Pacific Corp
	Giles & Kendall Co
H	H
	Home Comfort Products Co
I	
A	
	International Harvester Co92, 93
I	K
	Kemper Brothers, Inc53
A-L	KitchenAid Home Dishwasher Div. (Hobart Mfg. Co.)
	L
	Lear Siegler, Inc
A	Lyon Metal Products
	Lyon Van Lines
	M
A	
A-L	widen Div. (Stanadyne)
	N
L A-L	
A-L	NuTone, Inc
Secretary and the second	

C			
T	Olympic Stain Co		Cov. IV
A-I-L	Overhead Door Corp		.42, 43
P			
A-I	PPG Industries		.30, 31
A-I	PPG Industries (Coil Coal	tings)	.46, 47
D	PPG Industries (Fiber Gla Pacific Lumber Co		
	Paslode Co.		
	Pease Co		49
A T	Penna. Grade Crude Oil Philip Carey Co. (Div. of I	Assn	125
A-I	Poloron Products, Inc		102E1
	Ponderosa Pine Woodwo	rk Assn	84, 85
I	2		
-	R & G Sloane Mfg. Co., In	nc.	13
A-L	Red Cedar Shingle & Ha	ndsplit Shake	
	Bureau		
5			
	Scheirich Co., H. J.		113
A	Shakertown Corp		111
A-L-D	Simpson Timber Co		
A-L	Skil Corp Sonoco Products Co		
	Snelling & Snelling		
	Speakman Co		19
A-I-L	Standard Dry Wall Produ State Farm Insurance	icts, Inc	122
	Superscope, Inc		132
	Sweets Light Constructi	on File	120
-	Г		
	Temple Ind.	102WA F	2A M1
		N1, S1	, SW1
A-L	Thermador (Div. of Norr	ris Ind.)	6, 7
1	U		
A-L-D	U.S. Plywood		51, 103
A-I	United States Gypsum C	Co	Cov. III
	Universal Rundle Corp.	******	87
A-D	Urethane Fabricators (Am-Finn Sauna Div.)		114
	W		
			2.4
	Wabash, Inc		
	Weiser Lock		
	Advertising		
	Advertising Sales Staff		
	Sales Staff	DETROIT 4822	57
	Sales Staff ATLANTA 30309 Glen N. Dougherty	Charles E. Durh	6 am, Jr.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E.	Charles E. Durh 2600 Penobscot	6 am, Jr.
	Sales Staff ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868	Charles E. Durh 2600 Penobscot (313) 962-1793	6 am, Jr. Bldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. [404] 892-2868  BOSTON 02116	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770	6 am, Jr. Bldg.
	Sales Staff ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868	Charles E. Durh 2600 Penobscot (313) 962-1793	6 am, Jr. Bldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze	6 am, Jr. Bldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. [404] 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B	6 am, Jr. Bldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES	6 am, Jr. Bldg. 002 ldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381	6 am, Jr. Bldg. 002 ldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson	6 am, Jr. Bldg. 002 ldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. [404] 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. [617] 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S	6 am, Jr. Bldg. 002 ldg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boyliston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10	6 am, Jr. Bldg. 002 ldg. 90017
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113 Milton H. Hall, Jr.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua	6 am, Jr. Bldg. 002 ldg. 90017 t.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boyliston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10	6 am, Jr. Bldg. 002 ldg. 90017 t.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square (216) 781-7000	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686	6 am, Jr. Bldg. 002 Idg.
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. [404] 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. [617] 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. [312] 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686 PHILADELPHI. Raymond L. Ka	6 am, Jr. Bldg. 90017 t. 036 dd t
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square (216) 781-7000  DALLAS 75201 Jerry Ambroze 1340 Republic Nat'l.	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686 PHILADELPHI. Raymond L. Ka Six Penn Cente	6 am, Jr. Bldg. 90017 t. 036 dd t
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square (216) 781-7000  DALLAS 75201 Jerry Ambroze	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686 PHILADELPHI. Raymond L. Ka	6 am, Jr. Bldg. 90017 t. 036 dd t
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. [404] 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. [617] 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. [312] 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square [216] 781-7000  DALLAS 75201 Jerry Ambroze 1340 Republic Nat'l. Bank Building [214] 747-9721	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686 PHILADELPHI. Raymond L. Ka Six Penn Cente (215) 568-6161	6 am, Jr. Bldg. 1002 ldg. 10036 rd t 19103 mmer r Plaza
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. (404) 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boyliston St. (617) 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. (312) 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square (216) 781-7000  DALLAS 75201 Jerry Ambroze 1340 Republic Nat'l. Bank Building (214) 747-9721  DENVER 80202	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686 PHILADELPHL Raymond L. Ka Six Penn Cente (215) 568-6161	6 am, Jr. Bldg.  102 ldg.  1036 rd t  19103 mmer r Plaza
	Sales Staff  ATLANTA 30309 Glen N. Dougherty 1375 Peachtree St. N.E. [404] 892-2868  BOSTON 02116 John S. Renouard McGraw Hill Bldg. 607 Boylston St. [617] 262-1160  CHICAGO 60611 Karl Keeler, Jr. Charles E. Durham, Jr. 645 N. Michigan Ave. [312] 664-5800  CLEVELAND 44113 Milton H. Hall, Jr. 55 Public Square [216] 781-7000  DALLAS 75201 Jerry Ambroze 1340 Republic Nat'l. Bank Building [214] 747-9721	Charles E. Durh 2600 Penobscot (313) 962-1793 HOUSTON 770 Jerry Ambroze 2270 Humble B (713) 224-8381 LOS ANGELES Donald Hanson 1125 W. Sixth S (213) 482-5450 NEW YORK 10 John S. Renoua 330 W. 42 Stree (212) 971-3686 PHILADELPHI. Raymond L. Ka Six Penn Cente (215) 568-6161	6 am, Jr. Bldg. 02 ldg. 90017 t. 036 rd t

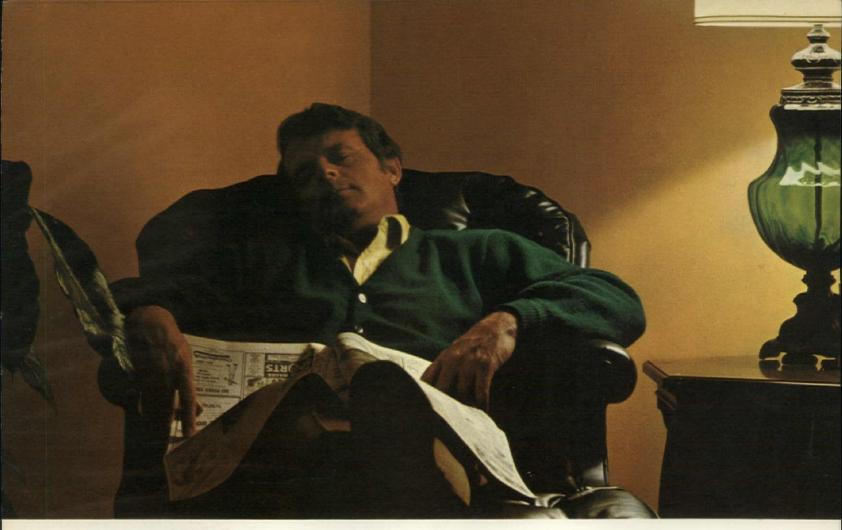


Sweet's Light Construction Catalog File where reference turns to preference



Proof of the pudding is in a study just completed. Send for your free copy to:

Mr. Robert Eddings Sweet's Div. of McGraw-Hill Information Systems Co. 330 West 42nd Street, New York, N.Y. 10036



# THERMAFIBER, the extra-dense sound attenuation blanket,

assures comfort and acoustical privacy.

The most effective sound-control partitions rely on sound attenuation blankets for efficiency. Performance of the partitions is based on the blanket's acoustical impedance.†

Extra-dense THERMAFIBER is the only blanket labeled with tested acoustical impedance ratings (see table). Since all blankets are not the same, substitution of a less dense blanket or one without a comparable acoustical impedance rating will impair the acoustical performance of the partition system.

For sound control efficiency comparable to laboratory-tested-and-rated systems, the same materials must be used in partitions on the job.

Partition system left, 2-in. USG® Metal studs with 2 layers ½-in. SHEETROCK\* FIRECODE\* "C" Gypsum Panel faces and 1½ in. THERMAFIBER Sound Attenuation Blankets, achieves STC of 52; without THERMAFIBER, STC is 45.

To protect your specifications, specify THERMAFIBER Sound Attenuation Blankets with U.S.G. partition systems. See our Architect Service man, or write 101 S. Wacker Dr., Chicago, Ill. 60606, Dept. HH-91.

†Measurement (in terms of rayls) of a blanket's resistance to flow of acoustical energy, determined by combined performance of the blanket's thickness and density.

\*Reg. U.S. Pat. Off.

THERMAFIBER	SOUND AT	TTENUATION
Blanket Thickness Inches	Density pcf	Acoustical Impedance (Frequency, 1000 Hz) Rayls
No insulation	0	0
1	4	725
11/2	3	450
2.	2.5	360



UNITED STATES GYPSUM
BUILDING AMERICA



## START WITH WOOD/FINISH WITH OLYMPIC STAIN.

Costs less than paint. Easier to apply than paint. Lasts longer than paint. Guaranteed not to crack, peel or blister. 66 Colors, solid or semi-transparent. Protects wood beautifully.



