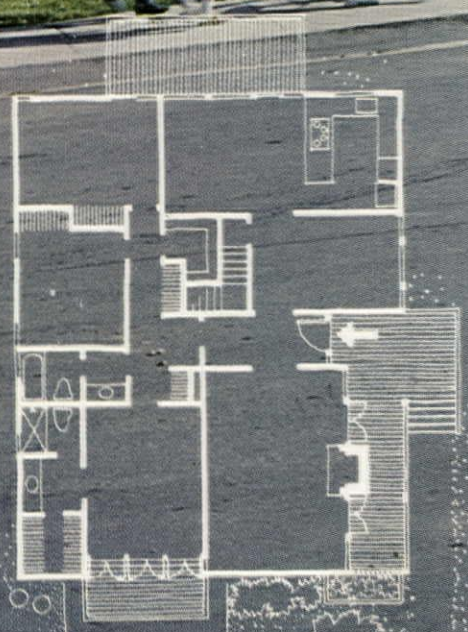
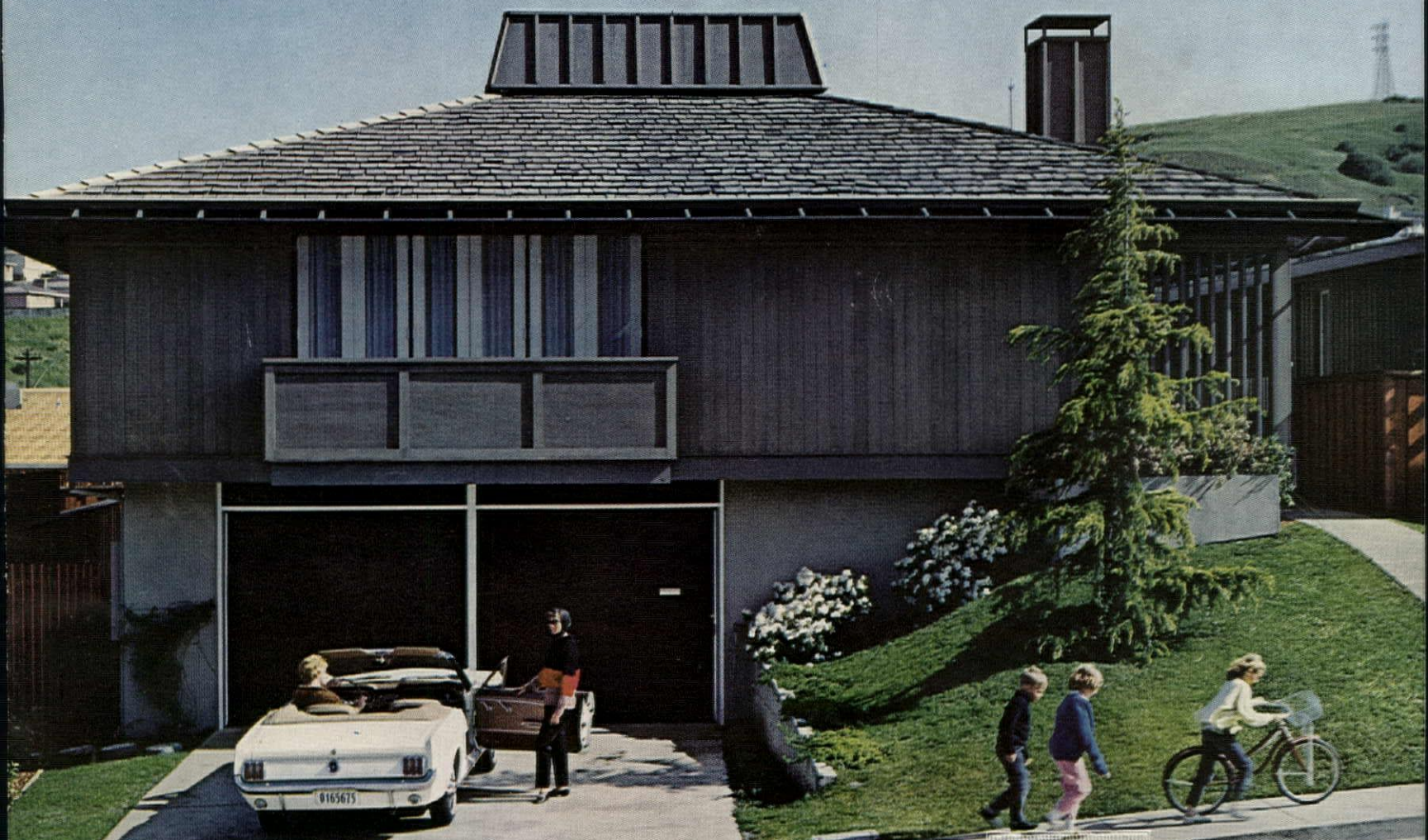


House & Home

MANAGEMENT MAGAZINE OF THE HOUSING INDUSTRY

JULY 1964



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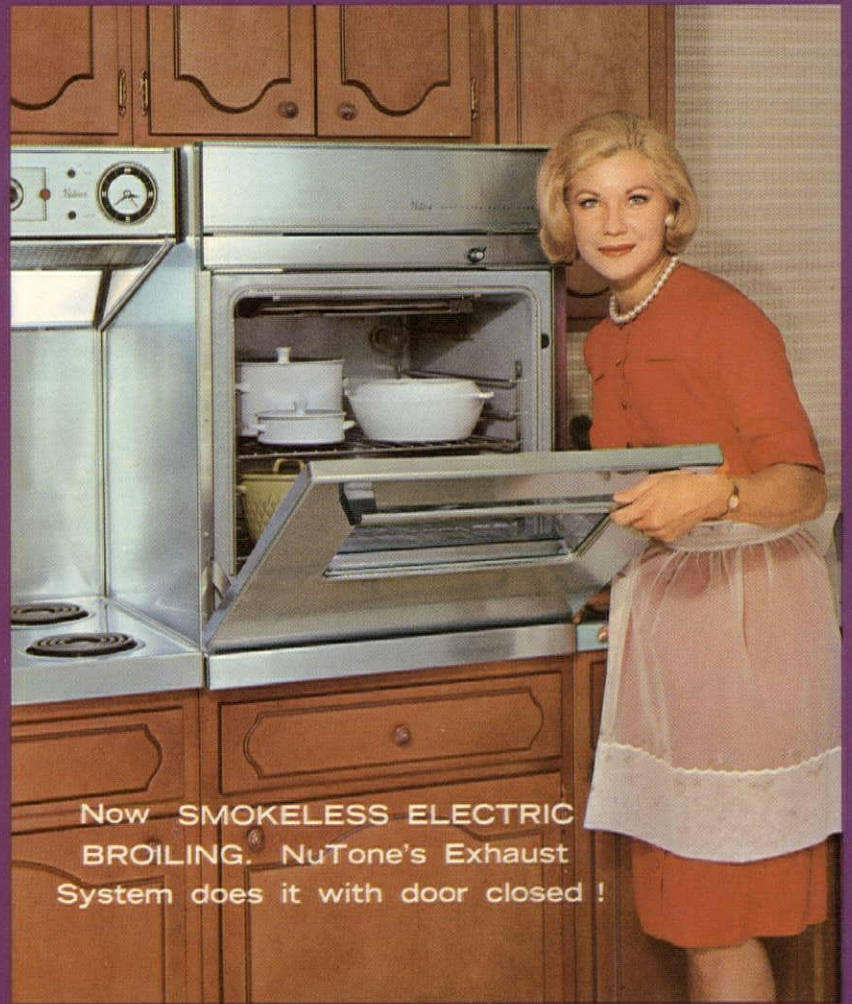
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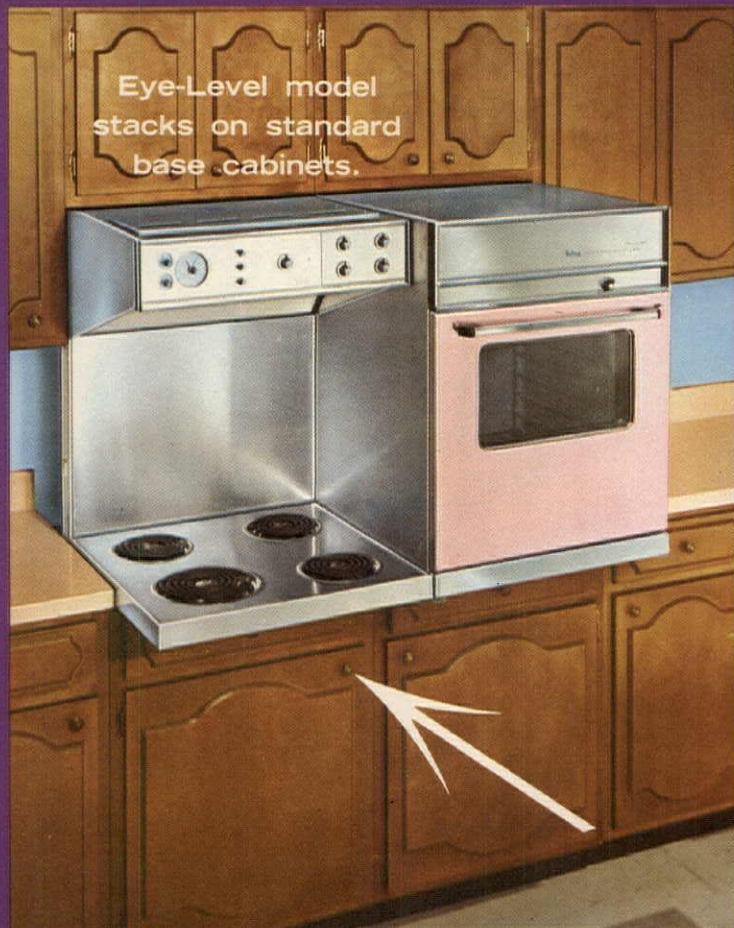
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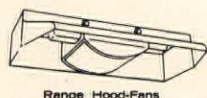
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See previous page



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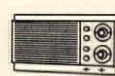


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Publisher's note

The future of House & Home

Although you may not notice it, a major change is being made in the publication of HOUSE & HOME. This issue is the last to be published by Time Inc. The next issue will be published by McGraw-Hill Inc.

You may not notice this change for several reasons:

- McGraw-Hill has stated its plans "to keep the magazine and its staff as intact as possible."
- McGraw-Hill is dedicated, as Time Inc. has been, to maintaining HOUSE & HOME as the leading force for excellence in American housing.
- McGraw-Hill, like Time Inc., is an experienced publisher. Both are leaders in their fields—Time Inc. in the general magazine field, McGraw-Hill in the business publication field for which it publishes more than 40 magazines.
- McGraw-Hill, like Time Inc., knows well the construction industry. It has had considerable experience in publishing successful magazines for different branches of that industry, including *Architectural Record*, *Construction Method & Equipment* and *Engineering News-Record*. It also compiles and distributes Sweets Catalog Files for architects, engineers, builders and contractors.

The transfer of HOUSE & HOME to McGraw-Hill grew out of Time Inc.'s conviction that the important mission of HOUSE & HOME could be more effectively prosecuted by a publishing house like McGraw-Hill, which is strongly committed to business publications.

Commenting on the transfer, James Linen, president of Time Inc. said: "We are confident that under McGraw-Hill's able direction HOUSE & HOME will continue to play its important role in the enlightenment of the housing industry and will continue to maintain its long-established standards of excellence in service to readers and advertisers."

Speaking for McGraw-Hill Publications, President Shelton Fisher pointed out that they have never had a publication in the housing field, and added: "We now welcome the opportunity to provide specialized coverage of the housing market by assuming publication of HOUSE & HOME, a magazine whose editorial excellence has long been recognized by us and by industry in general."

In the 12 years since it was founded by Time Inc., HOUSE & HOME has become a leader in every respect—first in service to the industry, first in circulation and first in advertising.

Behind this leadership have been the devoted efforts of HOUSE & HOME's capable staff and the caliber of the magazine's editorial content.

The rewards for this editorial leadership have been many and satisfying: more editorial achievement awards than any other member-magazine of the Associated Business Publications (a total of 26), more reader respect than enjoyed by any other magazine in its field (60 reader preference surveys won, none lost) and more tangible results of its editorial influence in terms of the progress made by the housing industry and the rising quality of American housing.

If we seem proud of our editors' achievements, forgive us. We are. We are proud of the 151 issues of HOUSE & HOME they have produced under Time Inc.'s aegis and of the great reputation they have earned for this magazine.

This very considerable heritage we now entrust to McGraw-Hill with the sure conviction that it will be built upon to the benefit of HOUSE & HOME, its audience and its new publisher.

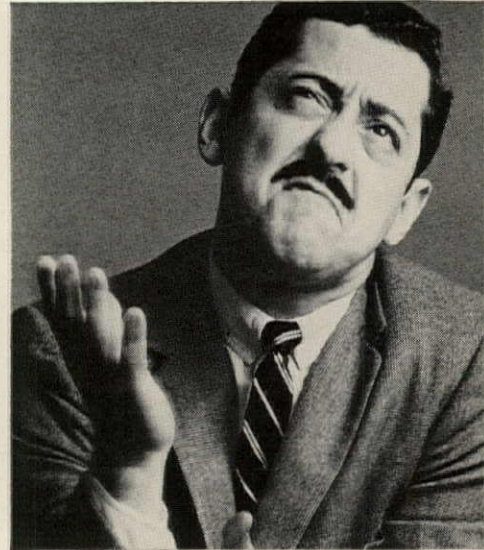
May all three prosper in the years ahead.—J. C. H. JR.



Asbestos-cement pipe...not for me!



Sure, we Italians invented it...



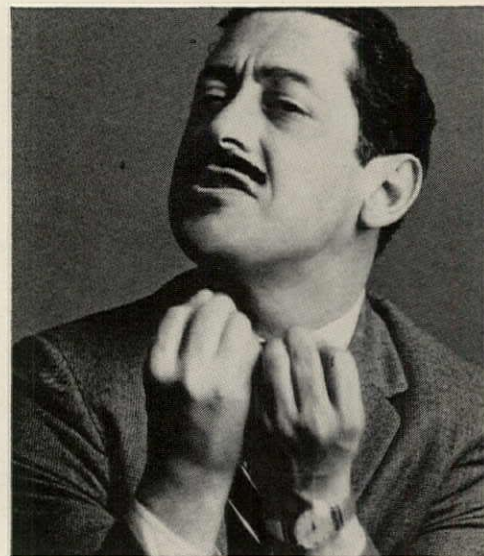
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House & Home

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VOLUME XVI NO. 1 JULY 1964

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NEXT MONTH

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'38% of all builders can be rated probable failures in one year'

In a month dominated by remarkable quotes, this one was a standout. It underscores a new development in housing: market researchers have now sifted through the why of some soft local markets and are feeding back to builders lessons they can learn from failures:

- In Miami, Researcher Charles E. Kimball ended a three-year study of homebuilding with his startling picture of how risky homebuilding can be. On April 30, continued Kimball, 73 Miami builders had not completed a house for two years—yet were still offering unsold houses. Chief ills: “Wrong price range and/or location, inept merchandising.” Dade County helped with “depressing building codes and reactionary and inconsistent zoning practices,” while FHA’s “stultifying repossession practices have added to the confusion.”

- In San Francisco, Researcher Sanford R. Goodkin told the Pacific Coast Builders Conference that 45,000 unsold houses on the Pacific Coast represent builder mistakes which good market research could have avoided. He blamed overpricing or poor value for price, 70%; bad floor plan, 60%; poor exterior elevations, 50% and poor financing, 40%. Biggest clumps of unsold homes: 21,689 in the Los Angeles complex, 4,574 in the San Francisco area, 1,769 in Sacramento.

- In San Francisco, builders themselves acted to cope with a looming problem: between 3,000 and 4,000 of 10,000 apartments just completed or under construction are vacant. Most must ask \$200-plus rents—in a city where only about 2,000 units get that much rent now. The Chamber of Commerce organized a committee led by Builder Joseph Eichler to sell citizens on downtown living.

- In Las Vegas, researchers seeking a cause for overbuilding noted a curious fact: overbuilding occurred despite a sustained population boom (*see p. 10*). Wondered one researcher: is this a portent of Southern California’s future—where more homes were built per new family last year than at any time since 1950.

Jobs 'may be the gravest challenge our economy has faced'

Thus does Philip Hauser, dean of the nation’s population experts, argue that housing demand does not depend upon numbers alone. For, while the population growth undergirding the apartment boom seems strong until 1970, the 600,000 youths who will be seeking new jobs each year of the 1960s is triple the pre-1960 rate. If the U.S. cannot absorb the increase, “unemployment could rise to 10 million by 1970,” he says (*see p. 10*).

Building codes, another long-time trouble spot, are yielding gradually. The Building Officials Conference of America has become the first proprietary code group to remove a requirement for floor bridging—at NAHB’s urging. The International City Managers Assn. is following up Code Expert Hal Colling’s revelations (H&H, June) by briefing its directors on the pressures product groups bring on building officials.

In some slow markets builders are even asking their traditional foes, public housing agencies, to bail them out. Builders of 150 homes in Santa Maria, Calif., offered to sell their houses at \$11,330 each. The city is expected to decline. In Washington, public housing is buying 500 FHA Sec. 221 units a nonprofit foundation built in 1961. Reason: 25% vacancies despite moderate rents of \$71 to \$72.50 for one-bedroom units, \$95.50 to \$98 for three bedrooms.

The Public Housing Administration is haltingly pushing a nationwide plan to buy FHA and VA foreclosed homes and apartments for public housing. Results so far: negligible (*see p. 14*). Builders have long feared this would lead to legalized blockbusting, since the acquired houses must be rented without race bias.

The push for integrated housing is still a potent force. How strong?

'If I have to kill any of you to get my rights, I will'

This remark by Executive Secretary Thomas Atkins of the Boston NAACP provided a jarring note at the Boston kickoff to a series of educational rallies the Presidential Committee on Equal Opportunity in Housing plans to stage across the U.S. to unlock more suburban doors to Negroes. The series is the committee’s answer to builders’ complaints that ingrained community prejudices are the biggest barrier to integrated housing, not the attitudes of builders and realty men.

The Boston rally drew 458 persons but apparently went only a step toward reversing community prejudices. Most of the 70 co-sponsoring groups (including Boston homebuilders) plan follow-up meetings. President Myron Roberts of the Greater Boston Real Estate Board told how effective they can be. The Boston board was the nation’s only realty board to support a state antibias law. Since the law was passed in 1963, brokers have set up individual fair housing groups in Boston suburbs.

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FHA budget scalping provokes floor fight in Congress, slows processing

The House has just given FHA its severest budget cut in years over the sharp protests of congressmen and housing trade groups.

It chopped off every penny of a proposed \$4 million (4.7%) increase, then slashed the budget \$2,065,000 (2.4%) below last year's spending.

So serious was the knifing that NAHB fired off protest telegrams to all 435 congressmen when the House appropriations subcommittee of Rep. Albert Thomas (D., Tex.) urged the drastic cutbacks. Said NAHB: "Home building industry shocked by cut in FHA appropriations proposed by subcommittee. Self-supporting agency uses its own funds, not tax dollars; fees and insurance premiums support FHA operations. Private real estate and building business need quick service from FHA. Urge your support amendment increasing FHA authorization." The Mortgage Bankers Assn. and National Association of Real Estate Boards also rallied their lobbying forces against the cut. But when the appropriations bill came to a vote a week later, the cut stuck.

Processing pinch. The House vote, in late May, came amidst FHA's rush season for new house applications, which are now at record levels. It also put a damper on FHA Commissioner Philip Brownstein's requests, although the Senate has usually restored a large part of the money. But this year the Senate is immersed in civil rights debate. So Capitol Hill observers do not expect the Senate action on FHA's budget until late July or early August. By then the peak season for new-house builders will have passed.

FHA brass, aghast at the House cuts, see no alternative to making "sizeable reductions in force." This could mean furloughing 400 staffers until some of the money is restored.

The House did offer FHA some relief: it told FHA to use fee appraisers, largely for used homes, "consistent with good judgment." But even this may not aid current processing because government agencies must gear spending to the amount approved at the latest stage of legislative action by Congress. And last year Congress sharply limited the use of fee appraisers.

Floor debate. Rep. Albert Rains (D., Ala.), chairman of the housing subcommittee, was so distraught he kicked off an unusual House debate on FHA financing:

- "You are not saving taxpayers' dollars . . . FHA operates on its own money. The taxpayers do not pay for the operation of the FHA. The gentleman [Thomas] is cutting back on the FHA's use of money which it earns.

- "You are reducing the personnel and expenses that they need to relieve a backlog, and that is not good business."

And, said Rains, it is a "little dangerous"

H. Sochurek—LIFE



BUDGETER THOMAS
Too many jobs at FHA?

to cut out FHA jobs while trying to reduce the agency's inventory of foreclosures.

Appropriations Chairman Thomas was unmoved: "Of course these are their own funds," he argued. "But they procure these funds by virtue of government credit . . .

"I do not know of any agency in government that has had a nicer increase in jobs. Beginning in 1962 they had 7,280 and this year they wanted 9,479."

Rains said he believed the House would vote to let FHA spend its own money if given the chance. But he did not push the issue to a vote. Nor did he ask the House to restore the cuts. Reason: defeat via a

U.S. mayors back land tax study

Mayor James Clarkson of the small (40,000 pop.) but rapidly blossoming Detroit suburb of Southfield has won his one-man battle for a study of land-value taxation by the U.S. Conference of Mayors.

Mayor Clarkson, 39, fresh from victory in a three-year fight to boost land assessments in Southfield (NEWS, Sept. '61), persuaded the mayors at their New York City convention to approve a staff study of "the principles of land value taxation in the various states of our union."

Lest that seem a minuscule victory,

Walter Daran



SOUTHFIELD'S CLARKSON
After a rebuff, victory

floor vote would seriously hamper efforts to restore the money in the Senate.

VA claims squeeze. The House appropriations bill also cut the ceiling on lenders' claims honored by VA under its home-loan guaranty program.

In recent years Chairman Thomas has insisted that VA pay such claims from a revolving fund fed by its income (mainly from the sale of mortgages and its direct-loan portfolio). Last year he set the ceiling at \$300 million.

By the end of May VA had won another \$60 million from Congress. But the new ceiling, recommended by Thomas' subcommittee, is only \$257 million. VA officers say without Senate help VA will "really be in the soup by Christmas."

HHFA hiring ban. For the second straight year the House banned more employee hiring by HHFA. Specifically, it 1) turned down a plea for 104 new staffers to run urban renewal programs, 2) wiped out the low-income housing demonstration plan by rejecting a request for \$5,075,000 plus \$5 million already committed, 3) refused a request for an added \$1.5 million to step up housing research, including an expanded report on new house sales and new apartment rentals. The House voted only \$387,400 for research—the same as last year—to continue the monthly reports on sales of merchant-built homes.

The House refused to appropriate \$40 million in new money for Sec. 701 planning grants and open space land purchases.

Clarkson's resolution prevailed in a conference almost totally preoccupied with how the mayors can get more federal tax dollars for projects planned at city hall.

The play-by-play of Clarkson's effort went like this: on the first day of the conference Clarkson asked the resolutions committee to "take an aggressive position" in support of levying property taxes on land only and ending taxes on improvements. Proponents say the system as applied in New Zealand and Australian cities curbs land speculation and urban sprawl, penalizes creation of slums and encourages owners of older homes to improve them.

But Clarkson's resolution ran afoul of the resolutions committee (headed by Detroit Mayor Jerome Cavanaugh)—apparently because he was loud in praise of magazines (including HOUSE & HOME) that have supported the land-tax reform.

Undaunted, Clarkson redrafted the resolution to delete the magazine references. That done, it carried without debate.

In Canada, the Montreal District Home Builders Assn. has declared war on land speculators. Speculators hold 84% of available land in some areas and demand \$12,000 an acre for land assessed at \$3,500, cry builders. They want higher land taxes.

WASHINGTON INSIDE

▶ NAHB fights FHA downgrading

Organized homebuilders are pulling out the stops to press for changes in President Johnson's bill to boost pay of top Federal officials (NEWS, June). The bill would put the FHA commissioner in a twilight zone: the President would be empowered to set his salary just below new levels 1 to 3—\$32,000 to \$29,000. The catch is that the commissioner is now at Level 3 (\$20,000) and could be dropped all the way to Level 6 under the proposal—quite a come down in Washington, where salary often is the key to policy-making power. (At any level, the job would pay more, however.) It also rankles builders that the White House bill would have the long vacant job of deputy HHFA administrator, at Level 3, outrank the FHA chief.

▶ New lease on life for FHA?

Chairman John Sparkman (D., Ala.) of the Senate housing subcommittee hints that the Oct. 1, 1965 deadline on FHA's power to do business may be extended this year "to allay any fears about the continuation of the agency's operation." Builders say uncertainty might dry up FHA mortgage money next spring because lenders would fear the agency might have to refuse insurance on committed projects. Moreover, extension next year would make FHA a legislative hostage again for more housing subsidy.

▶ Housing gypsters scrutinized

President Johnson's consumer adviser, Mrs. Esther Peterson, is fielding numerous complaints about housing. Complainers hit high-pressure selling and high loan-closing costs. FHA brass has been asked what it does to guard home buyers.

▶ FHA bonus for good design

Housing agencies—FHA, PHA, URA, VA—are reaping reams of publicity for their design contests. But FHA also stepped up William J. O'Connor to new design post, and one likely outcome is a bonus to builders in FHA ratings for good design.

C. Bavagnoli—LIFE

Bob Gomel—LIFE

Henri Dauman—LIFE

UPI

L. Burrows—LIFE



GOLDWATER



SCRANTON



ROCKEFELLER



NIXON



LODGE

How Goldwater and other possible GOP nominees stand on housing issues

Sen. Barry Goldwater, front-runner for the GOP nomination for President at the San Francisco convention this month, has taken little active part in shaping housing policy in the Senate.

He voted against the 1961 Housing Act, but was absent for some key preliminary votes. He opposed 40-year, no-down-payment FHA loans and was announced as favoring cutting public housing from 100,000 to 37,000 units and trimming \$700 million from a \$2 billion renewal boost.

Goldwater voted in favor of a proposal by Sen. Jacob Javits (R., N.Y.) to help house middle-income families by creating a Federal Limited Profit Mortgage Corp. modeled after New York State's Mitchell-Lama program. The agency would have issued \$2 billion in bonds, loaned the money to foundations and trade unions to build middle-income units. The plan died.

In 1962 Goldwater opposed bypassing a committee and forcing a floor vote on President Kennedy's plan to elevate HHFA to an Urban Affairs Dept.—a plan President Johnson has just revived.

Goldwater's rivals have different solutions for housing. Governor Nelson Rockefeller of New York says, "I favor federal encouragement of state middle-income housing programs [like New York's Mitchell-Lama program, H&H, March] that bring private capital to bear upon the problem, and liberalization of depreciation provisions in the federal tax laws where pri-

vate construction meets the objectives of a community's urban renewal program. The usefulness of FHA programs should be increased through reduction of costs and red tape." In 1962 Rockefeller pushed a plan to end what he called the "folly" of public housing (NEWS, Apr. '62) and has just won its passage (see p. 18).

Gov. William Scranton of Pennsylvania voted for the 1961 Housing Act as a congressman, but he also favored limiting all spending to one year. He opposed the Urban Affairs Dept.

Former Vice President Richard Nixon and Ambassador-to-Viet-Nam Henry Cabot Lodge, the 1960 nominees, promised "to supplement and not supplant private initiative."

Realty developer, builder are victors in primaries

James H. Scheuer, wealthy 44-year-old renewal developer, rode a wave of insurgent votes for a stunning victory over Rep. James C. Healey, 53, for the Democratic nomination in the 21st Congressional district of the Bronx. He is heavily favored to win in November.

Builder Norman G. (for Gerald) Shanahan, 34, won the Republican nomination for Congress in California's 31st district in central Los Angeles. He opposes Rep. Charles Wilson in November.

SEGREGATION

HHFA 'intimidation' on bias vote ires California

A letter written months ago has catapulted HHFA administrator Robert Weaver into the fray over California's Rumford Fair Housing Act.

Californians will vote in November on a constitutional amendment, sponsored by real estate interests, that would 1) repeal the Rumford Act and 2) bar the state or any smaller agency from preventing a property owner from using his "absolute discretion" in selling or renting property.

In the letter, written in February to Rep. Augustus Hawkins (D., Calif.), Weaver said the amendment "raises seri-

ous questions as to the future of the urban renewal program in California." He noted that the ambiguous language seemed to prevent local renewal agencies from obeying the November 1962 executive order banning race bias in federally aided housing.

President Rodney Hansen of the Building Contractors Assn. has just blasted the letter as "another in a long list of intimidating moves by federal officials to prevent the free exercise of the will of the people."

Said Hansen: "When the federal government announces its intention of withholding tax-supported services that are in no

way related to the civil rights issue unless the electorate votes in a manner desired by the Administration, it seems to me that basic constitutional rights are violated."

Weaver is not the only national personality to comment on the repeal. Integration leader Martin Luther King urged defeat of the amendment, and Gov. Nelson Rockefeller of New York, stumping in the state primary, said repeal would be a "step backward." Rockefeller's opponent, Sen. Barry Goldwater of Arizona, observed only that laws play a "very limited" role in solving racial frictions.

Baby boom brings job hunters—not home buyers

Every time population experts look at the post World War II baby boom its expected impact on one-family house building seems to get farther and farther away. Not long ago, 1965 was to be the year post-war babies, now married, started showing up at model homes. Now Sociologist Philip M. Hauser of Chicago University, the nation's ranking population expert, tells *HOUSE & HOME* that new families formed by post-war babies will not begin buying many homes until 1970.

The reason: the key home buying age group—25 to 54—will show only a 10% increase in households between 1960 and 1970. Until 1970 the baby boom will be felt mostly in apartments, says Hauser, as households with heads under 25 years old increase 90% during the decade.

Job question. But the great surge anticipated in younger households could itself be delayed if workers under 25 are not absorbed into the economy. Young



CHICAGO'S HAUSER
The baby boom: a mixed blessing

workers without jobs will put off marriage and double up with other households.

During the 1960s, says Hauser, 13 million people will be added to the labor force. But 6 million of them will be under 25. This is an average of 600,000 a year, or three times the number of new workers

added yearly between 1955 and 1960.

This impact of young workers, coming at a time when unemployment is already a high 5% (10% in male workers aged 20 to 24) and when automation is closing jobs normally filled by the young and the inexperienced, "may constitute the gravest challenge our economy has ever faced in peace time," says Hauser.

This year, the U.S., for the first time since 1960, produced enough jobs to absorb the increase in new workers, holding unemployment to 4½ million.

"But the real test lies ahead—with the post-war baby influx," says Hauser. "If we're not able to absorb the increase, unemployment could rise to 10 million by 1970."

The first impact of rising unemployment among the young will be a decline in the demand for apartments. But, says Hauser: "Any drop in young household formation would probably adversely affect the demand for owned homes in the 1970s."

LOCAL MARKET

Las Vegas vacancy glut: a warning to Southern California?

More and more builders are demonstrating that they cannot keep their output within the limits of demand—even when demand is rising.

In Las Vegas builders for the last several years have enjoyed rising population, rising employment and rising housing demand. Yet they are mired in one of homebuilding's worst apartment gluts. Apartment vacancies now stand near 33%—and in west central Las Vegas top 51%. One-family housing shows an average vacancy of 4.2%—triple the national average. And almost 90% of the vacant one-family units were built in the last year.

Ominous implications. Such troubles demonstrate, says James Gillies of the University of California at Los Angeles, that "builders do not have an inordinately great capacity to estimate how many units can be absorbed into any given market in any period of time. Nothing has happened to the economic base of Las Vegas," he says, "except that it has expanded, and yet there is a tremendous oversupply of housing. The same situation occurred in Sacramento and Phoenix in the past few years [for more on Phoenix, see page 86]. The important question is whether or not it is currently occurring in Los Angeles."

Rush to Vegas. Las Vegas' troubles began, ironically, with the growth of the Nevada Test Site. Workers and engineers, flocking to the installation, strained the Las Vegas housing supply, already taxed

because of expanding gaming and resort industries. Moreover, recessions in southern California and in the southwest led many other workers to seek employment in Las Vegas. And the magnetism of Las Vegas drew builders and construction workers whose markets elsewhere were drying up (NEWS, Sept. '62). Population ballooned from 127,000 in 1960 to 240,000 now and continues to rise at a 2,500-a-month rate.

These newly arriving builders and local builders set about filling the need for housing—particularly the need for apartments. They were encouraged in this by Las Vegas lenders, whose coffers bulged with mounting deposits. S&Ls, working under regulations that limited their financing of multi-family housing, urged builders to put up triplexes and fourplexes, which are not limited by S&L regulations.

Apartment starts rose from an estimated 1,000 in 1961 to an estimated 1,500 in 1962. By 1963 vacancies began to mount. FHA found a 25% vacancy rate in mid-1963. But building kept on, rising to some 3,500 by year end.

Suddenly the boom began to weaken. Building slowed down, construction workers (who had themselves become a significant demand factor) were laid off. Rents began to weaken, from \$125, in some projects, to \$95. Late last year, FHA Director James Baker clamped down, refusing to issue any more apartment commitments.

Finally a puzzled and frightened Las Vegas homebuilders association decided to

find out what had gone wrong. It hired Shipley-Stewart Corp., Downey, Calif., real estate researcher. Shipley's study, performed in February and March, is just now available. It shows:

- Las Vegas has 2,000 vacant single-family homes for sale and another 400 occupied homes for sale. Another 44,600 occupied homes are not for sale.

- Some 3,200 multi-family units are vacant, only 6,500 occupied.

- Triplexes and fourplexes are in glut; a startling 80% of all apartment vacancies are concentrated in these units.

- Builders failed to sell new housing: 88% of vacant one-family homes and 70% of vacant multi-family were built after January 1, 1963.

- Rental vacancies are clustered 45% in units with moderate rents of \$100 to \$119, even though this category represents only 28% of total supply.

- The \$20,000 to \$25,000 range of single-family homes has 27% of house vacancies, but accounts for only 17% of homes. Houses priced between \$25,000 and \$30,000, representing 6% of the market, had 12% of the vacancies.

Remedy: cutbacks. The study tells one-family builders they must cut back slightly to 4,352 starts a year to achieve a 4% vacancy rate.

To bring the apartment vacancy rate down to 7% by 1966, apartments must drop to 730 units a year, down 79% from the 3,500 started in 1963.

MATERIALS & PRICES

Producers may bypass Commerce on dry-lumber standards

Lumber producers are so upset at how the Commerce Dept. is conducting balloting on proposed new dry-lumber standards (NEWS, Apr.) that they are mulling over a plea to adopt the standards privately even if Commerce rejects them.

Chairman A. J. Agather of the American Lumber Standards Committee, which drafted the standards linking finished lumber size to moisture content, broached the new strategy in an angry speech to the National Lumber Manufacturers Assn.

Lumbermen, said Agather, have encountered a "stacked deck" in Commerce. The acceptor ballot is designed so "every handicap has been placed in the way of securing an affirmative vote . . . Our industry has never been able to obtain from the Department of Commerce any indication of what constitutes a majority acceptance vote or, in fact, what will be considered valid objections. In essence this means the decision rests entirely with the Department of Commerce and is still subject to political influence."

Producer's solution. "Should [the standards] be defeated as a result of the circumstances I have described, what is to prevent our national federation from adopting these standards as national standards [for NLMA members]," suggests Agather.

The Photographic



ALSC's AGATHER
How to unstack the deck

Lumber dressed to the new standards is already moving into lumber yards. By year-end observers expect few, if any, manufacturers will be making dry lumber dressed to the old 1 5/8" size for a nominal 2" thickness.

Weyerhaeuser, which led off by adopting the standards as a company norm, is now shipping half of its dry lumber at the new 1 1/2" size. Other major producers like Boise-Cascade, Willamette Valley Lumber and Elk Lumber are following suit.

Weyerhaeuser stains its new dry lumber a cherry-brown color and marks it "Weyerhaeuser engineered 4-square kiln dried."

FHA holds out. FHA reacted to the producers' news by ordering its 75 district insuring offices not to accept the new lumber sizes in FHA-insured houses. Directors were told violations could lead to dismissal.

The order hit offices that had been accepting the dry lumber as a nonstandard item. Richard Canavan, the agency's assistant commissioner for technical standards, explains he closed this escape route because "FHA could not, in effect, look the other way while local offices accepted the dry sizes."

This, however, looks like the only bar to builders' use of the new dry sizes. The U.S. S&L League, in a new construction guide, tells S&Ls of the proposed standards and promises a further report.

Proprietary code groups have taken no official stand. The Southern Building Code simply requires lumber to meet "nominal standards" and leaves interpretation of the requirement to the local building inspector. A committee of the Building Officials Conference of America has recommended approval when the new standard is submitted (after a Commerce decision). "In the meantime we are advising local inspectors we think it is satisfactory, but there must be a careful check of moisture content and handling," says Executive Director Paul Baseler.

ZONING



REVERSAL of zoning bans renting these apartments.

Robert E. Dias



AMENDMENTS may kill this unfinished resort motel.

Robert Seaver

Apartments and motel run afoul of zoning, face razing

What penalty hangs over a builder who ignores zoning ordinances? Two similar cases promise an answer. In Ridley Township, Pa., a Philadelphia suburb, Albani & Son is appealing a court order barring it from renting 100 completed units of a 204-unit apartment project (left photo). The Delaware County Court upset a zoning variance which had permitted Albani to build in a single-family zone. Though warned of a possible reversal, Albani started the proj-

ect. Now it may be forced to demolish the apartments, which adjoin a new Catholic church and school.

Albani argues that private residential zoning of its five-acre tract is "confiscatory," and, under its constitutional rights, tenants should be permitted to occupy the apartments.

In Provincetown, Mass., Builder Robert Roman has nearly completed a four-story shorefront motel (right), but faces a suit

by six Provincetown homeowners (including Composer Abe Burrows), who contend Roman waited more than six months after he got a building permit to begin construction and that his motel is therefore subject to a subsequent zoning amendment prohibiting buildings over two and a half stories high. They have petitioned Barnstable County Court, which, if it agrees, could force Roman to tear his motel down.

NEWS continued on p. 14



Homes and prospects seem cold? Try an Emerson Electric "circle of heat"!

What sold her? A lot of things, but one small extra made an especially strong impression... that Emerson Electric fan-forced baseboard heater in the family room.

Funny about women... most of them think a family should be able to *use* the family room. Too often, though, the family room's the coldest spot in the house. Jalousie windows, sliding glass doors, tile floor, or a drafty fireplace... whatever the cause of the cold, there's a smart solution: add a "circle of heat."

Emerson Electric makes five new fan-forced baseboard heaters (1500 to 4000 watts, 5120 to 13,562 BTUs) with built-in, floor-level thermostats. Each has a fan that forces air over two separate heat sources, quickly creating a circular flow of warm air throughout the room. No cold spots, no drafts, no blasts of hot air.

One thing to remember, though: You have to call your prospects' attention to these whisper-quiet heaters. From two feet away, you can't even hear them running!

Building from blueprints, remodeling, or adding on to a home... install Emerson Electric fan-forced baseboard heaters for whole-house warmth or in hard-to-heat rooms. There's hardly a family room, den or basement recreation room that wouldn't be more livable (and actually easier to sell) with an inconspicuous Emerson Electric fan-forced baseboard heater. Try it!

The complete Emerson Electric Builder Products Package:

HEAT . . . Baseboard Heat, Built-In Heaters, Radiant Heating Cable, Bathroom Heaters from Emerson Electric and Emerson-Pryne.

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Reflective homeowners prefer the mirror finish of Kwikset

Taken quite a shine to it, in fact. No wonder; even brilliantine never had it so good as when reflected in this Kwikset lockset. It's Kwikset's unique, deep polishing and careful buffing methods that produce that flawless, gleaming finish. And the exclusive plastic protective coating keeps it sparkling up to 5 times longer than other locks tested.

Kwikset has plenty of other merits for home owners to reflect on, too. And reflect they certainly have, for year after year they've made Kwikset America's largest selling residential lockset. Come to think of it, it's probably America's largest selling mirror too.

Kwikset **K** *locksets*
America's largest selling residential locksets

KWIKSET SALES & SERVICE COMPANY, A SUBSIDIARY OF THE AMERICAN HARDWARE CORPORATION, ANAHEIM, CALIFORNIA.



RING OF SLUMS hurt one-family homes in Buffalo. Highest priced model (\$19,900) is at left and lowest (\$15,900) in center background.

URBAN RENEWAL

Why house sales flopped in an urban renewal project

First Hartford Realty Corp. of Hartford, Conn., has just moved to cancel its contract with Buffalo, N.Y., to build 150 homes for sale in Ellicott, the city's first renewal project.

First Hartford opened six models in March to citywide publicity. Two months later it quit. Its sales record: zero.

The flop ends a contract won by First Hartford after bitter wrangling between city hall Republicans, who favored Urban Properties Inc. of Pittsburgh, and Democrats who backed First Hartford. Even the reasons behind the flop are charged with partisan politics, but the arguments speak volumes to builders attempting the still-tricky business of rebuilding former slum neighborhoods. Here's what happened:

No pioneers? In the beginning First Hartford's models played to thousands of would-be buyers. But few signed sales contracts and none had credit ratings strong enough to justify FHA applications.

The sales drought fanned uncertainty about the future of the neighborhood. The

models were tucked in a corner still ringed by glowering slums (*see photo*) and two nearby public housing projects. To visitors they looked tiny compared to the 70 acres of surrounding land—vacant since 1961 because of the political brouhaha (NEWS, Aug. '63).

"Purchasers do not want to be pioneers—they want to know what is going up around them," explained First Hartford's attorney, Harry Halprin of New York City, a month after the model opening.

By then First Hartford had decided it could not locate enough buyers for one-family detached homes and instead offered to build 150 townhouses for sale. The city has never made an official reply.

Overpricing? City officials blame the sales flop on prices that far outstripped the incomes of Negro residents in the surrounding neighborhood.

First Hartford proposed last fall to sell homes for \$13,500 to \$15,500. Instead final prices came in at \$15,390 to \$19,990 for a five-bedroom, two-bath model.

First Hartford says higher prices are for better quality.

A bad press? Buffalo newspapers covered First Hartford's models lavishly, printing three and four column photos.

But after the long political hassle over choosing a developer, the company could never shake the lingering ill will.

When First Hartford met sales resistance, Mayor Chester Kowal, a Republican, went on a well-publicized tour of the models. The resulting headline: "MAYOR BLAMES INFERIOR DESIGN."

The mayor complained about pitted sidewalks, kitchen drawers that could not be opened because the refrigerator stood in the way and posts that partly obstructed basement stairways. First Hartford President Neil Ellis promised corrections.

Grumped Buffalo's *Courier-Express*: "You can't expect people to spend thousands of dollars on inferior products. The deficiencies may be correctable, but they are deficiencies. They should never have existed and certainly not in showcase houses."

PUBLIC HOUSING

New PHA policy turns FHA foreclosures into public housing

The Public Housing Administration's pressure to turn FHA and VA foreclosures into public housing is showing halting results.

In the past 18 months local public housers have bought or agreed to buy 369 units from FHA. That is more than the 337 units converted to subsidized low-income use in the preceding six years since the first such purchase in 1956. Since Dover, Del., took over 60 row houses (NEWS, May, '63), local housers have bought or agreed to buy 161 one-family homes and 208 apartments. Cities buying one-family

homes: Centreville, Ill., 11; Battle Creek, Mich., 16; Easton, Pa., 60 and Cayey, Puerto Rico, 74. Buying apartments are: Washington, 26; and Harrison Township, Pa., 122. Darby Township, Pa., buying a sour subdivision from VA, so far has acquired 35 homes at \$5,000 each.

Most of this results from PHA Commissioner Marie McGuire's new policy: any local public housing agency seeking new units is given a list of foreclosed FHA and VA units in its area. It must then give PHA a detailed report on why the vacant units

would not satisfy its need. Congressmen, who sometimes have seen such purchases as veiled integration schemes, have had only one response so far: they want Mrs. McGuire to inspect vacant military housing units too. She calls this unworkable.

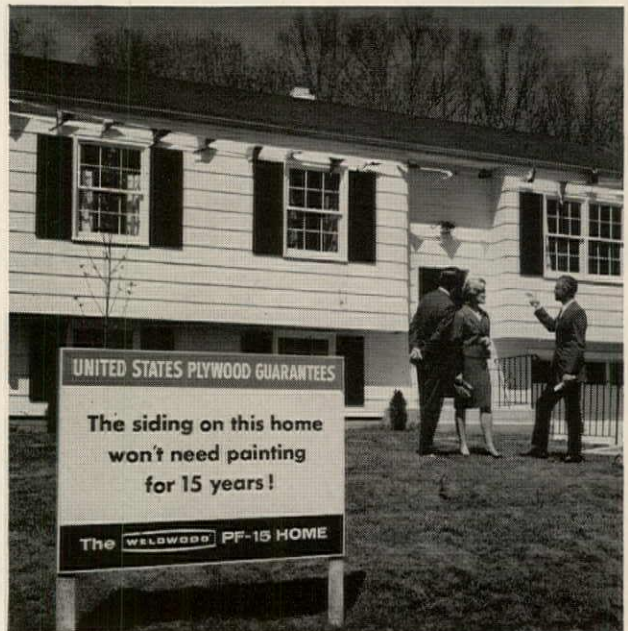
FHA sales of foreclosures topped new acquisitions for the first time in April, 3,708 sales to 3,643 repossessions. FHA says colleges, not PHA, are its biggest customers. So far FHA has sold 814 units to 14 colleges, mostly for married students.

NEWS continued on p. 18

Sales prove it: Home buyers pay more for siding surfaced with Du Pont TEDLAR®. Why?

U.S. Plywood guarantees Weldwood PF-15 siding,

Recently, in a medium-sized development, more than half the homes sold in the first 90 days had TEDLAR® PVF film on the siding—and better than one in four customers who had a choice of lower-cost siding paid extra to get TEDLAR. TEDLAR has obvious advantages: it's tough, smooth, fade- and chalk-resistant, is hard to stain, easy to clean. Plus this clincher: U. S. Plywood's written guarantee that Weldwood† PF-15 siding, surfaced with TEDLAR, will be paint-free for 15 years.



Home buyers want guaranteed long-term economy. Home buyers look beyond the immediate price of a house to its long-term cost. They know conventionally finished siding will need repainting three, maybe four, times in the next fifteen years. U. S. Plywood guarantees, in writing, that Weldwood PF-15 siding will not need painting for 15 years. So although it costs more initially, home buyers who choose TEDLAR save considerably in the long run.



surfaced with TEDLAR, won't need painting for 15 years!



Home buyers want the convenience of TEDLAR. With TEDLAR, economy and convenience go hand in hand. Home buyers resent the time and trouble it takes for house maintenance. When their siding is pre-finished with TEDLAR, they know they're freed from both the expense and nuisance of exterior maintenance. TEDLAR is exactly what they want on their labor-saving, easy-to-run, up-to-date homes.



Home buyers like the easy maintenance of TEDLAR. Home buyers like a new home to go on looking new—and that's exactly what siding surfaced with TEDLAR does. Whatever the weather, Weldwood PF-15 retains its original appearance better than any other pre-finished siding. When other finishes have deteriorated badly, TEDLAR needs only a wash-down to look fresh, smooth and handsome. Mail the coupon below to learn more about this remarkable new film finish.

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LEGISLATURES

California votes to audit S&L holding companies

Gov. Edmund G. Brown has just signed a bill lifting the curtain that shielded California's 50* S&L holding companies from state regulation.

But the law is much wider than that. Corporate or individual owners of 10% or more of any state or federally chartered S&L must disclose all their financial interests. They must report their financial condition plus all inter-company ties, and undergo examination by independent accountants and regulatory authorities.

The holding companies control 78 of the 204 state-chartered S&Ls with \$10 billion of the \$13 billion invested in state associations. The 70 federals, with another \$7 billion of deposits, are theoretically owned by their savers, but the management usually has control through proxies.

Even the world's largest S&L, the \$1.5-billion Home S&L of Los Angeles, is affected. It is owned exclusively by Tycoon Howard Fieldstad Ahmanson.

How the battle went. Brown and S&L Commissioner Frederick E. Balderston sought the disclosure law. The original proposal was confined to state S&L holding companies, but the legislature amended it to include federals and individuals after a bitter fight by 14 S&L holding companies. They argued that the original proposal discriminated against them.

The measure first sailed through the Senate, but the amendment then aroused the opposition of the powerful California S&L League, which includes all 274 associations. It lobbied for the original bill as the fight shifted to the Assembly finance and insurance committee. It pitted against each other such giants as President Charles A. Wellman of the \$1.5-billion First Charter Financial Corp., the state's largest public holding company, and President Edward L. Johnson of the \$693-million Financial Federation Inc., the third largest. Wellman was chairman of the League's legislative committee and Johnson led the 14 insurgents. President Bart Lytton of Lytton Financial Corp., another big holding company, backed Johnson.

By the time the league thought it might have sufficient votes to re-amend the bill to its original form, the session was in its final week. A re-amended version would have required Senate concurrence plus Assembly passage. Caught in a time squeeze, the league dropped its fight against the original broadening amendment.

Settling for half a loaf. Executive Vice President Franklin Hardinge Jr., widely regarded as one of California's most sophisticated lobbyists, explained that the league backed away rather than risk the loss of the entire bill in a closing rush.

Whether Balderston will even try to regulate the federals remains an open question. For as Gov. Brown signed the meas-

* Twenty-four of them publicly held, the others private.

Ken McLaughlin



CALIFORNIA'S BROWN
Should the state oversee federals?

ure, he said he would ask next year's legislature to strip from the act all reference to federal S&Ls. "The S&L commissioner has no authority or responsibility for any of their activities," said Brown.

This brought an immediate riposte from Johnson. He was astonished, he said, "that the governor or anyone else would try to weaken what the legislature has accomplished."

Praised by commissioner. Balderston and Wellman called the bill "a significant step forward."

The disclosure measure was one of the

H&H staff



LEAGUE'S WELLMAN
"Significant step forward"

17 fundamental S&L industry reforms urged on Brown and Balderston by a Sacramento County grand jury that indicted one S&L and several officials on charges of excessive or fraudulent lending (NEWS, May). Balderston endorsed a holding company bill in a point-by-point reply to the jury's criticism, but he said several of the other recommendations "parallel present procedures." (As an aftermath of the largest S&L scandal so far, West Coast S&L of Sacramento was fined a maximum \$5,000 last month for making unauthorized loans to Builder Jay Parker, who has been sentenced to jail.)

New York: housing to upgrade the poor

Gov. Nelson Rockefeller has just signed a controversial bill to submit a \$165 million public-housing bond issue to a public vote in November and to subsidize poorer families renting in middle-income projects.

Help from big-city Democrats took the program readily through the New York State Senate. A rebellious Republican Assembly turned it back by a 73-to-66 vote in its first test, then passed it, 82 to 64, after the governor gave in to his party leaders' demands on more school aid.

More public housing. Rural assemblymen, traditional foes of public housing, spoke sharply against the proposal to provide 3,000 public-housing units by 1968.

"We have paid \$1 billion for public housing in 25 years and we haven't made a dent in the problem," said Gene Goddard, an upstate Republican.

Mixing the poor. Rockefeller's plan to house low-income families in middle-income projects drew passionate opposition too.

New York City's largest newspaper, the *Daily News*, pointed out that a similar proposal had been rejected by the voters in 1962. Said its editorial:

"Slap 'Er Down Again, Voters! It is as bad now as it was then, and we hope the

voters will see their duty and do it with relish."

The subsidy plan will mingle low and middle-income families in publicly assisted but privately built developments erected under the state's Mitchell-Lama subsidized-interest (currently 4.1%) mortgage program. Social theorists contend such mixing will motivate the poor to adopt middle-class values and try to upgrade themselves.

Up to 20% of the Mitchell-Lama apartments will be leased by the state Housing Finance Agency to provide 800 to 1,000 units yearly for a three-year experiment with poor families. The State Division of Housing and Community Renewal says families earning from \$3,200 to \$7,000, depending on how many rooms they need, will be eligible.

Rents will be held to \$15 to \$18 a room compared to \$25 to \$30 charged regular tenants, and the state will make up the difference. Subsidies will average \$405 a year for each apartment.

The legislature approved a \$1 million capital grant for the program. A similar plan to use public housing funds was overwhelmingly defeated by referendum in 1962, (NEWS, Dec. '62) and opponents argue the new lease-financing plan was devised to circumvent the voters' will.

MONEY begins on p. 29

MORTGAGE MONEY

90% piggy-back loan taps new mortgage money...

Ben Martin

Former FHA Commissioner Julian H. Zimmerman and the Mortgage Guaranty Insurance Corp. of Milwaukee are starting a 90% conventional mortgage loan plan. To help builders boost sales, the plan saves the home buyer the expense of second-mortgage or land-contract financing when he prefers to avoid dealing with FHA and other 90% loans (e.g. from S&Ls) are unavailable.

MGIC and Zimmerman, now president of Lumbermen's Investment Corp., Austin, Tex., developed the high-ratio program in collaboration with associates in Toronto and Montreal who are initiating a similar operation in Canada (see below).

They call it piggy-back mortgaging because a separate corporation lends the difference between what investors like insurance companies can lend—usually 75%—and the 90% loan most buyers need today. The entire loan is then amortized as one package, eliminating short-term notes with large monthly payments that are characteristic of junior financing.

New company organized. The borrower signs only one note for up to 90% of value on an owner-occupied single-family residence. An institutional investor advances 83⅓% of the loan. The other 16⅔% comes from Mortgage Finance Corp., a new subsidiary formed by Lumbermen's with \$300,000 seed capital.

All loans will be insured by MGIC, the largest private enterprise rival of FHA. The



LUMBERMEN'S ZIMMERMAN
Pioneering with an FHA rival.

institutional investor gets priority of interest in the real estate. MFC receives priority in the proceeds of an MGIC policy of loan insurance as protection against a loss from a borrower's failure to pay.

MGIC includes principal, interest and expenses in claim settlements. So if it chooses to pay 100% of the claim and take title to the real estate, both investors are paid in full. If MGIC elects to pay minimum coverage of 20% of a claim, the proceeds will first pay MFC's 16⅔% and then apply the remaining 3⅓% to the amount the institutional investor realizes from the sale of the property he takes.

Cheaper rates. Senior Vice President C. W. (Bill) Smith of MGIC says the new split-

loan technique has these advantages:

- Private loan insurance rather than junior liens on real estate means better protection for the secondary investor.

- An 80% to 90% loan commands a ¼% higher interest rate than loans of 75% or less.

"At current average competitive rates, this differential would permit a borrower to obtain a 90% loan for 6%. The 75% institutional investor would receive 5¾%. The rate to MFC would be increased to 6¾%, or 6% on its own top one-sixth investment plus the ¼% it will get on each of the bottom five-sixths via a joint investment agreement. The 6¾% equals 7¼% minus ½% for servicing."

This is less than rates generally charged for seconds, but the loss risk is negligible with mortgage insurance.

No quick profit. Zimmerman will head the new company initially, and he and Smith estimate volume at \$100 million the first year, \$16⅔ million of it for MFC. The kickoff operation is expected to begin with Investors Diversified Services of Minneapolis on an Aurora Properties Inc. residential development of 1,100 acres in New Orleans.

MFC will use short-term bank credit and some long-term debt, and will seek \$1 million with an issue of collateral trust indentures backed by its holdings. It expects to make a public stock offering this year.

... Canada follows suit to overcome a shortage of capital

Canadian investment companies—which worked closely with the tyro American operation for piggy-back loans—are organizing to tap new pools of mortgage money.

Canada can use such efforts. For its mortgage financing is one of the backward phases of its housing industry.

Part of the trouble is that National Housing Act loans are pegged at an interest ceiling (now 6¼%) below what most private lenders want. So the government's Central Mortgage & Housing Corp. has to make nearly half of NHAS directly. Moreover, NHA loans are only available on new housing, and carry a loan-to-value ceiling of 95% on the first \$12,000 of value plus 70% above—with a loan limit of \$15,600. Most conventional lenders are limited to 66% of appraisal on new and used homes. All this makes quality housing costly to finance and produces a free-for-all in second mortgages at rates from 12% up.

Two new companies. To end this the Canadian group has set up Mortgage Insurance Co. of Canada, a private insurer similar to the Mortgage Guaranty Insurance Corp. of Milwaukee, and has formed Central Covenants Ltd., a mortgage investment house.

Here's how the Toronto tandem hopes to ease the shortage of both short- and long-term mortgage money in Canada.

Mortgage Insurance will insure 83⅓% mortgages on existing as well as new homes up to \$35,000 for the 21 leading lenders in Canada. Since these lenders can hold legally only 66⅔%, Covenants will buy the upper 20% of each 83⅓% loan. Covenants will deal only in insured loans.

Charges & profit. Mortgage Insurance will charge a 2% premium on the total mortgage. All high-ratio loans will cost ¼% more than Canada's average conventional rate of 7% (compared with 6% in the U.S.), so interest will be 7¼%. The ¼% will be passed on to Covenants, creating a higher yield from the high-risk portion of the mortgage and thereby letting Covenants borrow more readily to finance continuing purchases. Covenants will pay lenders holding its mortgages a service fee.

Advantages. Most of Canada's 21 major lenders are stockholders in Covenants. Covenants can thus buy the upper 20% of the lenders' mortgages and have the opportunity to sell the debt back to the lenders' own investment departments. It will sell

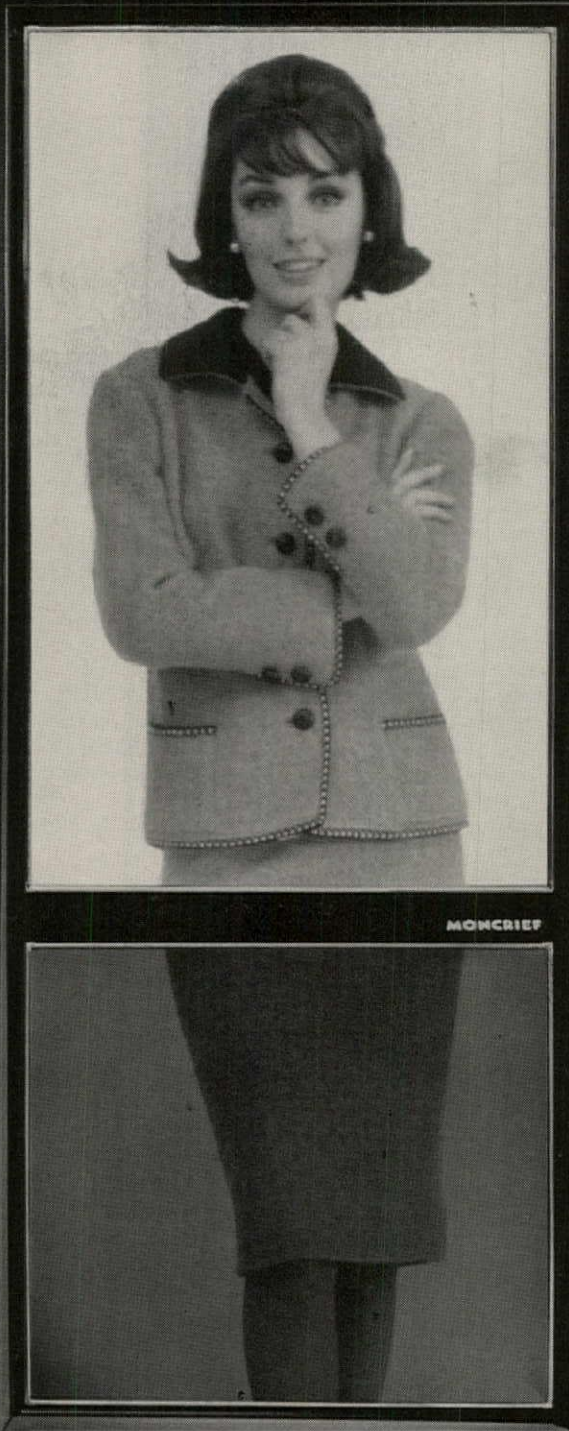
collateralized trust indentures backed by the MICC coverage. The private insurance will standardize the loans and make them more attractive to investors.

New leaders. President John C. Neely of Alcan Design Homes (Montreal), the Aluminum Co. of Canada's home sales subsidiary, led a task force that put Mortgage Insurance together with a capitalization of \$5 million and authority to go to \$15 million. Gardner English, former vice president of Investors Diversified Services of Canada,* has been elected president.

Holborough Investments Ltd. of Montreal, a holding company owned in equal shares by Aluminum Co. of Canada, the Bank of Nova Scotia and Greenshields Inc., a Montreal investment banker, own 55%. Others owners: Canadian Pacific Investments, the railroad's investment subsidiary, 15%; Canadian Enterprises Development Co., a small business financing company, and the Canadian National Railway pension fund, 10% each; Trans-Canada Airlines pension fund and MGIC of Milwaukee, 5% each.

* A spin-off from the Minneapolis company of the same name.

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Mortgage men's big chance: S&Ls are cleared to start nationwide lending program

Mortgage bankers expect to boost their originating and servicing business under a new federal s&l rule letting any insured association lend 5% of assets in any metropolitan area in the U.S. after July 1.

Why, since mortgage bankers and s&l's have done little business until now? Because the Internal Revenue Service is telling s&l's they cannot originate and service loans outside their lending areas without endangering their tax advantages.

"We expect great benefit," says Vice President Sherwin Vine of Citizens Mortgage of Detroit, in a typical comment. "There is high optimism among the mortgage men with whom I have talked."

President Eugene Mortlock of the \$200-million First Federal s&l in New York concedes that s&l's cannot afford to operate the new program independently and will probably have to work through mortgage bankers at first. But he warns the mortgage men to mend their ways.

"Their servicing is inadequate for them to expect a great deal from this for very long," he cautions. "They must reconcile themselves to adding research departments and to providing better economic data if they want to make the arrangement permanent. It must, in short, become a real partnership. In return for servicing fees, they must truly service."

Mortlock predicts that s&l's will otherwise learn to operate the program through companion s&l's in other states.

Concern over dividends. Concern over higher savings account dividends is rising in government and trade association circles, but it arouses virtually no sympathetic anxiety among mortgage bankers.

HHF Administrator Robert C. Weaver cites a trend to higher savings bank dividends and points to some California s&l's offering 4.9% and 4.95% on shareholders' savings. The nationwide s&l average was 4.27% on January 1, up from 4.24% a year earlier. The U.S. s&l League says there was a slight increase at the end of the first quarter. It expects sporadic raises in several areas on the July 1 dividend change date.

Weaver calls such a trend self-defeating for builders and housing.

"Higher money costs lead to higher mortgage interest rates," he argues. "Any significant rise in mortgage interest rates could dry up portions of the demand for housing and mortgage credit."

Mortgage men disagree. But HOUSE & HOME's survey of 18 key cities finds scant support for such alarm. Sums up Mortgage Banker Lon Worth Crow of Miami: "Interest rates do not produce or depress housing demand. If anything, it's the other way round. Besides, cheap interest rates are one of the least important factors in any rise in building activity. When business is good, nobody cares if they are high. When it is bad, few people are buying housing anyway."

MONEY continued on p. 34

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing). As reported to HOUSE & HOME the week ending June 5, 1964.

City	Conventional Loans ^W		Construction Loans ^W		FHA 207	FHA 220	FHA 203 ^b
	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Banks, Ins Cos. & Mtg. Cos.	Interest + fees	Firm Commitment	Firm Commitment 35 years	Min. Down 35 year Immed
Atlanta	5 1/2-6	5 3/4-6 1/4	6+1	6+1	a	a	97 1/2-98
Boston local	5-5 1/2	5-5 1/2	5 1/4-6	5 1/4-6	a	a	a
out-of-st.	—	—	—	—	a	a	97-97 1/2
Chicago	5 1/2-5 1/2	5 1/4-6 1/4	5 1/2-5 3/4+1-1 1/2	5 3/4-6+1-2	99-par	99-par	97-98
Cleveland	5 1/2	5 1/2-6	6+1	6+1	99-par	99-par ^b	97 1/2-98 1/2
Dallas	5 1/2-5 3/4	6 1/2-6 1/4	6 1/2-6+1	6 1/2-6+1	99-99 1/2	a	98-99 1/2 ^b
Denver	5 1/2-6	5 1/2-6 1/2	6+1 1/2-2	6+1 1/2-2	99	a	a
Detroit	5 1/4-5 1/2	5 1/4-5 1/2	6+0	6+0	99 1/2-par	99 1/2-par	97 1/2-98
Honolulu	5 3/4-6 1/2	6-7	6+1-2	6+1-2	a	a	97
Houston	5 1/2-6	5 1/2-6 1/4	6+1	6 1/4+1	98 1/2-99 1/2	98 ^{bd}	97-98 1/2
Los Angeles	5 1/2-6	5 3/4 ^b -6.6	6+1 1/2	6-6.6+1 1/2-2 1/2	99 1/2	99 1/2	98
Miami	5 1/2-5 3/4	5 1/2-6	5 3/4-6+0-1	5 3/4-6+0-1	a	a	97-97 1/2
Newark	5 1/2-5 3/4	5 1/2-6	6+1	6+1	99-par	99-99 1/2	98 1/2 ^b
New York	5 1/2-6	5 1/2-6 ^r	5 3/4-6	5 3/4-6 ^r	par-100 1/2	par-101	par
Okla. City	5 1/2-6 ^b	5 3/4-6 1/2	6+1-2 ^b	6+1-2	a	a	97 1/2-98 1/2 ^b
Philadelphia	5-5 3/4	5 1/4-6	5 1/2+1	5 3/4+1	par	par	99
San Fran.	5 1/2-6 ^b	5 3/4-6.6	5 3/4-6+1-1 1/2	6-6.6+1 1/2-2 1/2	99-99 1/2	99 1/4-99 3/4	98 1/2
St. Louis	5 1/4-6	5 1/2-6 1/4	5 1/2-6 1/2+1-2	5 1/2-6 1/2+1-2	a	a	a
Wash. D.C.	5 1/2-5 3/4	5 1/2-5 3/4	5 3/4+1	6+1	99	par	99

FHA 5 1/4s (Sec. 203) (b)

City	FNMA Scdry Mkt ^{xy}	New Construction Only		Existing ^z Min Down 25 year Immed
		Minimum Down* 30 year Immed	10% or more down 30 year Immed Fut	
Atlanta	97 1/4	98-98 1/2	97 1/2-98 1/2	98 1/2 ^b 98 ^b 97 1/2-98 1/2
Boston local	98 1/4	par-101	par-101	par-101 par-101
out-of-st.	—	97-98	98	a a 97-98
Chicago	97 1/4	98 1/2-99 1/2	97 1/2-99	98 1/2-99 1/2 98-99 1/2 98 1/2-99 1/2
Cleveland	97 1/4	98 1/2-99	98-99	99-99 1/2 98 1/2-99 98 1/2-99
Dallas	97 1/4	97 1/2-99	97-98 1/2	98 1/2-99 98 1/2-99 97 1/2-99
Denver	96 3/4	98-99	97 1/2-98 1/2	98-99 97-99 97 1/2-99
Detroit	96 3/4	98 1/2	a	99-99 1/2 a 98 1/2
Honolulu	96 3/4	97-97 1/2	96 1/2-97	97 1/2-98 97-97 1/2 97-97 1/2
Houston	97 1/4	97 1/2-99	97 1/2-99	98-99 a 98-99
Los Angeles	96 3/4	98	97 1/2	98 ^{b,c} 98 1/2 98 1/2
Miami	97 1/4	97 1/2-98	a	98 ^b a 98 ^b
Newark	97 3/4	99-par	99	par 99 par
New York	98 1/4	par	par	par par 97-99
Okla. City	96 3/4	97 1/2-99	97 1/2-99	98-99 a 97-99
Philadelphia	97 3/4	par	par	par par 99 1/2
San Fran.	96 3/4	98 1/2-99 ^f	98-99 ^f	99 98 1/2 98-98 1/2 ^k
St. Louis	97 1/4	97 1/2-99	97 1/2-99	97 1/2-99 97-99
Wash. D.C.	97 3/4	99	99	99 99

*3% down of first \$15,000; 10% of next \$5,000; 25% of balance.

Footnotes: a—no activity. b—limited activity. c—for local portfolios. d—on spot basis. f—98 for loans over \$20,000. h—limited 6%. j—some 5 1/2 and 5 3/4 available. k—for 25 or 30 years. l—in isolated circumstances on choice loans. m—no fee if permanent loans included. p—1/2 point differential has generally disappeared. r—depending on % of loans. s—no fees to 1%. t—higher price offered by correspondent for one insurance company. v—limited 5 1/4. w—interest charged to borrower. x—FNMA pays 1/2 point more for loans with 10% or more down. y—plus 1% stock purchase figured at sale for 75¢ on the \$1. z—on houses not over 30 years old of average quality in a good neighborhood.

* Immediate covers loans for delivery up to 3 months, future covers loans for delivery in 3 to 12 months.
 • Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones.
 • Quotations refer to houses of typical average local quality with respect to design, location and construction.

VA 5 1/4s

City	FNMA Scdry Mkt ^{xy}	New Construction Only	
		No down 30 year Immed	Fut
Atlanta	97 1/4	97 1/2-98 1/2	97 1/2-98 1/2
Boston local	98 1/4	par-101	par-101
out-of-st.	—	97-98	98
Chicago	97 1/4	98-99	97 1/2-99
Cleveland	97 1/4	98-99	98 ^b
Dallas	97 1/4	97 1/2-99	97-98 1/2
Denver	96 3/4	97 1/2-99	97 1/2-98 1/2
Detroit	96 3/4	98 1/2	a
Honolulu	96 3/4	97 1/2	97
Houston	97 1/4	97 1/2-98 1/2	97 1/2-98 1/2 ^b
Los Angeles	96 3/4	98	97 1/2
Miami	97 1/4	97-98	a
Newark	97 3/4	99	99
New York	98 1/4	par	par
Okla. City	96 3/4	97 1/2-99	97-98 1/2 ^b
Philadelphia	97 3/4	99 1/2	99 1/2 ^b
San Fran.	96 3/4	98 1/2-99 ^f	98-99 ^f
St. Louis	97 1/4	95-99	95-99
Wash. D.C.	97 3/4	99	99

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Bernard Dill, dir., Massachusetts Purchasing Group; Chicago, Robert Pease, pres., Draper & Kramer Inc.; Cleveland, David O'Neill, vice pres., Jay F. Zook Inc.; Dallas, Aubrey M. Costa, pres., Southern Trust & Mortgage Co.; Denver, Allen Bradley, asst. vice pres., Mortgage Investments Co.; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Corp.; Honolulu, Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, vice pres., T. J. Bettes Co.; Los Angeles, Christian Gebhardt, vice pres., Colwell, Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Newark, William W. Curran, Franklin Capital Corp.; New York, John Halperin, pres., J. Halperin & Co.; Oklahoma City, M. F. Haight, first vice pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Banking & Trust Co.; St. Louis, Sidney L. Aubrey, vice pres., Mercantile Mortgage Co.; San Francisco, Frank W. Cortright, sr. vice pres., Bankers Mortgage Co. of California; Washington, D. C., George W. De Franceaux, pres., Frederick W. Berens Inc.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA, VA 5 1/4s
 Immediates: 97-97 1/2 Futures: 97-97 1/2

Note: prices are net to originating mortgage broker (not necessarily net to builder) and usually include concessions made by servicing agencies. Majority of loans being sold today are spots.

FHA, VA 5 1/4 spot loans (On homes of varying age and condition)

Immediates: 96 1/2-97 1/2

Prices cover out-of-state loans, reported the week ending June 5 by Thomas P. Coogan, president, Housing Securities Inc.

CONVENTIONAL LOANS (combined averages)

	February	March	April
New homes	5.81	5.79	5.79
Existing homes	5.95	5.94	5.92
(interest charged by various lenders, new homes)			
S&Ls	5.94	5.91	5.89
Life Ins. Cos	5.42	5.48	5.47
Mortgage Companies	5.73	5.74	5.70
Commercial Banks	5.61	5.60	5.62
Mut. Sav. Banks	5.55	5.60	5.56

Source: Federal Home Loan Bank Board.

NET SAVINGS DEPOSIT CHANGES

	% change		
	Apr. '64	Apr. '63	Year to date from 1963
Mut. sav. banks ^a	97	d	1,150 89
S&Ls ^b	295	(-38)	2,603 (-26)
Commercial banks ^c	1,400	40	6,300 0

a—National Association of Mutual Savings Banks. b—United States Savings & Loan League projections. c—Federal Reserve Board. d—not calculated because of loss last year.

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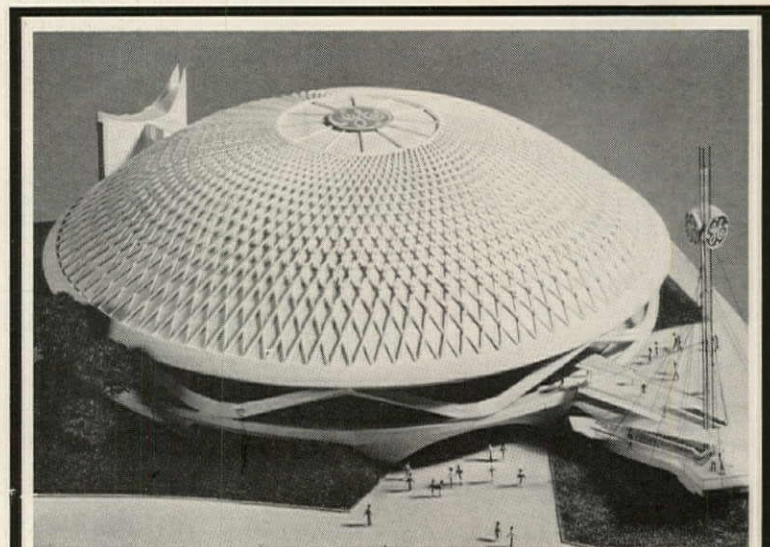
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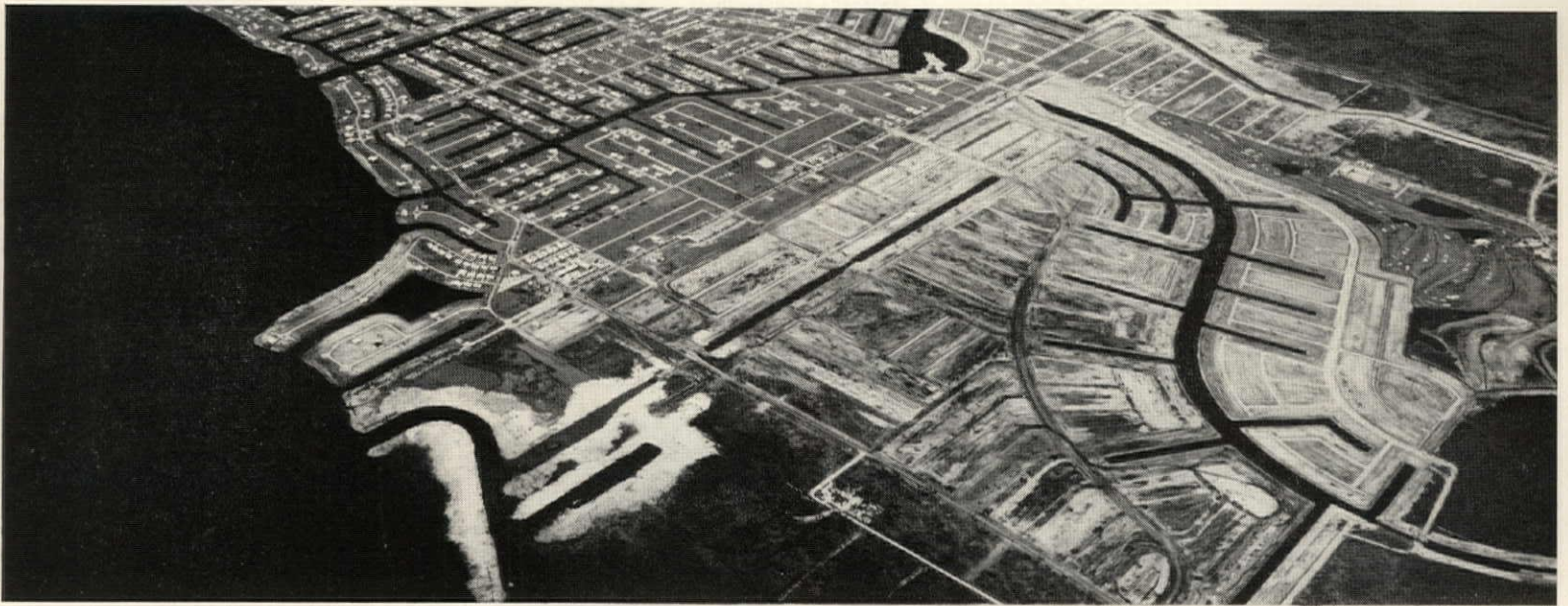
Aberdeen East, Matawan, New Jersey, is an attractive community of 240 Gold Medallion Garden Apartments being built by Arthur Goldberg and Paul Waters of Parr Associates, Inc. The sales appeal of these total-electric apartments is enhanced by the modern General Electric lighting and underground power system.



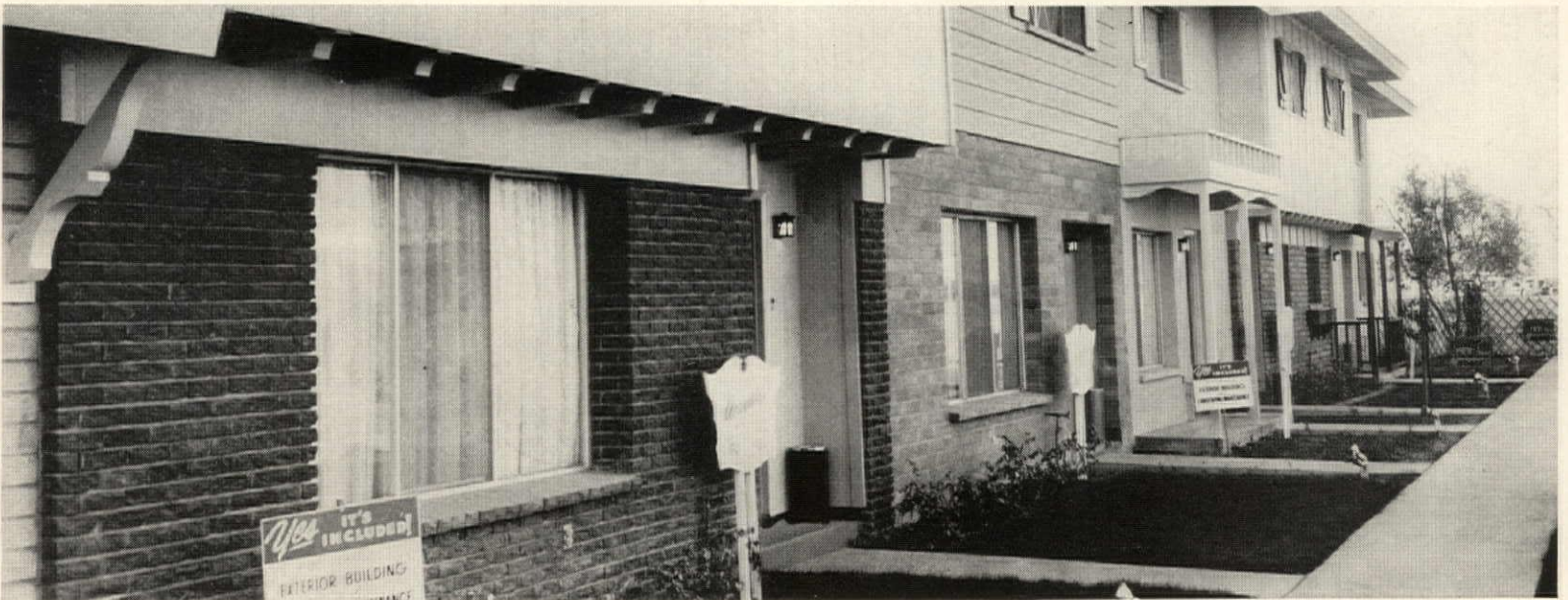
Ambassador East Apartments, Royal Oak, Michigan—Builders Allen Layne and Marv Brooks built their 82-unit Garden Apartment complex to Medallion standards, featuring General Electric push-button kitchens and climate control. These sales features, plus attractive exterior lighting, a swimming pool, and beautiful landscaping add to the appeal of this outstanding Detroit-area apartment.



Medallion City, New York World's Fair—approximately 46,000 people a day will tour Medallion City at General Electric's World's Fair Progressland. The many advantages of all-electric living will be demonstrated through General Electric's complete line of electrical products for residential and commercial applications.



Cape Coral, Florida, where Gulf American Land Corporation is building Medallion Homes on carefully planned waterfront lots. Each contemporary Florida home will feature a modern General Electric kitchen and electric climate control for year-round comfort. All-electric living, coupled with well-planned community facilities, are making Cape Coral one of Florida's most successful residential communities.



Hallcraft West Plaza Townhouses, Phoenix, Arizona, where builder John Hall has combined the comforts and conveniences of total-electric living by General Electric in Gold Medallion townhouses, with the pleasures of a carefully planned family recreational area and community center. Fifty-six townhouse sales the first week at West Plaza have proven that Hallcraft's combination brings results.



Lakeshore Estates, Topeka, Kansas, where 20,000 people turned out on opening day in the rain to tour George Emery's new Gold Medallion home community. Three hundred all-electric homes will feature a General Electric range, dishwasher, Disposall®, refrigerator, separate freezer, built-in stereo, intercom, hot water heater, central air conditioning and General Electric's ceiling cable heat.

Advance buys CIMCO, dickers for a piece of Palomar

Advance Mortgage Co. of Detroit is feeling its way toward a move that could make it the nation's second largest mortgage banker. At presstime, it was negotiating to buy 225,000 shares of Palomar Mortgage Co. (13.8% of its stock) from Palomar Chairman and President Nels G. Severin, 1958 NAHB President. No price was disclosed, but at Palomar's current bid of \$3.625 the shares would cost \$815,625.

Purchase of the Palomar stock could open the door to an eventual merger with Palomar, whose \$597 million in mortgage servicing volume, when added to the \$496 million of Advance, would fall just short of the \$1.4 billion of Houston's T. J. Bettes, the long-time leader.

Advance completed a first step toward expansion last month by acquiring all the outstanding stock of Central Investment & Mortgage Co. of Atlanta (92½% from Palomar costing \$930,000 and the rest from a CIMCO officer). This added \$80 million to Advance's servicing volume (pushing it to \$576 million).

Advance's rise began in 1956 when it doubled its servicing volume from \$99.6 million to \$209.7 million by buying Irwin Jacobs & Co. of Chicago. In 1962 Advance added Residential Mortgage Co. of Pittsburgh and Mortgage Securities Co. of Covina, Calif. (NEWS, Apr. '62).



ADVANCE has increased earnings steadily since 1960 to \$680,000 in 1964, up 8% over 1963.

Losses soar at General Development, but cash flow improves

In the perilous world of land development, 1963 turned out to be a better year in some ways for General Development Corp. than 1962, even though its book losses increased tenfold to \$5.3 million.

The explanation lies in that key item—cash flow—which regulates the health of all land developers. At GD, cash flow increased 121% from \$1.9 million to \$4.2 million, despite a 45% drop in sales from \$54.2 million to \$29.4 million. Here's how this happened, as revealed in GD's just released annual report:

- Cash revenue fell only 5%, from \$35.0 million to \$33.1 million, reflecting a decline in down payments and continued inflow of payments from past sales.

- Expenditures dropped 13%, as the cost of sales fell.

Cash and other liquid assets, as a result, rose 28% to \$2.3 million.

GD's net loss figure (\$5.4 million) also looks worse than it is because:

- GD set aside \$1.9 million for allowances for contract cancellation, despite the decline in contracts.

- GD incurred a \$554,000 loss from abandoning a worthless Canadian venture.

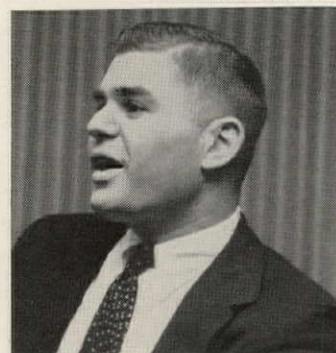
GD's downturn in sales cannot be ignored, especially since it is the second in two years (in 1962 sales fell 6%). Reduced sales now can only rebound in reduced cash flow later. To counter this, Chairman Charles H. Kellstadt and President James L. Rankin have brought in a new management staff and revamped fiscal and management policies. First quarter profits of 6¢ a share, up from 7¢ loss in the previous quarter, show some of the effects.

Walter Daran



PALOMAR'S SEVERIN
Cought in a cash bind

Robert H. Johnson



ADVANCE'S ROSE
Ready to invest working capital

Thorny problems. The purchase of Palomar shares, though tempting to Advance, may pose problems for President Irving Rose, 38. Rose has insisted that mortgage bankers should not diversify into land development, real estate management or equities in homebuilding. But Palomar is heavily committed in this direction. Rose has also maintained that mortgage bankers should remain liquid, partly because desirable long-term loans tend to be granted on the basis of capital funds (long-term debt and equity) available as working capital.

Palomar, which 57-year-old Severin organized in San Diego in 1950, has grown rapidly, but has not remained so liquid. In fact, Rose's opportunity to buy into Palomar stems from Palomar's heavy commitment to nonliquid assets. These assets drained Palomar's working capital, forcing Severin to seek help from outsiders.

Only \$4.0 million (47%) of Palomar's \$8.5 million in capital funds is available as working capital. But \$2.3 million of this working capital is tied up in land and construction in progress. Advance, in contrast, has \$9.2 million of its \$9.8 million in capital funds—94%—available as working capital, according to Advance's April 1964 report. If the Palomar deal goes through, Advance will pump \$2 million in working capital into Palomar. But before Rose agrees to a position in Palomar, he is likely to insist that Palomar restrain its penchant for land development, speculative housing and construction loans.

Retirement city hurts. Palomar's cash difficulties were brought to the surface by the troubles of once-successful Palm City, a retirement community opened by Nels Severin and Marshall Secrist in 1961. In its first few months Palm City attracted 500 buyers. But last year sales dropped to almost nothing (H&H, Apr. '63), partly because of stiff competition (Del Webb's Sun City and Ross Cortese's Leisure World are both closer to Los Angeles) and partly because of absentee management. (Last month Builder Dan Grady, who headed Palm City development for Severin, switched to General Investment & Development Co. in Boston.)

Palomar found itself the holder of more than 200 unsold homes in Palm City, which tied up much of its capital. Notes Severin: "We have as much money or more in construction loans in other builders' projects."

Late last year, Severin invited Frank Goodman and Dick Farrer, who had merged their Real Estate Mortgage Co. with Palomar in August 1961, to find an answer for Palm City. They advised Severin to sell—to them. He did, unwilling to devote himself to the on-site management that Palm City demanded. The price: something less than the \$10 million estimated value of land and improvements (which include a 65-unit inn, shopping center and water and sewage disposal systems). Severin reportedly took a \$2,367,000 loss. First thing Goodman and Farrer did was soothe restive homeowners and abolish the age limit.



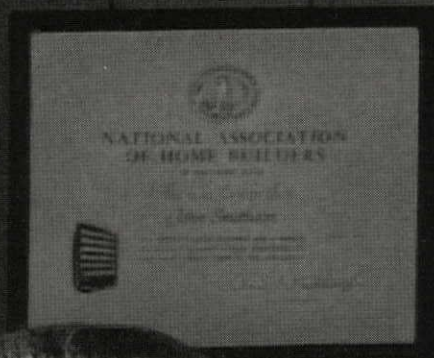
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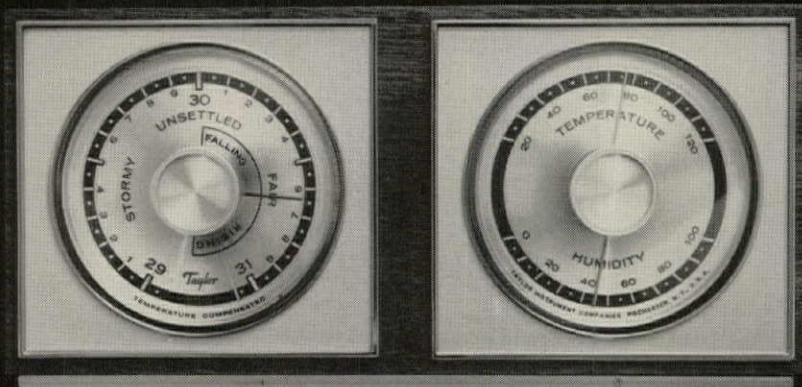
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Savings bankers, spurred to broader role, pick Crawford as president

The man who came to talk first to savings bankers assembled in New York City last month was **Adolph A. Berle**, professor emeritus of Columbia Law School and former member of the Commission on Money and Credit.

He spoke bluntly: "The savings bank industry must block out the scope of a greater future. If it does not, one day it may turn out that savings banking has no future."

Savings banks, the oldest type of savings institution, are "beleaguered on all sides," Berle told the 44th annual convention of the National Association of Mutual Savings Banks. Commercial banks are in the savings business, and s&ls "have grown faster than the savings banks themselves."

Berle's prescription: savings banks should broaden their services, seek state power to lend for education and even organize mutual investment trusts for savers. "Seventy per cent of your business now is financing homes. If you add reasonable and soundly based credit for the family inside that home, you have the idea," he argued.

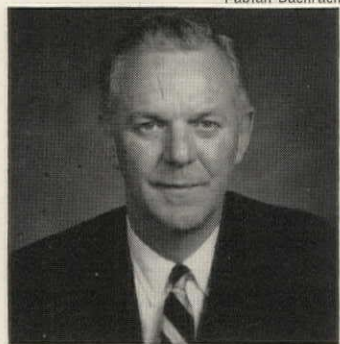
Such frank comment understandably tramped on some tender toes. New York savings bankers only recently had pondered the mutual trust idea—and voted no.

NAMSB Executive Vice President **Grover Ensley** rebutted Berle's somber view of growth: "Deposit gains at savings banks maintained a generally upward course from the fourth quarter of 1961 through the first quarter of 1964," but commercial banks and s&ls have been growing slower since late 1963, he reported.

Hoping to light the fuse for more growth, the savings bankers tapped **Morris D. (for DeCamp) Crawford**, 48, an expert at growthmanship, for their new president. He succeeds President **R. Stewart Rauch Jr.** of the Philadelphia Savings Fund Society.

Harvard Law School grad **Rusty Crawford** joined Bowery Savings Bank in New York City in 1953, moved to president in 1961. Under Crawford, Bowery has topped the \$2 billion mark in assets (the bank took 116 years to reach \$1 billion in assets, doubled in size in the next 13). A pending merger with Manhattan Savings Bank would boost this to \$2.7 billion.

Crawford is an ardent advocate of expanding savings banks into the 32 states that do not charter them now. In the past two years he has spearheaded NAMSB's still-



NAMSB's CRAWFORD
To keep pace with competitors, grow

stalled drive in Congress for federal charters, but he does not rule out the slower method of persuading state legislatures to legalize savings banks. Two years ago savings banks chipped into a Central Industry Fund to set up the Alaska Mutual Savings Bank in Anchorage, and Crawford says: "It would be a good idea to try the same approach elsewhere."

Is Berle's recipe too strong a tonic for savings bankers? says Crawford: "I hope it stirs up a lot of talk and action."

Nor is the spirit of growthmanship likely to stop. Stepping in behind Crawford as NAMSB vice president is President **Robert Morgan** of Boston 5¢ Savings Bank, another mover and shaker.

J. W. Murphy joins Pace Setter Homes

James W. Murphy, vice president of Bert L. Smokler & Co. of Detroit, has become president of Pace Setter Homes of Houston. At Pace Setter, Murphy will guide (under chairman **Norman Dobbins**) expansion into two new Houston subdivisions (Pace Setter is now building in five subdivisions in Houston), a resort development in Galveston, a 2,000-acre ranchette resort development in Liberty, Tex., and several commercial ventures, including a multi-story office building in downtown Houston.

BUILDERS. Kaufman & Broad plans 2,800 townhouses (\$10,000 to \$18,000) for the Chicago area. President **Eli Broad** predicts the new units will add \$30 million to K&B's volume, which last year was \$31.8 million. **Philip Borden**, former president of H. C. Huber Homes, Dayton, has joined K&B as assistant to Broad.

Ross Cortese plans a \$500 million retirement community 12 miles east of Princeton, N.J., with

30,000 garden apartments. Also in New Jersey, **Harry and Richard Goodwin** are selecting three builders to build exclusively on a proposed \$33 million, 700 acre residential development in Washington Township. A financial backer: Colonial Mortgage Servicing Co., subsidiary of Atlas Credit Corp.

Harry T. Kelly, vice president of Equitable Properties Corp., Columbus, has been named executive vice president of Sterling Park Development Corp., which is building a giant community near Dulles International Airport.

Four executives of Oddstad Homes have bought an Oddstad subsidiary, Challenge Contracting Co., Redwood City, Calif., to continue the activity of the parent organization. They are: Challenge President **Gordon W. Hanson**, Vice President-Treasurer **John B. O'Malley**, Vice President **C. A. Trifeletti** and Secretary **Elma D. Oddstad**. The shift was prompted by the auto death of Oddstad President **Andres F. Oddstad** (NEWS, Mar.).

Stanley Berman, former FHA associate deputy commissioner, heads a new department at Pearce, Mayer & Greer, New York realty company specializing in FHA, URA and other federally and state-assisted housing.

Editor Doug Haskell retires at Forum

In 1923 a fresh political science graduate from Oberlin College named **Douglas Haskell** stopped to look at Yale's Harkness Quadrangle, decided he didn't like it and panned it in *The New Student*, an intercollegiate magazine of the day. Another new magazine, *TIME*, took notice, termed him "an insistent young man."

The insistent young man is now 65 and is retiring June 30 as editor of *ARCHITECTURAL FORUM*, sister publication of *HOUSE & HOME*, a post he has held since 1955.

In four decades-plus of tilting at the ordinary in architecture, Haskell has been more honored than most critics. In 1951 the American Institute of Architects voted him a full-fledged corporate member even though he has no architectural degree. In 1962 AIA named him a fellow.

Still the enemy of the ordinary, Haskell plans to continue writing. "Most men reserve their throw-away writing until the end of their life," he muses. "I hope to reverse that trend."

EDITORS: **Bayne A. Sparks** has resigned as publisher of *American Builder* after 14 years with the magazine.

Werner is president of Great Lakes Homes

Robert R. Werner has moved up from executive vice president to president and chief operating officer in a realignment at Great Lakes Homes attributed to rising sales. Great Lakes sales last fiscal year were \$9.5 million—38% above the year before. Senior Vice President **William A. Jahn**, a retired president of Inland Steel Products, becomes chairman of the executive committee. **Lee Larson** continues as board chairman.

PREFABBERS: **John J. Flynn** has been elevated to a newly created post at Inland Homes, executive vice president, to direct dealer financing and marketing. **Thomas S. Ferguson** also moves to a new post, senior vice president, to direct production and research at Inland's four plants. Both were vice presidents.

At National Homes, **J. R. Richards** has been appointed executive vice president for operations. **Dale Baker** succeeds Richards as vice president and general manager of the Tyler, Tex. plant.



ARCHITECT ANSHEN
'Drove himself too hard'

Anshen, designer of modern homes, dies

Architect **Robert Anshen**, 54, died May 25 in his San Francisco office of a liver ailment complicated by barbituates. With partner **Stephen Allen**, Anshen stormed to national fame by winning an unprecedented two AIA-N&H honor awards and two merit awards for contemporary homes in 1956. Recently the firm stressed commercial building. Says Allen: "He just drove himself too hard."

DIED: **Frank J. Luchs**, 50, vice-chairman of the Build America Better Committee of the National Association of Real Estate Boards and executive vice president of the Washington realty firm of Shannon and Luchs, May 6, in Washington; **John R. Worthman**, 63, charter member of NAHB who served on its first board of directors, May 8, in Fort Wayne, Ind.

IN GO
DUST, DIRT,
POLLEN



OUT COMES
CLEAN AIR
HOUSE-WIDE

Honeywell electronic air cleaners will be standard

Crofton, a new community in the Washington-Baltimore-Annapolis area opened for business this spring. And, Honeywell Electronic Air Cleaners were *standard equipment* in the model homes. In fact, they'll be standard equipment in *all* of the town's planned 2,000 single-family homes and 1000 apartments . . . and even in the shopping center stores.

We asked W. Hamilton Crawford, President of Crofton Corporation and its parent company, Crawford Corporation, to tell us why . . .

"Well, for three reasons: First, we know that cleanliness ranks high with new home buyers. We want Crofton families to enjoy cleaner homes, with less dusting, cleaning and redecorating.

"Secondly, the high pollen efficiency of the Honeywell Electronic Air Cleaner should be important in

this area of the country, and should have a really big appeal.

"And finally, we are convinced that electronic air cleaning should be an integral part of the environment in every truly up-to-date home."

Naturally, Mr. Crawford's remarks please us. And we feel Crofton homeowners will be just as pleased with the performance of their Honeywell Electronic Air Cleaners. The unit can actually remove up to 95%* of the airborne dust and pollen . . . including the tiny particles of smoke, cooking grease and bacteria that can pass right through ordinary filters. And, it can cost as little as \$1.50 a month added to the mortgage.

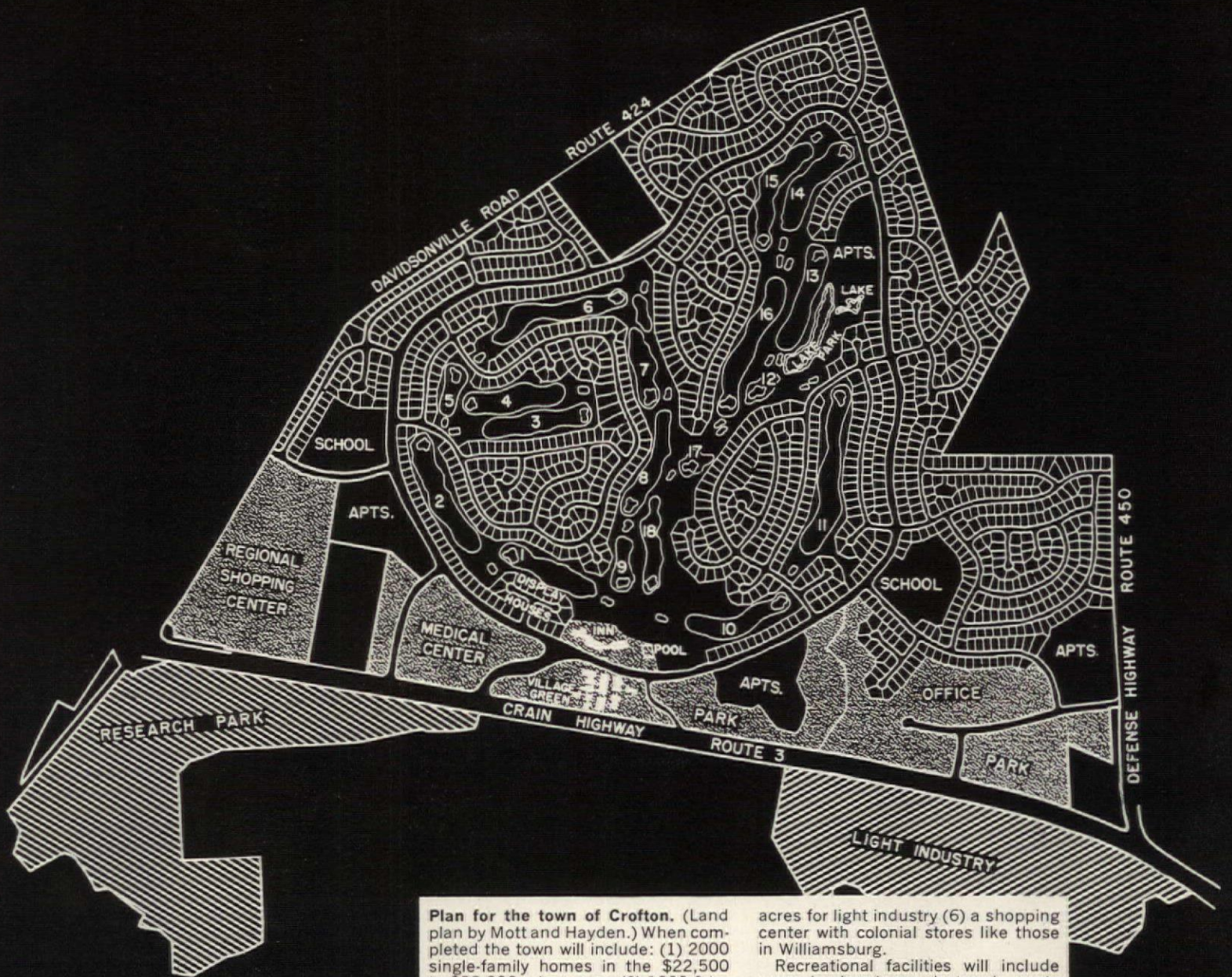
There's a good chance your prospects are already familiar with the advantages of Honeywell Electronic Air Cleaning. Honeywell air-cleaner advertising reached over 3 million of

them last year in House & Garden, House Beautiful, Holiday, and dozens of other out-standing consumer magazines. Our promotion program is still going strong . . . this year we've even added network TV.

Look into it.

Why not add the unique appeal of Honeywell Electronic Air Cleaning to *your* homes. It could be just the modern "exclusive" you need to attract more quality-home buyers. Call your local heating and cooling dealer, ask for a demonstration, and price it. Or, write Honeywell, Dept. HH7-18, Minneapolis, Minnesota 55408.

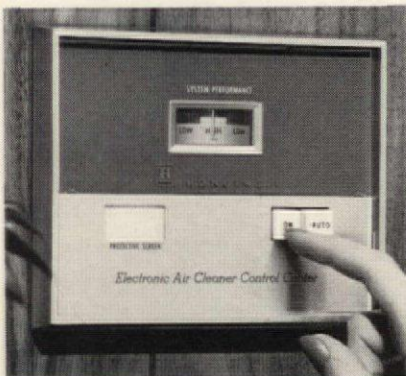
Honeywell



Plan for the town of Crofton. (Land plan by Mott and Hayden.) When completed the town will include: (1) 2000 single-family homes in the \$22,500 to \$33,000 price range. (2) 1000 2-to-4 bedroom town houses and garden apartments (3) some medium rise apartments (4) a 125-acre park for industrial research facilities (5) 117

acres for light industry (6) a shopping center with colonial stores like those in Williamsburg. Recreational facilities will include several swimming pools, tennis courts and a small lake stocked with fish. Notice also the 18-hole professional golf course which winds through the entire area.

equipment in the entire town of Crofton, Maryland.



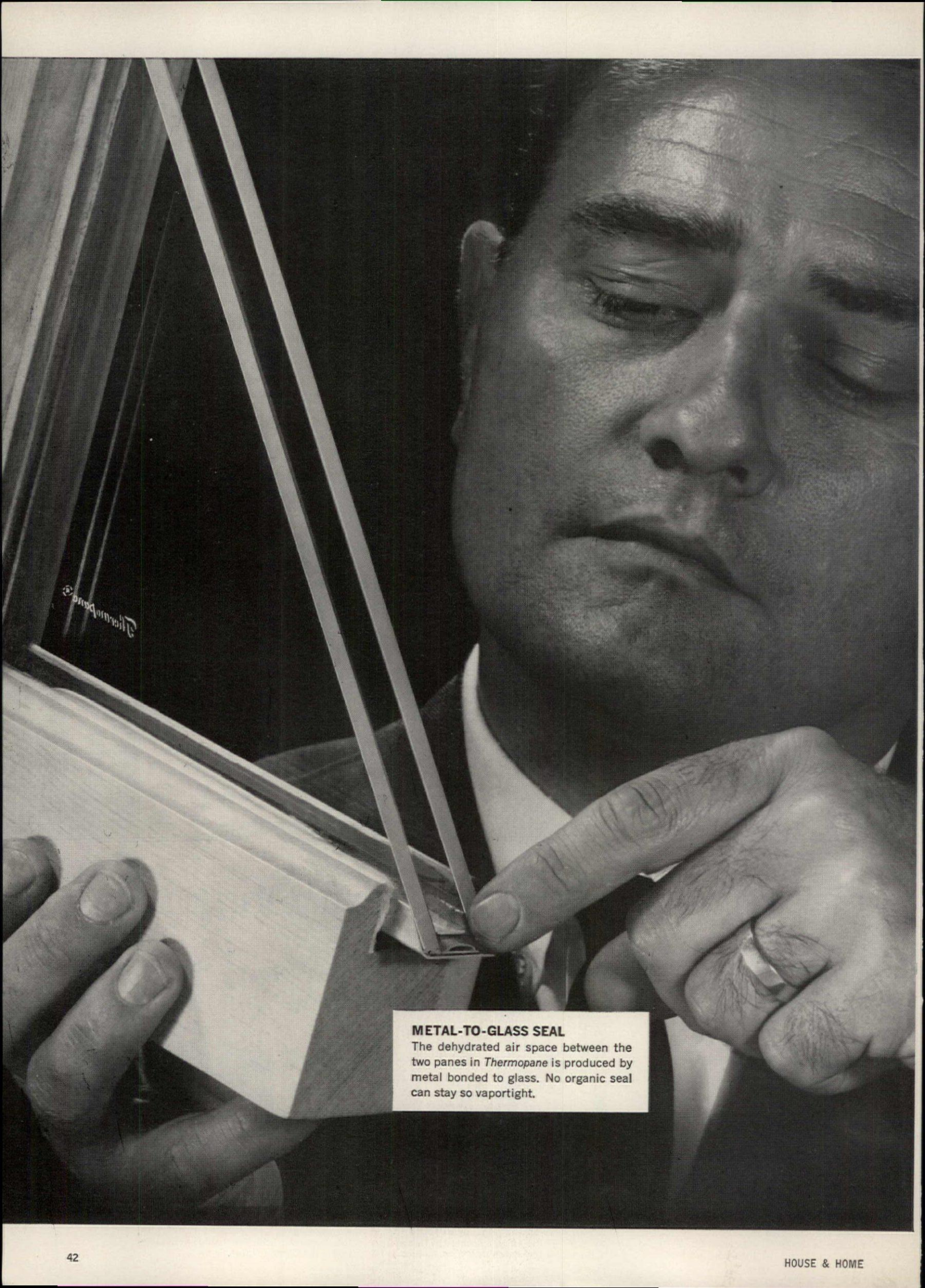
Handsome and handy, this wall-mounted Control Center for the living area shows homeowners that their Electronic Air Cleaner is working at peak efficiency . . . also shows them when the unit needs cleaning. To your prospects it's an obvious symbol of the quality you've built into your homes.



Only 7 inches deep, the Honeywell Electronic Air Cleaner fits easily into the duct work of any forced-air heating or cooling system. While ordinary fiber furnace filters are only 5 to 8% efficient, the Honeywell unit has been rated at up to 95% efficiency. *(As rated by National Bureau of Standards Dust Spot Method.)



Offer it as an option. You can offer Honeywell electronic air cleaning as an optional feature in your homes just by having the low cost cabinet assembly installed along with the forced air heating/cooling system. Makes it easy for the buyer to add the Honeywell Electronic Air Cleaner later.



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The dehydrated air space between the two panes in *Thermopane* is produced by metal bonded to glass. No organic seal can stay so vaportight.

You can see why the BONDERMETIC SEAL® IS MORE VAPORTIGHT

Only
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INSULATING GLASS

has the dependable
metal-to-glass seal

The *Bondermetic Seal* is important to you. It's more vaportight because every component of the metal-to-glass seal is inorganic and has zero permeance for air and water vapor. Other insulating glasses use an organic mastic material, and are not sealed by a direct bonding of metal to glass.

Naturally, a more vaportight insulating unit assures you of greater customer satisfaction, with fewer call-backs. Homeowners enjoy clearer windows, plus the comfort and fuel savings of *Thermopane*—a name they know and trust.

NEW 10-YEAR WARRANTY. L·O·F has recently doubled its standard warranty on both *Bondermetic Seal* and *GlasSeal*® units. L·O·F is the first insulating-glass manufacturer to offer builders and owners such a generous warranty on every unit they produce. That's a real back-up for your own home guarantee.

Any way you look at it, *Thermopane* insulating glass—with this remarkable 10-year warranty—is the best insulating glass for your new homes.

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Libbey·Owens·Ford
TOLEDO, OHIO



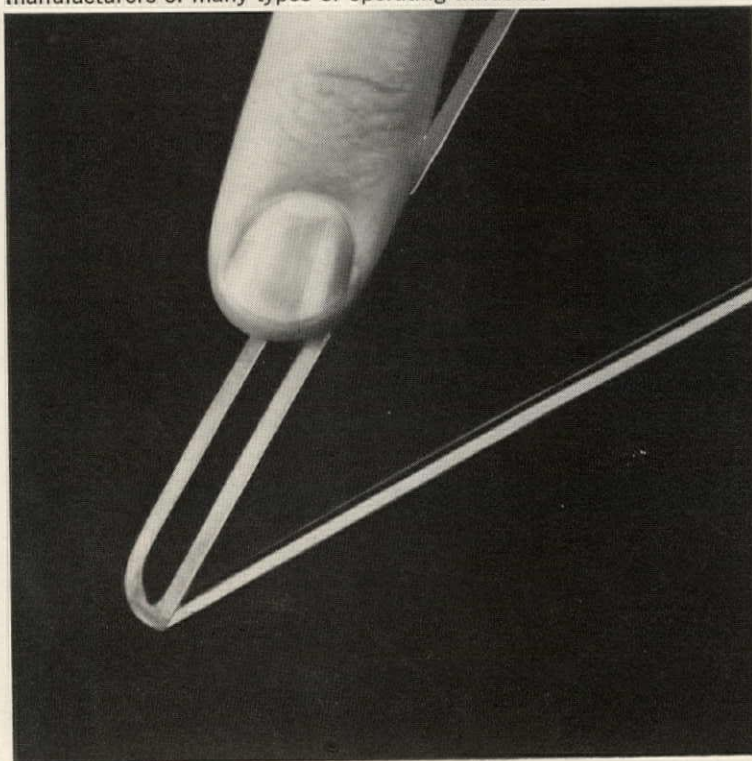
THE NAME FOR CONFIDENCE

In a survey by an independent research organization at the national NAHB convention in December, 1963, 500 builders were asked:

- Which brand or brands of insulating glass would be the greatest help in selling houses? 54.7% named only one brand. In these answers, *Thermopane* led the next brand 6 to 1!
- Which brand or brands of insulating glass would be more likely to gain referral sales for you? 49.1% named only one brand. In these answers, *Thermopane* led the next brand 6 to 1!
- Which brand or brands of insulating glass are best known to prospective home buyers? 73.6% named only one brand. In these answers, *Thermopane* led the next brand 9 to 1!

GLASS-TO-GLASS SEAL, TOO

It's all one material—all glass. Dehydrated air is hermetically sealed between the panes. Widely used by manufacturers of many types of operating windows.





LOCAL WORKERS fabricate roof trusses on site, hoist them onto the walls of hollow concrete blocks. The floors are concrete tiles on compacted soil.



LOCAL MATERIALS, except for some plumbing fittings, make up the house. A ventilated cavity between the roof and ceiling helps keep houses cool.

U.S. team comes up with \$2,050 house for Honduras

An architect and two U.S. agencies have teamed up to show how U.S. know-how and aid can help ease the severe housing shortage in Latin America. (In Latin America the population doubles every 28 years, but only one house is built for every 16 new persons, compared to one house for every three new persons in the U.S.)

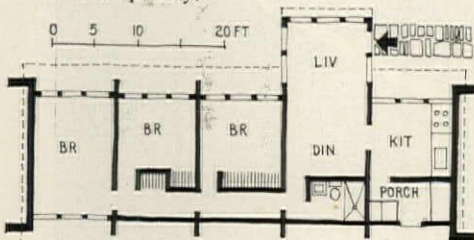
President Louis Berger of Louis Berger Assoc., Orange, N.J., the American Institute of Free Labor Development (AIFLD) and the U.S. Agency for International Development (AID) have designed, promoted and financed 160 houses for United Fruit laborers in San Pedro Sula, Honduras.

Dr. Berger, a consultant who has built up an annual foreign volume of almost \$4 million in six years, and his staff architect, Robert A. Mayers, designed a 754-sq.-ft., three-bedroom house that costs Honduras workers \$2,050. Mayers' plan adapts so well to hot climates that Berger is now considering it for vacation housing in St. Croix, V.I. (where it would sell for \$3,500 plus land).

AIFLD, a nonprofit agency formed by AFL-CIO, arranged the Honduras project. AIFLD cooperated with Sitraterco, the workers' union, hired Dr. Berger to produce plans and helped line up a \$400,000 loan from AID—the first direct loan from AID to a Latin American labor union.

Idiosyncracies. The Honduras project typifies much that is unique about building in Latin America.

- Workers who earn less than \$5 a day can afford \$102.50 down payments. Says Berger: "They manage somehow. I think they could dig up \$200 if they had to." All 160 units were sold quickly.



PLAN is longitudinal, allowing breezes to reach each room. The houses are staggered.

- Land costs are the chief obstacle to inexpensive housing in Latin America, "mainly because most people invest in land to avoid inflation," says Berger. Land soars in value because it is taxed lightly or not at all. Where currencies are unstable, it becomes the only dependable repository for money, he notes. The Honduras project was possible only because United Fruit donated some 30 acres.

- Local labor is cheap, but under local supervision is so unproductive it drives up construction costs. In Honduras the solution was U.S. supervision. Architect Mayers and his wife, Berger's only representatives on the scene, spent a full year at San Pedro Sula. Mayers was able to keep construction costs down to \$4.50 per sq. ft. by helping Sica Construction Co., a local contractor, learn U.S. methods.

- Diversity of Latin American climate and building habits requires design hand-tooled for different localities. Mayers rejected an AIFLD proposed design, successful in Guatemalan mountains, because it 1) involved

methods unfamiliar in Honduras and 2) would have shut out prevailing breezes in San Pedro Sula.

- Latin American families, unaccustomed to new housing, often crowd into one bedroom and turn the rest of their homes into stores or rooming houses. In Honduras deed restrictions curtail this tendency.

- Latin American workers are often lax in meeting payments, especially when due the government. In the Dominican Republic, recounts Berger, workers stopped paying one-by-one. The government, afraid of reprisal, did nothing. In Honduras the \$16 monthly payment is deducted from wages.

- The Honduras project is too high priced for the bulk of workers in Latin America—many earn \$1 a day or less. To meet their needs, Berger has proposed a \$200 house using a corrugated aluminum roof, metal posts and cross bracing and an asphalt-soil floor. Workers, with Peace Corps volunteers, could erect the house themselves and drape it with local vegetation for privacy.

Builder, prefabber foresee market in Germany

West Germany's still unsatisfied housing demand, plus dire need for better techniques, provides an opportunity for U.S. know-how and materials. This is the conclusion of a recent six-man trade mission to Germany sponsored by the Commerce Dept.

For home manufacturers, President George E. Price of National Homes finds "long-range opportunity" for medium- to high-priced prefabs, created by "tremendous interest in prefabricating housing" as a way to cut costs. New prefab units, at 20,000 a year, account for only 4.2% of total starts. By 1965 they are expected to reach 100,000. U.S. prefabbers should hire German architects to fit models to German codes before entering the market, Price advises.

For homebuilders, President Herman Sarkowsky of United Homes, Federal Way, Wash., reports that "as Germans climb the consumer ladder, their desire for better hous-



SARKOWSKY



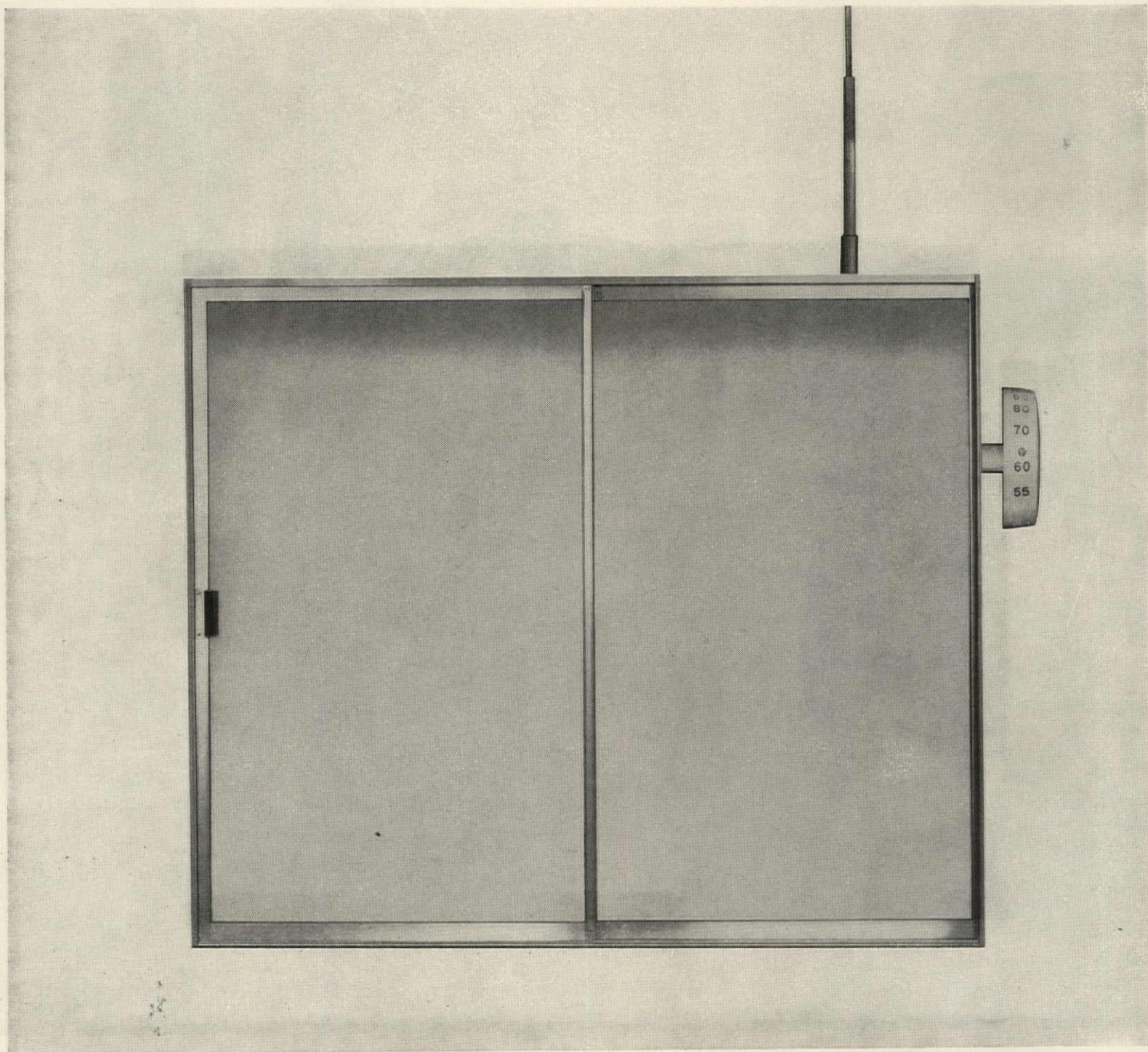
PRICE

ing will grow." Sarkowsky sees only "limited" opportunity for U.S. builders. But he may join with a German partner to build medium-priced one-family homes in Germany (now only 30% of starts). He foresees a growing demand for one-family homes, but admits that zoning is a problem. Says he: "It takes five years to get a change." Biggest U.S. advantage: in Germany virtually all housing is directed by architects, who have little incentive to cut costs.

Marketing roundup starts on p. 51



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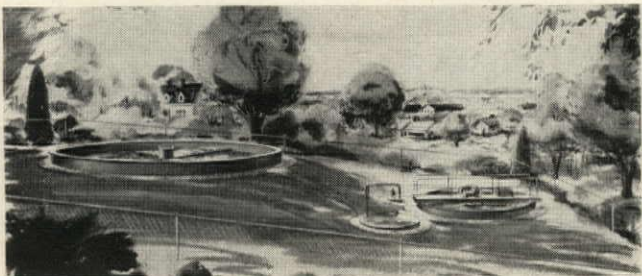
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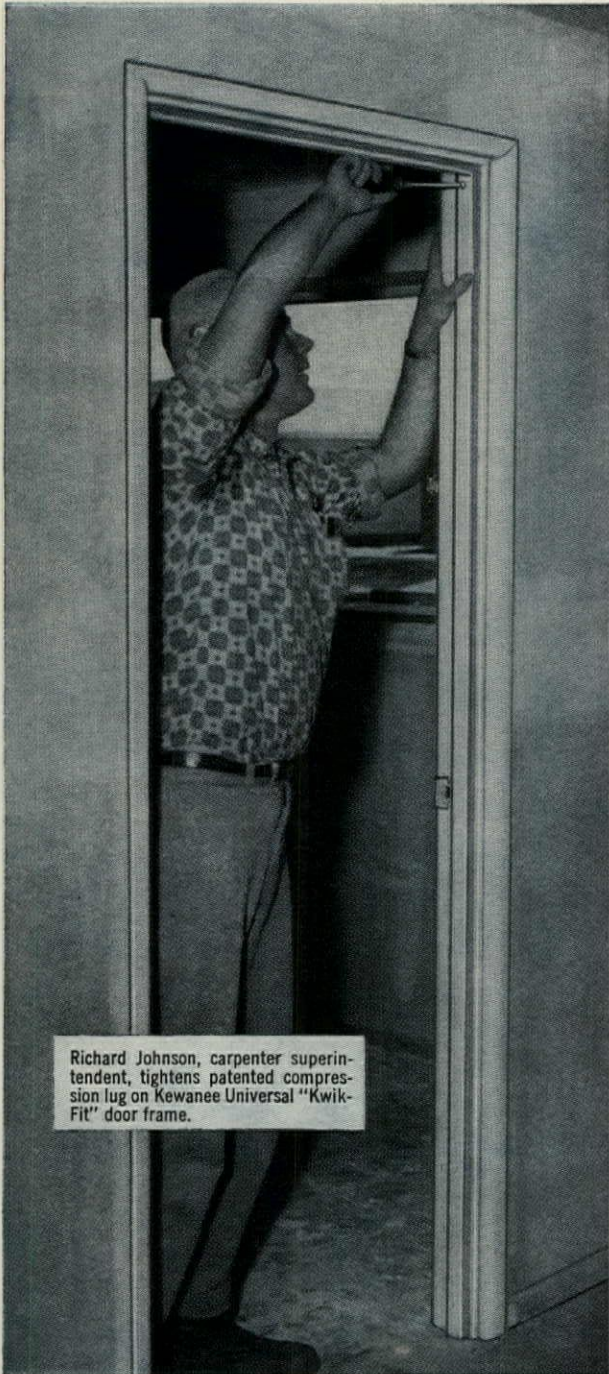
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Land area used is amazingly small. Even the largest system—it'll handle 600 homes—takes up only 50' x 100'. The smallest CompleteTreator (big enough for 30 homes) can be delivered, fully assembled, on a trailer truck. Write for bulletin—No. 73 "Compact Sewage Treatment Plants."

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Richard Johnson, carpenter superintendent, tightens patented compression lug on Kewanee Universal "Kwik-Fit" door frame.



Richard Livings, Livings Builders Hardware Co., Chicago, Illinois, shown with George Felsenthal, Kewanee representative, before one of the model homes in Merriam's Country Club Hills community.

Kewanee UNIVERSAL "KWIK-FIT" STEEL DOOR FRAMES

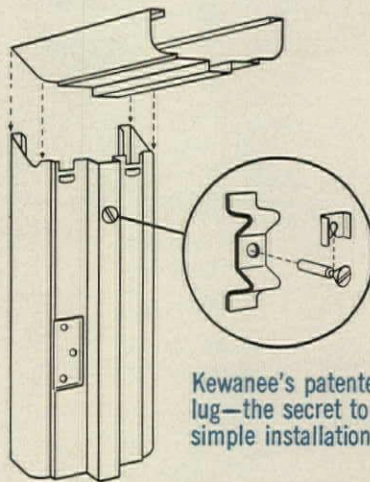
*save builder 1½ hours
in installation time,
per opening!*

"Sure they cost a little more, but look what we save on installation," says Richard Johnson, carpenter superintendent for J. E. Merriam Company, nationally known land developers and builders.

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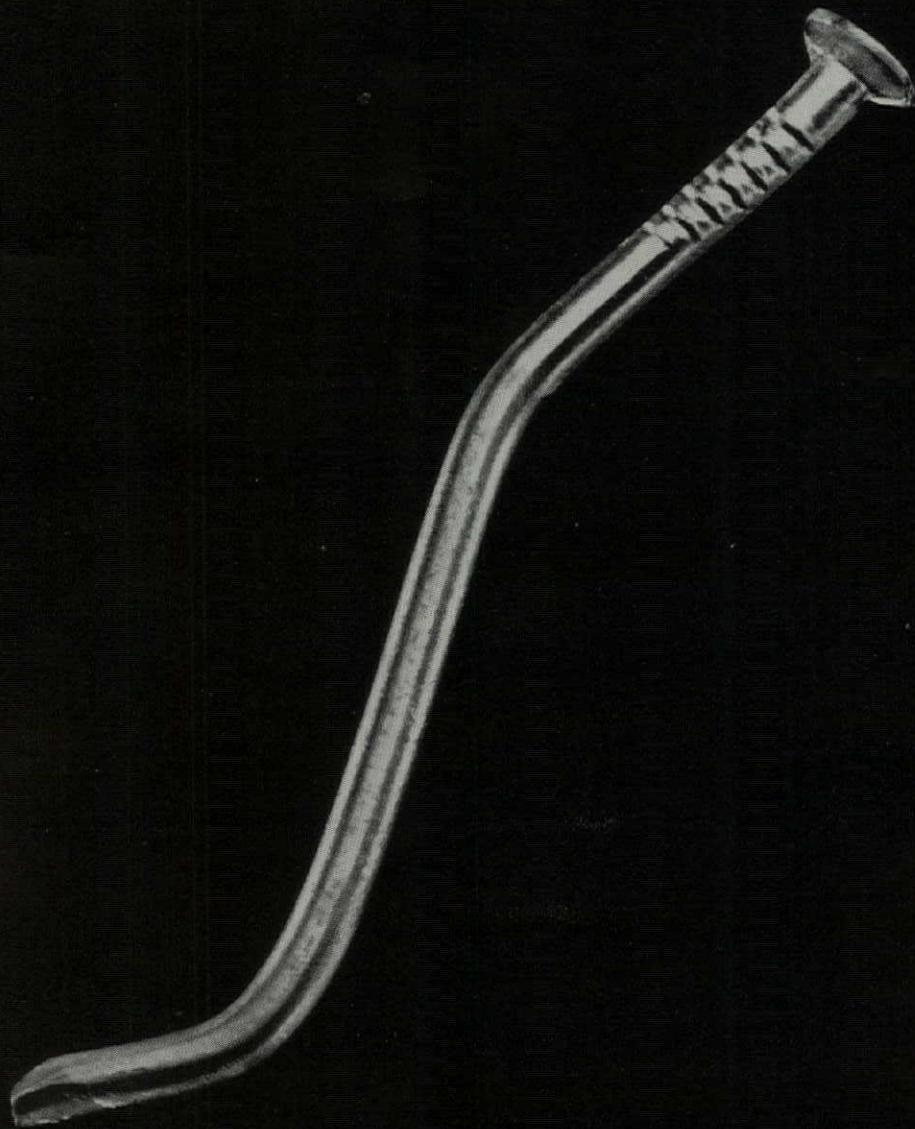
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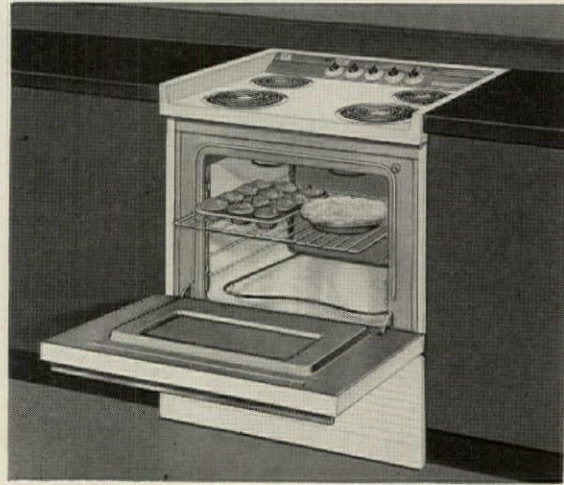


Roger Jay Davis, Vice President
Old Bridge Construction Co.,
writes...

“When we
pair this...

with your push-
button automatic
defrosting
refrigerator...

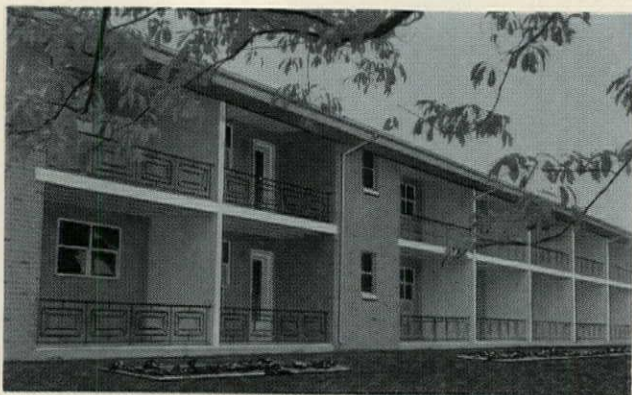
it is no wonder that our kitchen
appliances help sway prospective
tenants our way...”



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Barclay Apartments, Vineland, N.J., consist of four buildings with a total of 72 apartments plus a private swimming pool. Kelvinator disposers are also included in each kitchen.

Architect: William Duble, A.I.A.

“Your new 30" slip-in range, with its wraparound aluminum foil insert for easy cleaning, is a most valued asset,” writes Mr. Roger Jay Davis, vice president, Old Bridge Construction Co., Cherry Hill Twp., N. J., “not only for the consumer but also for the apartment house owner, who no longer has to spend hours cleaning a range before a new tenant moves in. When we pair this with your push-button automatic defrosting refrigerator, which is the closest thing to a frost-free refrigerator that an economy-minded builder can offer, it is no wonder that our kitchen appliances help sway prospective tenants our way in this competitive market.” Want to sway tenants your way? Write or wire for full information today!

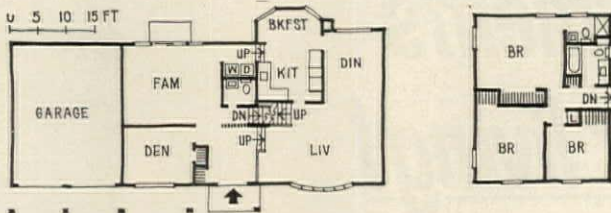
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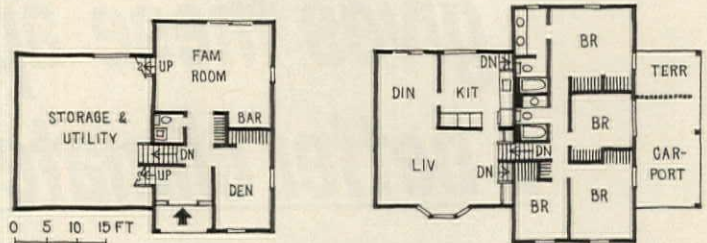
Harry Kalmus



1,765 SQ. FT. HALF TWO STORY AT \$23,740 was Stackler & Frank's bestseller when introduced to the Long Island market last fall.



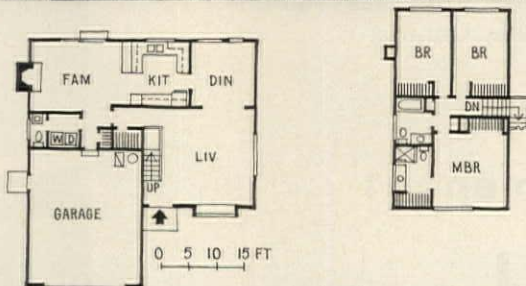
Fred M. Hublitz



1,668 SQ. FT. MODEL AT \$29,500 is Wagman Construction Corp.'s best-seller in Silver Spring, Md. Record: 70 sales in six weeks.



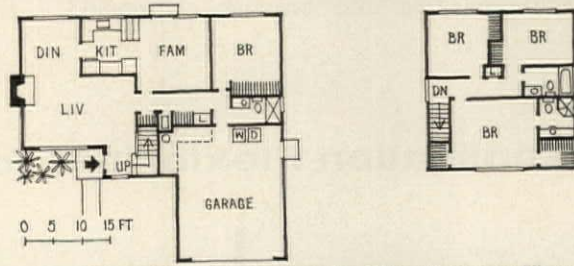
H&H staff



1,750 SQ. FT. MODEL AT \$24,950 is the fastest selling model at Dutch Haven Homes, Huntington Beach, Calif. (see below).



Campbell-Ricco



1,600 SQ. FT. MODEL AT \$22,500 by Oliver Rousseau Homes, Fremont, Calif., is the first of two half two-story models the builder plans.

Bigger houses on tight lots yield the half two-story house

The search for ways to put more house on increasingly expensive land is reflected by the four houses shown above—all modified versions of the split level houses of the 1950s.

On the West Coast, where more and more two-story houses are challenging the popularity of the one-story ranch house, almost every major builder is building one or more of these half two-story models. Among them: Larwin Group Companies (volume: over 1,200 per year), giant Sunset International Corp., which builds in San Diego, Sacramento and Los Angeles, and Cavanaugh Development Co., building in Los Angeles and Orange counties and Sacramento.

In the East, builders like John R. Minchew of the Washington, D. C. suburbs (75 houses per year) and Virginia Homes, Columbus, Ohio (200-plus houses a year) are among the innovators who include versions of this type of house in 1964 model lineups.

California builders usually put a second story over one half of a one-story house, let the garage protrude toward the street from the two-story area to keep the predominantly low lines of the traditional California house. In the East, the garage is used as a wing attached to one side of the two-story section, balanced by a slightly raised one-story section on the opposite side.

Sales success with these houses is attributable to: 1) family privacy that multi-level houses afford inside; 2) more-house-for-less money, since a builder can provide two floors of living space over a part of the house that has the same foundation and roof area as a one-story house; 3) the height of the two-story section, which makes a house look bigger from the street.

In Huntington Beach, Calif., Big Builder William Lyon found that his three-bedroom, three-bath house (lower left, above) accounted for 59% of 168 sales. Result: he has added two new elevations to the four already offered with this floor plan.

Marketing roundup continued on p. 59

YORK Air Conditioning gives these apartments a better climate for living!

More and more builders are specifying York Flex-O-Metic systems to provide low-cost, all season comfort for garden-type apartments. These flexible systems provide a cooling coil, heat exhaust section and a Borg-Warner oil or gas-fired furnace in a compact package that is easy to install and that assures positive cooling capacity.

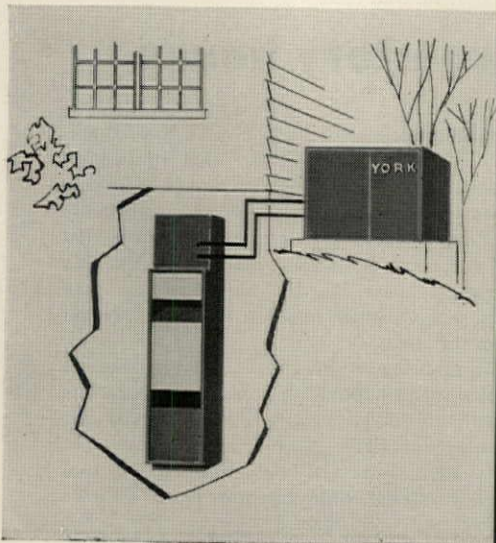
Advanced York features for builders include pre-charged tubing for connecting heat exhaust unit to coil, to eliminate field charging and brazing; Air-cooled

design means no pumps or water towers are needed. And York's cooling maze coil assures more air contact with cooling surfaces for faster cooling, improved dehumidification.

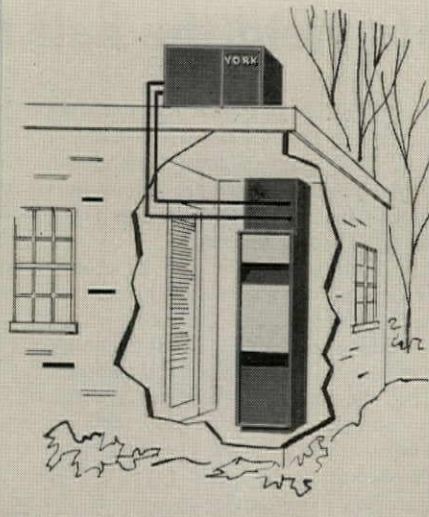
When you plan air conditioning for your next apartment or private residence, ask your York Representative about competitively priced Flex-O-Metic systems. Or write York Corporation, York, Pennsylvania. In Canada, contact National Shipley Company, Ltd.; 326 Rexdale Boulevard; Rexdale, Ontario.

Application Flexibility and Convenience!

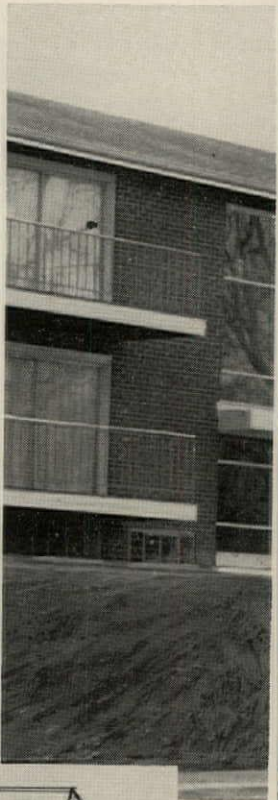
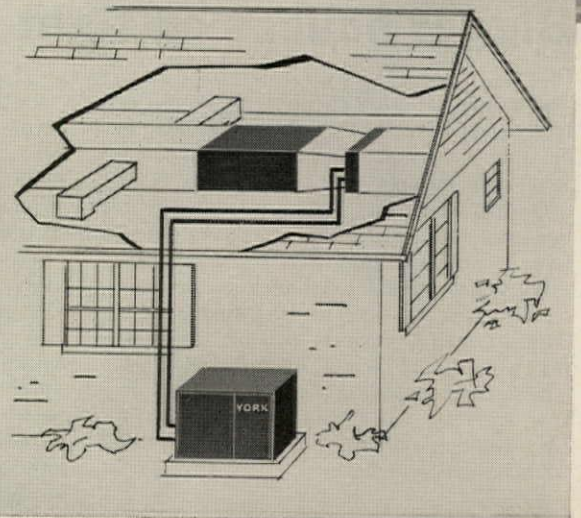
Ground level installation. Heat exhaust section is on a slab, outside building. Cooling coil is inside, on furnace.

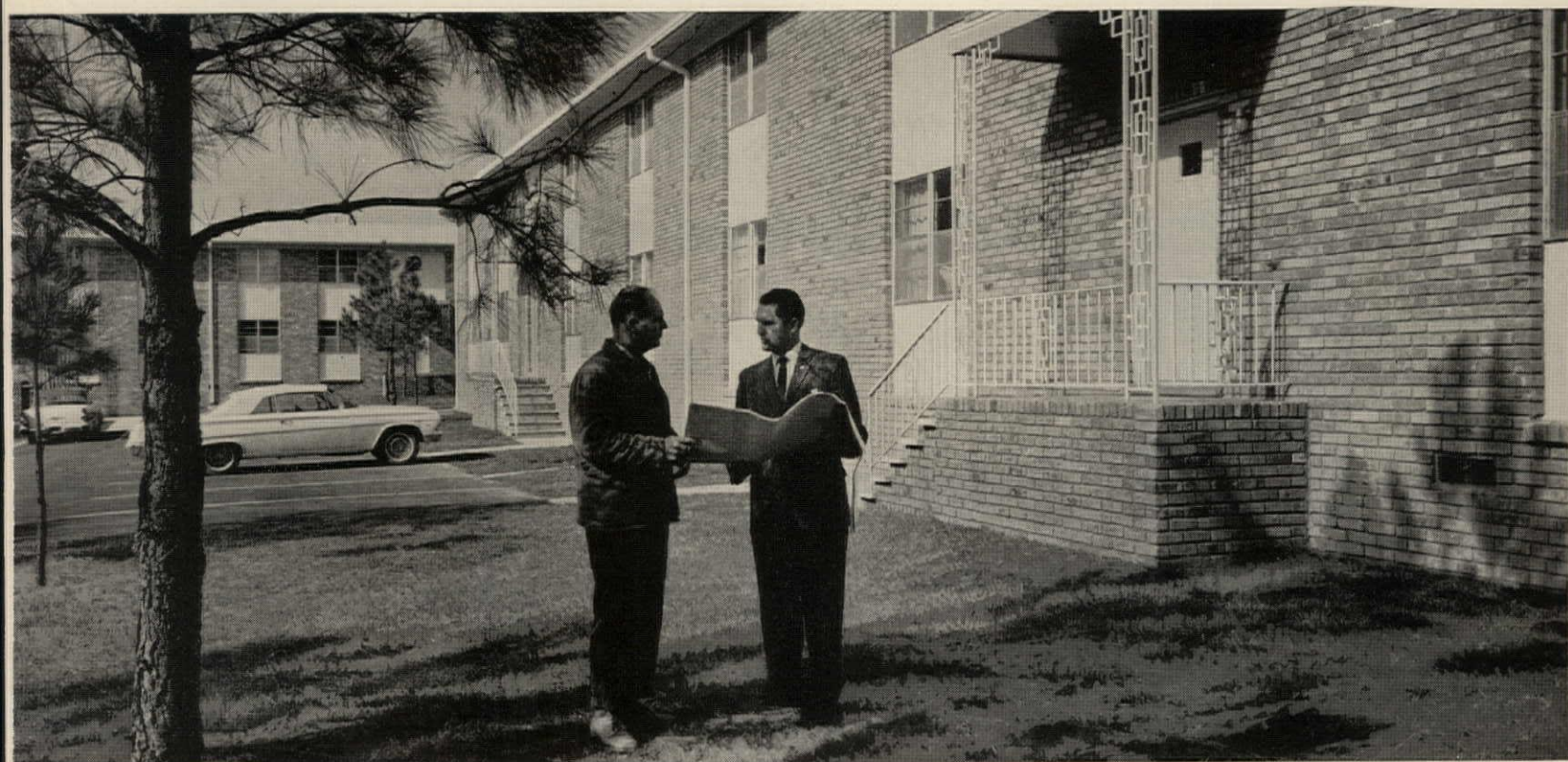


Roof location. In this garden-type installation, outside section is on roof. Furnace and coil are in alcove.



Ranch home application. Exhaust section is outside, on slab. Horizontal furnace and coil are located in attic space.





Smyrna Gardens Apartments, Atlanta, Georgia. Modern 40-unit garden-type apartments are comfort-conditioned by York Flex-O-Metic systems, including Borg-Warner furnaces. Smyrna Gardens also features Norge kitchen appliances and Borg-Warner plumbing fixtures. Owner and builder, King-Williams Land Co., Inc., of Atlanta.



Warren Park Apartments, Baltimore, Maryland. Five buildings, with a total of 200 apartments, are air conditioned by York Flex-O-Metic systems, including Borg-Warner furnaces. Owner, Warren Park Associates; Builder, Gorn Bros., Inc.; Architect, Morris Steinhorn, A.I.A.

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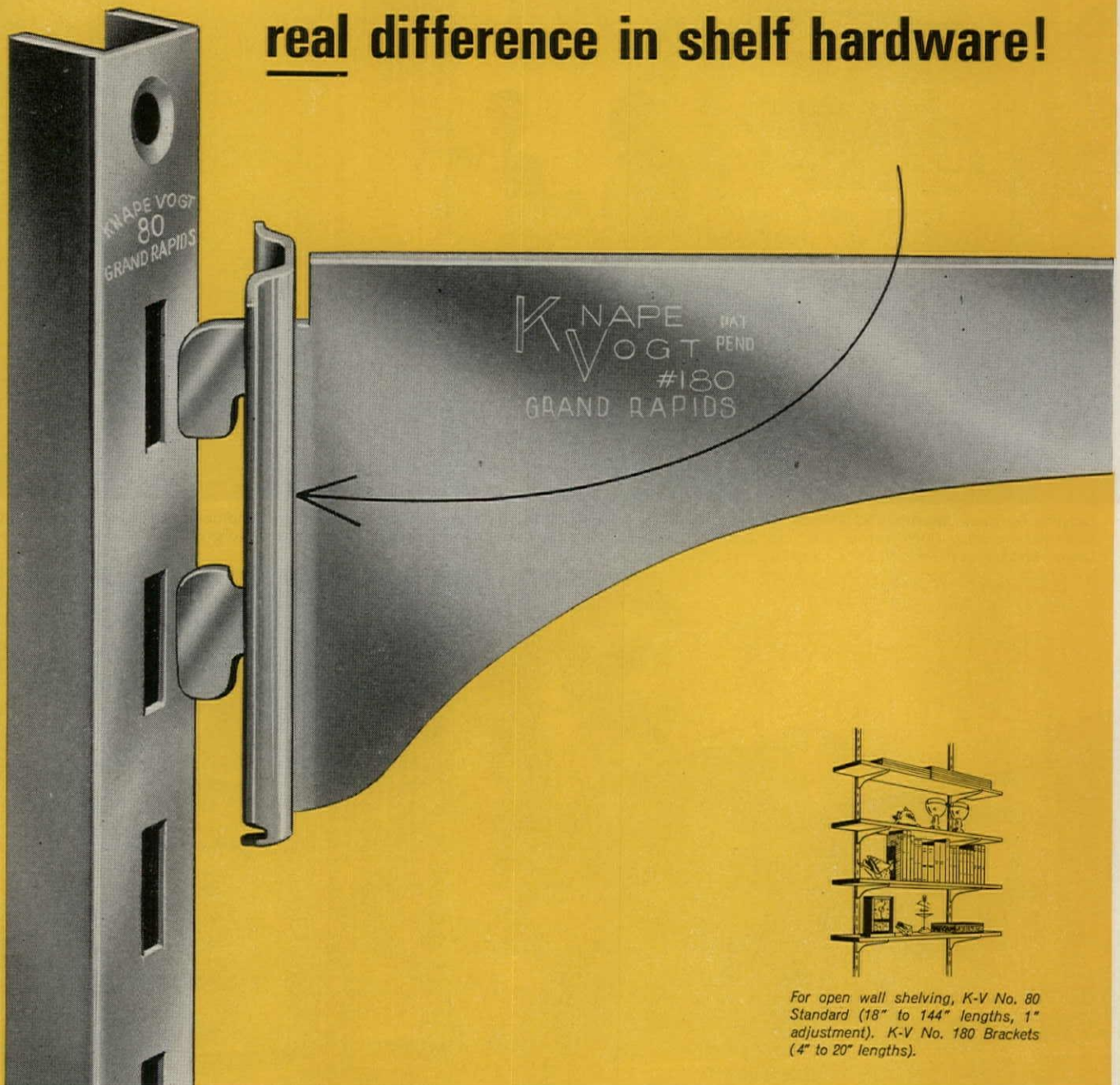
HH-74

YORK CORPORATION
 York, Pennsylvania

Please send me complete information on York Central Air Conditioning for apartments and homes.

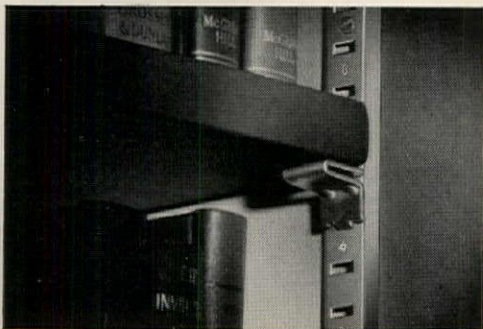
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Grand Rapids, Michigan

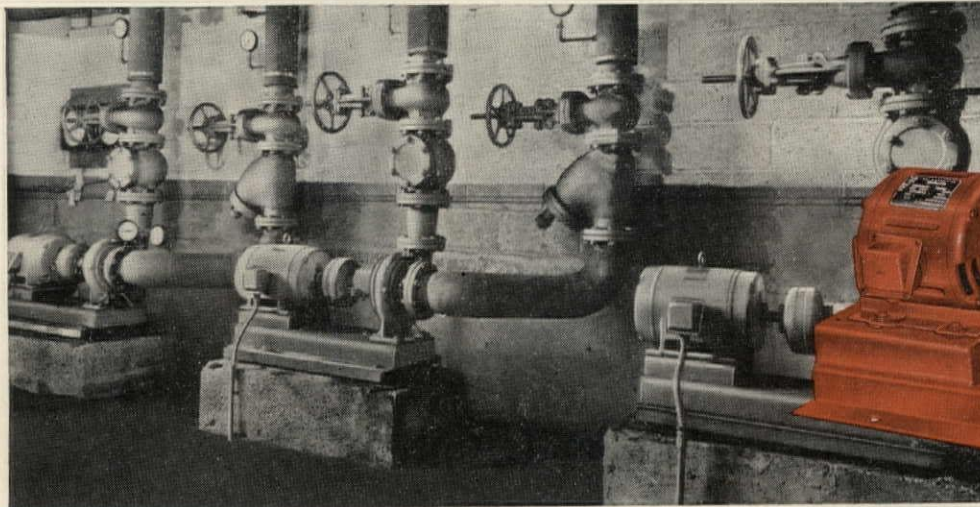


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B&G UNIVERSAL PUMP

Battery of B&G Universal primary circulating pumps



At Green Acres Garden Apartments, Valley Stream, N.Y., 61 two-story units containing 294 apartments are heated by a B&G *Hydro-Flo* forced hot water baseboard system. The system is designed for primary and secondary pumping, a method conceived and developed by B&G engineers.

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A typical system consists of a primary main, continuously circulated by a B&G Universal Pump, with smaller B&G Pumps drawing on the primary main to supply separate heating zones. Each zone pump is under individual thermostatic control, so that each zone can be supplied with exactly the amount of heat required by its function or exposure.

The Green Acres installation has six secondary heating zones and six domestic water zones.

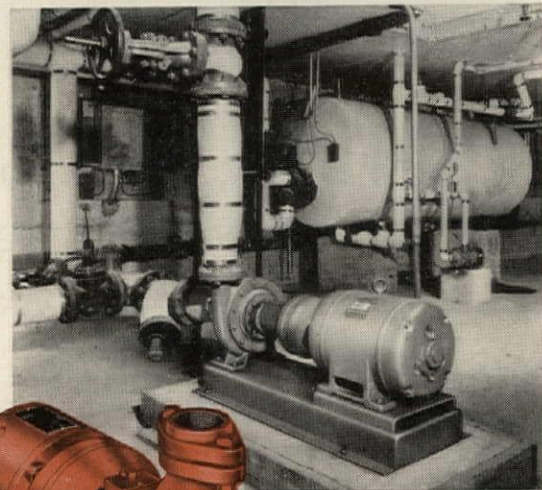
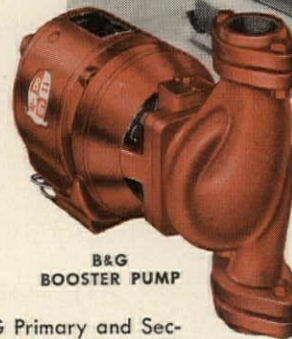


Photo shows secondary heating pump, domestic water secondary pump and domestic water recirculating pump.



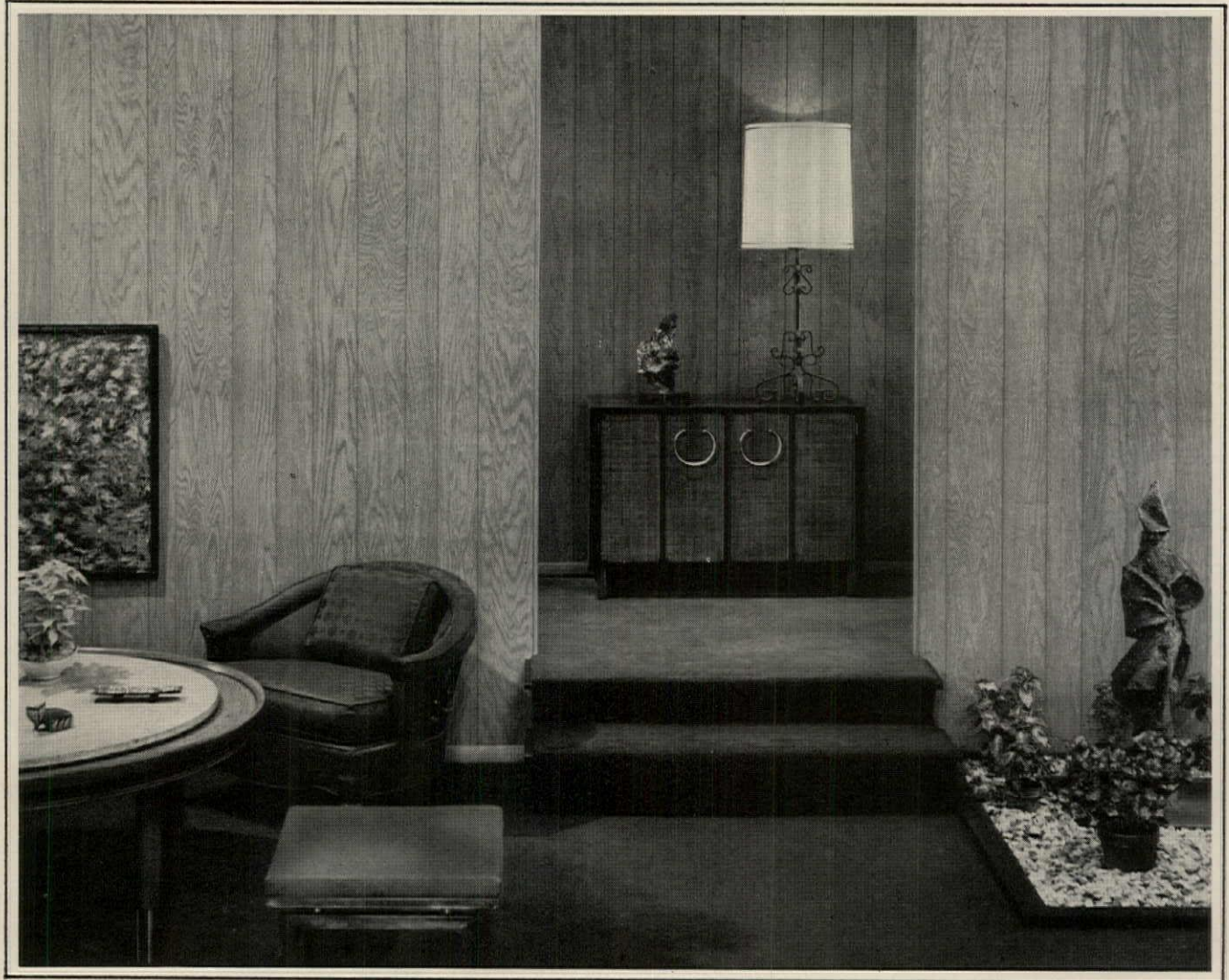
B&G BOOSTER PUMP




B&G SERIES 1522 PUMP

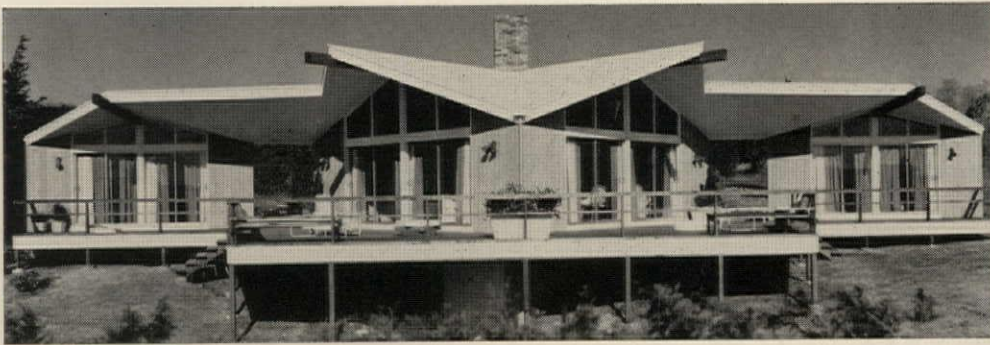
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Promotion house seeks to spur second-house sales

A \$26,800 vacation house on Cape Cod (*above and right*) is aimed at the second-home market and will get heavy promotion to the industry (via sponsoring Weyerhaeuser Co.), and to the public (via four pages in June's *Woman's Day*).

Designed by Architect Burton A. Bugbee of New York City, the 676-sq.-ft. basic house has triangular rooms to create an illusion of space, can be built in three stages. Weyerhaeuser will provide promotion kits to retail lumber dealers for their builder-customers.

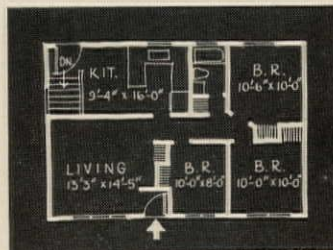
R. K. Arnold

Odd-lot builder's service truck helps build referral sales

A highly visible Courtesy Maintenance truck is a strong prop under the high percentage (30%) of referral sales achieved by Cowan Construction Co.'s odd-lot operation in Sarasota, Fla. (over 200 houses per year).

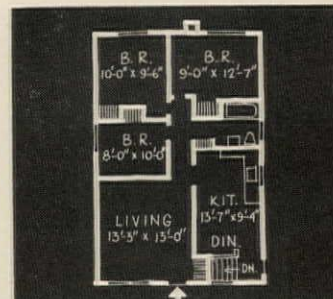
The truck-borne handyman not only clears up small complaints (major troubles go back to subcontractors), but literally goes looking for trouble. He makes 10 to 20 calls a day on recent buyers, asking if there are any complaints he can correct.

If the owner is not at home, a doorknob card invites him to phone for a return visit. Significance: builders who formerly kept their names off service trucks for fear of inviting complaints from nearby buyers might now consider the goodwill they get from such service, a bargain way to get referral sales.



WIDE-FRONT HOUSE (37') will go on a 50' lot, with kitchen at rear.

R. K. Arnold



NARROW-FRONT MODEL (24') will fit even a skimpy 35' lot, costs \$10,990.



Divided staircase in foyer makes split-entry a bestseller

This impressive foyer, seen from its double entry doors, helped Realty Company of America to a four-month sellout of an 83-house subdivision in Des Plaines, Ill. Twin open stairways lead up to the formal living room and flank a wide (6') stairway leading down to the recreation room. The three- and four-bedroom, 2½-bath houses (\$29,950 to \$31,750) were designed by Architect Herman H. York of New York.

Tract builder switches to odd-lots, increases sales 500 %¹

Two years ago, Builder Irving Dworkin was building 30 to 35 houses a year (\$14,000-\$20,000) in the suburbs—"and dying." Then he switched to scattered sites near the built-up edge of eastern Detroit. Results: 60 sales the first year, 120 in 1963 and prospects of 150 in 1964. Dworkin's Diore Construction Co. aims at the low-priced market (\$11,000-\$15,000) on low-priced lots that have been unsalable for as long as 40 years for such reasons as narrowness (35' and 40'), arterial street locations or abutting commercial or industrial use.

Dworkin put up two models on high-traffic streets, then set out to buy every overlooked lot he could find that met FHA standards (lower for old than new subdivisions: e.g., where half the sites on a street are built on, the street need not be paved).

His houses—three- and four-bedroom, one-bath, brick models—are designed with the tastes of low-income buyers in mind. All are one story high, so the buyers can paint and maintain themselves. They have full base-

ments ("our buyers won't look at a slab house"), with utilities grouped in one corner, so most of the space can be converted to a recreation room, plus rough plumbing to allow installation of a lavatory later.

Land, that bugaboo of suburban tract builders, is Dworkin's easiest problem. Real estate brokers bring him 90% of his sites through listings they dig up. Some have cost him as little as \$500 (with utilities), and he has not yet paid more than \$1,500, compared with the \$3,500 or more he estimates it would cost to develop new sites on raw land.

A two-man sales staff headed by Leonard Ross handles all prospects. Most sales are FHA or VA (80% of buyers make minimum down payments). Many buyers, says Dworkin, are families who don't want to leave old neighborhoods, members of old-time groups who want to live near friends or churches or working men who want to walk to work. All construction is subbed out and two superintendents—rough and finish—oversee the scattered sites.

Letters start on p. 61



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See garage doors made with Structoglas at the New York World's Fair in the Houses of Good Taste, the Sinclair Marina geodesic dome, and in Middletown, New Jersey at the Formica World's Fair prototype house.

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Land speculation and high land prices . . . Foreclosures . . . California S&Ls

How land prices hurt housing

H&H: The idea of higher taxes on unimproved land is interesting [H&H, Mar.]. We are looking at this now to see where this would lead us. Lower land prices certainly would be good for the house-building business and therefore good for our lumber business.

RALPH M. SHAW, vice chairman
MacMillan, Bloedel & Powell River Ltd.
Vancouver, Canada

H&H: You have put your finger squarely on one of the most disruptive factors in the building economy . . . As a housing product manufacturer, I am conscious of the growing compulsion for builders to use cheaper materials because of the inflated land prices they have to pay . . . The land owner contributes virtually nothing to the improvements which enhance the value of his unimproved land and I have long been distressed by the haphazard, hedge-hopping pattern of urban development, with residential and commercial areas clustered in isolated pools surrounded by gaping plots of raw land.

JAMES B. EDENS, president
Southwest Forest Industries
Phoenix

H&H: A splendid editorial! What you said needed saying and will, I am sure, make a contribution to a better understanding of the problem.

MARTIN L. BARTLING, vice president
U.S. Gypsum
past president, NAHB

H&H: You are doing a great service with this editorial on land speculation. With the eventual advent of navigable water here at Lewiston, land values have jumped to completely outlandish figures and the land owners are sitting tight feeding out only a little piece at a time. Speculators are having a field day, and housing is being held down because of the excess cost of just ordinary lots. Certainly the answer is equitable taxation of land, but what a battle this is!

BENTON R. CANCELL, president
Potlatch Forests Inc.
Lewiston, Idaho

H&H: I suppose getting higher taxes on land depends almost entirely on local effort, so I intend to get to work on this immediately.

CLARENCE A. THOMPSON, past president
Lumber Dealers Research Council
Champaign, Ill.

H&H: Land prices in this area have been the main deterrent to single-house building in the past couple of years.

LAWRENCE J. FITZPATRICK, president
J. J. Fitzpatrick Lumber Co.
Madison, Wis.

H&H: I don't think there can be any argument about the desirability of reducing the land cost in the total housing package. . . .

GENE C. BREWER, president
U.S. Plywood Corp.
New York City

H&H: I view with nothing short of dismay your proposal that the way to sell more building products is to increase taxes on unimproved land, thereby forcing more land on the market at lower prices.

KENNETH R. WALKER
Paul Bunyan Lumber Co.
Anderson, Calif.

Rx for high land prices

H&H: Robert Weaver apparently accepts the idea that the high price of land is stopping construction of medium-priced homes. So he is proposing to have the government put up part of the price of the land on condition that part of the land be used for building the type of homes that Weaver wants [H&H, Apr.].

In effect, Weaver proposes to increase the cost of government by getting involved in these land purchases, whereas the direct approach, i.e., the HOUSE & HOME approach, is to get higher taxes on land, thereby bringing the price down to where the builder can afford to pay it.

ROBERT DE FREMERY, vice president
Onox Inc.
San Francisco

How houses are really sold

H&H: Your marketing issue [Mar.] was excellent, but what happened to the salesman? Houses do not sell themselves. It takes a knowledgeable, highly motivated salesman to position his product above the competition.

Our industry desperately needs emphasis on recruiting, training and compensating of genuine sales professionals. Too much emphasis has been placed on *things*.

THOMAS W. RICHEY
S. V. Hunsaker
Irwindale, Calif.



H&H: Congratulations on a fine merchandising issue. . . . I wish to point out that the entry listed as Leo Shanahan's on p. 111, numbered 19 [above], is actually the entry of the Drogin Homes' house pictured on p. 100.

STEPHEN B. DROGIN
Drogin Homes
San Diego, Calif.

Foreclosure and delinquencies

H&H: I wonder why the FHA and VA foreclosure rate is so much higher than that of conventional loans [News, Mar.] given the fact that the FHA is supposed to appraise the changing market so much more carefully than the aggressive S&Ls and there should not be any secondary financing on FHAs? Is it just a matter of low equity? If this is true, then the observation that a person's income is the most important factor in sound lending is wrong.

Comparisons of foreclosures between California and other parts of nation must be made with great care because we use the trust deed here, which is much easier to foreclose on than a traditional mortgage.

Your magazine continues to be superb.

JAMES GILLIES, assistant dean
Graduate school of business administration
University of California, Los Angeles

How to win zoning changes

H&H: If more applicants would consider the suggestions in your article ["Zoning: 20 tactics to persuade communities to accept apartments," May] they would make the job easier for commissions. Projects with real merit would have more chance of becoming reality.

We cannot condone all the suggested tactics but they are interesting.

JONATHAN R. CUNNINGHAM
director of planning
El Paso, Tex.

Housing's market shackles

H&H: The housing industry has not reached its true potential largely because housing costs during the last decade have risen faster than other consumer items. Unquestionably our archaic and unrealistic building codes are one of the principal causes of the high cost of housing, but the monopoly power and uncontrolled restrictive trade practices of the building trade unions have had a far greater impact on labor costs. With rising lot prices, these things are seriously interfering with the ability of the industry to give the American public the kind of housing it deserves.

RODNEY M. LOCKWOOD, past president
National Association of Home Builders
Birmingham, Mich.

Middle-income housing

H&H: Your article, "Misleading myths of middle-income housing" [Mar.] deserves the highest commendation. It is an excellent job, and one that badly needed doing.

GRAHAM T. NORTHUP
Mortgage Bankers Assn.
Washington, D. C.

H&H: Your straight-from-the-shoulder remarks should be must reading for all those officials in public life who have been sold a bill of goods by public housers who wish to expand their area of operation into middle-income housing.

ROBERT F. FERGUSON JR.
executive vice president
New Jersey Association of Real Estate Boards

Letters continued on p. 63



It doesn't matter who lives upstairs when there's Acrilan® on the floor.

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It is more resilient, more durable, less prone to shed than wool. It resists fading, staining, moths, mildew—is non-allergenic, too. And it's not as expensive as it looks.

Any questions? Write Chemstrand, Contract Carpet Merchandising, 350 Fifth Avenue, New York 1, N.Y.



California S&Ls

H&H: In your article "California's s&l cliff-hanger" [News, Apr.] you quote a comment by Tom Clarke, attorney for Lytton Financial Corp., made during a bitterly contested hearing concerning the alleged inexperience of Mr. and Mrs. Herbert M. Sandler of Golden West Savings.

Both Lytton and Clarke had on numerous occasions described Mrs. Sandler as one of the most knowledgeable people in the country about the s&l industry. In fact, Mrs. Sandler was instrumental in originating, negotiating and placing \$16½ million in debt securities for Lytton Financial Corp. in 1962.

Mrs. Sandler, a Wall Street financial analyst for many years, is acknowledged to be an expert in s&l matters and is consulted by nationwide business publications and large institutional investors on s&l activities and trends. Attorney Sandler's practice included corporate, real estate and s&l matters.

The application made by Lytton was denied after the hearing in which Clarke made his remark, and the application of Golden West Savings for permission to operate a branch in the financial district of San Francisco was approved by the California s&l Commission. Such approval was the first in more than four years for that area. This decision was certainly based, in large part, on the fine loan portfolio of Golden West Savings.

HERBERT M. SANDLER,
executive vice president
Golden West Savings
Oakland, Calif.

Bouquets . . .

H&H: Our staff looks forward to HOUSE & HOME each month. It is, without a doubt, one of the most widely read publications we receive, professional journals included. We don't always agree with everything in the magazine, but the level of coverage and the stimulating and controversial issues presented materially aid us in keeping well informed about fields with which we are directly concerned.

JERROLD R. ALLAIRE, associate planner
City of Modesto, Calif.

Subscription offices: HOUSE & HOME, 540 N. Michigan Ave., Chicago 11, Ill. Change of Address: Four weeks are required for the change. Please name magazine and furnish a label from a recent wrapper. If no label is available, please state as exactly as possible the address to which magazine has been sent. Change cannot be made without old as well as new address. Editorial and advertising offices: Time & Life Building, Rockefeller Center, New York 20, N. Y. Address advertising correspondence to the advertising director and editorial correspondence to the managing editor. HOUSE & HOME will not be responsible for unsolicited manuscripts or illustrations submitted, and it will not return such material unless accompanied by postage.

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Now that plywood is showing us how by putting a time-limit on its cheapest grade . . .

We've got another little list that never would be missed

The plywood industry is giving all of us an important lead toward housing progress by moving to discontinue its just-a-little-bit-cheaper Interior Grade, so-called because its glue line will fail if it gets wet.

Now let's hope we can get rid of a few more cheap-to-buy-but-wasteful-to-use items that downgrade new housing and keep home buyers from realizing that everything about today's new homes can and should be so much better than yesterday's best. For example:

Outdoor locks without safety slides—they may cost 30¢ less, but why put any lock at all on the front door if burglars won't need a key to get in?

Green framing lumber—it may be \$5 mbf cheaper to buy than the new 1½" dry, but it costs more for erection labor and a lot more for nail-pop and plaster-crack call-backs.

Washdown toilets—they may or may not cost \$1 less to make, but they have been obsolete for 51 years. So using them in 500,000 new bathrooms this year will make all these 500,000 new bathrooms (average cost at least \$500) obsolete, noisy and almost unsanitary before they are flushed for the first time.

No. 14 circuit wiring—it costs 7 mills less per foot to buy, but it costs more per outlet installed, because No. 12 carries 33% more current.

Builders' model appliances—women know better than to buy them in a store, so why kid ourselves they like to find them in new homes?

Overhead wiring—in areas served by progressive utilities this worst-of-all eyesores saves the builder less than \$100 a house.

6' 8" closet doors—they waste the whole top of the closet and cost more in place than 8' ceiling-high doors.

\$5 trees—the average home buyer will sell the house and move away before they begin to look like anything.

An editorial by Perry Prentice

Tiny bedrooms—this is the cheapest fault to correct before the house is built (as little as \$3.30 per sq. ft.) and the hardest to correct afterward. If the master bedroom is too small for twin beds (i.e., smaller than 12x15), half your prospects won't buy.

Clothes poles and clothes lines—nothing so cheapens the looks of a development as a lot of wash hanging out to dry. With a package mortgage a washer-dryer costs hardly 50¢ a month more than the washer alone.

Fuses and a fuse box—this anachronistic nuisance cost the contractor only \$13 less than modern circuit breakers.

Cheap contractors'-grade paint—if it cuts 30% off bill for paint-in-the-can it will cut hardly 5% off the cost of paint-on-the-house (i.e., the total cost of the paint job). And before long the cheap paint's failure can make a whole development hard to sell by making the houses look shabby from half a mile away.

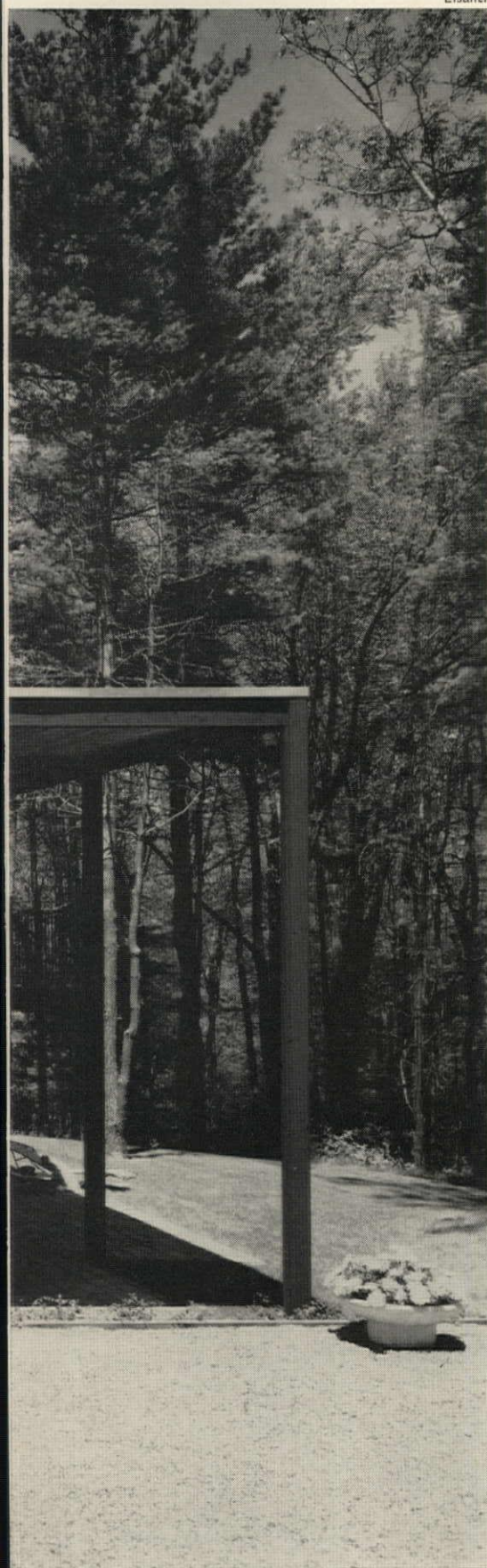
19" x 17" lavatories—they may save the plumber \$6, but they will cost the home buyer closer to \$100 to replace when he finds he can't wash his face without either banging his head on the faucet or splashing water on the floor.

Inadequate water pipes—anything less than a 1" supply line will have trouble meeting the needs of a two-bath house with dishwasher and clotheswasher, and small pipes inside the house will be noisy and wear out too fast.

Screw-type wiring devices—what a way to waste 10¢ a minute labor!



Classic simplicity of this post-and-beam house by Architects John Black Lee and Harrison DeSilver proves that the difficult split entry can be handsome in appearance, workable in plan.



1964 Award Winners

1 Five merchant-built houses picked by a demanding jury

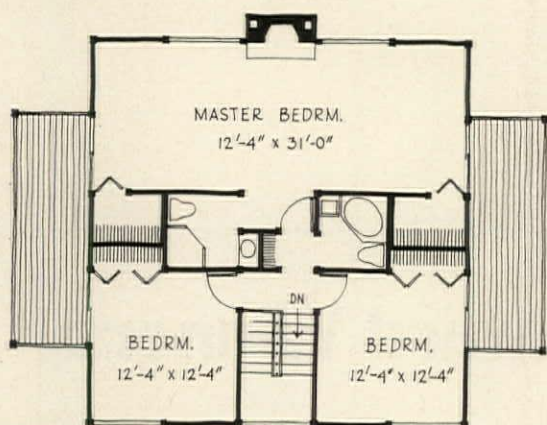
The five award-winning merchant-built houses on the next ten pages (and three top custom houses that begin on p. 76) ran a tough gauntlet against most of the best-designed houses in the country in this year's Homes For Better Living program, sponsored by the American Institute of Architects in cooperation with HOUSE & HOME and *The American Home*. This is now the oldest (since 1956) and largest (605 entries) residential design awards program in the U.S.

The winners were picked for things they do better than the houses that most builders are building and most architects are designing. For instance: 1) space is arranged for the kind of living that most of today's families need and want, 2) standard building materials are used in new, imaginative ways, 3) traditional building forms are modified and improved upon and 4) the houses are carefully tied to their sites.

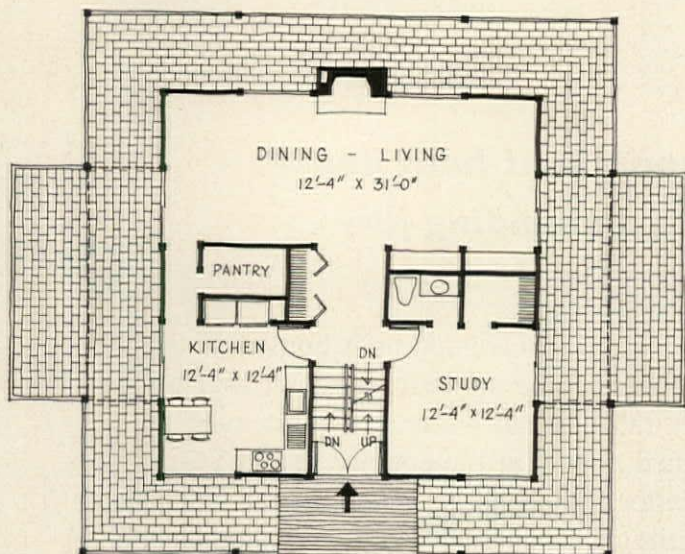
It would be a mistake for the housing industry to brush off these houses as designs that buyers won't accept. Four of the winning houses are being built in fast-selling, successful subdivisions, and plans for the fifth (*left*), a prototype house, have sold by the hundreds.

Says the jury: "Today's market for new housing consists of a series of smaller, specialized markets—like the market for good contemporary design. The smart builder will commission and use the kind of architectural skill needed to satisfy this market because some buyers cannot be sold anything else."

For the builder-house winners, turn the page.



2ND FLOOR



1ST FLOOR

All rooms on both levels are arranged for easy access to each other and to terraces or balconies.

A bridge and sunken terrace solve the split-entry problem

Here is an imaginative solution of two big problems in designing split-entry houses: 1) how to provide good circulation and 2) how to avoid a clumsy exterior.

The architects dropped the house grade 5' below street level and provided access to the split entry with a 6' 8" wooden bridge.

Result: cleanly separated yet highly accessible living areas, with every room open to terraces or balconies (the house has eight sliding glass doors).

Furthermore, the interior space (2,048 sq. ft.) is flexible. Construction is based on post-and-beam framing and a 6' module (and fractions thereof), so the non-load-bearing interior walls are adaptable to a variety of floor plans. One example: the huge master bedroom (12' 4" x 31') can easily be turned into two rooms.

The exterior is designed for good looks and good living. One example: the generous (6' 4") roof overhangs not only make the house seem lower but also shelter at least part of each outside-living area.

Does the house click with the public? Apparently so. Since it was published in *Better Homes & Gardens* (Mar. '63), BH&G has received 700 orders for plans.

Says the jury: "It could easily be developed into a builder's most sophisticated model—provided the site were right."

Photos: Lisanti





Sweeping expanse of living-dining area (31') opens to terraces on two sides. Ceiling is underside of 2½" wood decking.

AWARD OF MERIT

CLASS: over \$25,000 including land
 ARCHITECTS: John Black Lee, AIA,
 and Harrison DeSilver
 BUILDER: Ernest R. Rau
 LOCATION: New Canaan, Conn.



← A natural slope was bulldozed to put the house grade 5' below street level. The house is priced at \$32,000 without land.

Huge master bedroom (12' 4" x 31') has twin walk-in closets and sliding glass doors at each end, which open to balconies.

continued

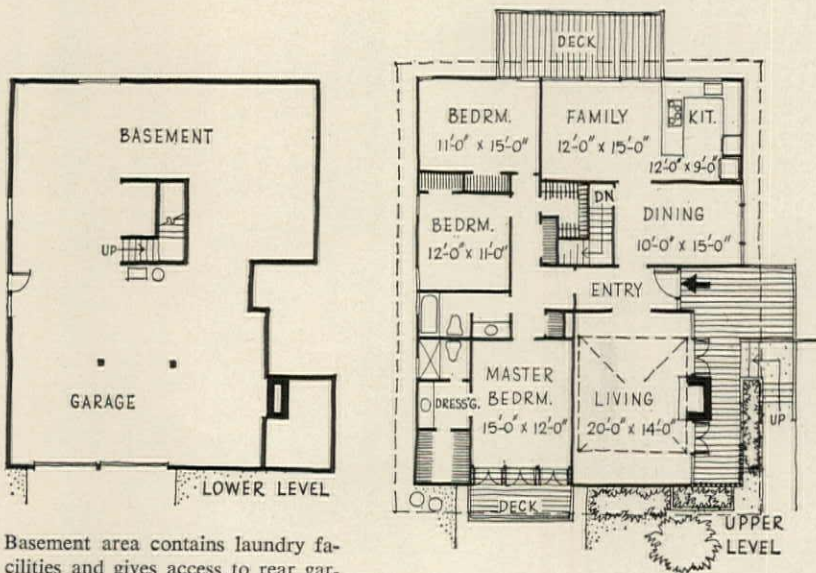
Stain-finish hillside house gets better looking with age

This three-bedroom house (*see cover*) was designed 1) to adapt to slopes, 2) to weather gracefully and 3) to provide a variety of interior spaces.

A basement level allows for flexibility in siting: the garage entrance can be moved to left or right depending on the direction of slope. Staining virtually all the exterior with a weathering gray finish achieves the second goal (siding is resawn redwood vertical 1x6 tongue-and-groove; all trim is redwood and the roof is cedar). Only the wood doors and windows, the garage doors and lower-level stucco finish are painted. A pyramid-shaped cathedral ceiling in the living room, a skylight over the bedroom corridor and balconies attached to all but three rooms give variety to the interior spaces.

At \$35,000, the 1,775 sq. ft. house has sold ahead of production on a tract with five other models.

The jury's comment: "We applaud the general character of the subdivision this house illustrates. Even in California you don't get many subdivisions like this. One commendable thing is the skillful handling of wood elements throughout the house and the whole subdivision."



Basement area contains laundry facilities and gives access to rear garden. Both bathrooms on living level are compartmented.

Roof pyramid is capped by a monitor that hides a skylight, plumbing vents and flues. Gray finish is used on exterior.

Photos: Karl H. Riek





Pyramidal living-room ceiling adds to spaciousness. French doors open onto a roofed deck. Fireplace has precast concrete lintel.

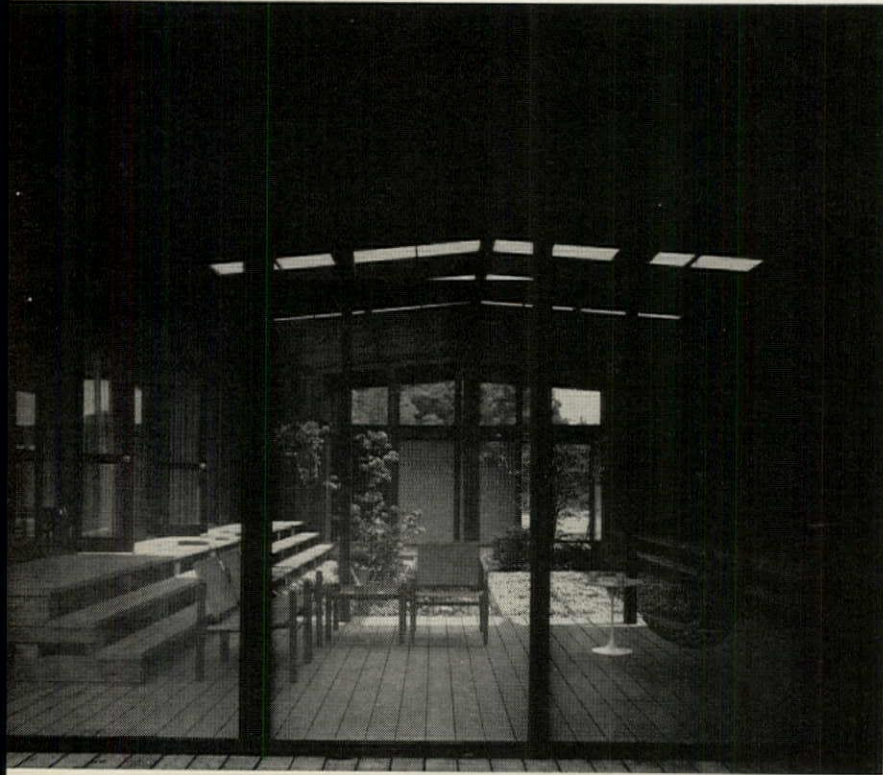
HONORABLE MENTION

CLASS: over \$25,000, including land
 ARCHITECT: A. Robert Fisher, AIA
 BUILDER: Stoneson Development Corp.

Alternate version of roof shape (right and left) has gable-end glass and open ceiling. Rear balcony opens off kitchen-dining area.



Photos: P. E. Guerrero



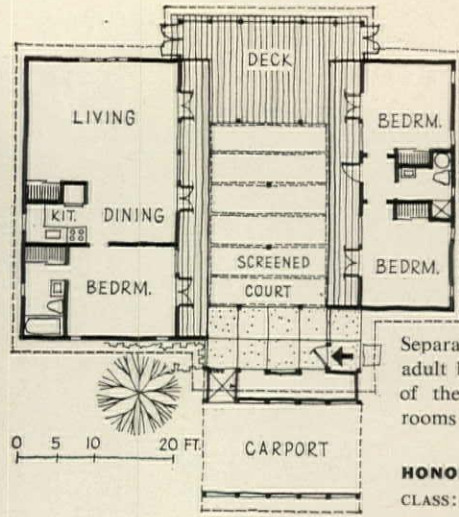
Open roof floods court and interior-facing rooms with daylight. Wide decks and steps to courtyard provide extra seating space.

From the street, garage and storage rooms help screen the interior court. The house is based on a 4' module in both directions.

Maris © Ezra Stoller Assocs.



Offset siting of two sections of the house creates visual excitement from outside and helps shelter a terrace in the rear.



Separation of two wings puts the adult bedroom on the opposite side of the house from children's. All rooms look into the court.

HONORABLE MENTION
 CLASS: between \$15,000 and \$25,000
 ARCHITECT: Bruce Campbell Graham
 BUILDER: D.F.D. Inc.
 LOCATION: Rehoboth Beach, Del.

A screened central court provides outdoor privacy

The court in this vacation house opens only to the rear of the property which, in most models, borders on an attractive canal. Exterior walls, except for those facing the court, have narrow windows (1'10") to maintain a sense of privacy. Both units of the house are raised above grade level on foundation piers for ventilation and protection against rising water. House has 1,104 sq. ft. of living space inside, 520 sq. ft. outside and sells for \$18,500 to \$19,500 on leased land (ground rent: \$200 per year).

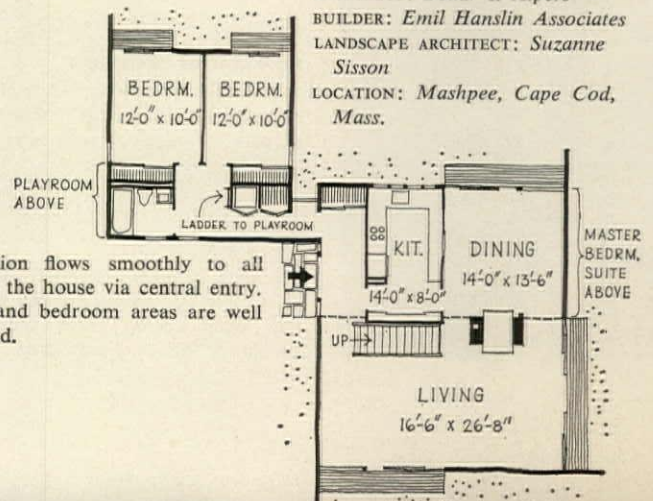
Says the jury: "Modest, low-cost, good interior space."

A fresh version of the saltbox gets a contemporary flavor

The architects of this former H&H cover house (Sept.) borrow the roof lines of early American saltbox houses and emphasize a colonial silhouette by using white cedar roof shingles. The exterior has large areas of fixed and movable glass and rough-textured exterior plywood with recessed battens. Exterior wood areas are trimmed in bright colors. The 1,750-sq.-ft. house costs \$26,900 plus land.

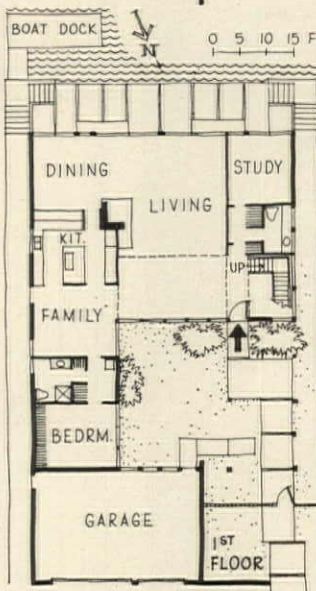
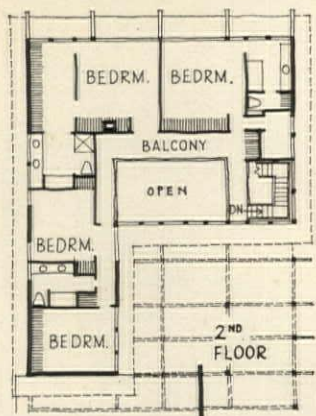
Says the jury: "A compact, simple-to-build house that is not stereotyped. It can be varied on the site."

AWARD OF MERIT
 CLASS: over \$25,000, including land
 ARCHITECT: Bedar & Alpers
 BUILDER: Emil Hanslin Associates
 LANDSCAPE ARCHITECT: Suzanne Sisson
 LOCATION: Mashpee, Cape Cod, Mass.



Circulation flows smoothly to all parts of the house via central entry. Living and bedroom areas are well separated.

Photos: Maynard Parker



Trellised entry court opens to luxury on a narrow lot

Everything about this \$162,400 model house spells opulence—intentionally. It sits on a small (80' x 120') but expensive (\$50,000) leasehold site. And it was built as a showcase for a plush waterfront development.

The architects captured a feeling of expansiveness despite the limited site with a majestic (52' x 33') garden-entry court in the hollow of the L-shaped house. The impression of great space continues into the 4,488 sq. ft., two-story interior, notably in the 19' high balconied area of the living room (*below, right*).

Says the jury: "A tremendous job in handling a narrow lot. The entry court is the key design feature."

HONORABLE MENTION

CLASS: over \$25,000, including land
 ARCHITECT: *Burge & Roach*
 BUILDER: *Macco Realty Co.*
 LOCATION: *Newport Beach, Calif.*

Two-story plan gives most rooms on each level water views. Bedroom adjacent to garage is for maid, opens to family room.

Impressive garden-entry court doubles as entertainment area, opens to family and living rooms as well as to stairs to second floor.



Severe lines of the house and its fencing are softened by a wooden trellis over the garden-entry court. All rooms are oriented either to a view of the bay or inward to the court.



Living room soars two stories high, includes a balcony that functions both as a gallery and as access to bedrooms. Entire wall left is glass and opens to deck and boat dock.





Vince Finnigan

The six experts who judged the merchant-built houses

Charles M. Goodman, FAIA, Washington, D.C., designed one of the nation's most famous builder-architect subdivisions, Hollin Hills, in suburban Maryland (with Builder Robert Davenport). In the mid-'50s he designed National Homes' line of pre-fabs. Last year he designed a 508-unit urban renewal project in Washington for Reynolds Metals Co.

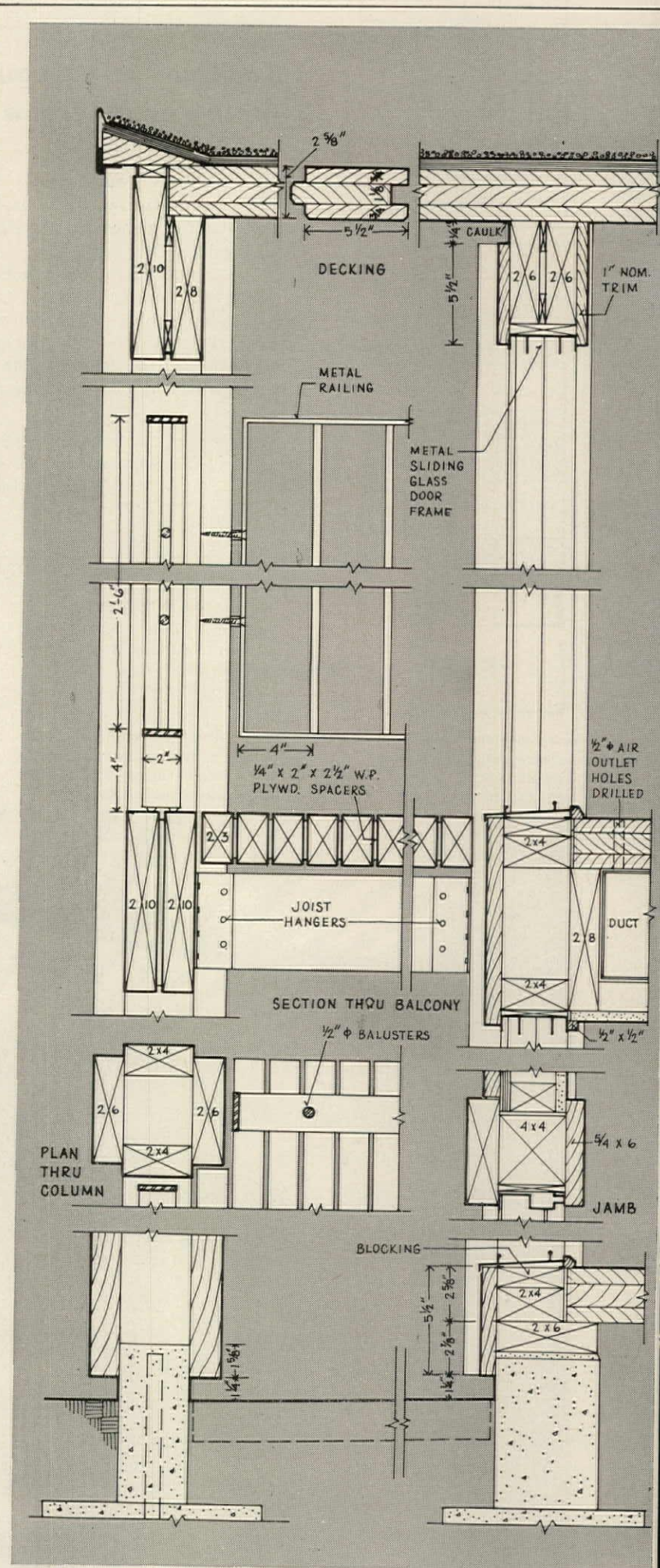
Frederick M. Wells, AIA, design staff chairman of Cornell's College of Architecture since 1945, has designed many custom houses in New York State.

Allan C. Borg, building editor of *The American Home*, is a graduate architect (University of Florida '53) who became an editor in 1961, but who still heads his own design and construction firm in a New York City suburb (annual volume: \$250,000).

John L. Schmidt, AIA, director of architectural and construction research for the U.S. Savings & Loan League, has just completed land-planning and house-design booklets for the guidance of local s&l loan officers. Schmidt designed housing and heavy construction before joining the league in 1960.

Roger Y. Lee, FAIA, Berkeley, Calif., has won a long list of citations for his custom houses. In 1963 he received a First Honor Award in the HFBL program for three houses he designed and built for sale on a hillside next to his own home. A University of California graduate, he became an AIA Fellow in 1963.

Jan V. White, HOUSE & HOME art director, has architectural degrees from Cornell and Columbia, turned to journalism in 1952, when he joined H&H. He has won many awards for layout and presentation.



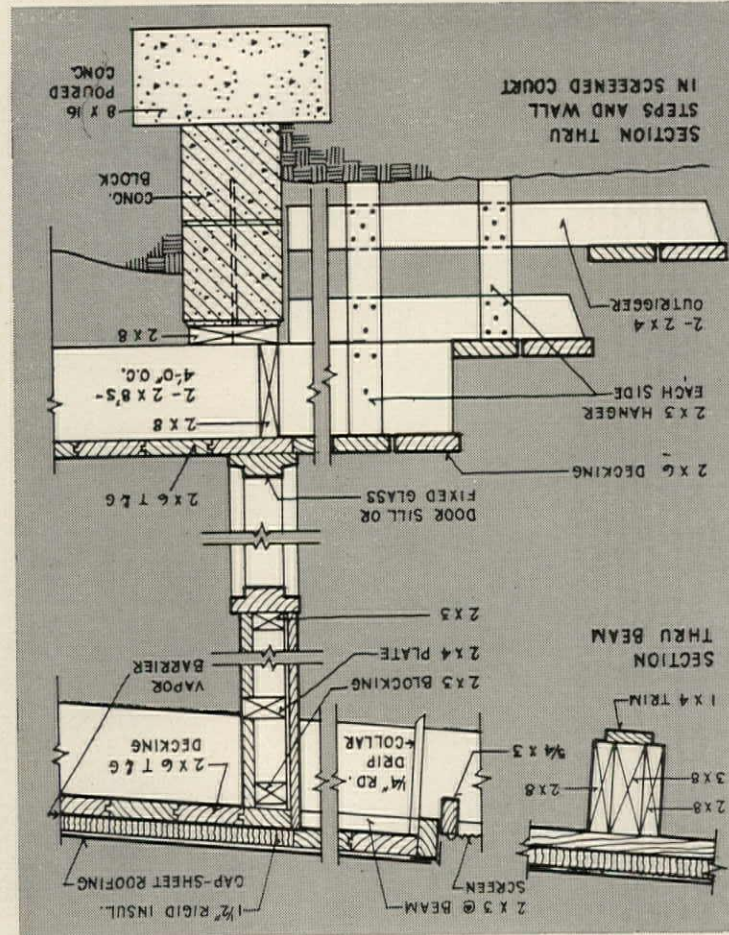
SIMPLE FRAMING in the Lee-DeSilver house (p. 68-69) is shown in this section through the exterior wall and second-floor balcony. Solid-wood decking (2 $\frac{5}{8}$ "") of floors and roof spans rooms easily (longest span: 12'). Heat comes from ducts through $\frac{1}{2}$ " holes drilled in the perimeter of flooring.

Beach-front house with a glass wall facing the water won an Honor Award. Designed for year-round use, it is raised above possible high tides on 3½"-thick concrete pilings. (For plan and photos, see p. 78; for details, see p. 84.)

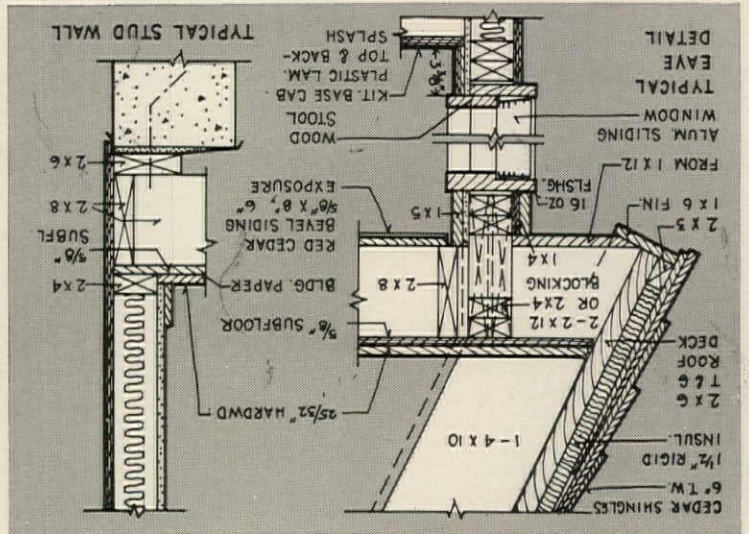


continued

FAST CONSTRUCTION of the vacation houses by Architect Bruce Campbell Graham (p. 72) is made possible by detailing that uses only standard components. The builder (D.F.D. Inc.) has set up a prefab plant to build wall sections, which are left uninsulated unless intended for year-round use.

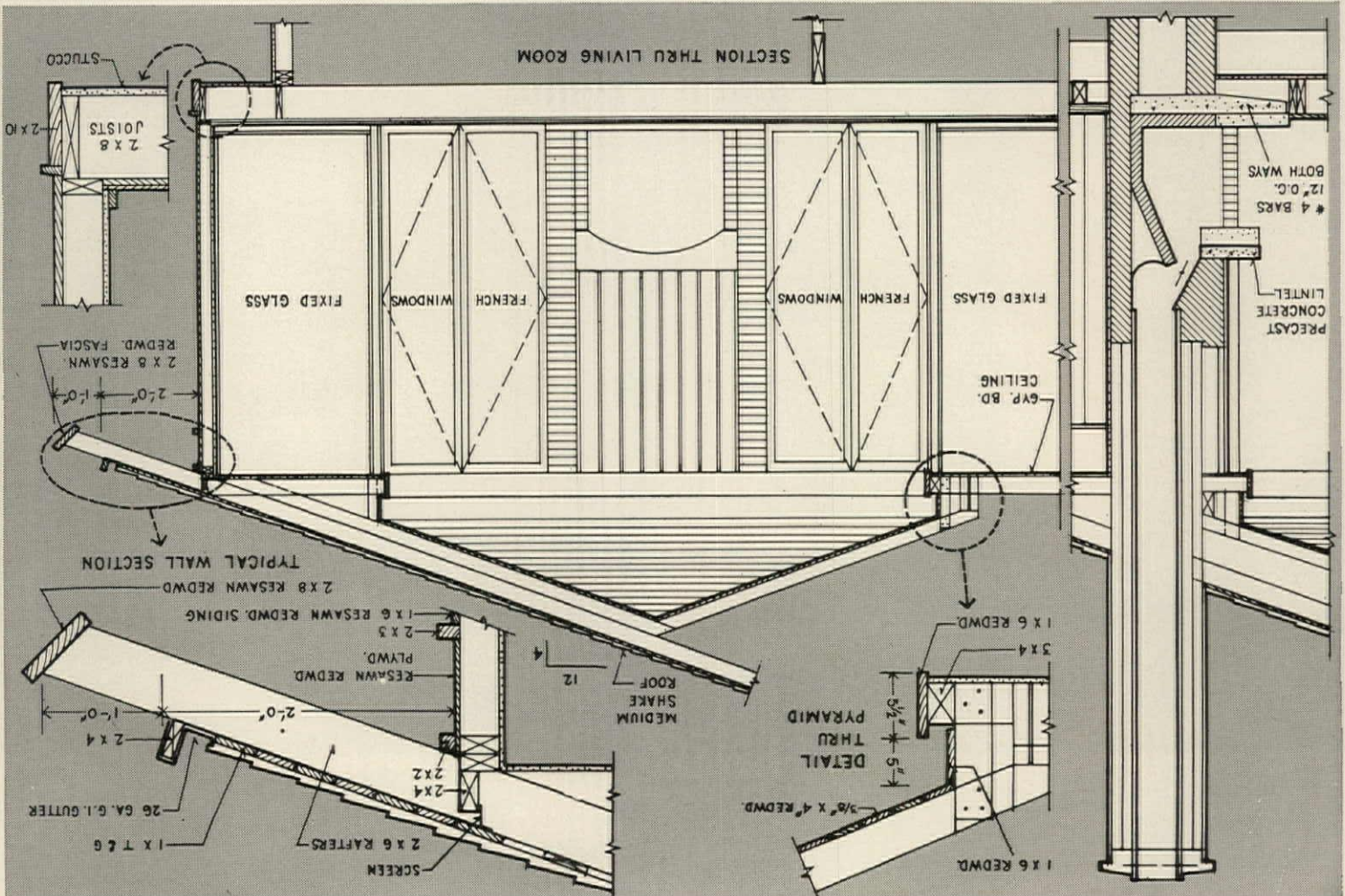


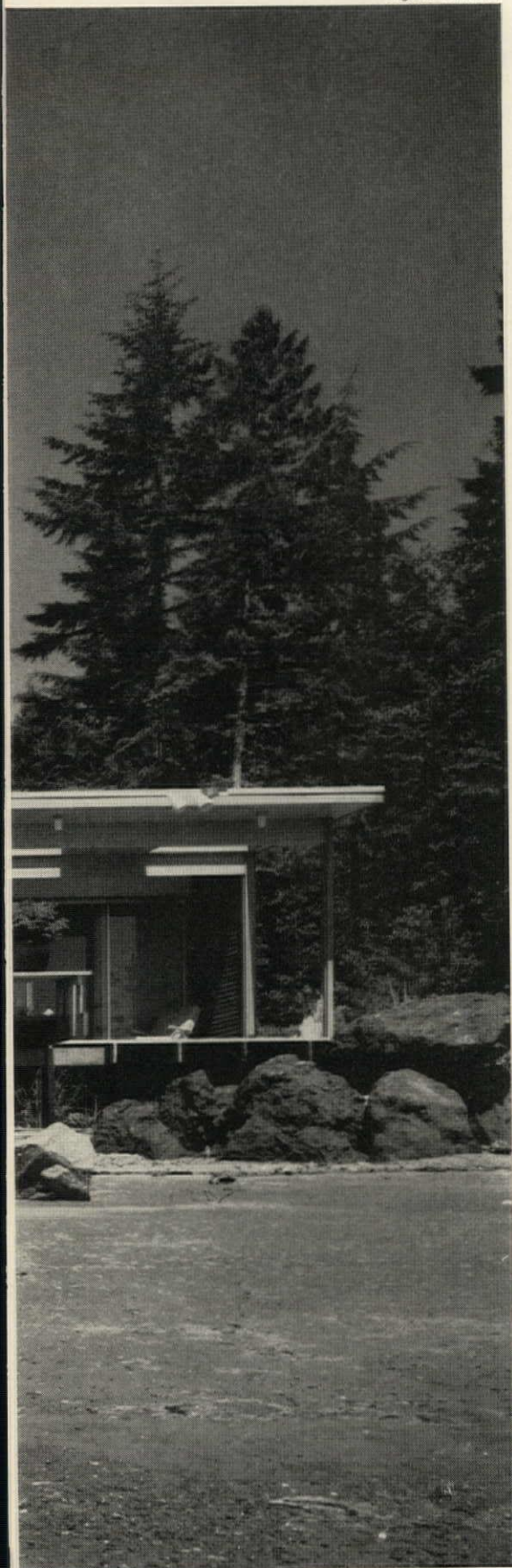
STEEP ROOF ANGLES of the house by Architects Bedar & Alpers (p. 72) are reminiscent of New England saltbox houses. The steep roof pitch permits a master bedroom on the second floor of the main section and a children's playroom (reached via a ladder), in the secondary wing.



Selected details from the best of the merchant-built houses

FEELING OF SPACE in the living room of the house by Architect Robert Fisher (p. 70-71), comes from fixed and opening sash on the fireplace wall. Looking onto the roofed veranda and from the 9' pyramid ceiling, Redwood fascia extend 1' beyond 2' roof overhang.





1964 Award Winners

2 *Three distinguished custom houses—tops among 211 entries*

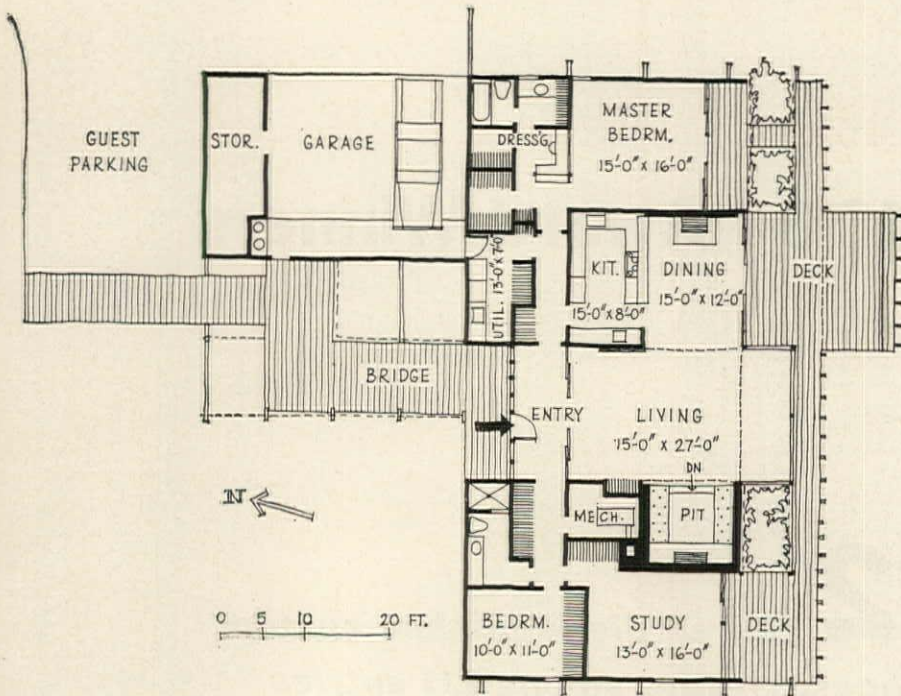
Does this paucity of top awards—the fewest in every year but one—mean custom-house design is slipping?

Far from it. Never before has the competition for top honors been keener. Never before have there been more runners-up. Ten custom houses won Merit Awards this year—and these will appear in months to come. Never before has the jury been more selective — and more unanimous — in its choices for top honors.

The three top winners are all West Coast houses (as were more than half the HFBL entries). But architects and builders across the U.S. can learn much from them.

- They are all familiar forms—a one story, a two story and a split level.
- Their materials have been used in simple but dramatic ways—one house, for example, has the narrow clapboard siding characteristic of New England but is undeniably California in feeling.
- They are brilliantly detailed (*see p. 84*).
- They solve site problems that are common to many parts of the country.
- They exemplify the best in indoor-outdoor living.

The jury called the three houses “truly distinguished as new contributions to architecture.” *For a close look at what makes them distinguished, turn the page.*



Plan puts master bedroom close to kitchen and garage for owners' convenience. Small bedroom and study at the far end form a guest suite.

A relaxing house, detailed as precisely as a machine tool

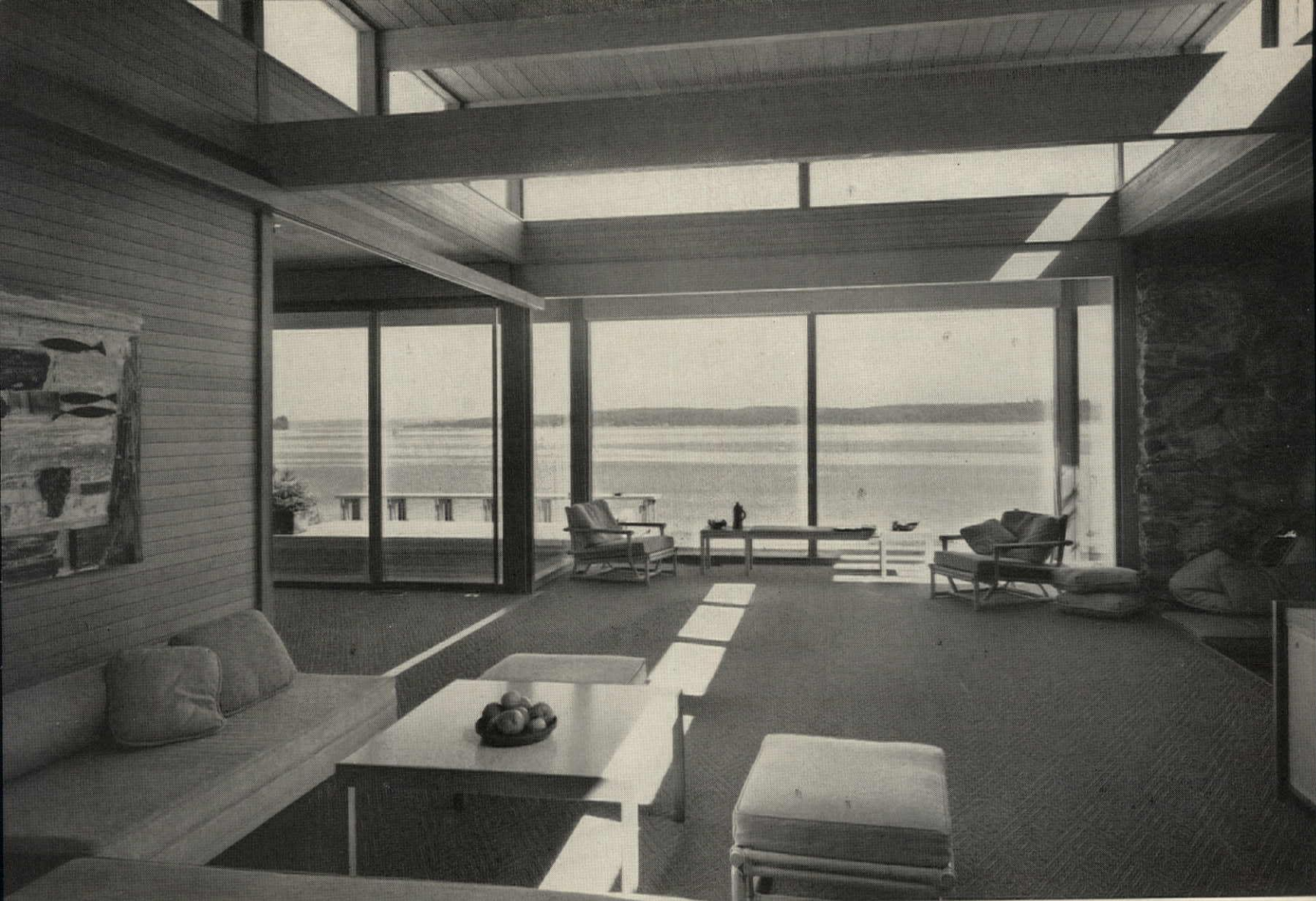
This year-round house overlooking Puget Sound is remarkable for the thoroughgoing way the post and beam framing is detailed to eliminate moldings and battens at every intersection. The architects prepared drawings for every detail (*selections appear on p. 85*) to show workmen how to achieve cabinet-making precision even though they milled their own stock on the job. The deceptively simple-looking details and the use of the same neutral-colored materials on both the interior and the exterior combine to give the house a sense of warmth, simplicity and repose.

In plan, the dining room, kitchen and main deck are closely related for informal entertaining by the owner couple, while a bedroom, study and bath on the opposite side of the house form a separate suite for guests.

Says the jury: "This is an extremely pleasant house with remarkably fine integration of all the parts. It is fine as a work of art, superb as a piece of architecture."

Photos: Hugh N. Stratford





Clerestory windows shed light throughout the living room. Glass walls opening onto the deck are oriented to a view across the water.

FIRST HONOR AWARD

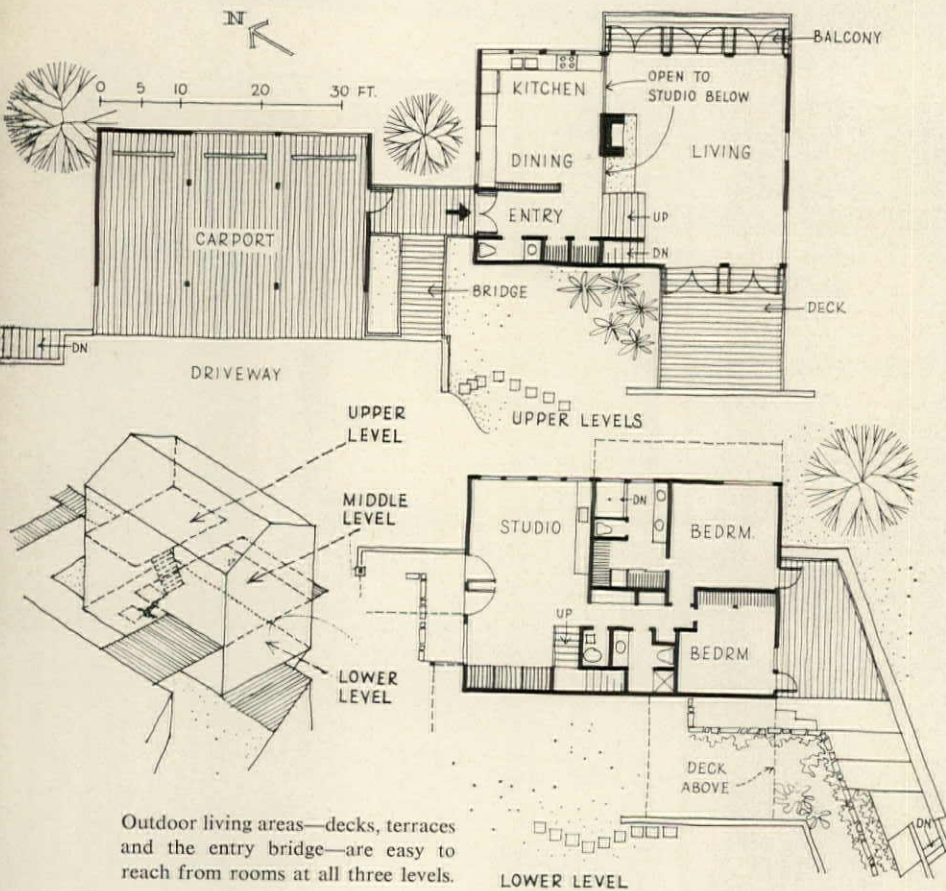
CLASS: over 2,800 sq. ft.
 ARCHITECT: Kirk, Wallace, McKinley, AIA, and Associates
 BUILDER: Heather Custom Homes
 LANDSCAPE ARCHITECT: Richard I. Yamasaki
 LOCATION: Longbranch, Wash.

← Post-and-beam framework for the covered deck shows the same crisp, simple detailing that gives order to the house. All wood is stained.

Stone alcove with a fireplace—two steps below the main part of living room—is a conversation pit or a cozy nook on winter nights.



continued



Three levels of airy space tied strongly to a steep site

The house splits space three ways to take advantage of a variety of views. But the spaces flow so smoothly from one level to another that the entire interior—except for the bedrooms—is visually unified. Key to this unity: the mid-level living room is open to the upper-level kitchen-dining-entry area and to the lower-level studio (see photo at bottom right).

The architects perched the house over a steep slope to minimize disturbance of carefully tended property, formerly part of a fine estate. But the house is tied to the site at all levels by decks and bridges.

Says the jury: "A superb job in making the house a part of the land. The horizontal planes are so positioned that it all comes out and makes workable sense. . . . There are no unresolved relationships anywhere, either in concept or in the relationship of the smaller parts—the window and door openings, spacing of the columns, even the railings. There is nothing abrupt about it."





High ceiling (16' at peak) and expanses of windows and glass doors make the living room almost a part of the outdoors.

← Private terrace (left) is off the bedrooms and below the living room. Use of clapboard in this house delighted jurors.



Studio on lower level gets north light for arts and crafts and opens to its own terrace beneath the wooden carport deck.

Three levels of living areas are lightly tied together by open stairways. All outside doors except in the entry are glass-filled frames.



Photos: © Ezra Stoller Assocs.

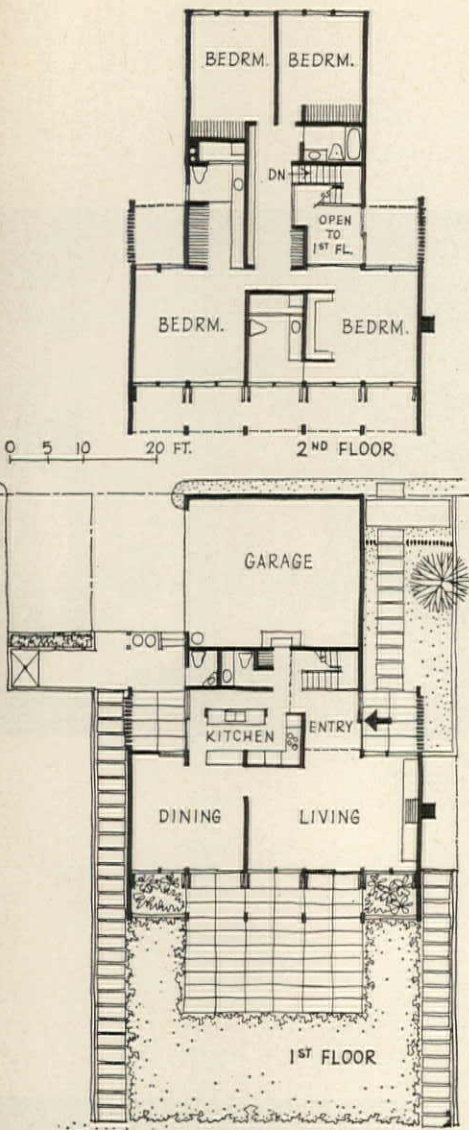


Wide wood deck leads from living room to hillside. Far end of the living room opens to balcony. Entry deck is through trees at left.

FIRST HONOR AWARD

CLASS: between 1,500 and 2,500 sq. ft.
 ARCHITECT: Marquis and Stoller, AIA
 BUILDER: Guy Baldwin
 LANDSCAPE ARCHITECT: Royston, Hanamoto, Mayes & Beck
 LOCATION: Mill Valley, Calif.

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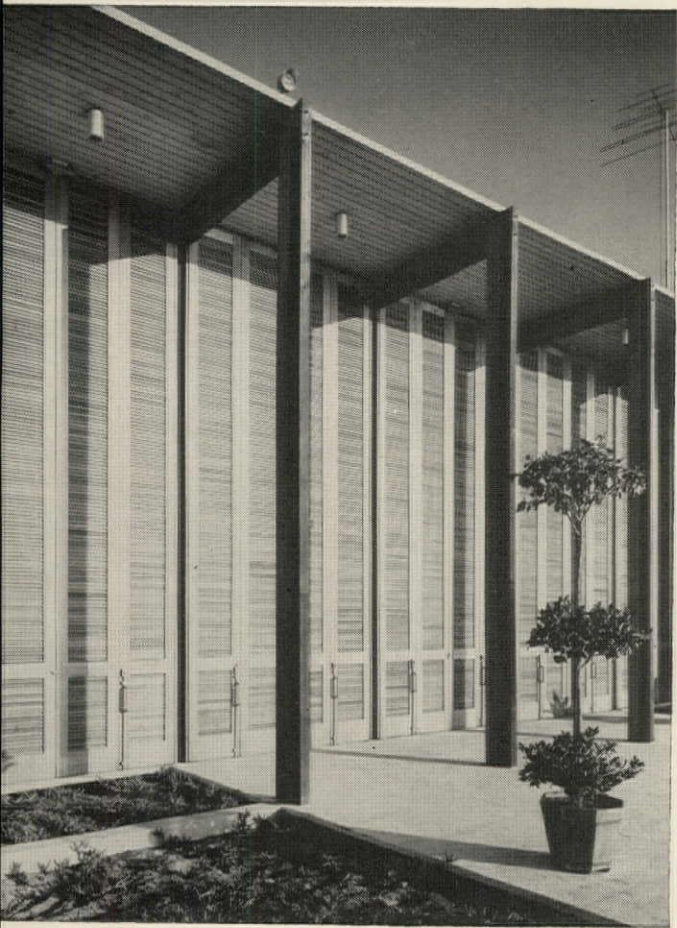


Open first-floor plan adds to spacious feeling in rooms oriented to the ocean-front terrace. Board fences give outdoor privacy.

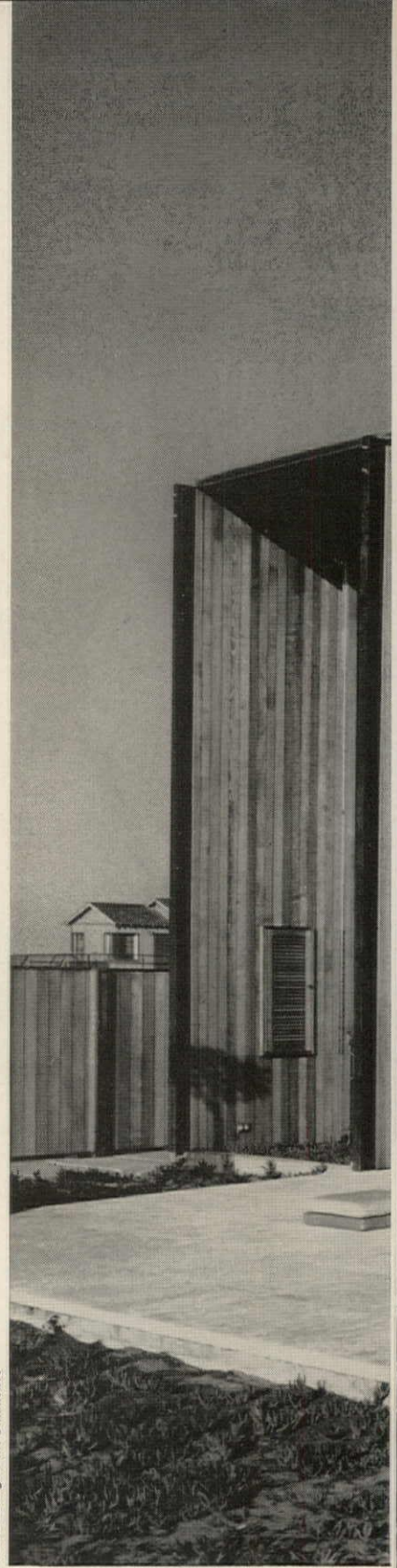
Two-story shutters shade a dramatic pavilion of glass

Three common vacation-house problems are solved here by Architects Hester-Jones & Associates: how to 1) relieve glare when the best view faces west into the afternoon sun, 2) provide big rooms within the tight confines of a 50' ocean-front lot and 3), close the house quickly and securely when it is not in use. The architects made the most of the view—and tamed the glare—with a combination of bronze-tinted glass and 17'-high louvered shutters (which also serve to button up the house from either inside or out). A two-story entryway and an open first-floor plan (left), with no doors between living, dining and kitchen areas, gave the clients the generous living space they wanted. Finish materials—natural or stained wood and terrazzo floors—were used for easy upkeep.

Says the jury: "A classically proportioned beach house, with a refreshing approach to solving the difficult problems of a small site as well as controlling the sun without losing a view. The consistency of materials both inside and outside—used dramatically but without structural gymnastics—makes it one beach house that is as good looking when it's closed up as it is when it's open."



Photos: Douglas M. Simmonds



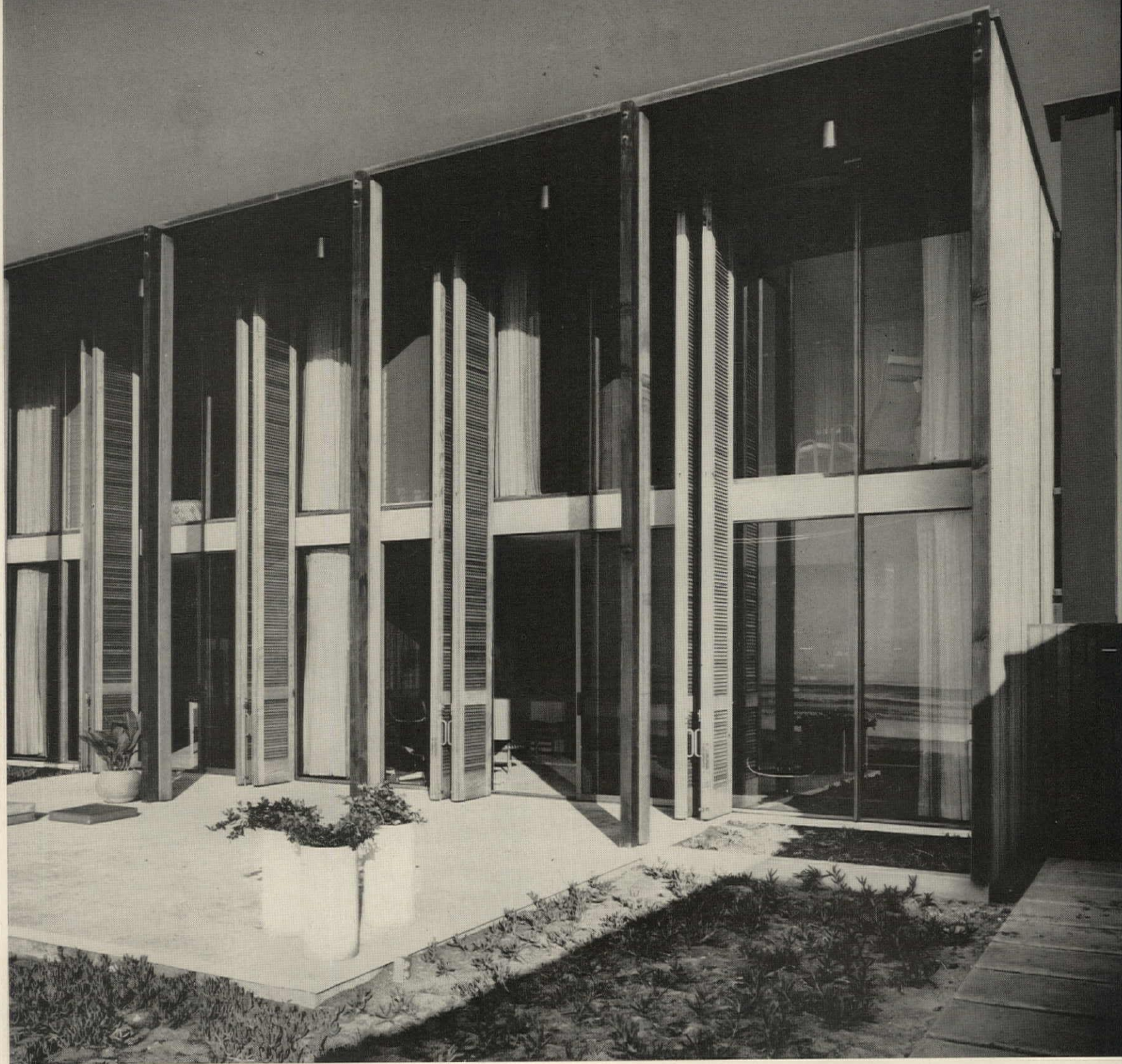
FIRST HONOR AWARD

CLASS: *between 1,500 and 2,500 sq. ft.*
 ARCHITECT: *Hester-Jones & Associates*
 BUILDER: *Mueller-Tuckett Co.*
 LOCATION: *Del Mar, Calif.*

Closed shutters, which filter the afternoon sun, pivot easily on full-length piano hinges. A steel frame takes roof load (*see details, p. 84*).

Entry hall is two stories high, while all other rooms are normal height. Stair treads are terrazzo slabs mounted on steel angles.





Open shutters let light into glass-walled living and sleeping levels on ocean side. Deep (6'2") overhangs keep rain off glass.



Living room has view of the ocean through tinted glass. White terrazzo floor is carried out onto the terrace, to blend with sand.



Master bedroom and bath (*right*) overlook the sea. Walk-in closet has louvered doors for ventilation in damp seaside climate.

continued



Vince Finnigan

The five men who judged custom-house entries

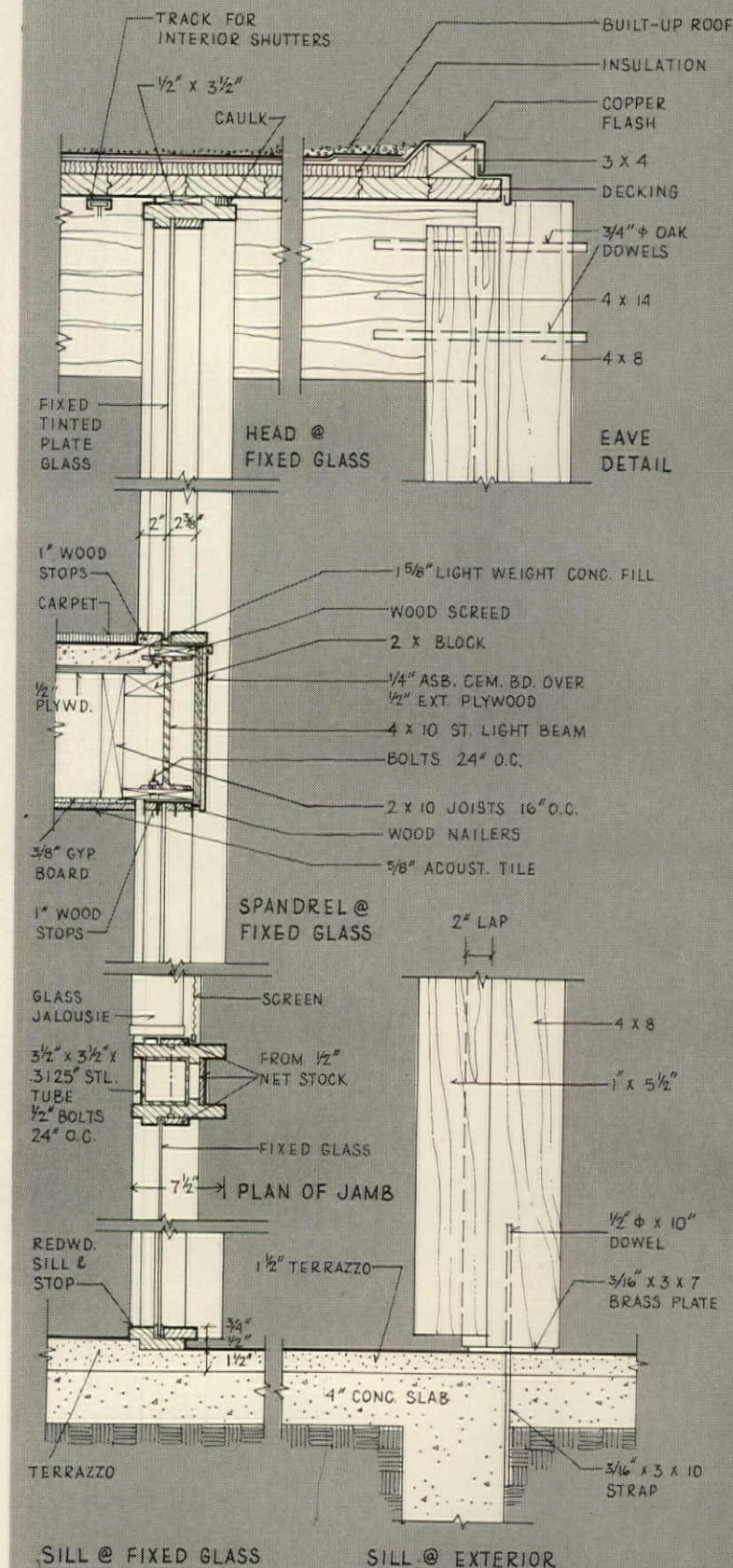
William F. Pedersen, AIA, of Pedersen & Tilney, New York City, is chairman of AIA's housing committee. In 1962 he won the \$50,000 first prize in the prestigious competition for a memorial to Franklin D. Roosevelt to be built in Washington, D.C.

Mark G. Hampton, AIA, has his own practice in Tampa, Fla. He is a three-time HFBL award winner, has also been cited in other AIA competitions. In 1963 he won the Portland Cement Assn.'s grand prize (a trip around the world) for a house he designed for Builder Matt Jetton (H&H, Jan.).

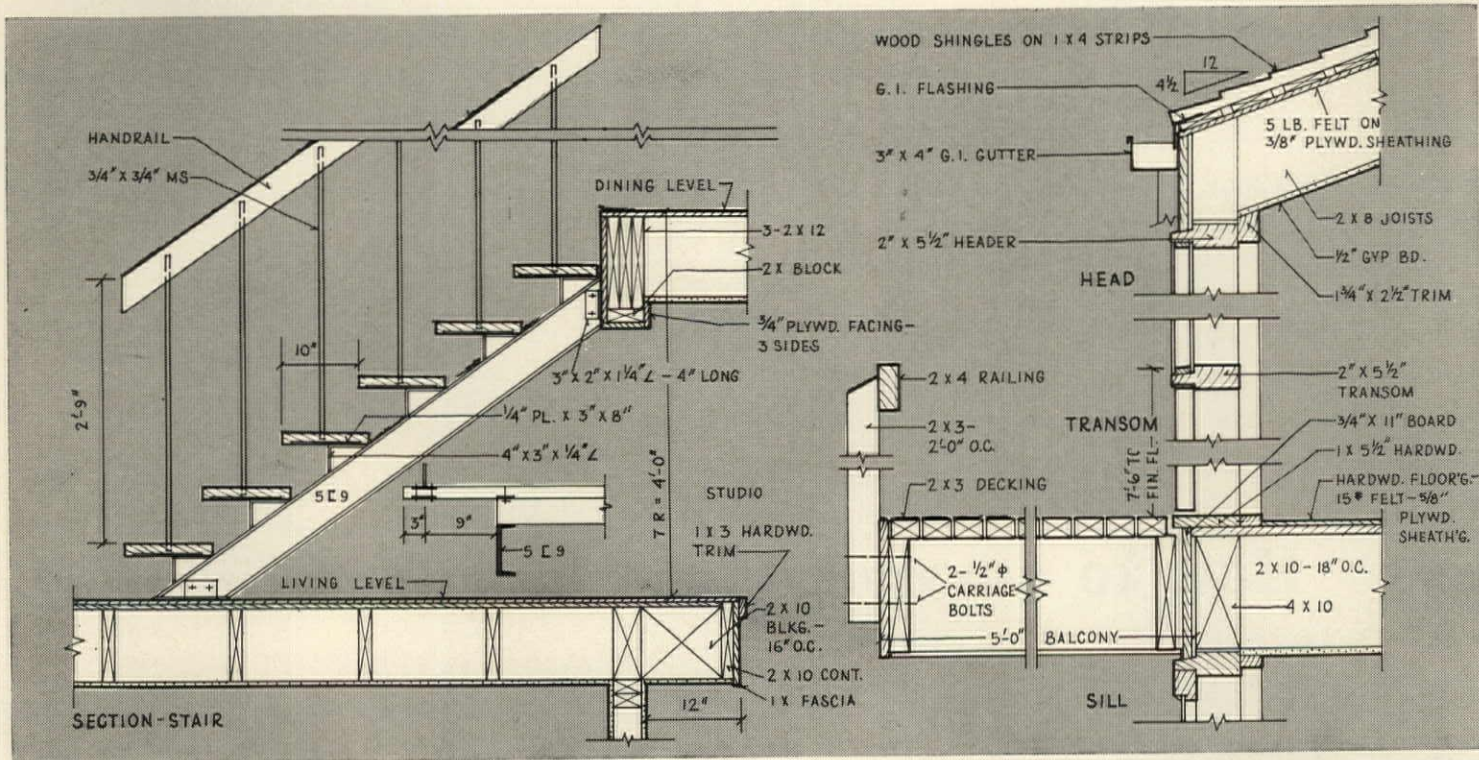
Edward A. Killingsworth, FAIA, partner in the long Beach, Calif., firm of Killingsworth, Brade & Associates, is a four-time winner in previous HFBL programs (as well as winner of an AIA Honor Award in 1963).

Henry L. Kamphoefner, FAIA, dean of the School of Design at North Carolina State since 1948, has served on many design juries and is one of the nation's outstanding architectural educators.

Joseph C. Hazen Jr., AIA, has combined his architectural and journalistic abilities as an associate editor, managing editor and, at present, publisher of H&H and ARCHITECTURAL FORUM. A graduate of Princeton's School of Architecture, he has designed speculative and custom houses and is Planning Board chairman in his home town of Summit, N.J.

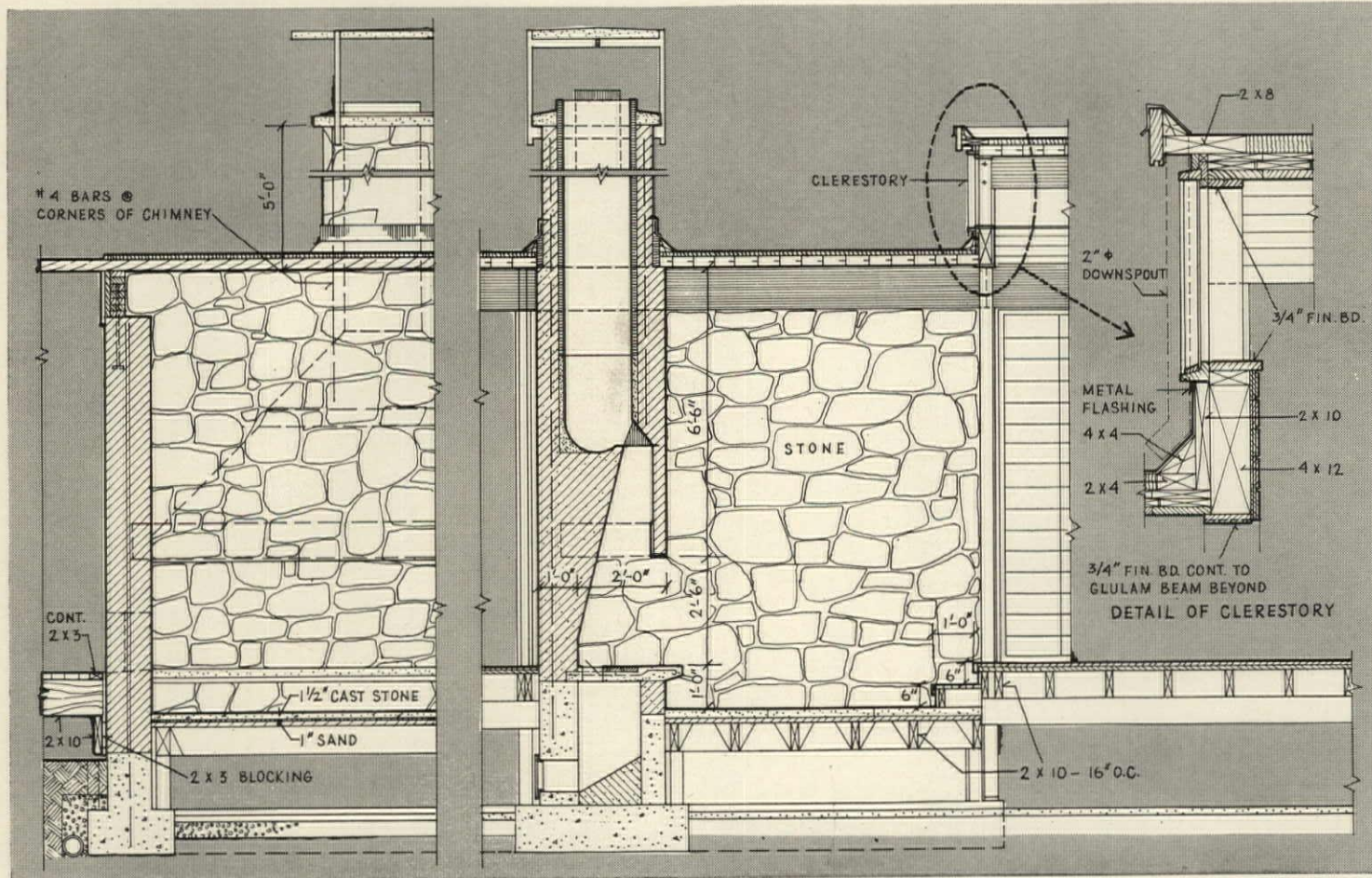


THREE-DIMENSIONAL BRACING of two-story glass facade of the Hester-Jones house (p. 82) is provided by a steel bent made up of a 10" lightweight steel beam welded to six vertical 3 1/2" square steel tubes. Wood columns, right, are tied to 4" x 14" roof beams.



Here are selected details from
the award-winning custom houses

SIMPLE STAIRWAY ASSEMBLY enhances the openness between levels of Marquis and Stoller house (p. 80). Stair treads of 1 1/2" hardwood are fastened to steel plates and angle irons, which are welded to light-steel stringers. Wall section, right, shows simple detailing of milled profiles where the wall meets the roof and the living-room balcony on the view side.

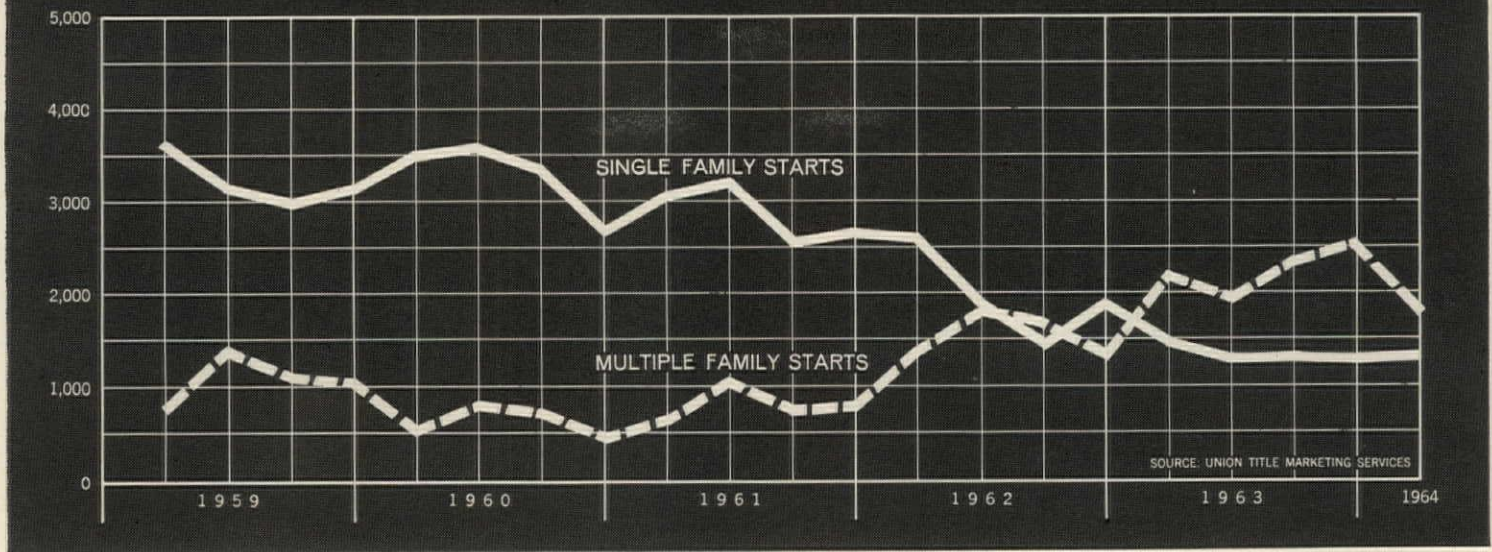


SHELTERED CHIMNEY CORNER, shown here in two sections, is the only masonry in Kirk, Wallace & McKinley's all-wood house, (p. 78). Chimney cap provides vital spark protection on the wooded site. Clerestory close-up (right) is typical of crisp detailing throughout the house.

Once-booming Phoenix has suffered one of housing's most spectacular reverses. One-family starts have plummeted 59% in four years. Builders turned so energetically to apartments that new rental vacancies have now reached 30%. Even so, a handful of builders continue to show good profits. A look at how they do it suggests lessons for builders everywhere about . . .

How to survive when your local market





flops and flips

You may think that your local housing market is a solid proposition, underpinned by rising population, jobs and incomes — perhaps even blessed by a resort climate.

Ought to make for good business, shouldn't it?

That's what Phoenix builders figured they had going for them at the start of the sixties. They were living in a world of myopic euphoria. In two disastrous years the market for new one-family homes shrank to less than half its former size. Rental starts rose—almost enough to take up the gap—but so few builders perceived the basic change their market was undergoing that:

- Most of Phoenix' big-volume builders kept plugging one-family homes so long that unsold inventories swelled to financially crippling levels.

- Many small-volume builders, trapped in the glut, went under as their chronically over-extended capital could not carry unsold homes until buyers turned up.

- Too late, builders woke up with a jolt to what was going on and scrambled so hard to diversify that they have now—apparently—overbuilt rentals, too.

What has confronted and confounded Phoenix seems likely to confront and confound builders in many other metropolitan housing markets. For housing no longer swings in broad national cycles. Instead, it moves city by city in cycles much gentler than an economist's classic boom and bust. But an individual builder can be critically wounded in the pocketbook even in what analysts call a gentle downturn. For almost all big-city builders must build in submarkets where swings can be sharp indeed.

What led Phoenix builders to stick with the slipping one-family house?

"We had been intoxicated with our past successes," says Big Builder John F. Long.

"We had seen other markets go to pieces, but we kept telling ourselves that it couldn't happen in Phoenix. We figured we were in only a temporary slowdown."

"I have to admit I didn't recognize that the bottom had begun to drop out of the one-family market," says Builder Ralph Staggs. "I didn't give up on the single-family market until February this year."

These two alone accounted for 24% of one-family starts in Phoenix in 1961—so their impact on unsold overhang was correspondingly large. Moreover, Phoenix builders made mistake after mistake as the one-family market worsened. Items:

- They pressed harder and harder with advertising and promotion, throwing money after a market that would not respond. Ralph Staggs, for example, abruptly began an entirely new campaign in the midst of the decline, hoping to revive sales in Park Phoenix, his huge 840 acre tract in South Phoenix. He changed the name of the development—to Vista Grande—and futilely pumped \$40,000 to \$60,000 a month into "a forward look" theme to brighten the area's image.

- They let overhead continue, failing to cut back on staff and crews. Long hesitated to release any of his valued construction

workers. Staggs finally, in 1964, had to slash \$60,000 from monthly payroll, letting 16 staff workers go in one blow.

- They began offering costly inducements to buyers, which aggravated the market by encouraging defaults. Some builders reduced down payments to almost zero to revive sales. Long went one better. He introduced a daring financing scheme in the summer of 1962—"no money down until next year"—not even rent.

FHA eventually stopped Long, refusing to accept the deferment of down payments as a sales expense and insisting instead on deducting an imputed rent from its appraisals.

Kaufman & Broad tried to hypo sales by offering to buy back its houses if buyers found themselves unable to meet mounting payments. K&B also offered free exterior maintenance (e.g., cutting grass and trimming hedges).

- Some builders turned to questionable sweat-equity deals—without success. Says Staggs: "I tried the sweat-equity idea, but got nowhere with it. The trouble with my deal was that it required buyers to do some work. Some of the other deals around Phoenix were just Mickey Mouse ways to cut down payments. The buyers didn't have to do anything."

Eventually builders and their sales managers, faced with a situation that was getting more desperate every day, resorted to price cutting.

- Builders failed to restrain their salesmen who became frantic with each month of declining sales—and declining commissions. Some salesmen began writing up sales agreements for buyers who could qualify only if a subcontractor or other employer agreed to verify their salary statements. One builder reports he discovered that his sales manager was permitting salesmen to write up sales on fictitious buyers. Says the builder: "I had to cancel 130 sales in one month."

Who cut back—and how much?

Between 1961 and 1963 one-family starts in Phoenix dropped 59%, from 13,571 to 5,549. How the big builders fared:

	STARTS		PCT. DROP
	1961	1963	
John Long	1927	301	84%
Del E. Webb	800	274	66
Ralph Staggs	797	85	90
John Hall	766	588	23
Cox Home Builders...	378	100	74
Kaufman & Broad....	605*	96	84
Allied Const.	272	52	82
Lusk Corp.....	260	25*	90

* 1962 figures.

continued

• *They did not cut back on land buying.* Long, in 1960, had enough land to keep building at a pace of 2,000 homes a year for the next 20 years. Staggs could have kept to his pace of 900 homes for five years. Even Kaufman & Broad, normally tight-fisted with the money it spends on land, found at one point it was the unhappy owner of a 2½ year inventory of land.

Market misjudgment led to unsold overhang—compounded by FHA

John Long, the market leader, started 1,927 houses in 1961. When his sales slipped, Long cut back too slowly. By mid-1963 he had 500 unsold homes on his hands. Lusk Corp., after selling 250 houses in 1961, found itself with a hard-to-move inventory of 50 houses in 1962. It decided to quit the single-family market entirely.

Only John Hall, of the big builders, managed to retain a giant volume. Building on scattered tracts in a higher price range, Hall fell only 23% from 766 to 588.

For smaller builders, the shriveling Phoenix market exposed the weak financial supports that had seen them through prosperous years. Observes President Whitney Anderson of the Phoenix Association of Home Builders: "Builders of 5 to 25 homes were hurt badly mainly because they were under-capitalized. When sales slowed down, the smaller builders couldn't meet their payments on land or maintain their model homes. They had no working capital to draw on because they had depended on mortgaging out on spec houses to keep going. Many of these smaller builders just went under."

Looking back, he adds: "The greatest temptation in our industry is the temptation to overwork capital. We just can't seem to stay within our capability to buy and sell."

Many builders blame lenders and FHA for not restraining their competitors. FHA, while pleading it was understaffed and faced with an overwhelming work load, admits that it did not subject every Phoenix buyer to thorough analysis. Only recently has it introduced a credit check on buyers.

As a result, FHA in mid-1963 found it had some 1,000 repossessed homes in Phoenix, mainly priced below \$15,000. In Maryvale, John Long's tract of low- and medium-priced homes, defaults and foreclosures piled up at an alarming rate. Last August, Long had 500 repossessed homes in Maryvale—in addition to his 500 unsold new homes, reports a Long spokesman.

FHA's foreclosure problem led the agency to compete with builders to try to keep its inventory down. FHA started cutting prices by as much as \$1,500 and, in some areas, started selling repossessed homes for nothing down.

At last, bitterness and despair began to infect the market

The pressure of declining sales—which forced builders into frantic maneuvers—stirred up ill will between competitors.

Says Sales Manager Tom Cavanagh of Knoell Homes: "Every house my competitors built in those days that they couldn't sell made it tougher on me. Eventually the prices on those homes got slashed and then a year or two later the buyers just walked out and FHA moved in with its no-money-down policy."

Much criticism was leveled at John Long, who, as the largest builder, became the biggest target. But Long had a more serious problem to contend with. The dispirited atmosphere of Phoenix had begun to pervade his Maryvale tract. It reached its peak last summer. Says Long: "This sort of thing fed on itself. One house was repossessed, then another, then the whole neighborhood didn't give a damn and whole blocks went to hell." Finally Long decided to act: "I offered to buy 100 to 150 repossessed houses from FHA. But I was turned down. Finally, we worked out a deal where we took over repos and fixed them up on a management contract. [managers get paid \$1 per month per house]. This way we knew we could prevent an area from unwinding completely."

Long formed Guardian Realty to handle foreclosures, and by last December it had 20 VA and 250 FHA houses to get rid of. Guardian tried to slow the foreclosure rate in Maryvale by counseling homeowners, helping them to find employment and even loaning them their monthly mortgage payments (interest free).

What builders failed to see: an upheaval in their market

Phoenix builders were overwhelmed by the collapse of their market because they had become fascinated with too simple a statistic: the population boom. Maricopa County population doubled between 1950 and 1960 to 663,510. And the climb has continued. This year, population has reached 840,000—28% above 1960.

But people streaming into Phoenix were less and less able to find jobs. Observes Economist Gary Driggs of Western S&L: "Only one out of every five persons who came to Phoenix after 1960 found work. This compares with almost two out of five in the ten years before 1960." He concludes: "A major reason for the decline in housing demand since 1959-60 has been the decline in the percentage of new population growth represented by employment. It isn't people that count so much—it's the money they have to spend."

Says Builder Dell Traylor: "It's easy now to see what happened. There hasn't been a major industrial firm located here since at least 1958."

Indeed, the housing market for a time was actually feeding on itself—supporting its own demand with its own labor. Many of the buyers in the big-volume price bracket (under \$15,000) were construction workers. Says Staggs: "I'd guess that half my buyers in South Phoenix were in the building trades."

Before long this self-inflated balloon was pricked. In 1962 a construction strike threatened with the approaching expiration of the Arizona master labor agreement. Employers, mindful of the upsetting effects of a strike in 1959, began slowing construction. The strike was averted, but the damage was done. Construction employment, already down in 1961, fell again in 1962 to 12% below the 1960 peak. Laid-off workers stopped buying houses or defaulted on homes they had bought only a year or two before.

At the same time, housing suffered another severe blow: almost overnight home buyers became conscious of the rising trend of property taxes. The awareness took hold with devastating effect.

Arizona is almost 85% government owned. This throws a heavy burden on the privately owned 15%, especially when suburbs are pushing into areas in need of schools and facilities, but shy of industry to share the cost.

The situation was aggravated as banks failed to collect enough money, along with mortgage payments, to cover taxes. New buyers, paying taxes at an old rate, sent up a howl when they were hit not only with an increase but also with an unexpected bill for back taxes. To compound this, buyers in some suburbs found themselves incorporated into Phoenix and slapped with an additional levy. Buyers of \$12,000 houses in one new Phoenix tract discovered in 1962 that they were paying as much as \$465 a year in taxes instead of the \$215 they expected. One builder reports that buyers in his tract were hit with a \$300 increase in one 12-month period.

Builders scrambled to diversify—and some succeeded

When builders eventually realized they had to turn away from one-family houses, they fell over each other trying to get into new markets—new kinds of housing or commercial building. In their haste, they left many things undone.

Staggs, brought to a standstill in single-family sales, thought he could regain his market share with low-priced (\$8,000 to \$12,000) duplexes. But after he had completed a half dozen models, he discovered zoning authorities were not anxious to give him the small-lot variance he needed. He waited months for approval and when this article went to press he was still waiting. In the meantime, he pushed plans for a mobile-home park.

John Long went further into the mobile-

How nine men reacted to the decline of the single-family market

Markow Photo



DETHRONED LEADER John Long, after falling from first place to fourth, laid plans for a comeback with townhouses and mobile homes.

Photos: H&H staff



SHARPSHOOTING Builder David Friedman pinpointed a neglected market in Phoenix—the pre-retirement age group—and resisted the sales drop.



NEW CHAMP John Hall (*left*) boldly invaded the condominium townhouse market in three locations, sold out one 188-unit project in five weeks.

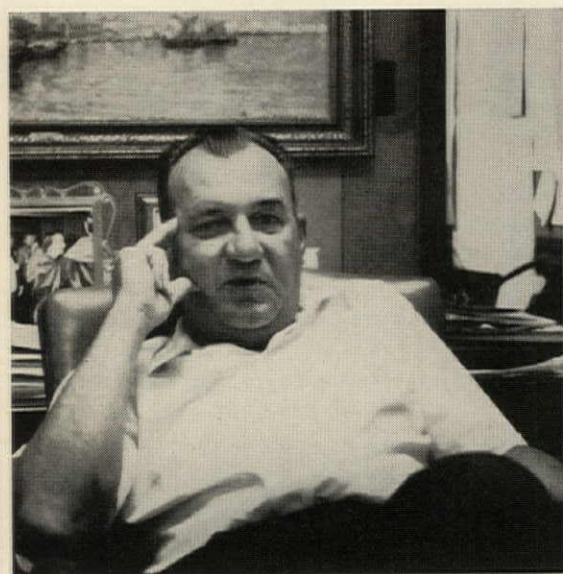
Here with Vice President G. L. Pennington, his mastermind of sales, Hall prepares for an entry into the Denver market with similar townhouses.



PERCEPTIVE Economist Gary Driggs of Western S&L saw need for better design, helped set up an architectural screening board for new projects.



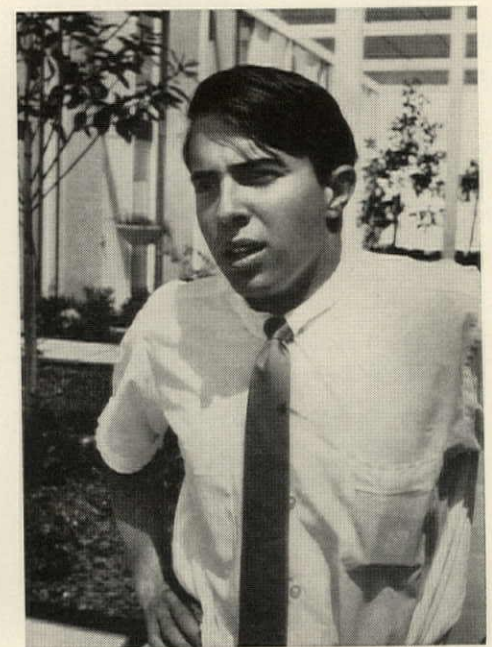
STYMIED Builder Ralph Staggs, whose starts dropped 90%, turned to duplexes but met with frustrating delays at the zoning board.



HBA PRESIDENT Whitney Anderson, like many Phoenix builders, diversified into rental units, commercial building and started taking trades.



PIONEERING Sales Manager Tom Cavanagh, with Builder John Knoell, found untapped location and prospered while others faltered.



YOUTHFUL Builder Frank Braggiotti, 22, scored fast success in an overbuilt apartment market with sophisticated design (*see next page*).

continued

home market by building his own mobile-homes. He planned to open a mobile-home park in Maryvale. But Long, too, over-looked zoning. Maryvale residents, already dispirited by foreclosures, persuaded the zoning board to halt Long's plan. Now, Long, after performing the public relations work he had omitted before, feels he can get approval for his park.

Builders who jumped first into new markets were often the most successful—but this may be equally attributable to their understanding of their new target. Builder David Friedman, an excellent example, introduced the Philadelphia row house to Phoenix, "modified to a hot climate." He kept his sales at a steady 150 a year, selling to a narrow preretirement market (ages 40 to 60).

John Long tried to follow Friedman to the preretirement market by opening a project of multi-level row houses practically on Friedman's doorstep — but sales slumped. Suggests Friedman: "He should have offered more privacy to his buyers around the pool area and his houses have too many steps for older buyers."

Some builders discovered that while tract housing was overbuilt, the custom market was neglected. One of the first to see this was Dell Trailor, who formed his own company in 1962. Says Trailor: "I put up a statistical chart in my office one day and just stared and stared at it until I felt I understood what was happening." His sales have been consistently above 100 a year.

Builder Ivan MacMillin decided to concentrate on custom housing, too. His sales rose from seven in 1959 to an anticipated 60 this year. MacMillin attracted buyers by offering a club room that combines living room and family room.

The problem facing the custom builder was land. Well-located land was often so high priced it frightened buyers away. MacMillin paid \$14,500 for three-fourths of an acre in Scottsdale just to keep a model on display. He soon learned that land prices had to be disguised in total sales prices when selling to custom buyers. Sam Friedman, another custom builder who met moderate success, found he had to do his own development to avoid high-priced finished lots.

Builders rushed into apartments and overbuilt the market in two years

Between 1961 and 1962, starts doubled for multi-family housing (from 2,178 to 4,376). A year later starts doubled for two- to four-family units (pushing them from 1,995 to 4,183).

Whole blocks of once-vacant lots became crammed with apartments in a few months. Says Apartment Builder Richard Beery: "We opened apartments in North Phoenix that rented out very quickly. But right after that two and three builders

followed us." The rush to apartments was so frantic that by the end of 1963, there was a 30% vacancy rate in new apartments, while older units were only 10% vacant. Observes Beery: "The trouble with the Phoenix market is that too many builders have been putting up poorly conceived projects." He lists these failings:

1. Poor location, chiefly in side streets.
2. Poorly trained managers.
3. Poor floor plans, with circulation that crosses living rooms.
4. Injudicious mixtures of adult households with young families.

Gary Driggs of Western S&L criticizes builders of fourplex projects who disregard privacy, offer monotonous facades and provide too little space for children. Many such projects suffer high vacancies and some have fallen into foreclosure.

In contrast, most builders who offer apartments rich in design and planning are rewarded with full occupancy.

Some single-family builders clicked in new locations while sales fell elsewhere.

Frank Knoell (pronounced canal) opened a small 20-acre tract in Tempe, a suburb southeast of Phoenix that had been closed to builders. Recalls Sales Manager Tom Cavanagh: "You couldn't get land in

Tempe. The people out here, just didn't want us. Frank was able to purchase those first 20 acres because he was friendly with one of the ranchers here."

Knoell and Cavanagh zealously promoted Tempe, home of fast growing Arizona State University. They capitalized on Tempe's low tax rate—and sold out in seven weeks. Says Cavanagh: "If we had tried to build on the west side, near John Long, we would have been dead." Slowly Tempe has opened to other builders, but Knoell, buying land in the path of growth, has kept a firm grip on that market.

Co-ownership townhouses became the hottest thing in the market

Lusk Corp., faced with declining sales of one-family houses, tapped a lucrative market in Phoenix in 1963 by introducing low-priced (as low as \$6,040) FHA cooperatives. These seemed to be what Phoenix was waiting for. Low-income buyers (earning as little as \$50 a week) paid as little as \$68 down for an efficiency apartment up to \$122 for a three-bedroom patio apartment. Monthly payments ranged from \$59 to \$106. Buyer response swept Lusk from 19th place among Phoenix builders in 1962 to second in 1963 as its starts soared from 25 to 388.

Lusk's success with cooperative ownership was not lost on other builders. But again, some followers stumbled where the leader succeeded. Fred Brescia opened medium-priced condominium townhouses at a choice location. But his small recreational areas failed to entice buyers. In a year he sold only 33 of 66 units.

K&B did better with its exotic Polynesian Paradise condominium, selling 156 units in 13 months. But Dick Beery, who had achieved success with rental units, stumbled when he tried condominiums. His 34-unit La Mila Grossa attracted only four buyers before he gave up and decided to let renters in too. The unusual combination of buyers and tenants clicked. Within a few months he had 16 renters and three more buyers. He decided to switch a second condominium to part rental.

John Hall, who took over first place in Phoenix in 1962 because his single-family homes survived the shake-out, watched the condominium market carefully. In December 1963, he nervously opened condominium townhouses in three locations.

The projects were an astounding success. One tract of 188 units sold out in five weeks (*see p. 91*). Another 116-unit tract sold out in a month and a third, with 102 units, sold out in a month and a half. Fastest selling model has been Hall's \$16,250 four-bedroom model (with 2½ baths and 1584 sq. ft. of living space). Buyers pay \$750 down and \$133 a month. A two-bedroom units sells for \$12,500—\$590 down and \$106 a month, plus \$20 a month for common areas.

Lessons of the Phoenix market

Dos and don'ts for builders facing a boom past its peak:

- Don't be fooled by the optimistic trend of a single economic indicator — such as population or housing sales.
- Look deeper for adverse undercurrents — such as weakening employment, rising real estate taxes—that can undermine the sales generating effect of basic market supports.
- Keep a sensitive ear and eye open for news events that may shape the psychological assumptions of your buyers.
- Watch for subtle indicators of a shift in buyer demand, like crowds of house hunters attracted by new features or models. They may signal a trend away from a single, dominant house type into small sub-markets for a variety of housing like co-ops, duplexes, condominiums, apartments.
- Don't try to revive a dying market with heavy promotion. Instead, start early to research ways you can capture the shifting market with alternative housing.
- Watch your inventory of unsold houses — and those of your competitors. Inventory may tell you more than sales. Don't be fooled by competitors who cut prices to move new models while older houses languish unsold for months.
- Keep a tight rein on your sales force. Keep them within your bounds for price changes, buyer qualifications, market inducements.
- Don't jump into apartments or townhouses until you've studied the market. A year is not too long to spend.
- Don't try to shoehorn into a new market on cheap out-of-the-way land that will only make your project a costly slow seller.

Builders tried to revive the market with these townhouses, apartments

Markow Photo



CONDOMINIUM townhouses by Hallcraft turned an emerging market for condominiums into a burst of new sales that could signal the end of four-year decline in Phoenix sales housing. Fastest selling units have four bedrooms.

Starr Photo



EXOTIC DESIGN of this condominium townhouse project paid off in sales for Kaufman & Broad. It marks K&B's first step away from one-family detached housing in Phoenix. K&B plans to open 221d3 townhouses.

H&H staff



CONDOMINIUM-RENTAL combination emerged when Builder R. D. Beery found buyers scarce. Rent: \$160. Sale: \$141 a month, \$1,600 down.



ROW HOUSES with alternating facades give Richard Friedman a consistent 150 sales a year, though he sells only to adult households.



COOPERATIVE townhouses by Lusk Corp. started a major shift away from detached housing. These units attracted low-income buyers.



TOWNHOUSES with a colonial flavor were among the first condominiums in Phoenix. Despite good location, underground utilities, convenient parking, recreation, freedom from maintenance, they sold slowly for Fred Brescia.

TRI-LEVEL retirement townhouses represent half of John Long's shift into condominiums. These units, which sell for \$19,500 to \$23,000, have not moved quickly. But lower priced condominium townhouses are fast sellers for Long.

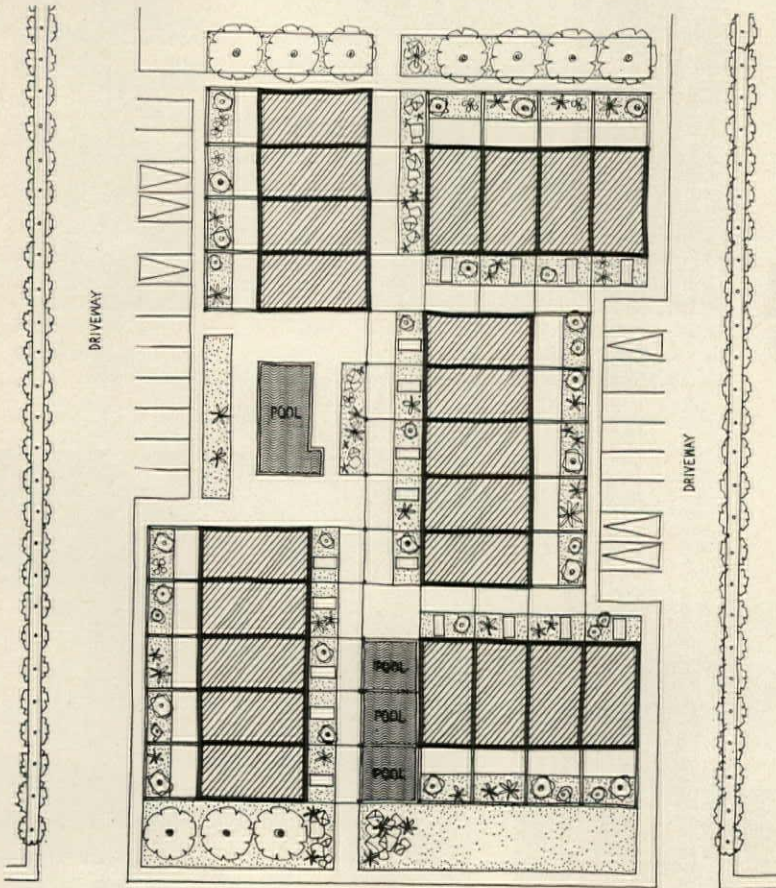
Handler Galleries



continued



FIRST 22 UNITS are grouped in sections of five and four. Each apartment has two floors, 1,024 sq. ft. of space and 1½ parking spaces in rear.



LAND PLAN makes good use of a narrow 167'x616' lot by placing narrow facade at the street and extending project back into the lot. Land cost \$50,000.



TWO SWIMMING POOLS serve residents, offer poolside telephone jacks, lighting and regulated water temperature to extend the swimming season.



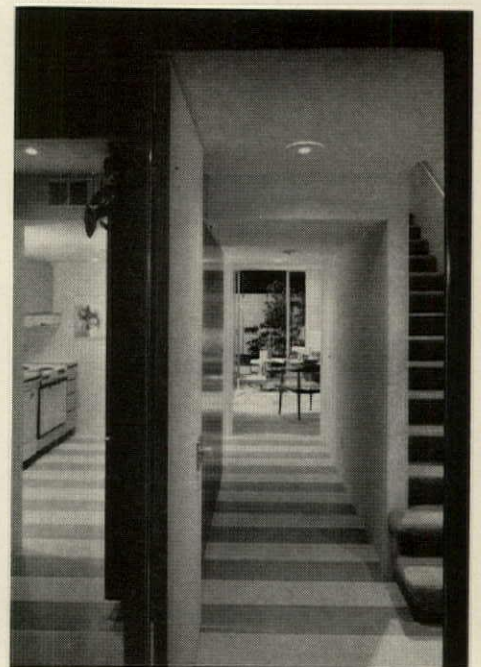
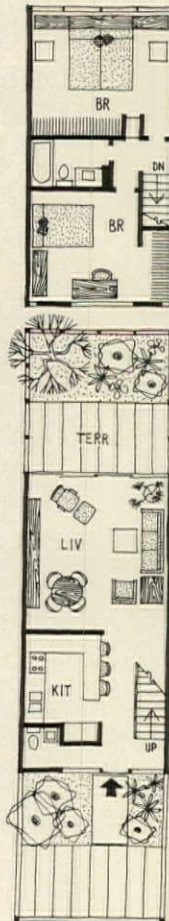
Striking design spells success for a 22-year-old builder

Frank Braggiotti spent a year studying the Phoenix market when he was 20. Now, at 22, he is one of Phoenix's most successful builders. His study showed him a need for "well-conceived, well-designed projects" built on choice bypassed land. With designer Alfred Beadle he worked out a plan to attract tenants with good design. He built the first 22-unit section of Three Fountains in 120 days, using Critical Path Method. This helped reduce costs to \$8.90 per sq. ft., including land, appliances, two swimming pools, carpets and drapes.

The first 22 apartments, opened in September, rented out quickly. Experienced builders had been plagued with vacancies averaging 30%.

Concludes Beadle: "We have a sophisticated market in Phoenix today." Braggiotti, already building his second Beadle apartment, says he'll stay in Phoenix as long as handsome housing sells or rents.

Photos: Beinlich



INTERIORS are identical, each offering living room, kitchen, half-bath downstairs and two bedrooms and bath upstairs. Rent: \$175 unfurnished, but with carpeting, drapes and electric appliances.

EACH APARTMENT is constructed on a 16' module. Says Designer Al Beadle: "Sixteen feet lets you get the maximum span out of 2x10 floor joists and 2x8 roof joists."

LIVING ROOM opens to private patio separated from parking stalls by 2'6" x 6'8" exterior masonite doors joined by 1" steel r sections.



Builder Jacob Hanemaayer has a double dilemma: he must keep prices low to maintain his volume (160 houses a year) and at the same time satisfy a market that demands a wide variety of design even in low price brackets. Here he tells you . . .

How to beat competitors' prices by \$2,000—and sell 37 different models

"No builder could survive in our area without a huge selection of models," says Jacob Hanemaayer, president of Dutchmen Homes, Kitchener, Ont. Dutchmen Homes has not only survived, it has become, by Kitchener standards, a giant. Last year it built 160 houses, and this year Hanemaayer expects sales to hit 200 houses—about 40% of the local market.

To dominate its market, Dutchmen has combined a near-custom operation with production so efficient that, says Hanemaayer, "Our houses average \$2,000 less than comparable houses by other builders." Production efficiency stems from:

1. A highly flexible modular panel system for both exterior and interior walls. "We can make up any model out of our panel inventory and have it on the site in two hours," says Hanemaayer.
2. A smoothly run fabricating plant in which a three-man crew turns out all panels and other components
3. Precise scheduling that determines months ahead what model will be built on what lot and when it will be finished.
4. A pricing system that gives buyers cash incentives to buy houses according to their scheduled completion dates.

A calculated risk in pricing is the big reason for Dutchmen's current success. Three years ago, with sales running at 50 houses a year, Hanemaayer decided to cut all prices by \$1,500.

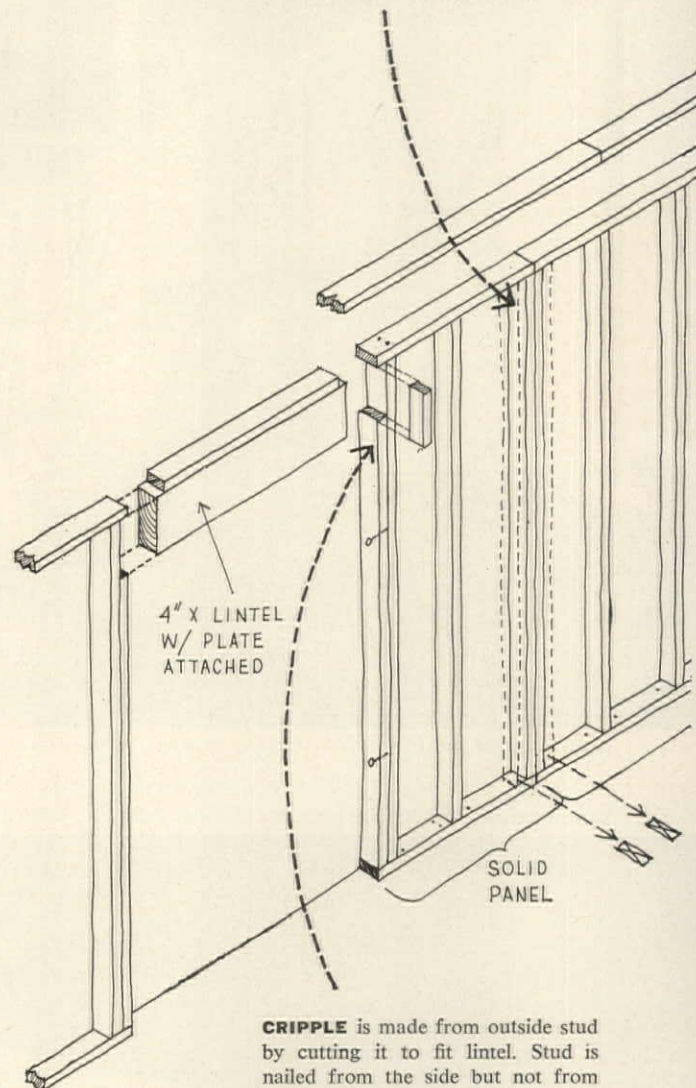
"I planned on operating for a year, or even two years, at no profit," says Hanemaayer. "I knew that eventually the price cut would raise our volume enough so we'd be better off than before."

What happened surprised even Hanemaayer. Dutchmen's volume doubled the following year, and profits hit a new high.

"Today," says Hanemaayer, "we're selling houses for less than it cost us to build them three years ago?"

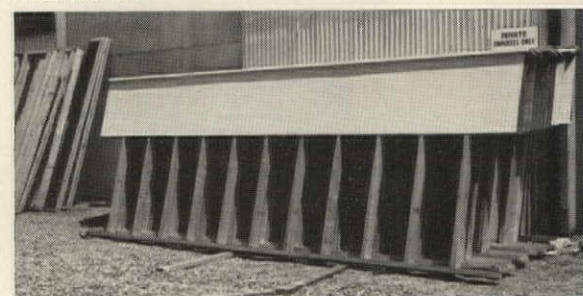
To learn about the panel systems and the schedule that have produced these savings, begin at right.

BUTT JOINT between two solid panels occurs when design calls for a blank wall more than 16' long. Two inside studs (dotted lines) are removed and used elsewhere.

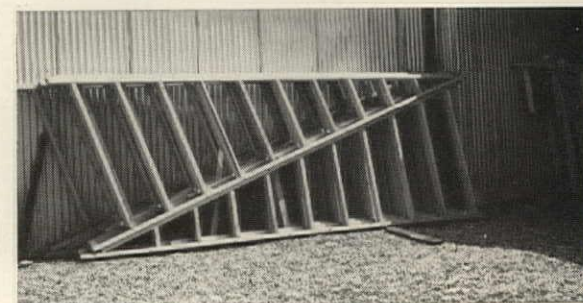


CRIPPLE is made from outside stud by cutting it to fit lintel. Stud is nailed from the side but not from the top, so the cut-out section drops free after a single saw cut.

Photos: H&H staff



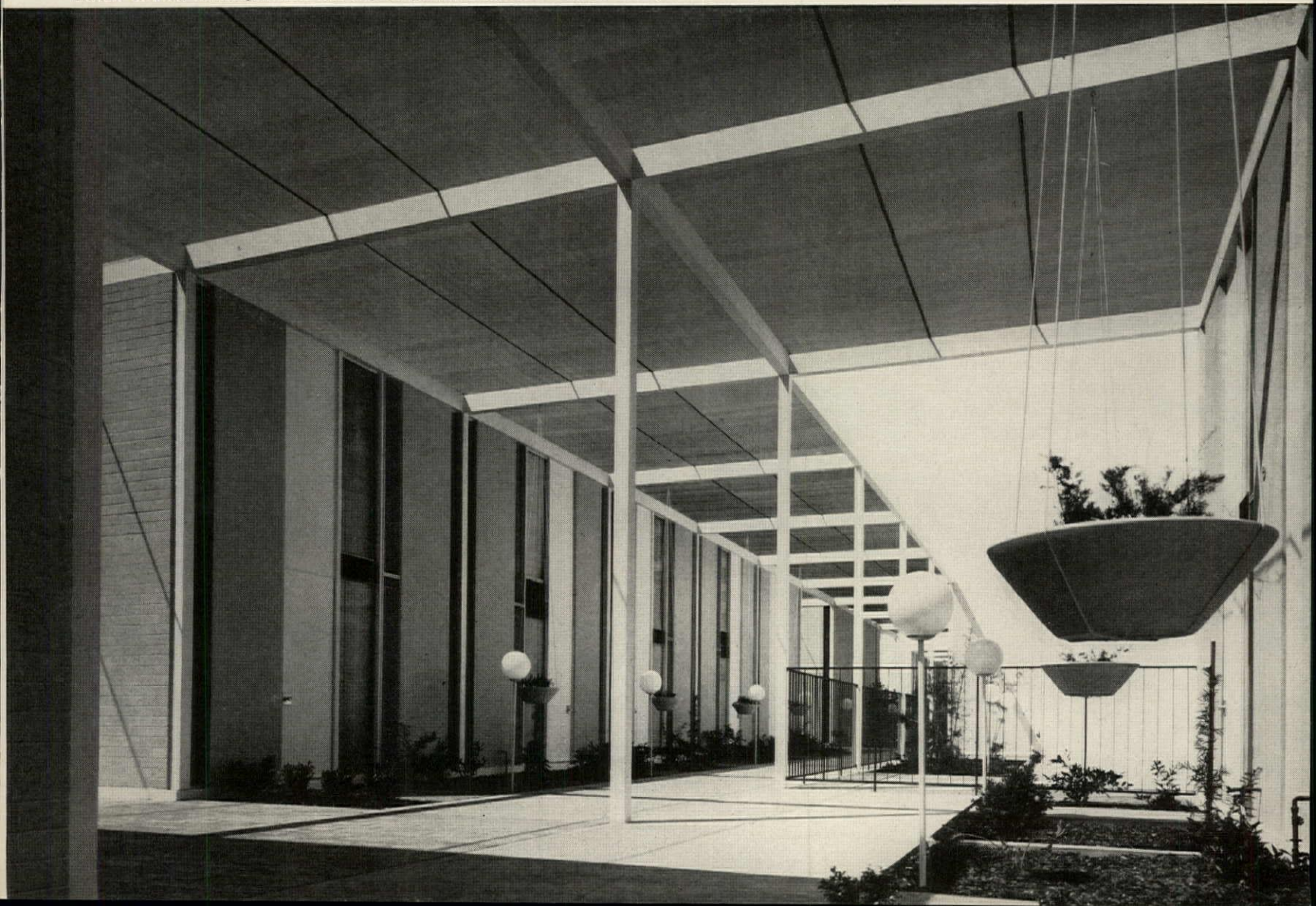
PREBUILT COMPONENTS include ladder rake-cornice (above) and two-part gable ends (below).

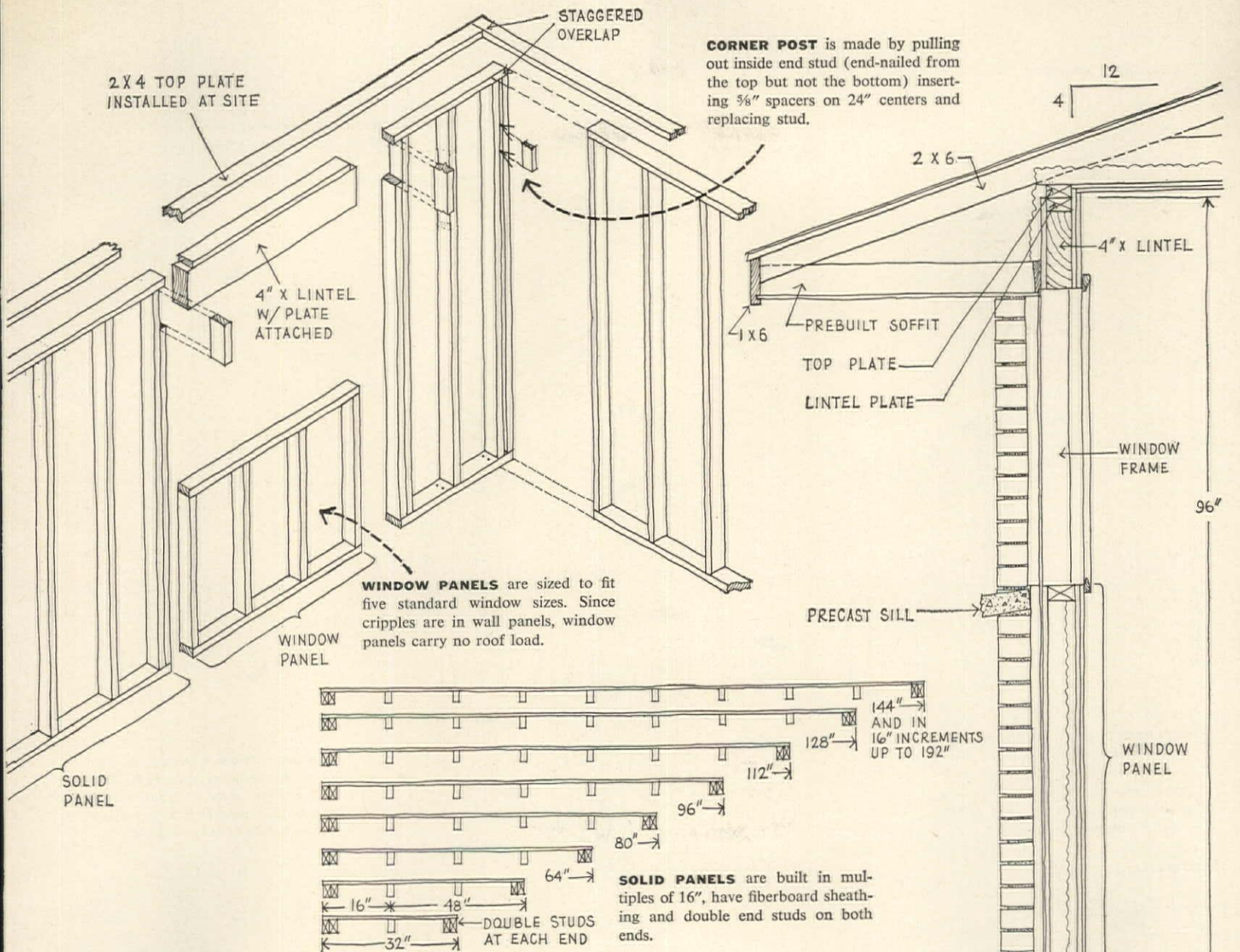




CLEAN-LINED DESIGN aimed at luring design-conscious tenants away from higher-rent apartments of prosaic style. First 22-unit section rented quickly.

INNER COURT. landscaped with lush tropical plants, is shielded from the sun by translucent panels. Structure is post and beam with concrete block.





CORNER POST is made by pulling out inside end stud (end-nailed from the top but not the bottom) inserting 3/8" spacers on 24" centers and replacing stud.

Modular wall panels are built without openings

Instead, door and window openings are built up from standardized short panels and precut lintels (*drawing, above*). Result: special panels never need to be laid out in the company's shop, and any one of the 37 models can be assembled from standard parts, which are kept in inventory (parts are normally inventoried for 25 houses).

Specifically.

Solid panels are built to a 16" module in 12 standard sizes ranging from 16" to 192". "This variety lets us fill in almost any wall between windows and doors with a single panel," says Hanemaayer. "We rarely have a solid wall so long that we need to butt two solid panels together."

Solid panels are built with double studs at both ends. A single cut, made in the field, turns the outside stud into a door or window cripple (*see drawings*).

Window panels are simply short solid panels sized to take up the space below the

lintel and window frame. The company has settled on five standard window sizes, so only five panel sizes are needed. If the window units are doubled or tripled, two or three window panels are butted together below them.

Lintels are made of 4x timbers which, says Hanemaayer, are cheaper than conventional double 2x lintels, and require no building up. The lintels are precut to the door or window opening size, and a 2x4 plate, cut back to allow the panel to overlap the lintel, is nailed on in the shop.

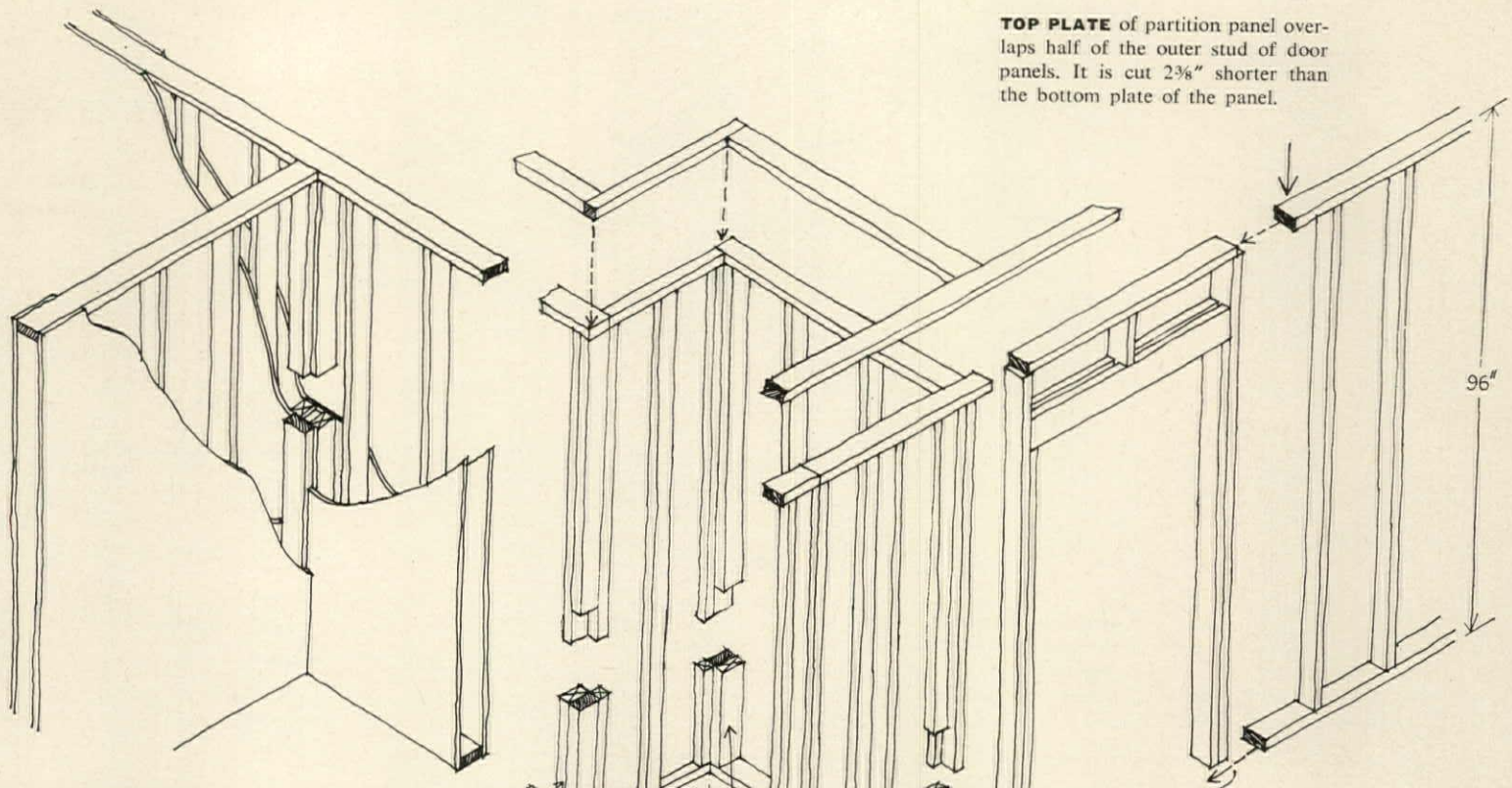
Window frames (*section drawing*) arrive on site with windows installed and interior, rather than exterior, trim in place. They are installed from the inside, and the brick veneer (used on all Dutchmen homes) is built up to them on the outside.

Prebuilt soffits (*section drawing*) are nailed to the panels before erection and braced. After the roof is framed, the fascia board is nailed to the rafter ends.

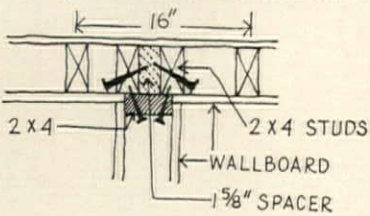
SECTION DRAWING shows relation of window components to brick veneer siding. Brick courses are laid out from top to bottom to insure proper spacing and full courses between soffit and sill.

continued

TOP PLATE of partition panel overlaps half of the outer stud of door panels. It is cut $2\frac{3}{8}$ " shorter than the bottom plate of the panel.



INTERSECTION of partition panel with exterior wall is always made with the stud end of the partition panel (above). Nailer and blocking post is installed in the field at the point of intersection (below).



24" CLOSET PANEL
-NAILER STUDS ADDED AT SITE

PASSAGE-DOOR PANEL is installed in the partition by site crews. It is $1\frac{5}{8}$ " shorter than partition panels because it is mounted on top of the partition panel's bottom plate.

Modular partition panels can be field-cut to any size

The result is a system that provides the production advantages of standardized panels without sacrificing the flexibility necessary for interior layouts—particularly in 37 separate models.

The partition system, developed by Dutchmen Homes, is made up of three panel types:

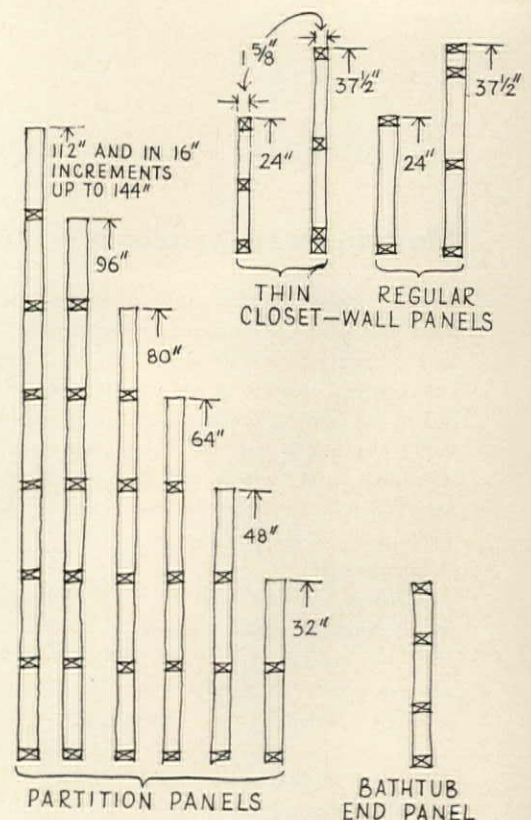
Basic wall panels are built in eight lengths ranging, in 16" increments, from 32" to 112" (drawings, right). One end stud on each panel is left out, and this is the key to the system's flexibility. For example, if the plan calls for a $93\frac{3}{4}$ " partition, a standard 96" panel is sent to the site, and field crews trim the extra $2\frac{1}{4}$ " from the top and bottom plates.

Special panels are made for non-modular partitions that occur in all models. They include 1) closet wall panels 24" and $37\frac{1}{2}$ " long, 2) the same panels made $1\frac{5}{8}$ " thick for non-load-bearing walls and

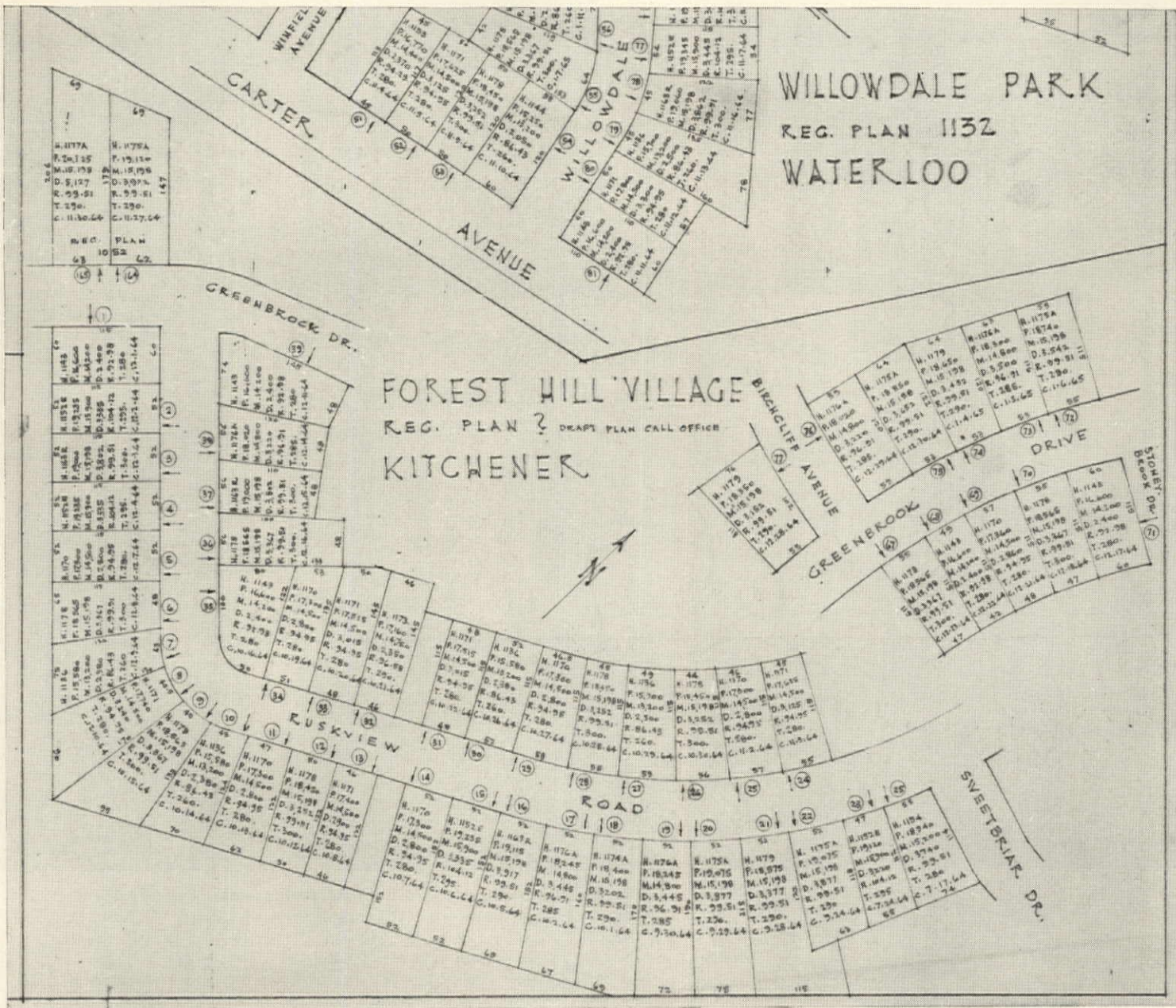
3) a tub-end panel 32" long with two intermediate studs, instead of one, to permit rough plumbing for the shower.

Passage-door panels (drawing, above) fit into the studless ends of the basic partition panels. They have full-length outer studs, cripples, a header and a top plate, which covers only half of the outer studs, leaving nailing room for the plates of the adjoining panels.

All partitions are laid out with their stud ends against the outside wall (above left). This permits modular stud spacing from the wall to at least the first partition corner or door opening. It also simplifies installation of wallboard or paneling. If the partition does not intersect the exterior wall at or near a stud, extra studs are added in the field at the point of intersection (detail, above). Spaced $1\frac{5}{8}$ " by blocking, they act as both partition nailers and wallboard backers.



PARTITION PANELS are built on a 16" module, run from 32" to 144" (left). Special panels (right, top and bottom) are for closets and bathrooms. Panels include framing only.



BUILDING SCHEDULE is shown on site plans, so buyers can select lot, model and completion date in any of Dutchmen Homes' subdivisions.

Everything revolves around a rigid completion schedule

The schedule, set up for all houses to be built in a year, dictates which of the 37 models will be placed on each lot and when the house will be ready for occupancy. As a result, factory crews know just which panels need to be in inventory at a given time, and mortgage processing can be handled with a minimum of last-minute emergency paperwork.

"The schedule makes it possible for us to build at top efficiency," says Hanne-maayer. "But," he adds, "the problem is to get prospects to buy according to the schedule." Here's how he handles this problem:

Models are selected and located according to past sales experience. "We know what models have been most popular in different neighborhoods," says Hanne-maayer, "and we plan our new schedule on that basis."

Buyers are offered lower prices if they

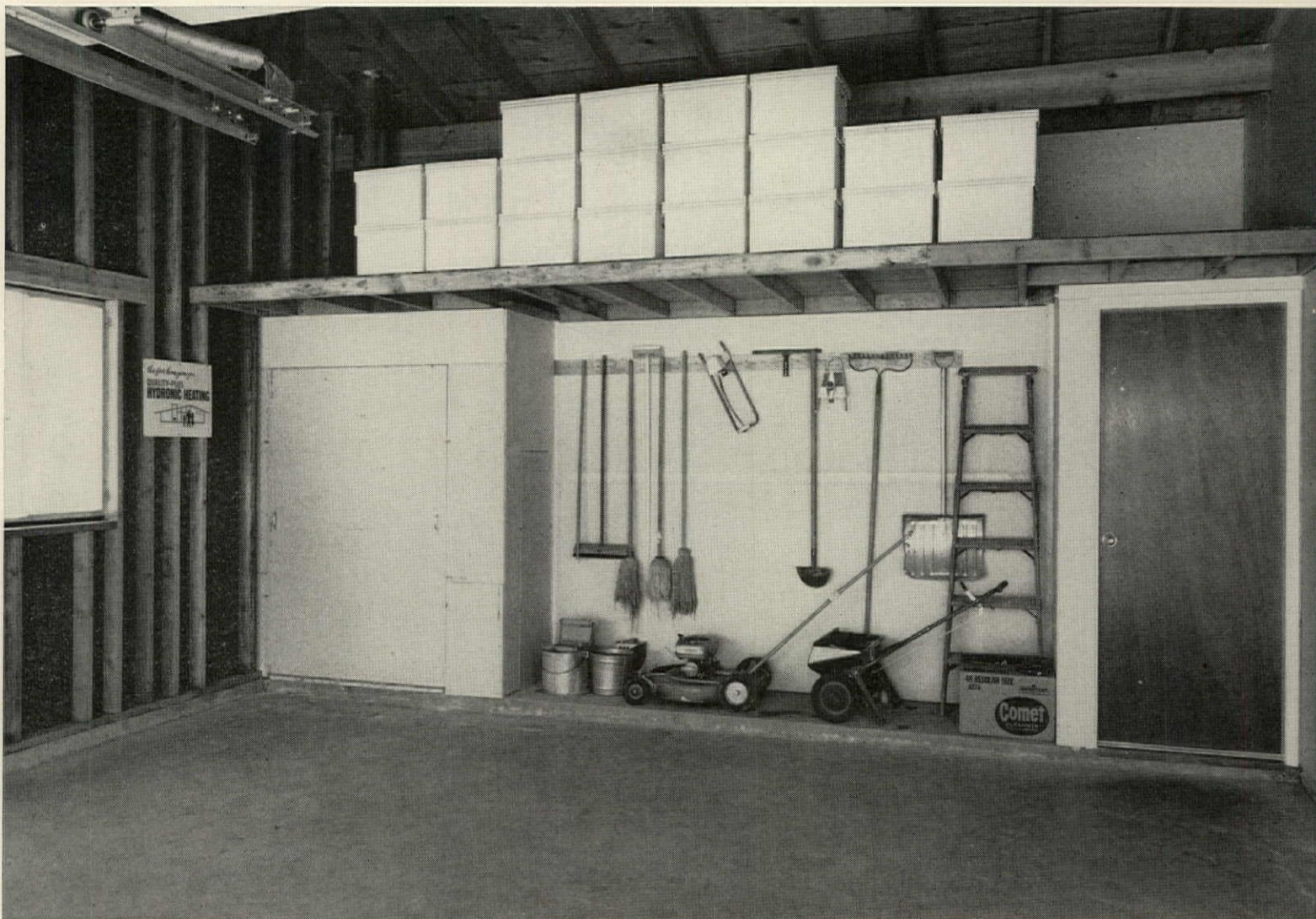
buy according to the schedule. The company advertises "up to a \$1,200 cash bonus" for buyers who buy a house as it is scheduled and before its completion.

(But some concessions are made for hard-to-close sales. Dutchmen Homes will change a scheduled model if 1) the completion date remains the same, 2) the new model fits the original lot and 3) the change is made far enough ahead of completion to permit the mortgage to be reprocessed.)

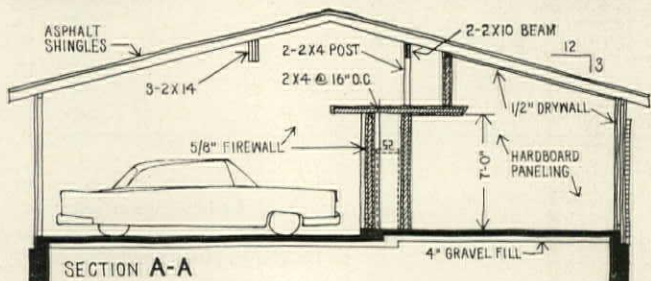
If a house is not sold by the time it is ready to start, it is built anyway, and marketed as a spec house without the pre-sold bonus. "There are always buyers who have to move in right away," says Hanne-maayer, "so we seldom have more than half a dozen spec houses on hand. And the higher price lets us carry a spec house for several months without losing money on it."

	(23)	(25)
	47	55
H.1152E	H.1154	
P.19,120	P.18,940	
M.15,900	M.15,200	
D.3220	D.3740	
R.104.12	R.99.51	
T.295	T.280	
c.7.24.64	c.7.17.64	
55	74	

MODEL DATA, listed for buyers on each lot plan, include (from top to bottom): model number, price, mortgage, down payment, monthly charges, annual taxes and date of completion. Circled number at top is the lot number.

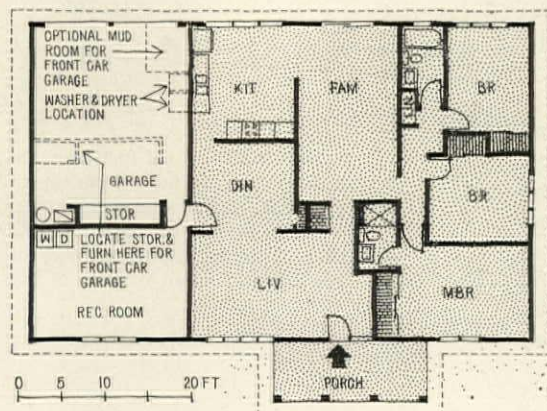
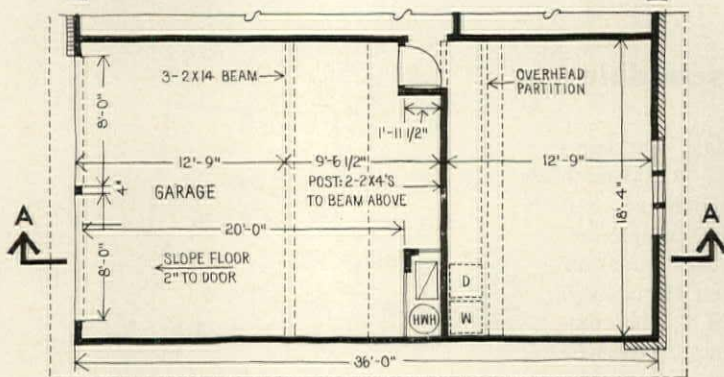


Hoetboetter



1. Build in storage and bonus living space, especially in basementless houses, advises Architect-Builder Fred Kemp, St. Louis. He vaults the ceiling above his oversize (36' x 18' 4") garages to get storage in the ceiling cavity and builds a storage-utility wall (photo above, plan and section at left) that separates the garage proper from a bonus recreation room (below). The cost is \$500 less than the cost of a basement and makes Kemp's \$22,950 slab houses his bestsellers.

Hoetboetter



12 ways to use garages as potent sales tools

Garages, once overlooked appendages of houses, are growing more important in today's housing market.

Chief reason: swelling purchases of goods and leisure-time products that are sometimes used and often stored in garages. Last year these purchases accounted for more than 10% of U.S. gross national product (the annual dollar volume of goods and services). Consumers spent \$67 billion for cars and billions more for barbecues, power mowers, luggage, sailboats and power boats, golf clubs, lawn furniture, garden tools, snow-blowers, fertilizers, new refrigerators (old ones are stored in garages), picnic equipment and power tools.

Second-time homebuyers surveyed by *House & Garden* (H&G, June) say they store so much in garages that there is little room for their cars. Garages of older houses—and even houses built in the early postwar years—can no longer hold the welter of goods homeowners would like to stuff in them. This, of course, is a sales opportunity for alert builders. And they are reacting by putting new emphasis on the garage and, in fact, by using it to help sell the house. *For 12 of their best ideas, begin at left.*



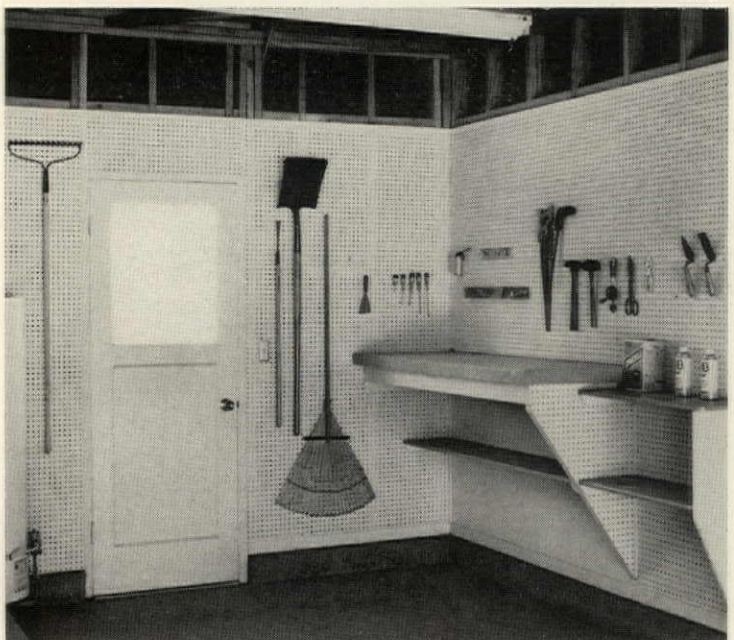
2. Provide enough space for three cars, says Leo J. Shanahan, Tustin, Calif., who did just that in 95% of the houses at his posh Peacock Hills Community. His reason: people who can afford \$40,000-and-up houses often have three cars or two cars and a boat. Shanahan's three-car garages cost \$1,000 more than a two-car garage.

Lisanti



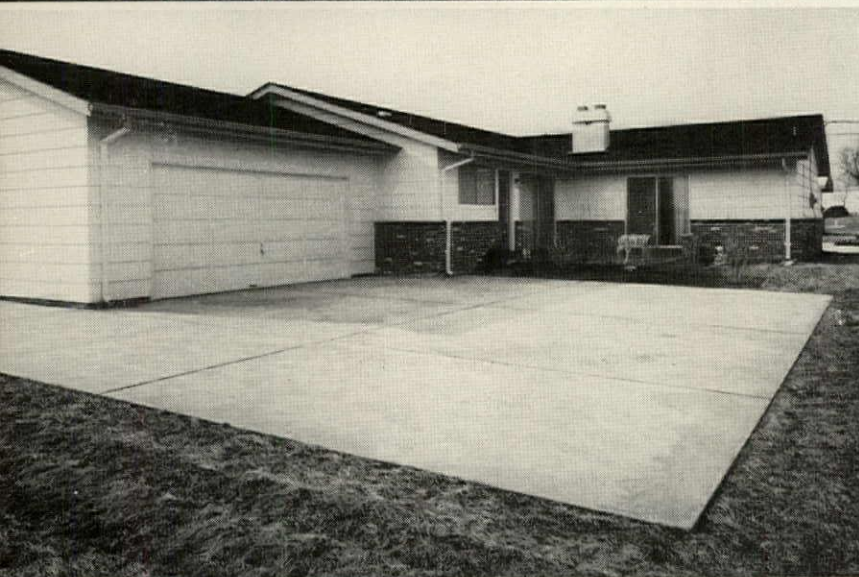
3. Build a workshop in one corner. Millions of World's Fairgoers will recognize the utility of this feature when they see the garage workshop (above) in the House of Good Taste designed by Royal Barry Wills & Associates (see p. 102). Many builders are now merchandising garages with power tools to get more husband appeal.

Camhi



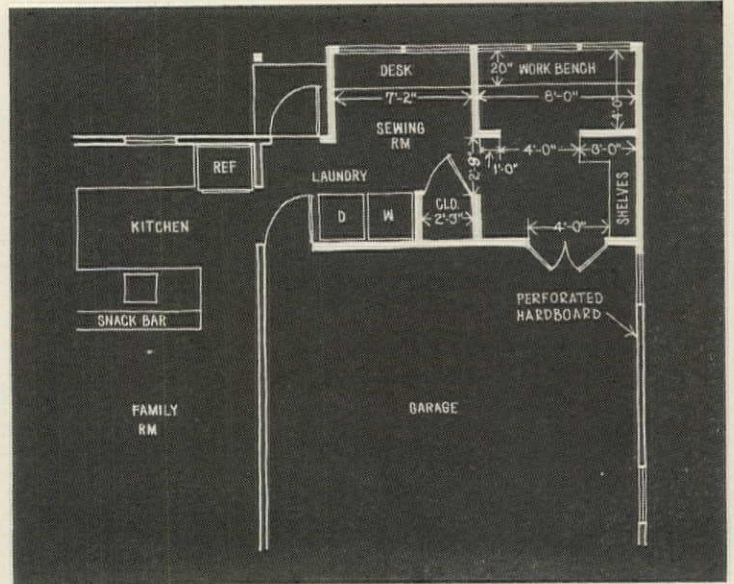
4. Make it easy for gardeners to store their tools, suggests Robert S. Grant, Fountain Valley, Calif., who puts gardeners' corners like the one shown here in the garages of his \$21,200-and-up houses. Grant finishes parts of two walls with 3/16" tempered pegboard (23¢ a sq. ft. installed) and makes shelves of scrap lumber.

continued

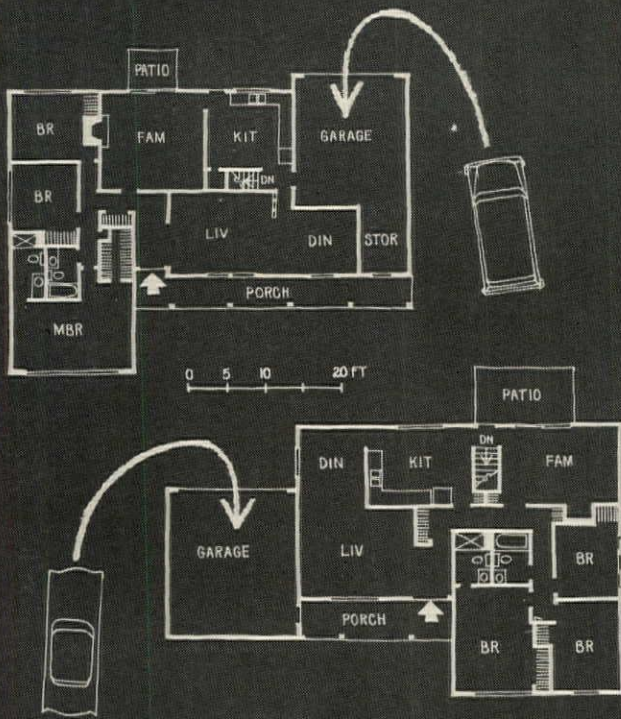


Victor M. Helm

6. Finish the space like a room, suggests Glen Norwood, Houston's biggest builder, who uses gypsum with a wood-grain-face (6¢ per sheet extra) to give the garages of his \$32,500 houses a finished-room look. At right in photo are a hobby room and storage area. Optional extra: electronic door opener (\$115).



7. Use some space for 'his' and 'her' hobby rooms, says Donald L. Huber, Dayton. His plan (above), designed with Raymond Loewy/William Snaith Inc., extends the roof line at the rear of the garage to window height and uses the added area for a shop and a sewing room—both pegboard-lined. Cost: \$520.



5. Hide the entrance in the rear, advises Alfred H. Mayer, biggest St. Louis builder, who started a local trend to rear-entry garages. Advantages: the house looks bigger from the street; children have more space for wheeled toys. Mayer charges \$600 more for rear entries, which require more paving, more windows, wider lots.

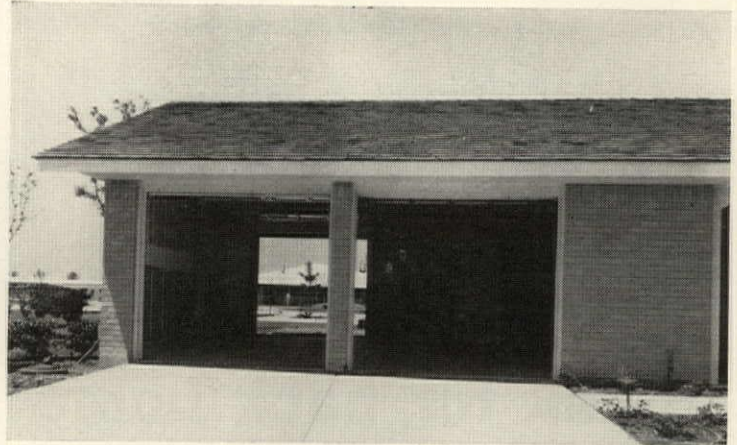


8. Include a utility alcove with roughed-in plumbing. That's what the Sunset International Petroleum Corp. does at San Carlos in San Diego. In California, where washer and dryer are usually relegated to an unfinished garage, this finished alcove, raised 4" above the garage floor, becomes an almost separate laundry room.

Ernest Braun



9. Tackle the problem of exposed clutter, suggests Brown & Kauffman, Palo Alto, Calif., whose bypassing sliding doors hide at least half the garage contents from the street at any one time—and thus make for a better looking neighborhood. B&K uses sliding garage doors in all its houses (\$25,000 and up).

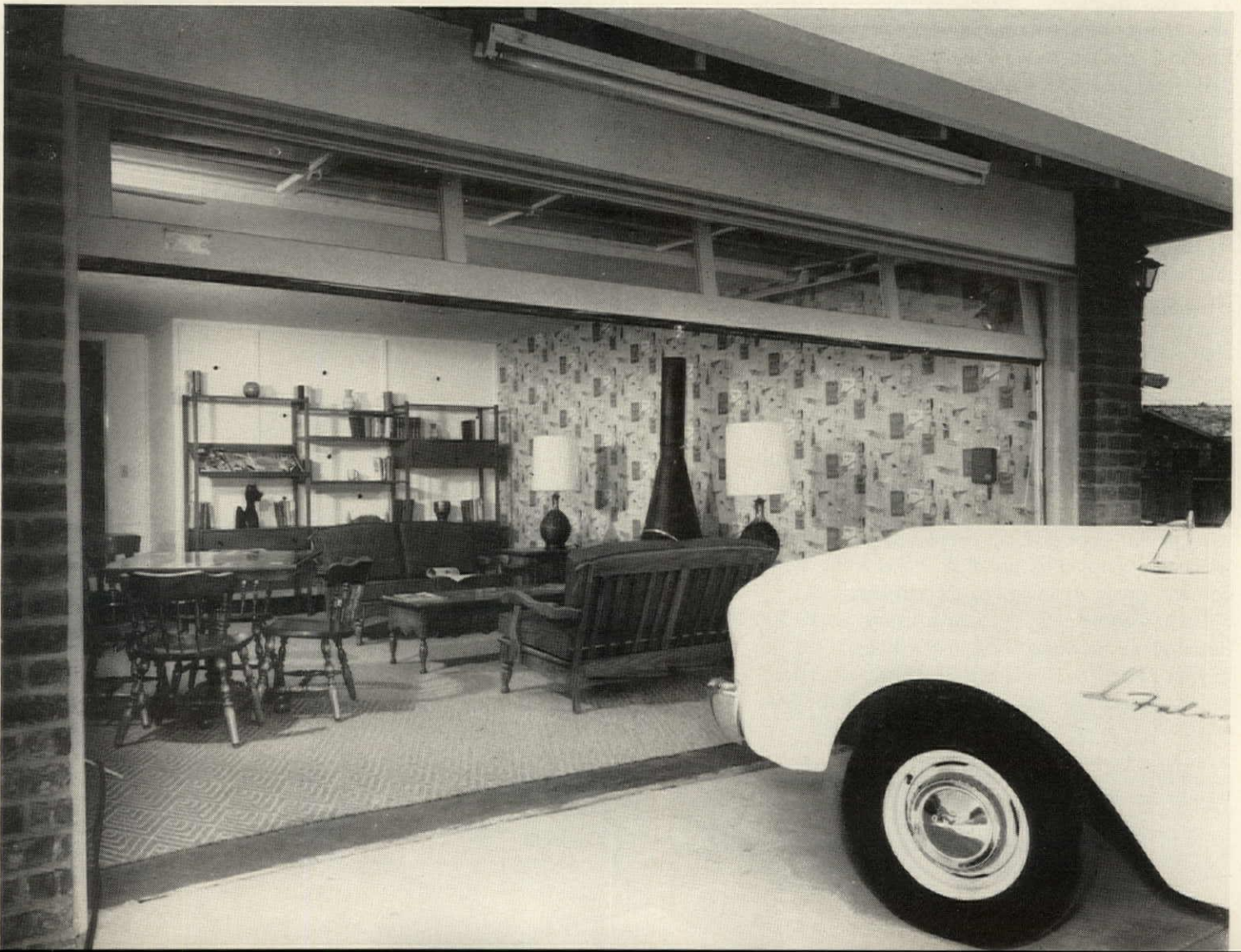


10. Put a boat door in the rear, especially if you build near a body of water as Del E. Webb does in Clear Lake City, Tex. Homeowners who don't own a boat can park a third car in the rear yard. The additional overhead door also turns the garage into a breezeway for outdoor living in rainy weather.

11. Detach the garage to increase backyard privacy, advises Glen Norwood of Houston. His separate garages, set back from the houses, screen backyards from each other and keep residents from parking cars on the concrete aprons in front of their homes—a practice that often gives a streetscape a parking-lot look.

12. Plan a garage that converts into a big party room, suggests Donald L. Stone, San Jose, Calif., who took full-page ads to promote his convertible garage (*below*) that can be turned into "a pool dressing room, ventilated workshop, scout meeting den and rumpus room for teen-agers." Stone's finishing cost: \$1.25 a sq. ft.

Victor M. Helm





Three Fair houses give buyers ideas to ask for back home

No matter where you design, build or sell houses, you'd be wise to study the Houses of Good Taste (symbolized by HGT above) now open at the New York World's Fair and shown at right and on the following pages.

The three display houses will not only be visited by millions of fairgoers over the next two years, but will also be published in 24 full-color pages in the September issue of *Better Homes & Gardens* (circ. 6,286,736). So the ideas and products in them are bound to sway the tastes of potential homebuyers in every market.

Unlike other model houses at the Fair,* the HGT houses highlight neither a specific product nor a special use. Instead, their appeal is broad and could affect housing of all types.

1 The traditional model, designed by Royal Barry Wills Associates, is a sprawling New England farmhouse sheathed in plastic. While the design is clearly colonial, the plan and low-maintenance surfaces bring it up to date. Wide corridors shown in the plan were designed for heavy Fair traffic.

2 The contemporary house, designed by Architect Jack Pickens Coble, is laid out as a series of pavilions in a compound. All rooms are reached through galleries, over bridges or across terraces. Steel framing was chosen by the architect strictly for aesthetic reasons; most builders probably would have framed the house in wood to cut costs.

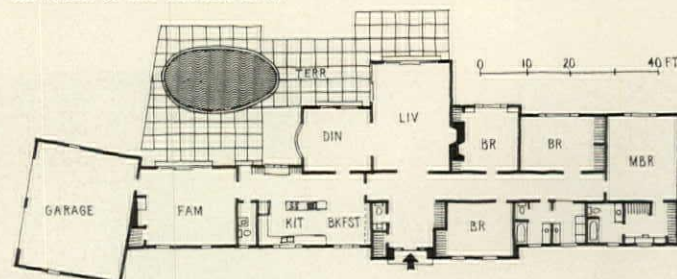
3 The modern house (the term is HGT's but does not distinguish it from the contemporary model) has uncluttered lines and windowless walls facing the outside world. At the core of the house—designed by Architect Edward Durell Stone—is a circular pool under a circular skylight toward which every room is oriented. Patio walls at the corners screen openings to the outdoors.

Each visitor gets a catalog listing over 300 brand-name products used in the house, and can buy an LP record in which the architects and decorators discuss the reasoning behind their designs.

* All State Properties vacation house (H&H, Dec.), Deltona Corp.'s Florida retirement house (H&H, Mar.) and the underground house (H&H, May).



COLONIAL EXTERIOR, finished with solid vinyl siding and random-design asphalt shingles, is typical blend of the old and new.



SPRAWLING PLAN locates kitchen, family room, dining and living rooms next to irregularly shaped terrace. Den doubles as fourth bedroom.



VINYL-LINED POOL, a packaged prefab unit, is gaining widespread appeal as a much-desired luxury now within means of medium-price buyers.



Photos: Lisanti



FORMAL DINING ROOM contrasts light-painted traditional molding and cabinetry with prefinished walnut paneling in the living room beyond.



CHERRY-PANELED FIREPLACE WALL in the den is v-grooved plywood with matching molding to simulate the pattern of solid wood paneling.



BATH-LAUNDRY—in bedroom wing—is finished as one large room with luminous ceiling and tile walls, then partitioned over cabinets at center.



1. New ideas update traditional design



FAMILY ROOM shows another blend of old and new: coated acoustical panels framed by weathered beams taken from a 19th century barn.

No one at Royal Barry Wills Associates would describe the firm's so-called traditional house as classic early American. Though based on colonial New England farmhouse lines, the 48'-long plan is as flexible as it is contemporary. Each room in the main living area—kitchen, family, living and dining rooms—opens directly to a long rear terrace. The den is located in the bedroom wing of the house for easy conversion to sleeping quarters. The family room adjoins the garage, which could be finished as an extension for large-scale entertaining.

Inside and out are examples of new materials and factory-applied finishes made to look traditional: plastic lap siding; plywood paneling applied like solid wood; plastic ceiling panels combined with rough-hewn beams; vinyl plank flooring. The constant reminder: buyers can have the new low-maintenance finishes in a house that looks traditional. Ellen McCluskey, FAID, decorated the house.



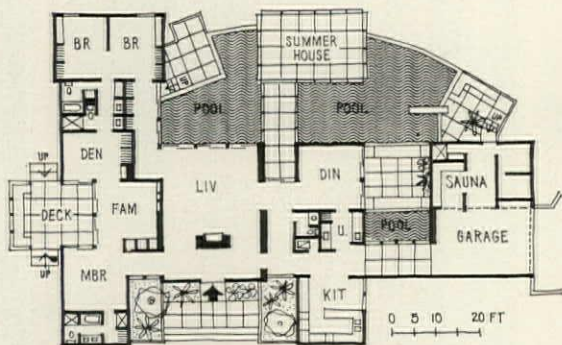
CEILING-HUNG HOOD vents island cooking center's drop-in range and barbecue. Lights are recessed in the ceiling and under cabinets.

continued



Kal Weyner

SEPARATE ROOFS define the five pavilions of H-shaped contemporary house. Flat-roofed structure at rear contains garage and sauna bath.



H-SHAPED PLAN has entry in the living-room pavilion where a fireplace defines the foyer. Bed-rooms are at left, the dining area at right.



2. Pavilions form a private compound

"Like walking through five different little houses" is the way Architect Jack Pickens Coble describes this house. Between the houses are terraces, patios and a swimming pool, all secluded from the outside world. Exterior walls are virtually solid, but let daylight enter through high strip windows. Interior walls are largely glass, allowing a full view and convenient access to private outdoor areas.

Outside, rough-textured wood shakes slope down to smooth aluminum siding panels set off by protruding framing. Inside, the ceilings show several new textures in acoustical tile. The living room's cathedral ceiling has a huge skylight in the center. Eye-catching floors include teak-tone wood strips laid in a finger pattern. Decorator: Dede Draper, past president (1962-'63) of NSID.

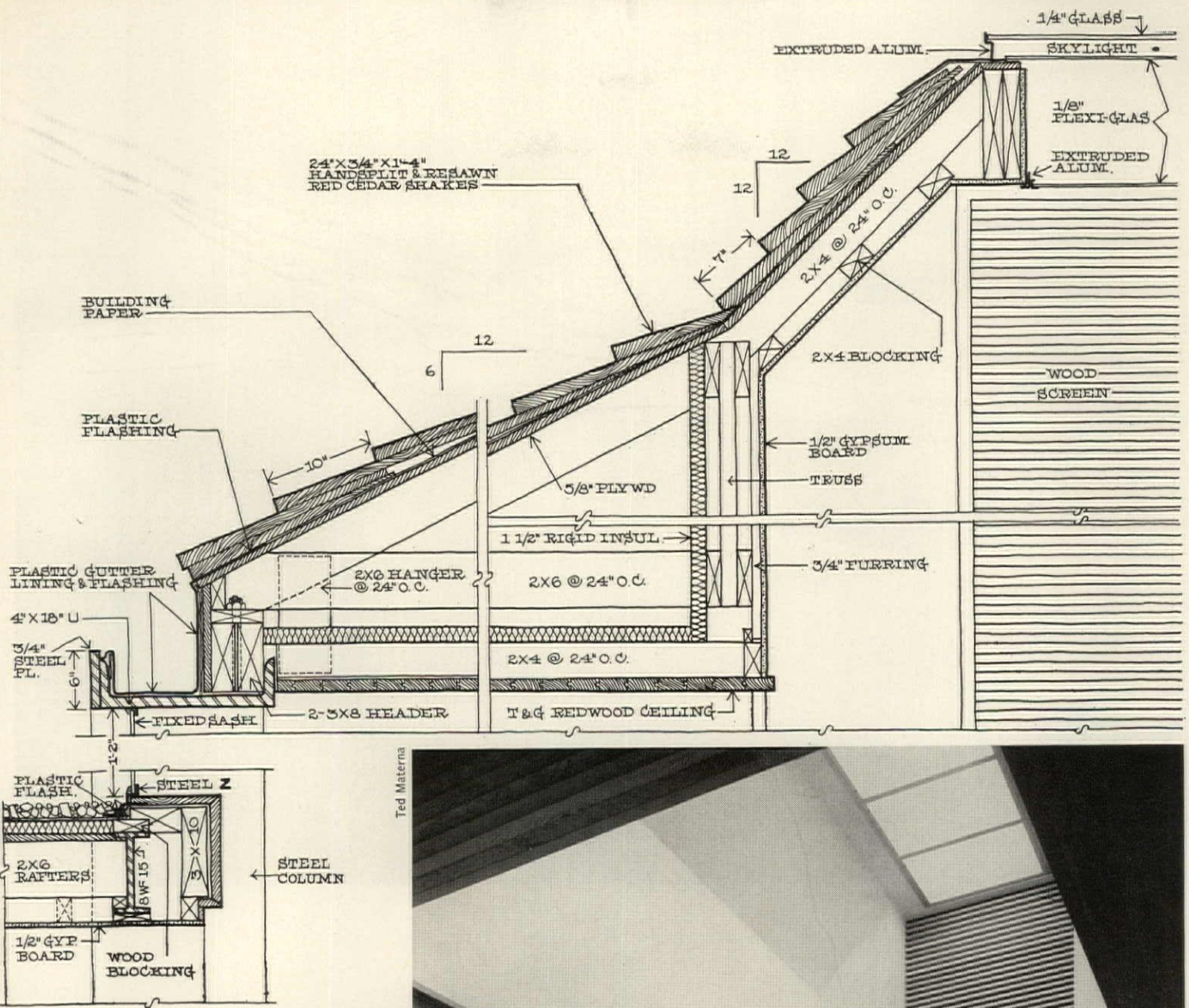


Ted Materna
Kal Weyner

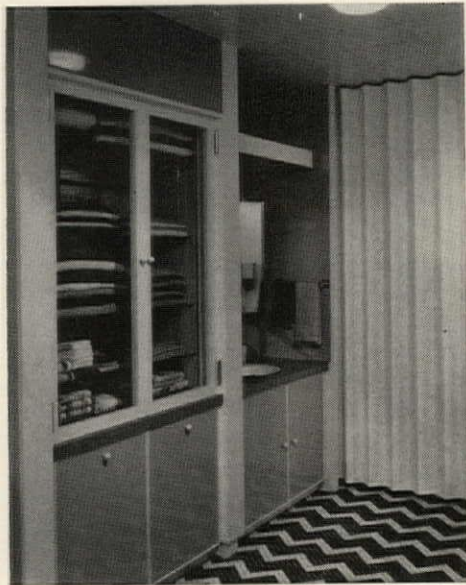


SUMMER HOUSE, separated by pool from the main house (see plan) is reached by a bridge that spans the pool.

MASTER BEDROOM opens to a screened terrace through sliding glass doors with vertical blinds. High strips of fixed sash maintain privacy.



THICK HAND-SPLIT SHAKES on main roofs drain into plastic-lined steel gutters and slope down to flat roofs over connecting galleries.



BATHROOM LINEN STORAGE is enclosed by glass doors. Bins for dirty clothes are built in behind bottom-hinged cabinet doors, below.

FIREPLACE WALL rises 14' to skylight over living room (see section above). Tall louver screen is built of 1 x 3 strips spaced 1" apart.

Ted Materna

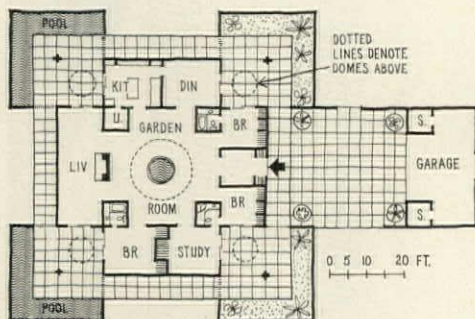


continued



Sherwood Greenberg

CLOISTERED HOUSE has solid walls on four sides. Interior daylighting is through nine roof openings and sliding glass doors to patios.



CRUCIFORM PLAN gives each room outdoor access to a walled garden. Traffic between rooms is across skylighted family-garden atrium.



3. Roof domes light a windowless house

Architect Edward Durell Stone designed this house for total privacy from neighbors and the street. All rooms and the entry open directly into an atrium topped by a circular glass skylight (*photo, right*). The windowless rooms also get daylight from eight smaller plastic skylights and from sliding-glass doors to outdoor living areas. Every room has direct access to one or more corner patios enclosed by high block walls.

The exterior finish of the house itself is a new synthetic stucco applied in panels without battens. Interior walls are finished with painted brick, prefinished plywood paneling, 2"-square ceramic tile, plaster or drywall. To deaden echoing in the high-domed atrium, acoustical plaster was sprayed on the ceiling. Sculptured and wood-fiber ceiling tile are used in other rooms, all of which were decorated by Sarah Hunter Kelly.

Photos: Lisanti

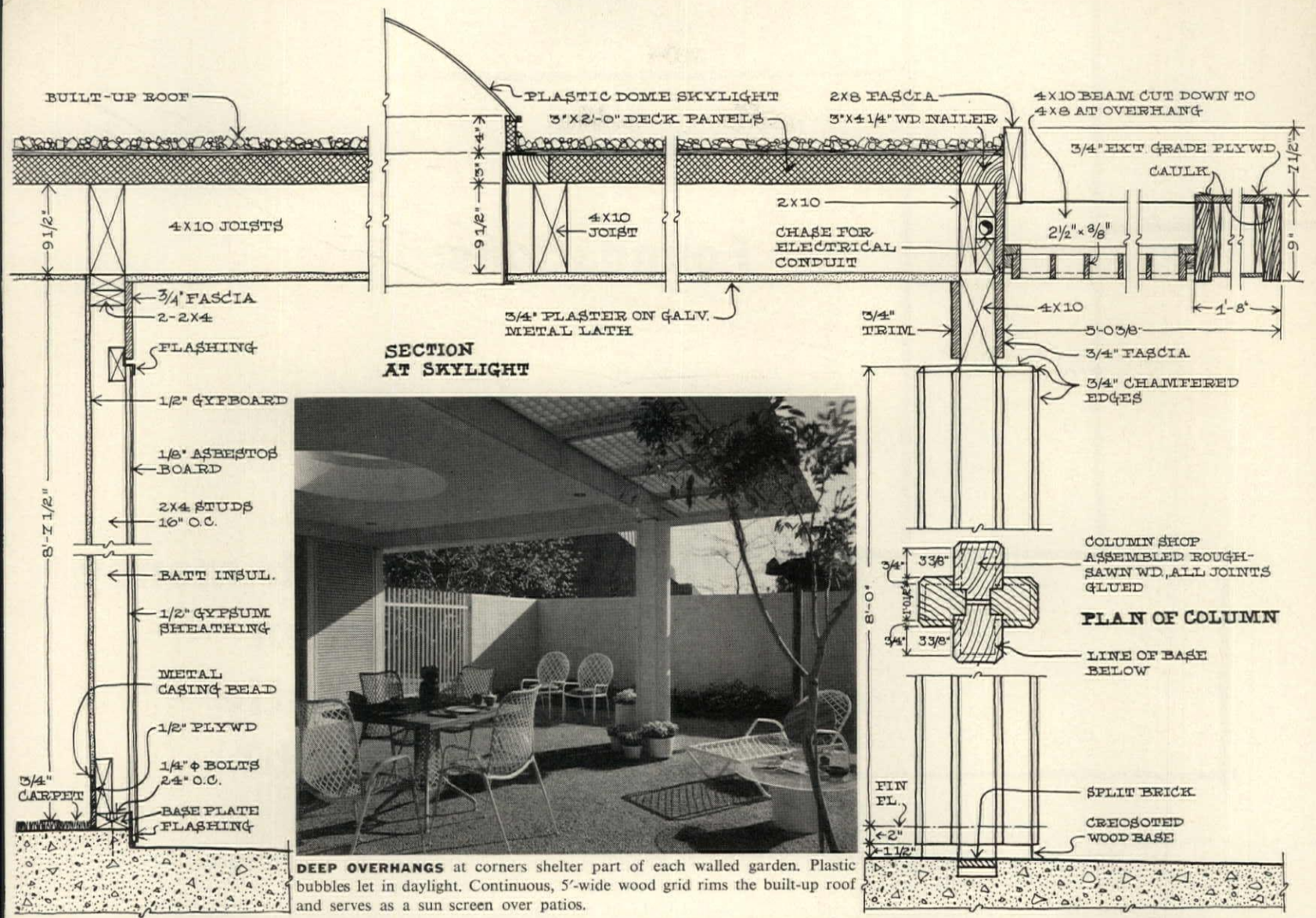


EXPOSED PAINTED BEAMS and fiberboard deck panels form finished ceiling in dining room and kitchen. Elsewhere acoustical tile is applied.



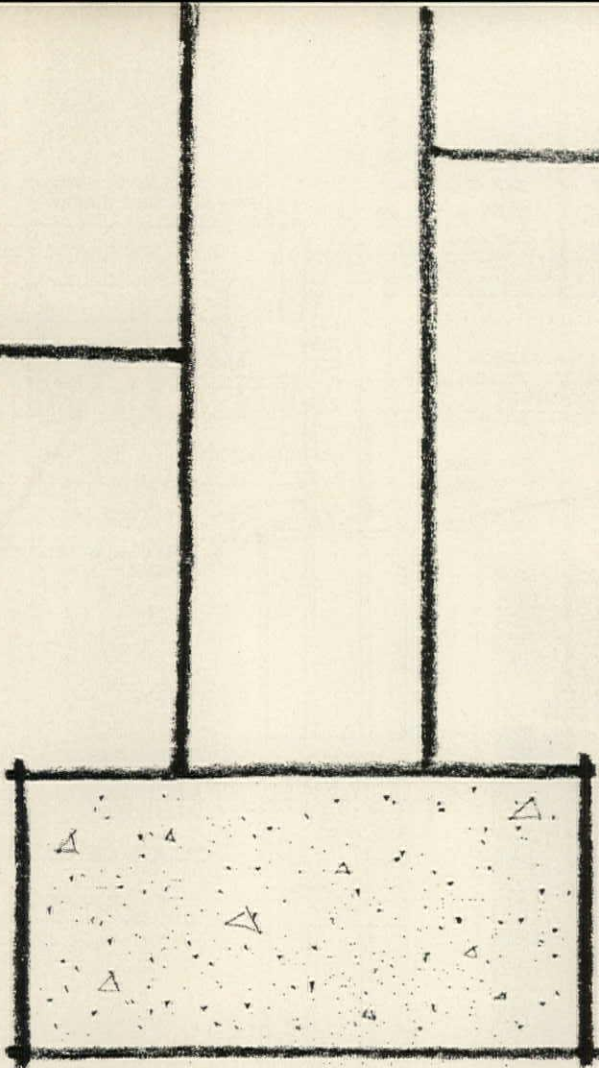
BREAKFAST AREA in the kitchen opens to patio. Vent hood over the island range and sink hangs from exposed beam. The floor is 9" ceramic tile.

GLASS DOME, 22' in diameter, covers the family area at center of the house. Heavy limestone rings the pool; acoustical ceiling is sprayed on. →



Sherwood Greenberg





Foundations:

Why bury so much money in the ground when there are less costly ways to do the job?

How specification codes put severe limits on the use of new foundation systems

Three model codes—put out by Building Officials' Conference of America, International Conference of Building Officials and Southern Building Code Congress—specify foundation wall sizes so exactly that there is no room at all for innovation.

Says BOCA: foundation walls of reinforced concrete may not be less than 8" thick. Block walls may be 8" thick if they are less than 6' below grade and support a wall less than 35' high, but must be 12" thick if the wall runs deeper.

Says ICBO: no foundation wall may be less than 6" thick, and reinforced concrete walls in basements must be 8" thick.

Says SBCC: all block walls must be 12" thick, all concrete walls 8". Exceptions: under one-story houses concrete may be 6" thick, and under one-and-a-half stories block walls may be 10".

Footings are allowed more design latitude than foundation walls. All three model codes base footing sizes on local soil-bearing capacities. And in most cities today builders can get their footing dimensions changed (usually made smaller) on the basis of bona fide soil tests.

Thirteen less costly—and often better—ways to build foundations are shown on the following pages.

All 13 would be approved under today's best performance codes although only four would pass the outmoded specification codes (*left*) still used by many communities. Outmoded codes have repeatedly stymied efforts to develop less expensive—but perfectly adequate—foundations. They are based on three misleading assumptions so deeply ingrained in home-building practice that they have obscured the facts.

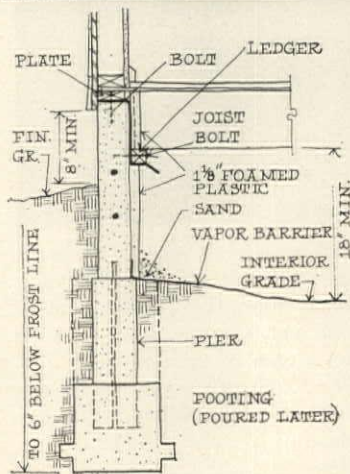
Misleading assumption No. 1: a foundation should be built to support the heaviest house that could possibly be built on it. The facts: the heaviest possible house is a solid masonry house, and since it would weigh about ten times as much as a comparable frame house, sizing the foundation for this maximum weight is foolishly wasteful. Even a brick-veneer, frame house can be adequately supported by a 3" reinforced concrete foundation. Yet most codes require foundations hefty enough to support a house with 12" solid masonry walls.

Misleading assumption No. 2: frost can heave foundation walls out of line. The facts: if a house is heated all winter, the ground under even the shallowest foundations will not freeze. Says Rudard Jones, director of the Small Homes Council-Building Research Council: "Even if the house is unheated and the foundation is a shallow grade beam, frost action will not move the house, but will simply displace earth around it. And if there is gravel under the beam to eliminate capillary action, there will be no frost action at all."

Misleading assumption No. 3: wood in contact with the ground will rot. The facts: naturally termite-proof woods like cedar, cypress or redwood, or wood treated with proper preservatives will not rot if the ground they contact is properly drained. Some New England farm houses, built with heartwood sills on grade, have been standing for 200 years.



Photos: Nancy Ferguson



PRESTRESSED BEAMS, cast in pairs and erected in the sequence shown above, save Builder Gale Corley, Valparaiso, Ind., \$200 per house.

Corley's casting form (*upper left*) has two pretensioned steel cables per beam. Beams are delivered to the site on a truck with hydraulic boom (*upper center*), which sets them in place. Before each beam is lowered, precast concrete piers (*upper right*) are screwed into its preset inserts, and pier holes are bored with an earth auger. Adjustable slings (*lower left and*

center) level and support the beam while the footings, poured around bases of the piers, set (*detail at left*). Beams are then joined (*lower right*) with a plate and ledger (for floor joists) bolted into drilled-in expansion anchors.

On a prepared site, graded to receive the beams and with pier holes dug, one man can install the foundation in a day.

Corley's prestressed system cuts his foundation costs by 24%. His cost is \$3.25 per lin. ft.—\$1.25 for the beams and piers and \$2 to install them—

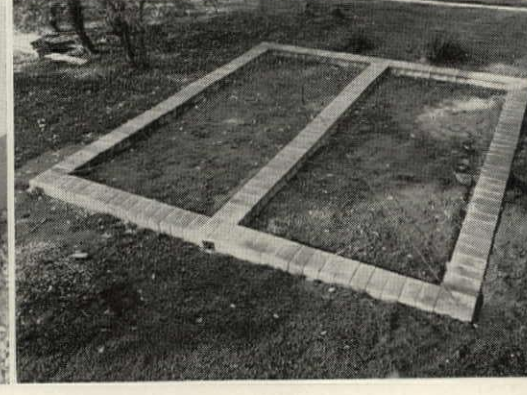
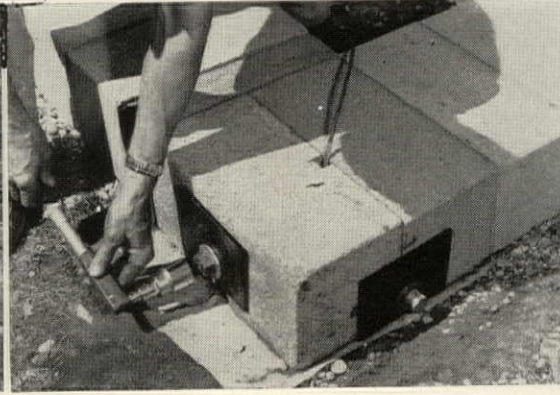
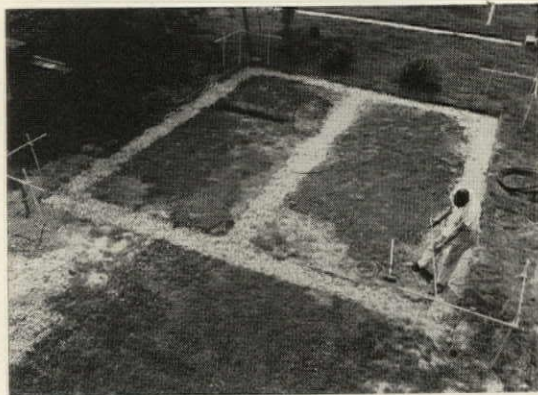
vs. \$4.25 for a block foundation wall on poured footings.

The system is ideally suited to winter construction. Corley has installed foundations through 12" of frost at no extra cost.

Big side benefit: a house on the prestressed foundation can be easily moved from a temporary site, like a model-house area, and the only foundation left in the ground is 1 cu. yd. of concrete—the footings in the old pier holes.

Corley developed the system over the last three years and has applied for patents on it.

Photos: J. C. Allen



TENSIONED BLOCKS make a dry foundation (no concrete to mix) that costs as little as \$1.60 per lin. ft. and can be built by one man in a day.

A 1' trench backfilled with gravel (*left*) serves as a footing for the post-tensioned blocks.

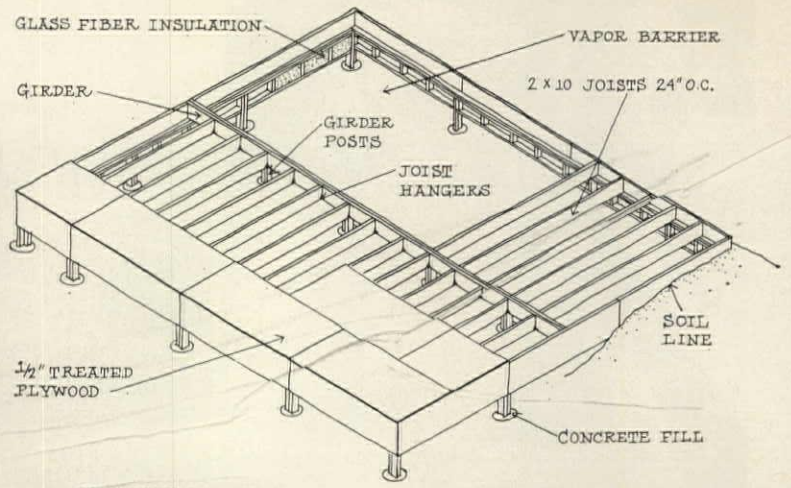
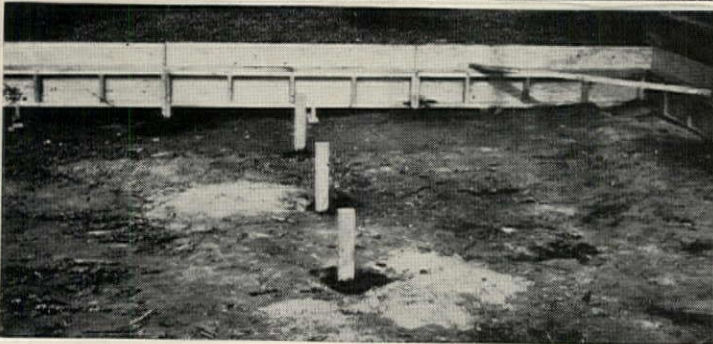
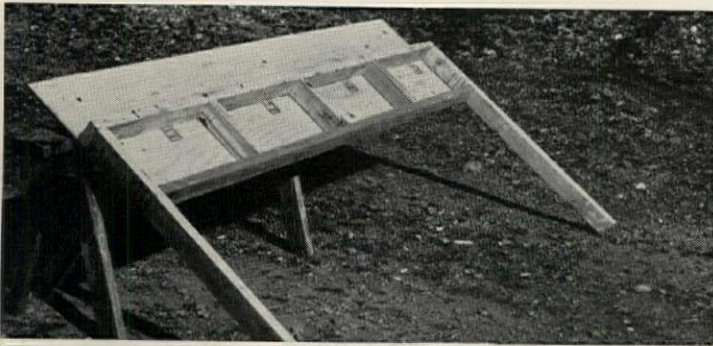
Kraft paper beneath the blocks prevents pebbles from getting between them. Galvanized pipe is threaded through the blocks, and nuts at the ends of the pipe (*center*) are run down on bearing plates to post-tension the blocks into structural grade

beams. Corner anchors — being positioned in first photo — are hand-driven into the ground before the blocks are set, and diagonal cables (*right*) between the anchors are tensioned.

Gravel in the trench prevents capillary action of ground water,

which causes frost heave. The foundation can be set in dead of winter. Grade beams can be used as a base for slabs or crawl spaces. Designer Carl Boester, Lafayette, Ind., developed the system, first shown by HOUSE & HOME in December 1960.

continued

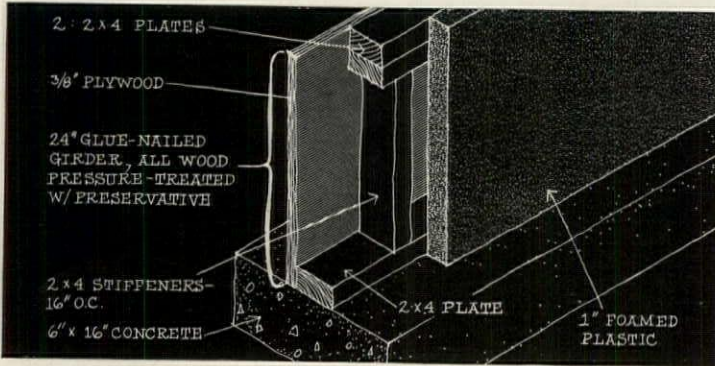


WOOD COMPONENTS made of 1/2" plywood and 2x4's, all pressure treated with pentachlorophenol, produced the foundation above for only \$2.21 per lin. ft. The total cost of a 24' x 28' foundation, plus floor joists and sub-floor, was only \$482.27.

Here is how the job was done: 1) the site was graded and pier holes dug; 2) 8' nail-glue beams were leveled and braced in po-

sition; 3) top plates were nailed around top flanges of the beams; 4) adjoining 2x4 legs were nailed together; 5) concrete was poured into pier holes around the beam legs.

The system was developed by the Small Homes Council-Building Research Council, University of Illinois. Koppers Co., which pressure-treated the wood, guarantees the foundation for 25 years.

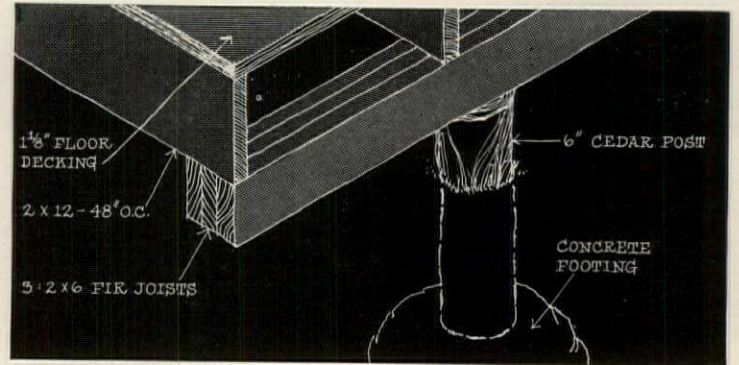


STRESSED - SKIN BEAMS

developed by Canada's National House Builders Assn. can produce foundations for under \$2.50 per lin. ft.

Plates are glue-nailed to a 3/8" plywood flange and foamed polystyrene is lightly tacked to their

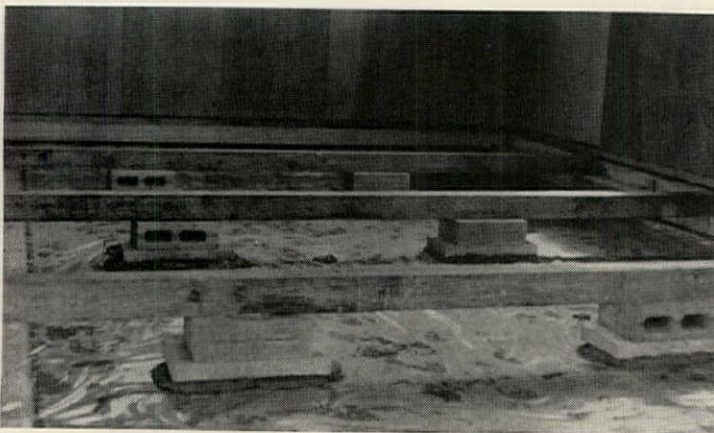
inside face as crawl-space insulation. The beams need a level support—a poured concrete pad or leveled sand and gravel (for winter building). They bear best on sand and gravel when they are vibrated into position. (For more details, see H&H, May, 61.)



CEDAR POSTS were a San Antonio builder's low-cost answer to unstable soil, which usually requires heavily reinforced—and expensive—concrete slabs.

Builder Cotton Jaroszewski used 6" cedar posts to support

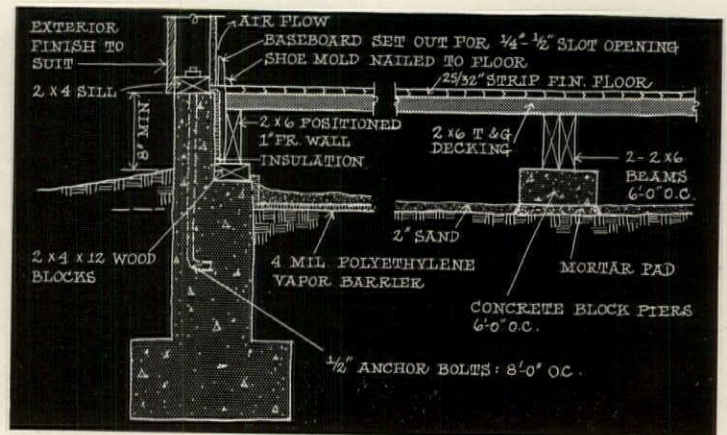
6x6 fir girders topped by 2x12s on 48" centers and a 1 1/8" plywood floor. His 24'x36' foundation and floor cost \$480 vs. \$780 for a slab of the same size. The \$5,950 experimental house was built for San Antonio's Project SARAH.



LOW-PROFILE SYSTEM can cut foundation and floor costs for a 1,200-sq.-ft. crawl-space house from \$1,400 to \$900.

Reason: it eliminates the need for crawl-space venting, floor insulation and deep interior piers and footings.

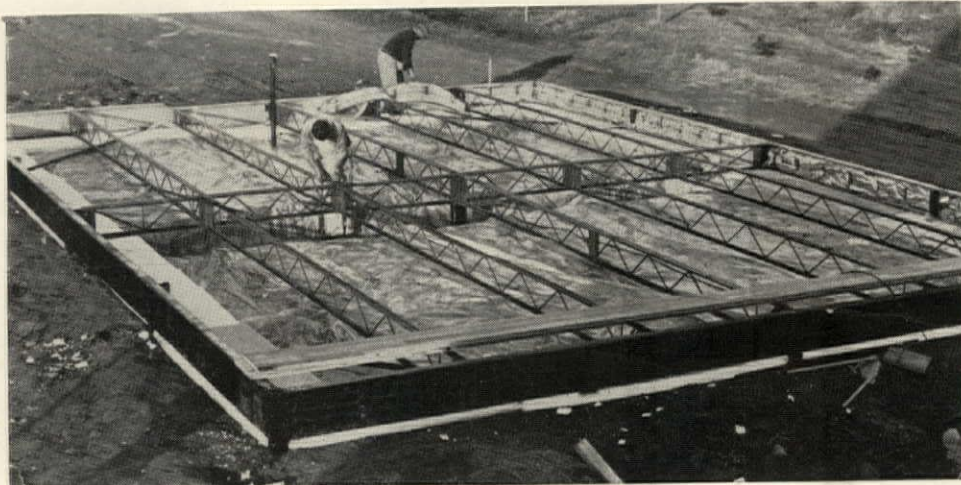
The only excavation is for the foundation walls or grade-beam trench because the floor frame—doubled 2x6s at 6' centers—rests on simple masonry piers. The piers are set on a vapor barrier over compacted earth.



The system gives a crawl-space house with a wood floor the low profile of a slab house, which would require excavation of the entire area. Walls of the house rest on the poured perimeter of the foundation (see details), which cost \$3 a lin. ft.,

or on grade beams on a gravel trench (\$2). The crawl space is a plenum—warm air circulates to baseboard slots.

The National Lumber Manufacturers Assn. collaborated with Washington State University to develop the system.



STEEL COMPONENTS, used in NAHB's 1963 research house (H&H, Feb. '63), are topped with a wood deck to form a floor and foundation costing from \$1.30 to \$1.50 a sq. ft. Unlike low-cost, crawl-space

foundations with wood-framed floors (as little as \$1.10 a sq. ft.), this is an all-weather system well suited to installation during cold northern winters: piers are simply augered into the earth and then concrete is poured

around them below the frost line. Grade beams of galvanized-steel channels are supported on steel posts, which are set in pier holes and surrounded with poured concrete footings. Open-web joists span the beams at

4' to 5' intervals and carry the 1" wood floor. The floor is nailed to abutting channels forming the top flange of each joist.

U.S. Steel Corp. developed the system with the NAHB Research Institute.



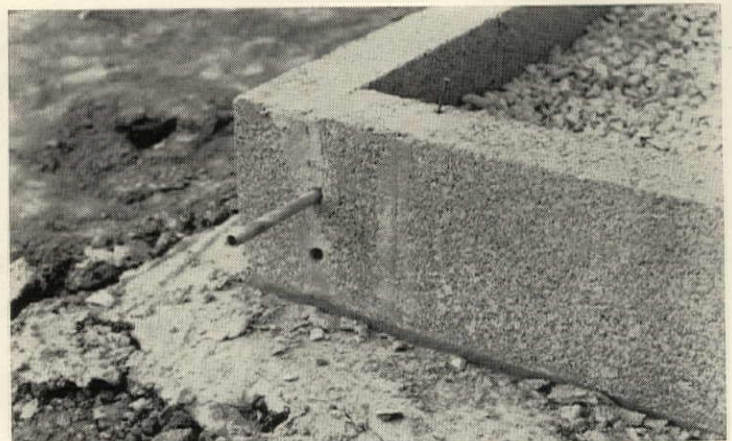
Photos: Fogarty Studio



BLOCK PERIMETER, introduced in NAHB's 1958 research house, eliminated the need for slab formwork. Today it could save up to \$170 on a 1,200 sq. ft. slab.

A trencher dug a 6"-wide, 16"-

deep trench into which a grade beam was poured to grade. Cinder blocks, 4" x 8", were simply set in the beam (left) to become the edge of the slab. The slab itself was foamed concrete for good insulation. It was poured on



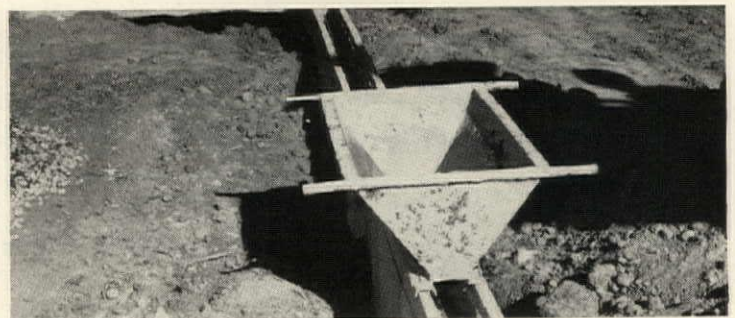
4" of compacted gravel fill atop mechanically tamped soil.

The narrow (4") grade beam with its block top would cost \$1.80 per lin. ft. (up 60¢ since 1958). By contrast a conventional 8"-wide footing with three

rows of 8" x 8" block runs about \$3 a lin. ft.

The foamed-concrete slab used in the research house weighs only 55 lbs. per cu. ft. Its insulating effect is equal to 1" of edge insulation.

Photos: Markow



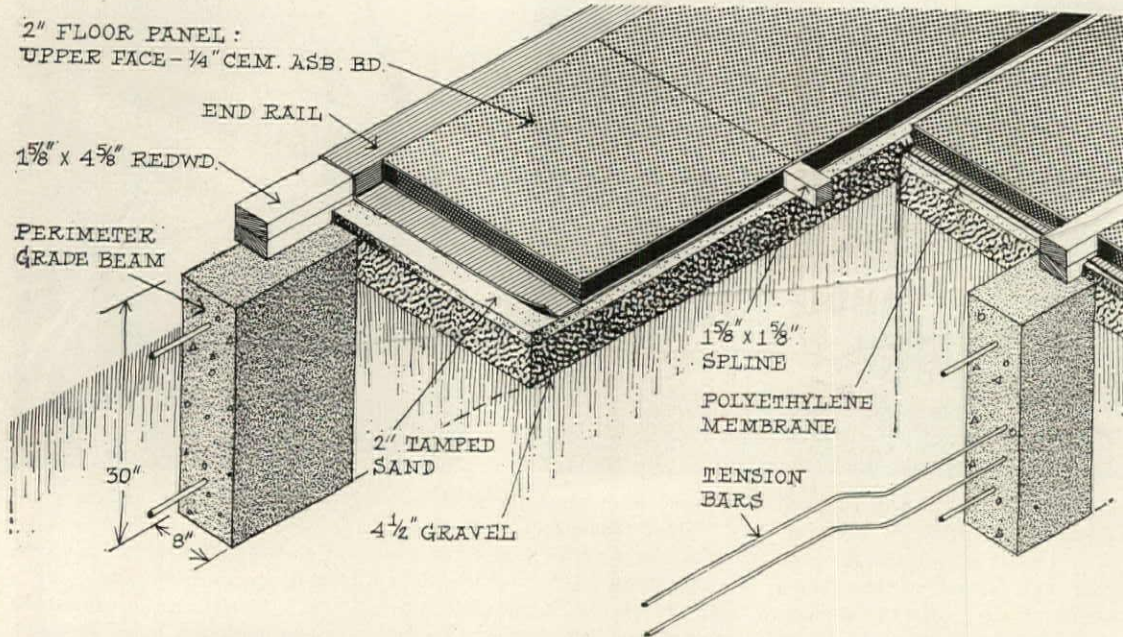
U-SHAPED BLOCKS serve as both the form and the side surfaces for a foundation wall that costs only \$1.50 per lin. ft.

Here is how the wall is built: 1) a concrete footing is poured in a shallow trench (left); 2) the blocks are set in the concrete while it is still wet (they have bottom lugs which make for a

tight bond); 3) two $\frac{3}{8}$ " reinforcing rods are hung on wire hangers inside the blocks; 4) concrete is poured into the blocks through a sheet-metal funnel (above) after the footing has set.

The system was developed by Phoenix Builder John Hall (see p. 89) with the Superlight Building Supply Co.

continued

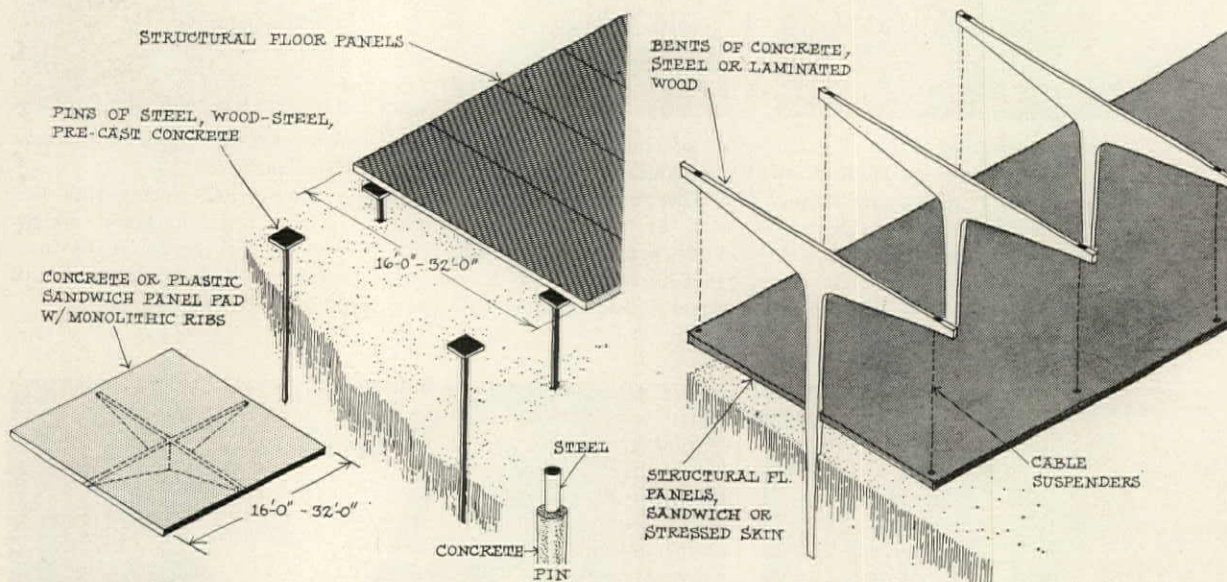


SOIL-SUPPORTED PANELS used in NAHB's 1960 research house made a structural floor that needed no framing. The floor of 4' x 12' sandwich panels was installed over a vapor barrier on a prepared and tamped

grade in only five man-hours. The job's special nature rules out a reliable cost projection. Splines joined the panels and doubled 2x4 plates, set between some of the panels, supported interior partitions. Exterior walls

were carried on a 30"-deep, reinforced-concrete beam without a footing. The floor panels' upper skin— $\frac{1}{4}$ "-thick asbestos cement—stood up well, even under the concentrated loads of grand pianos.

Here are three off-beat ideas that could also cut foundation costs



FLOATING PAD might be used for foundations of industrialized housing—factory-built living modules that are grouped to make up one house. Each prefabricated pad would arrive at the site with its module and would be set on grade with its structural ribs fitting into prepared trenches. Designers point out that such pads behave structurally like the heavily reinforced concrete slabs that float above expandable clay soils in the Southwest.

PIN-SUPPORTED PANELS in the form of the post-and-beam foundation system shown above would cut costs by eliminating the need for digging and grading at the site. Pins, driven into the ground by a sonic or vibratory pile-driving hammer, would carry structural floor panels. In granular soils pile drivers agitated by vibrators or high-frequency sound can sink piles so fast that the piles appear to be dropping into holes.

SUSPENDED PANELS in this system are an elaboration of a suspended floor system first suggested by Frank Lloyd Wright shortly after the turn of the century. T-shaped bents shown in the drawing above could be driven with a sonic pile driver or concreted into augered holes. Structural floor panels would then be suspended by cables from arms of the bents. The floor would be held rigid by being fastened to legs of the bents,



How Bertrand Goldberg used General Electric Zoneline Air Conditioning to design Marina City "for the varying needs of the individual tenant."



Again demonstrating its flexibility, a Zoneline unit has been installed above a door in a typical Marina City apartment.

Bertrand Goldberg explains a step forward in apartment design: "Today we are designing as flexibly as possible for the varying needs of the individual tenant. In the past we've frequently forgotten that each tenant has needs and preferences which are different from his neighbor's."

This new approach to apartment design is exemplified in Mr. Goldberg's Marina City, a 60-story project in Chicago housing 896 families, recreation and shopping facilities and a 700-boat marina.

"At Marina City Zoneline air conditioning units for each room allow not only each tenant—but each room occupant—to enjoy exactly the temperature and air environment that he desires. The push of a button gives each room occupant his choice of hot or cold air, automatic or manually controlled and either

re-circulated or filtered outdoor air."

Goldberg is also enthusiastic about Zoneline because it can be used so unobtrusively that "it doesn't compromise the integrity of the architectural design."

In addition to Zoneline room air conditioning, Marina City features 117 three-ton and 117 five-ton G-E central air conditioning units. Using both room and central air conditioning in the same building is just one more example of how Zoneline's flexibility and custom design can make it an integral part of any architectural design. For details, write Air Conditioning Department, General Electric, Appliance Park, Louisville 1, Kentucky.

GENERAL  ELECTRIC

New PPG Glide-A-Mirror[®] Wardrobe Doors





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on brightness!**

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on sales appeal!**

PPG GLIDE-A-MIRROR Wardrobe Doors do more than light up a room . . . they light a gleam in prospects' eyes. Where there used to be just utilitarian closet doors, there are now full length sliding mirrored doors to glamorize the room. And, they're not just mirrors, but High-Fidelity® Mirrors—made of twin-ground, polished Pittsburgh Plate Glass. The PPG emblem is another sign that you used quality materials.

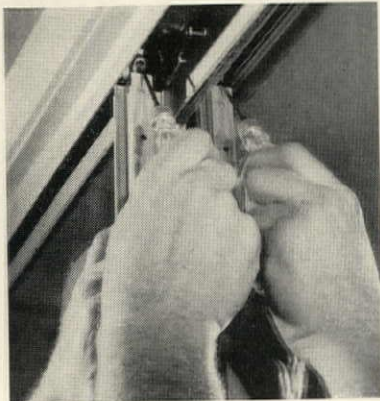
It costs less than you think to install this sales booster. There's no special framing or trim, no furring, no doors to hang, no finishing costs. One man should be able to install GLIDE-A-MIRROR Wardrobe Doors in one hour.

Capitalize on PPG's public acceptance and merchandise GLIDE-A-MIRROR in your model homes. Many of your prospects are seeing PPG GLIDE-A-MIRROR Wardrobe Doors in full color in *House Beautiful* and *House and Garden* magazines throughout the year. Pittsburgh Plate Glass Company, Pittsburgh, Pennsylvania 15222.



Glide-A-Mirror is delivered completely assembled by your local PPG Branch. No threshold required on openings up to 60". You can finish and carpet floors before installation.

Doors are suspended from track and adjusted with leveling screws. PPG High-Fidelity® Plate Glass Mirrors are securely mounted in handsome aluminum, backed by sturdy hardboard, and cushioned in a vinyl strip for extra safety. You have your choice of a variety of frame finishes.



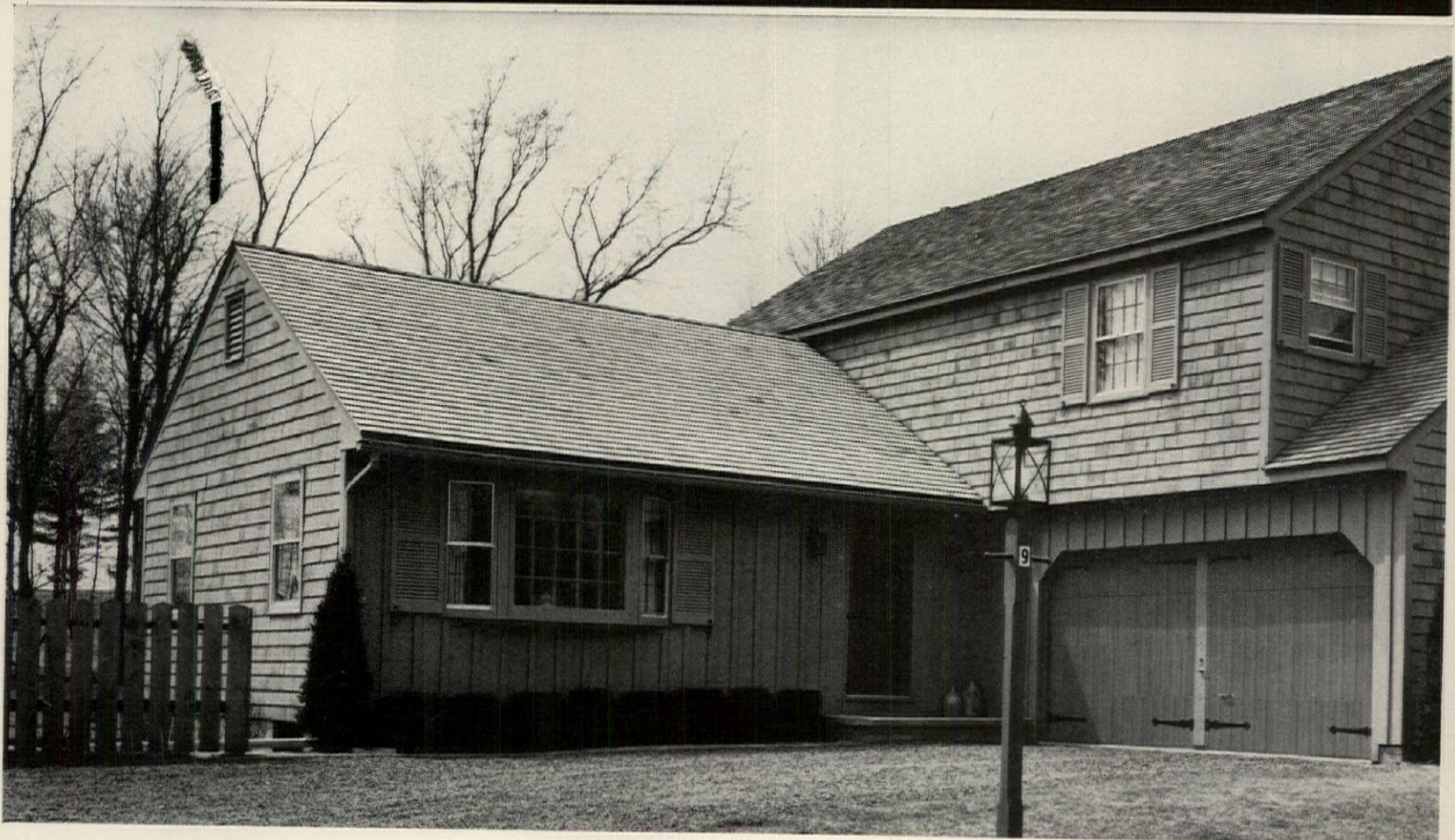
Track is simply screwed to head. Track and finished fascia are a one-piece extrusion. You can install doors after other trades are off the job.



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(1)

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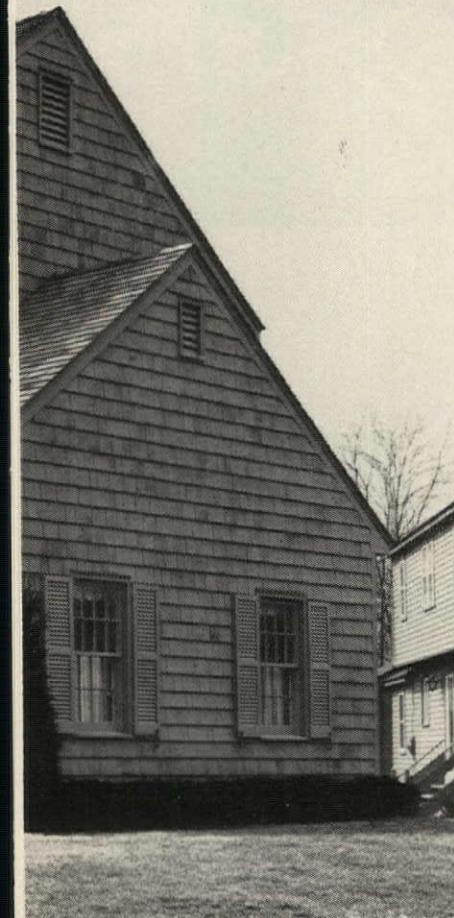
Specify the Certigrade, Certi-Split and Certigroove labels. They are your guarantee of consistent quality and grade based on rigid inspection and quality control.



(3)



(4)



(2)

(1) San Francisco, California / A 294-unit urban renewal project on a 22-acre hillside site. Architects: James K. Levorsen and B. Clyde Cohen. Builder: San Francisco Redevelopers, Inc. More than 2,600 squares of Red Cedar shingles (Certigrade #1, 18" laid with 8" exposure) are used on the sidewalls.

(2) Upper New York State / Residence built by Glenmont Building Corp. The roof shingles are Red Cedar (Certigrade #1, 16" Fivex with 5" exposure.) Sidewall shingles are the same material, but with 7" exposure.

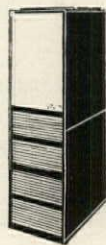
(3) The Red Cedar shingles on this Pacific Northwest home are 55 years old, yet they remained essentially intact during a storm that stripped away part of the newer aluminum over-roof. Winds reached 100 MPH.

(4) Houston, Texas / Red Cedar handsplit shakes were used on the mansard roof of this apartment building. (Certi-Split tapersplit shakes laid with 7" exposure.) Architect: Lucian Hood, Jr. Builder: Roy M. Horlocks.





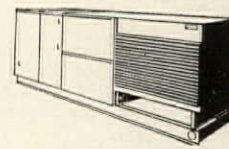
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PVC pipe eliminates waste in more ways than one

This could be the greatest single improvement in drain/waste/vent systems since plumbing came indoors. It's PVC pipe—light in weight, strong, easy to install with no wasted effort. This man is slipping a section of it into position in the outstanding community of homes at the New York World's Fair. □ Selected by The House of Good Taste, pipe

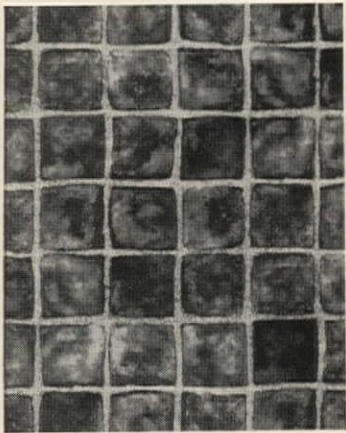
made of Geon vinyl will be seen by millions who visit the Fair. Here, as in any home, pipe and fittings made of PVC offer excellent strength plus impact and corrosion resistance. It is completely inert, will not scale or rust. Resists acids, alkalis, oils and solvents. □ Also significant to men in the building business is this: Geon PVC pipe is approved by the

National Sanitation Foundation for carrying potable water and has been rated self-extinguishing by the American Society for Testing Materials. Learn more about pipe made of Geon rigid vinyl; write B.F. Goodrich Chemical Co., Dept. EN-7, 3135 Euclid Ave., Cleveland, O. 44115. In Canada: Kitchener, Ont.



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Flooring



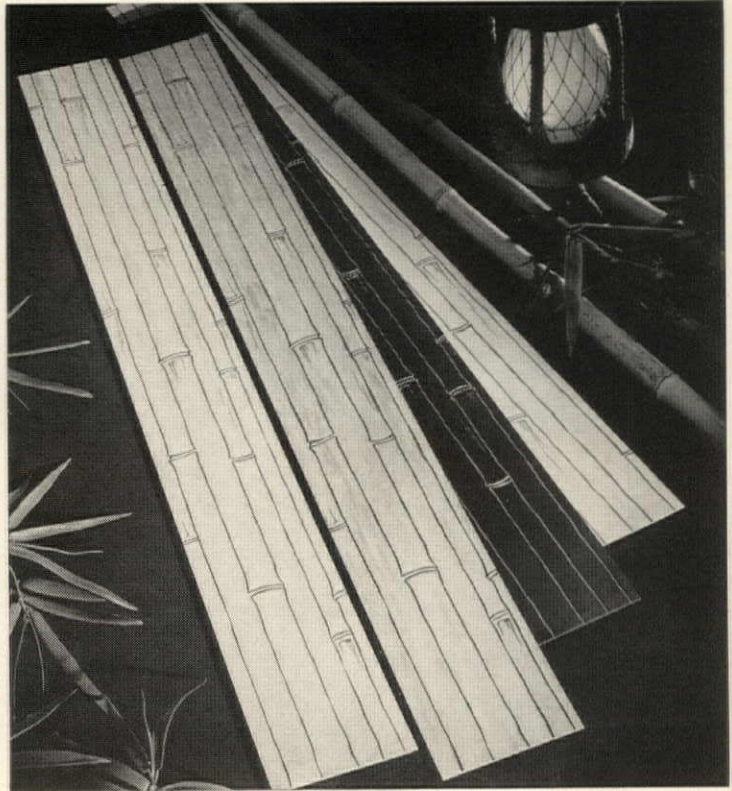
Vinyl floor covering is an exact copy of unglazed, hand-made Moroccan tiled floor. It comes in 6' widths priced about \$5 per yard. Offered in bisque, burnt umber, bronze green and terra cotta. Sandura, Jenkintown, Pa.

For details check No. 1 on p. 147



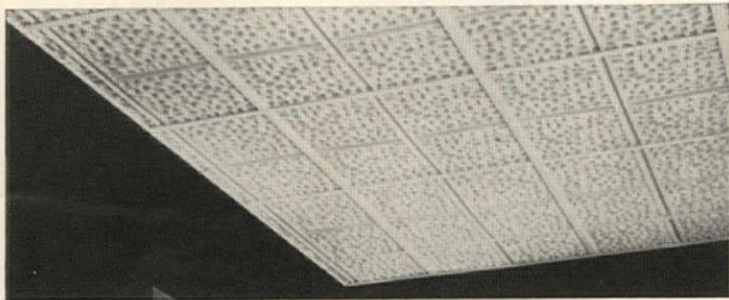
Vinyl-asbestos tile, called Embossed Excelon, comes in five colors of pebblestone, two parquet wood effects and four patterns of embossed travertine. Travertine tiles are 12" square and others are 9" square. Armstrong, Lancaster, Pa.

For details check No. 2 on p. 147

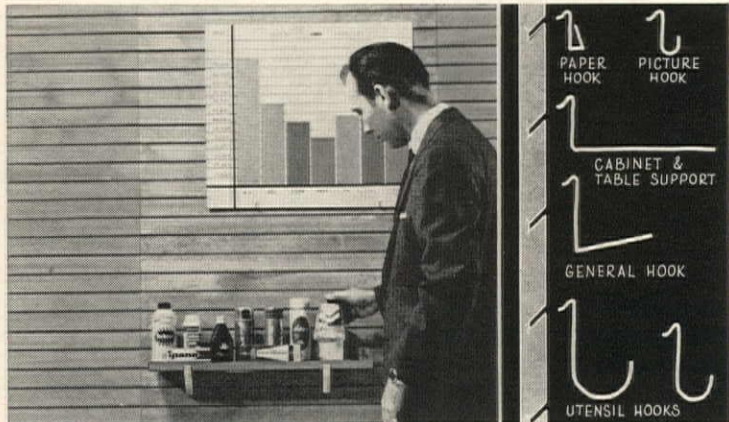


Solid-vinyl planks in a new Bamboo pattern come in black, beige, yellow and white. Planks are 4" wide, 36" long and .080" thick. Squares 36" x 36" are available to decorators and designers. Kentile, Brooklyn, N.Y. Available from flooring dealers.

Interior surfaces



Light-diffusing panels are formed of rigid vinyl, destaticized to eliminate dust attraction. Valencia panels fit standard grid systems. List price for 2' x 2' panel is \$2.32; for 2' x 4' panel, \$4.73. Leigh, Coopersville, Mich. (For details check No. 3 on p. 147)

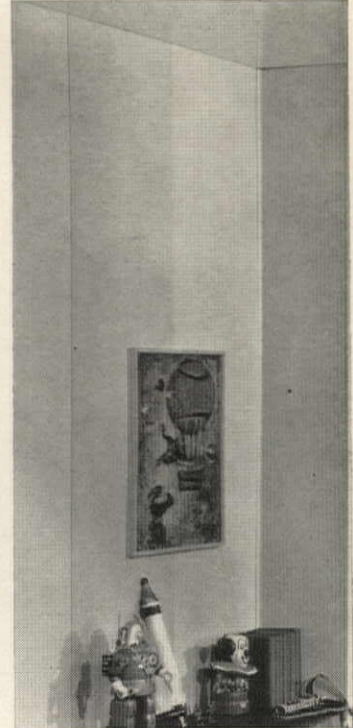


Wall panels have horizontal slots for hanging items weighing up to 150 lbs. Shutter Wall comes in pine, walnut, birch, mahogany, oak or aluminum. It can be nailed to studs or fastened over old walls. Walls Unlimited, Upper Montclair, N.J. (For details check No. 4 on p. 147)



Plastic-finished planks of hardboard come in a variety of pastel tones. Tongue-and-groove planks are 16" wide, 8' high and 1/4" thick. Baked-on melamine-silicone finish won't chip or fade, can be scrubbed. Barclay Mfg., Bronx, N.Y.

For details check No. 5 on p. 147



Persimmon plywood has dark-brown to near-black knots on light-to-medium gray-brown background wood. The prefinished plywood is an addition to the Charter line of quality hardwoods. U.S. Plywood, New York City.

For details check No. 6 on p. 147

New products continued on p. 127

What a heavenly floor!

How do they achieve that textured surface?

Easy to install?

We've just done our good deed for today.

Yes... and a fresh new example of the creative styling that's a hallmark of Azrock vinyl asbestos tile.* This one's called Pebbled-Onyx.

By encasing fine chips of actual marble in translucent vinyl. Beauty you can see and feel, in a floor that's built for endurance!

A breeze... over wood or plywood subfloors, or over concrete above, on or below grade. The people at Azrock will gladly supply samples, color charts and cost comparisons with other resilient floorings. Why are you smiling?



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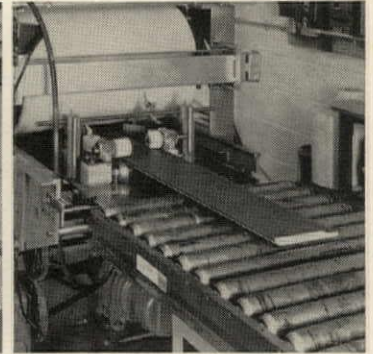
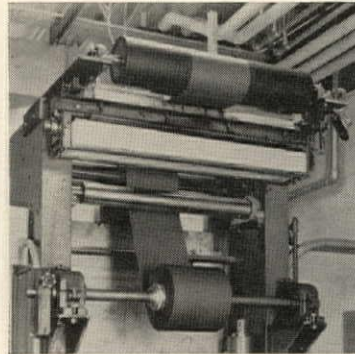
For samples, write to Azrock Floor Products, 554B Frost Building, San Antonio, Texas 78205.

*Also known as Vina-Lux.

Exterior materials



Primed siding of tempered hardboard, called Forest TP, is offered in panels $\frac{3}{8}$ " thick, 4' wide and up to 16' long, with plain or rustic surfaces and with v or u grooves. Lap siding is also available. Forest Fiber Co., Forest Grove, Ore. (For details check No. 7 on p. 147)



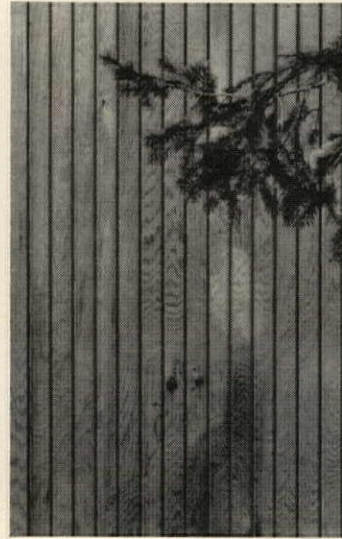
Laminated siding has paper overlay that its maker says triples paint life. Duro-Lok, soon to be marketed, has a big advantage to manufacturers: continuous lamination at speeds up to 100 ft. per min. National Starch, New York City. (For details check No. 8 on p. 147)



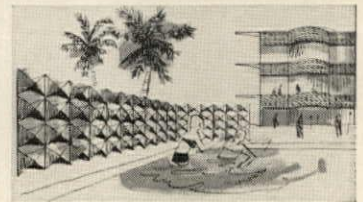
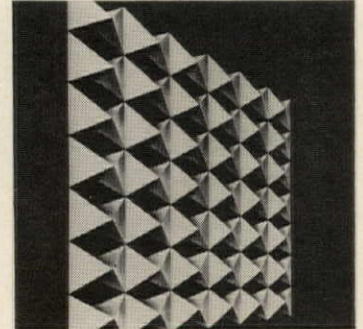
Fireproof siding is made of wood and asbestos fibers and cement. Woodrock cuts like wood, is rot and termite proof and has high paint-retention qualities. A prime coat is applied in the factory. National Gypsum, Buffalo, New York. (For details check No. 9 on p. 147)



Translucent doors are sandwich panels with glass-fiber-reinforced polyester plastic faces and cellulose grid cores. Panelux doors are for inside or outside use and come in a variety of colors and patterns. Glidden, Cleveland. (For details check No. 10 on p. 147)



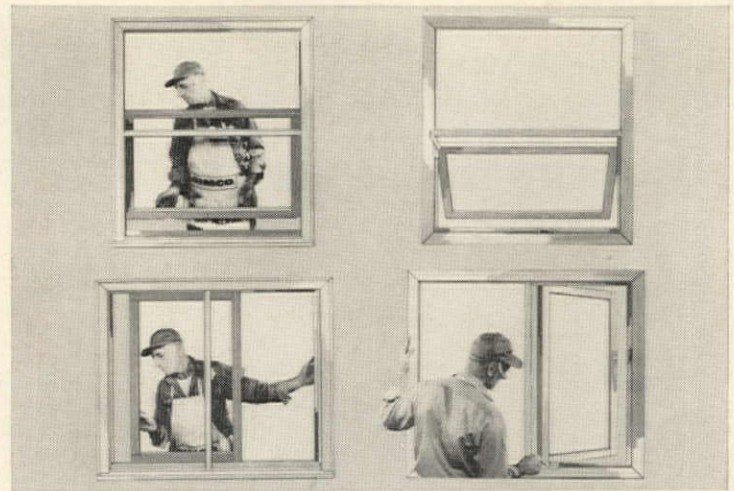
Knotty cedar siding comes in reverse board and batten, channel groove and Texture 1-11 patterns. Panels are $\frac{3}{8}$ " or $\frac{5}{8}$ " thick, 4' wide and 8', 9' or 10' long. Long ends are shiplapped to conceal joints. Evans Prods., Portland, Ore. (For details check No. 11 on p. 147)



Architectural screening of aluminum is used as a refacing material for commercial remodeling. In-place cost is as low as \$3 per sq. ft. Sel-Dec II is an engineered solar screen that comes in six patterns. Alcoa, Pittsburgh, Pa. (For details check No. 12 on p. 147)



Eight-foot shake panels can save up to 70% of installation time compared to regular shakes. E-Z-Ply has outer layer of unstained or gray primed cedar shakes, cross-bind center layer and undercourse layer. Shaker Town, Cleveland. (For details check No. 13 on p. 147)



Turn-around windows are changed from horizontal to vertical sliders (or from casements to awnings) by turning and changing hardware and trim. Rough openings are identical for both series. Rock Island Millwork, Rock Island, Ill. (For details check No. 14 on p. 147)

New products continued on p. 129



Mirrors make "deluxe" bathroom for Des Moines builder

"The bath and kitchen are the most important sales items in a new home," says John R. Grubb, builder of quality split level homes in Des Moines, Iowa. "We feature a 'deluxe' bathroom with generous mirror areas . . . two-basin vanities along two walls topped by mirrors, with a floor-to-ceiling mirror in the corner section. Women love it."

Quality builders, like Mr. Grubb, feature

quality mirrors made with *Parallel-O-Plate*[®] glass. This superb glass is twin ground for truest reflections and more freedom from distortion. There's no finer mirror glass made.

For bathroom mirrors, wall mirrors, door mirrors and sliding mirror doors, call your nearest L·O·F distributor or dealer who handles mirrors made of *Parallel-O-Plate* (listed under "Glass" in the Yellow Pages).

Libbey·Owens·Ford
Toledo, Ohio



This label identifies mirrors made of Parallel-O-Plate glass.



Porch-enclosure system called Retractable Wal has aluminum frames and heavy flexible transparent plastic glazing. Glazing is drawn up into head by an electric motor to give 100% opening. Guaranteed Weather, Bradenton, Fla. (For details check No. 15 on p. 147)



Mobile office, is a converted Ford Econoline Van. Elevating top provides stand-up headroom for six-footers. Travel Wagon converts quickly to a family camping van. Travel Equipment Corp., Elkhart, Ind. (For details check No. 16 on p. 147)



Gas water heater is sold with 20-year warranty. Model 990 has 104.6 gal.-per-hour recovery rate and a flame control that adjusts to hot water needs. Lower-priced models have 15-year warranties. Republic-Transcon, Warren, Mich. (For details check No. 17 on p. 147)



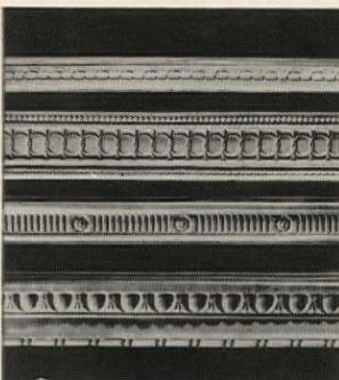
Plastic chandelier looks like cut crystal. Chandelette screws into a ceiling light socket like an ordinary light bulb and is easy to assemble without tools. Two-tier unit lists for \$2.49, three-tier unit for \$3.99. Snyder Mfg., Philadelphia. (For details check No. 18 on p. 147)



Hexagonal cupola has copper or aluminum roof, large screened louvers for attic ventilation and vertical baseboards for easy installation on any style of roof. In two sizes: 40" high or 55" high. Manor House Cupolas, Warsaw, Ind. (For details check No. 19 on p. 147)



Vanities are made of particle board and high-pressure laminate. Apron, doors and toeboard are recessed. Exposed edges are capped with gold or silver aluminum trim. Standard vanities are 24", 30", 36" and 42" wide. Andy Place Prods., South Bend. (For details check No. 20 on p. 147)



Ornamental molding for walls and ceilings looks like sculptured plaster, but is made of molded rag pulp. It is installed with adhesive and brads. From 2½" to 5½" wide. Cost: \$2.50 to \$3.50 per 41½ to 53" length. Fradol, Cleveland. (For details check No. 21 on p. 147)



Gypsum wallboard has new beveled back edge that lets panels butt tightly together. Bevel relieves edge pressure, allowing more secure nailing. Eased edge also is less sharp, making the sheets easier to carry. Celotex, Chicago. (For details check No. 22 on p. 147)



Carpet cutter can cut through any carpet and pad, cuts straight lines, curves or angles. Carpet saw weighs only four lbs., lists for less than \$80 and is available from rug and linoleum dealers. Crane Cutter Co., Santa Clara, Calif. (For details check No. 23 on p. 147)

Two lumber companies begin color-coding

One reason: to give product rather than commodity status to two new types of framing lumber. Specifically: Weyerhaeuser Lumber Co. is treating its new 1½" dry lumber with a cherry-brown stain. Slightly cheaper than conventional ¾" lumber, it is gradually becoming available nationally. (Check No. 24 on p. 147)

Temple Industries, Diboll, Tex., is giving new stud-grade 2x4's (H&H, May) a lavender stain that is also a water-repellent fungicide. Studs are pre-cut. Available in the Gulf Coast area. (Check No. 25 on p. 147)

New products continued on p. 133

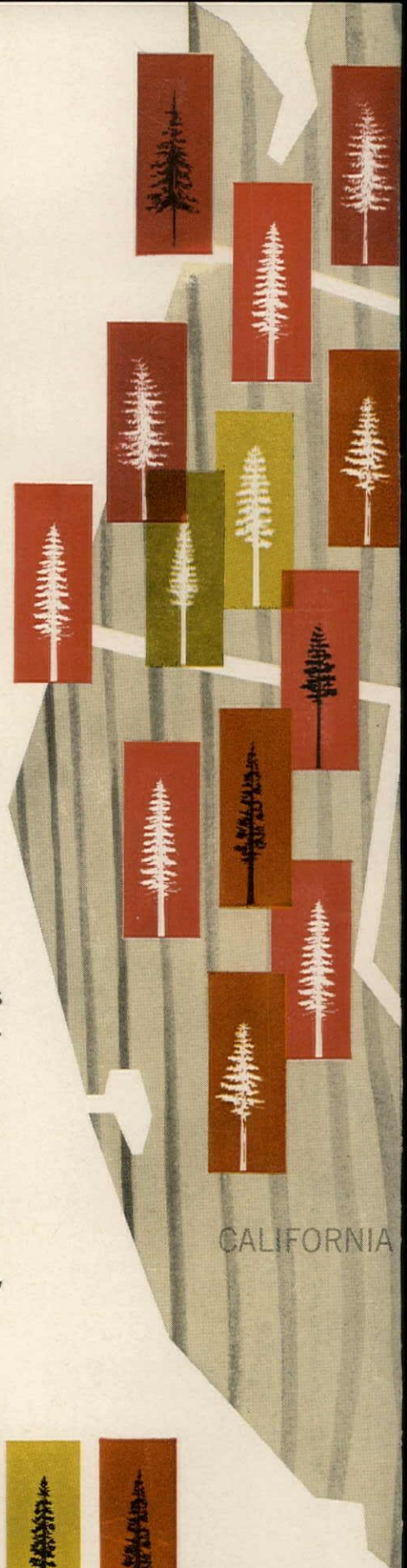
The leading mills in the entire Western
lumber producing area will soon be carrying a

NEW BRAND ON A BIG SPREAD

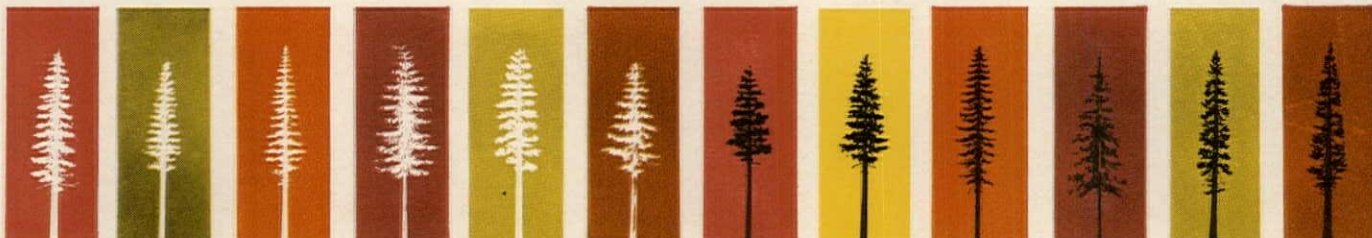
Now Western Pine Region lumber and Coast Region lumber will go to market under one "brand," under a new grade stamp: WWP, the mark of the new Western Wood Products Association.

So?

- So this is the first step in a planned program to simplify and streamline lumber buying and specifying.
- Now, under one grading agency, the broadest range of woods for every construction use—from the strongest of all construction softwoods like Douglas Fir and Larch to the most workable of all finish woods like the Western Pines... from delicate mouldings to massive beams.
- Now you have new assurance of dependability from woods made in the United States and the greatest timber producing region in the world—the American West.
- Now here are the greatest and most versatile lumber production facilities of any timber producing region, a region that represents 65% of all softwoods produced in the United States.
- So now start looking for the new WWP grade mark. It represents the biggest, most significant development in lumber marketing since the beginning of uniform lumber standards.



CALIFORNIA



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FIR

WHITE
FIR

WESTERN
LARCH

WESTERN
HEMLOCK

PONDEROSA
PINE

SUGAR
PINE

LOGEPOLE
PINE

IDAHO
WHITE PINE

ENGELMANN
SPRUCE

SITKA
SPRUCE

WESTERN
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INCENSE
CEDAR

WESTERN WOOD PRODUCTS ASSOCIATION

PORTLAND, OREGON





WASHINGTON

MONTANA

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OREGON

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UTAH

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NEW MEXICO

out of the West...
the best brand!



BONDWOOD HERRINGBONE, EAGLE (PREMIUM) RED OAK. UNITIZED IN PANELS FOR FAST INSTALLATION.

For Queens Only? Nonsense!

(BondWood® parquet is installed every day in 1200 square ft. homes)

Even in Cleopatra's day smart builders realized that luxurious floors helped sell palaces and temples . . . faster! That's why, today, the expert craftsmanship of HARRIS BondWood parquet adds up to more home for the money in the eyes of your buyers. Thick, solid hardwood all the way through,

BondWood is designed for adhesive installation over concrete or wood. And no other parquet on the market offers so many different woods and patterns. For flawless performance and dependability, specify BondWood in apartments, homes, gyms, auditoriums, classrooms and churches.

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Department HH 117
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Johnson City, Tennessee



*Par (Select) Red Oak
(Natural Finish)*

NAME _____

STREET _____

CITY _____ STATE _____

Finest in flooring since 1898

HARRIS FLOORING

JOHNSON CITY, TENNESSEE



NEW PRODUCTS

start on p. 125

Sealers and adhesives



Building sealer is an air-curing silicone rubber that can be stretched or compressed 50% without affecting the soundness of a joint. No. 780 bonds glass, metal, wood, porcelain, ceramics, plastics and concrete. Dow Corning, Midland, Mich. (For details check No. 26 on p. 147)



White adhesive for on- or below-grade use will not discolor seams in light-colored flooring or change the background color of translucent tiles. SU-360 does not stain woodwork, wipes off with a damp cloth when wet. Congoleum-Nairn, New York City.

For details check No. 27 on p. 147



Soil-pipe sealer is an air-hardening cement that is water, gasoline, grease and alcohol proof. usc Plastic Cement is applied to the bell and the rim of the spigot; then joint is filled with oakum. U.S. Chemical & Plastics, Canton, Ohio.

For details check No. 28 on p. 147



Caulking compound has a rubber base that gives it up to five times the life of oil-base caulking. Less costly than polysulfide sealers, Hornseal has permanent flexibility that insures water- and dust-tight joints. Dewey & Almy, Cambridge, Mass.

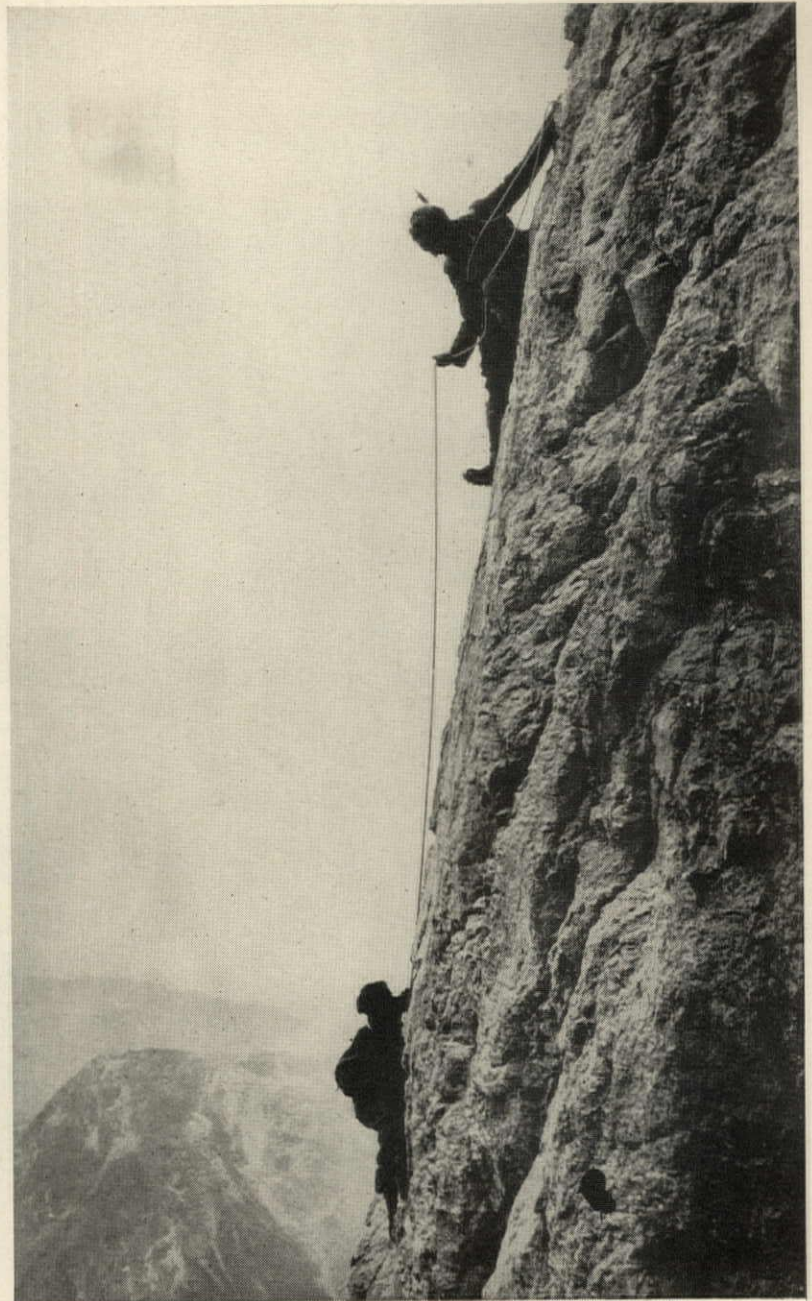
For details check No. 29 on p. 147



Blacktop sealer is traffic-ready in four hours. Park-King is a one-coat gilsonite asphalt coating that penetrates the base to bind the aggregates tightly together. Silicones give excellent water and weather resistance. Pace Prods., Kansas City.

For details check No. 30 on p. 147

Publications start on p. 145



Reaching new heights

Because alert mortgage bankers are always reaching out for new ways to finance the mortgage needs of their customers, they have turned in growing numbers to First Mortgage Investors as a single source of mortgage money.

- FMI invests in both conventional residential and FHA/VA construction loans, in land development loans, or FHA/VA mortgages originated and serviced by its mortgage correspondents. FMI also provides mortgage "warehousing" and standby commitments to its correspondents.
- FMI has already purchased over \$100 million in mortgages on one-to four-family houses and apartments dealing with over 100 local and regional mortgage bankers in 41 states.

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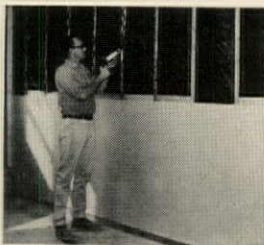
HOW ADHESIVES AND CAULKING GUNS MAKE STRONGER WALLS WITH FEWER NAILS

New Ful-O-Mite® Black Stuff grabs fast — develops a strong, solid bond — eliminates “ringing” or “thumping” in drywall construction. Makes a solid, unitized wall structure. Photos show typical construction applications.

Black Stuff Adhesive is smooth, tacky, easy to use. It goes through automatic pumping systems, pushes easily and effortlessly through hand caulking guns, and is easily trowelable. It will not sag off or run off vertical surfaces.

Black Stuff cuts down on nailing and nail hole patching, eliminates nail popping, reduces hammer marks when working with decorative paneling.

Black Stuff is available now in 1 and 5 gallon containers plus 1/10 gallon and 1/4 gallon cartridges. Check with your distributor or write directly to H. B. Fuller Company.



Stud adhesive — bonds to wood and metal.



Easy to apply by gun, pump or trowel.



Bonding polystyrene foams — does not collapse foam.



For paneling — reduces nailing.



H. B. Fuller Company

1150 Eustis Street, St. Paul, Minnesota 55108, Dept. 3668
INDUSTRIAL ADHESIVES SINCE 1887

Lumbermen plan push for home ownership

A \$3.2 million-a-year promotion campaign chiefly aimed at spurring sales of new one-family homes has just been approved by directors of the National Lumber Manufacturers Assn.

The money would come principally from 297 major companies supplying the housing industry. NLMA hopes to raise \$25,000 a year from 45 companies with sales over \$600 million, and proportionally less from smaller concerns down to \$5,000 a year from companies with sales up to \$150 million.

The campaign—called Project Home—would be timed to bolster housing's shrinking share of consumer dollars during the late 1960s and early 1970s when family formation, the basic underpinning of demand for one-family homes, should rise sharply. Promoting home improvement would be an additional goal.

"We must halt the down trend of the demand for housing and place superior housing on top of


the want list," says NLMA Executive Vice President Mortimer B. Doyle. "We must hit Mr. and Mrs. America with a shock too strong to deny."

Next step: a meeting of building-product company presidents to set up a Project Home Council of delegates from lumber, glass, metal, electric fixture, home appliance, heating and gypsum makers. NLMA directors also propose:

- A Congress of Forest Industries every five years to start industry-wide programs "to strengthen the economic futures of all industries dependent on trees as a raw material."

- Development of a "product preference seal" to give supporters of regional and national promotion programs "a recognizable preference in the market."

- A feasibility study to establish a "cooperative industry facility which could develop and provide complete modular designs for school and commercial structures."

New  names Jim Turnbull—temporarily

Few weddings ever played host to more kissing cousins than the recent merger of Western Pine Assn. and West Coast Lumbermen's Assn. (effective Aug. 1) into Western Wood Products Assn. (new trademark above).

For example: on loan as chief administrator of the WWPA—for 90 days beginning May 18—is James R. Turnbull (photo, center), executive vice president of American Plywood Assn. (new name for Douglas Fir Plywood Assn.) which is not a member of WWPA.

(Turnbull, the man of action who cut APA's dues 45% last year without cutting services, is primarily charged with setting up a new executive staff for WWPA.)

While on loan, he reports to John S. Richards (photo, right), former president of WPA and now president of WWPA.



The man who gave Turnbull his leave of absence is Jackson Beaman (photo, left), president of APA. The new WWPA is a giant: its members produce about two-thirds of all U.S. softwood.

Men and jobs

ASSOCIATIONS: Robert H. Combs has been named director of sales and promotion for the American Gas Assn./ Norman Bienenfeld, general manager of The Alumiline Corp., has been elected president of the National Association of Architectural Metal Manufacturers.

MANUFACTURERS: J. Herbert Scott has been appointed director of advertising and public relations by Skil Corp./ Eugene V. Allen is the marketing manager of Black & Decker's newly consolidated consumer

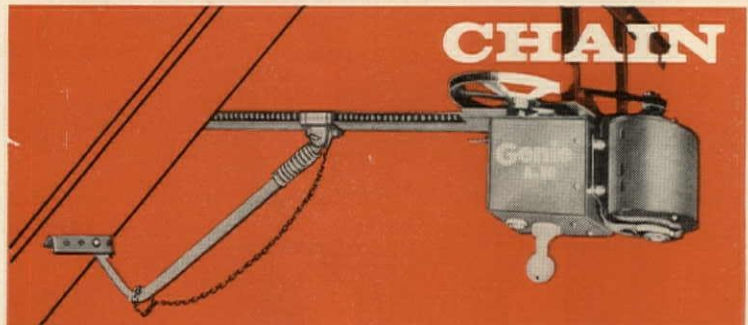
products division./ Davenport Cleveland has been named to the new position of manager, Greater New York contract hardware sales for the Yale Lock and Hardware Division of Yale & Towne./ Joseph E. Lindsay has been appointed manager of heating services for Crane Co.'s Plumbing, Heating, Air-Conditioning Group. Robert Kitchen was named winner of General Electric's national kitchen design competition; his award was \$2,500 plus the Kitchen Concept First Place Trophy.

New products start p. 125

**ALLIANCE
GENIE®**

**offers the only
complete line of
garage door drives**

**for custom-commercial-
tract-industrial builders**



Now you can order all three types of automatic garage door operators for your various building projects from one source — Alliance. And your profit is greater, too, when you include a Genie.

The building has more convenience appeal — your customers appreciate this extra quality equipment. Alliance Genie, with national distribution, has factory service available everywhere. See your dealer, or contact Alliance today for the Genie programs best suited to your building needs.

**GENIE keeps you in the
driver's seat!**



The Alliance Manufacturing Co., Inc.

Alliance, Ohio



(Subsidiary of Consolidated Electronics Industries Corp.)

One of the world's largest producers of Sub-Fractional H. P. Motors.
Manufacturer of the famous Alliance Tenna-Rotor and
Genie Remote Control Garage Door Operator



Close with a touch of elegance . . . and economy!



FREEDOM STAINLESS STEEL WINDOWS

Smoothest way we know to wind up a sales talk—successfully! FREEDOM Stainless Steel Windows!

Your buyer can see their slim, clean beauty—then tell him (or her—the ladies like FREEDOM Windows, too) that they'll stay that way. No corroding, pitting, or dulling, and they'll *never* need painting.

Then point out the extra strength of stainless steel. Strength that means windows that will never stick, twist, or distort.

People know about condensation with ordinary metal windows—and here you have another strong point. Stainless steel conducts heat or cold ten times slower than aluminum. And to further control condensation, heat loss, and cold transmission. FREEDOM Windows are made with tubular frames, using dead air space for insulation.

Finally, the clincher. FREEDOM Windows only *look* expensive. Actually, they're the most economical windows anyone can use, anywhere, *because they'll never need maintenance.*

Watch your prospects' faces, and have your pen ready while you're telling the FREEDOM Window story.



MANUFACTURING DIVISION
REPUBLIC STEEL CORPORATION

Youngstown, Ohio 44505

THE MAN FROM
MANUFACTURING



MANUFACTURING DIVISION
Republic Steel Corporation
Dept. HO-7407, Youngstown, Ohio 44505

Please send literature on FREEDOM Stainless Steel Windows.

Name _____ Title _____

Company _____

Address _____

City _____ State _____ Zip _____



What do you think your buyers will say when you tell them that your house's siding has a permanent finish (won't need painting) and won't dent, fade, chip, blister, discolor, scratch, crack, corrode, burn, rust, rot or entertain insects or vermin?



"We're Sold!"

That's the beauty of Monsanto Vinyl Siding!

No other siding can say as much, or do as much, to impress prospective buyers.

You will be impressed by the special design feature of this vinyl siding that makes it very easy to install with regular tools. No need to paint, so it's finished the moment it's up. And the price is right,

compared to quality woods or metal.

Remember: when home buyers ask about maintenance, tell 'em there's none whatsoever. This siding is solid vinyl—not a laminate. The color is built in—won't chip, peel or wear off. Stands up to all extremes of weather and corrosive at-

mospheres. It's as easy to clean as vinyl upholstery. What's more, this vinyl won't dent like metal—resists hailstone damage. Doesn't need grounding, either.

One more thing—the smart, clean look of it compliments any house style. Want to know more? Send coupon.



MONSANTO, Building Products, Dept. 804WG
800 N. Lindbergh Avenue
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Gentlemen: Please send complete information on Vinyl Siding . . . also free installation manual.

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New York
World's Fair!

DRESS UP THE GARAGE AND YOU SPEED UP THE SALE!

The garage can help sell your home—with all the customer appeal of a modern kitchen or family room. Doesn't take much money, either.

A peg board for tools above a work cabinet . . . a tiled or painted floor, easy to keep clean, for the children's play hours . . . hinged shelves or tables that fold against the wall—these are just a few of many economical ways to "Dress Up the Garage and Speed Up the Sale."

Starting with an "OVERHEAD DOOR" is the greatest idea of all, of course. And by adding a second at side or back, you provide movable walls that turn your garage into a light and airy "Convertible Breezeway," with part-time living potential that increases valuation far more than it costs.

A little extra "dress" in the garage space will give *your* homes a competitive sales edge.



Your "OVERHEAD DOOR" distributor, listed under "OVERHEAD DOOR" in the white pages, will be glad to offer many ideas and suggestions. Call on him, or write Overhead Door Corporation, Hartford City, Indiana.

SEND FOR FREE BROCHURE AND IDEA BOOK, loaded with dozens of ideas and plans to help you "Dress Up the Garage and Speed Up the Sale."



The original upward-acting sectional door, made only by
OVERHEAD DOOR CORPORATION

General Office and Manufacturing Division: Hartford City, Indiana
 Manufacturing Distributors: Dallas, Tex.; Portland, Ore.; Cortland, N.Y.; Oxnard, Calif.; Hillside, N.J.; Lewistown, Pa.; Nashua, N.H. • In Canada: Oakville, Ontario



NEW GARAGE SCREEN HELPS SELL HOMES!

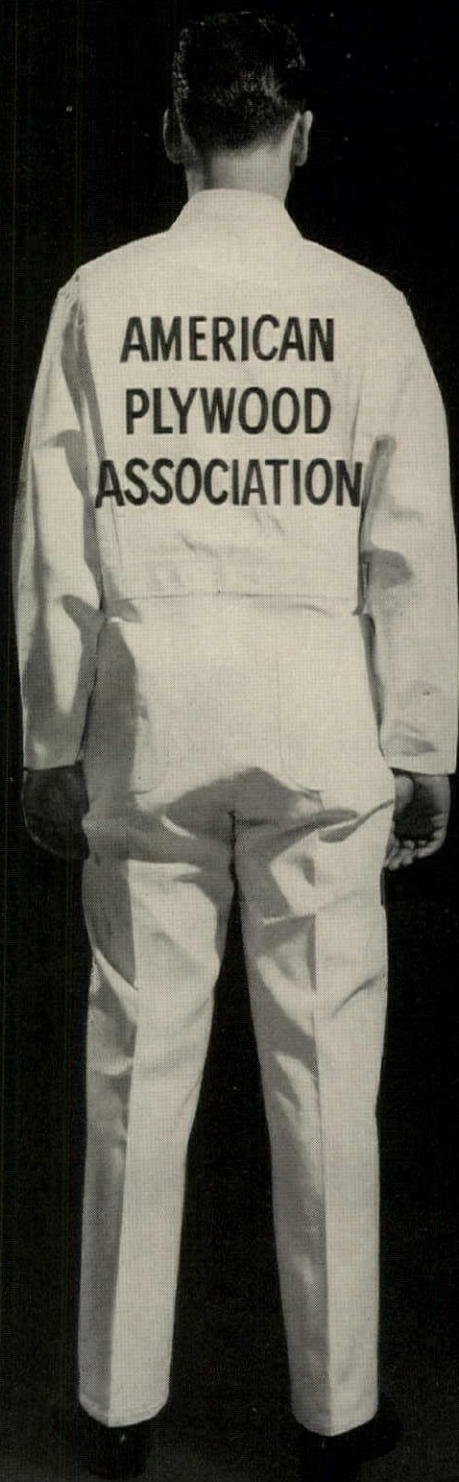
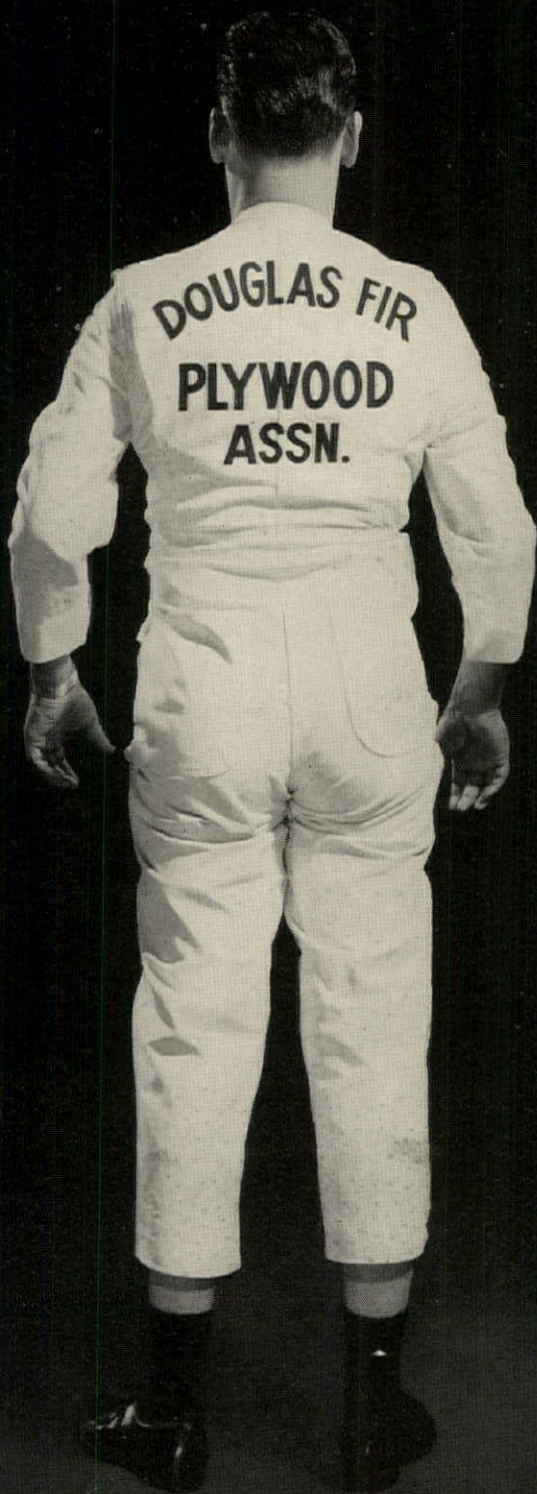
A brand-new idea from "OVERHEAD DOOR." Lets garage space double as living space — with privacy, a world of ventilation, and no insects. Attractive screen rolls up into self-storing hood. Warranted to be durable.



EXTRA LIVING SPACE FOR GREATER SALES APPEAL! A few pieces of casual furniture . . . a game design painted on the floor . . . an "OVERHEAD DOOR" at front and back—ideas like these can convert your model home garage into a breezeway-recreation area that modern homemakers can't resist!



AUTOMATIC OPERATOR FOR AUTOMATIC SALES! Opens The "OVERHEAD DOOR" from inside the car at the touch of a button. Puts a clincher on the extra value of your home and garage. Women like — and want — this big, modern feature. Another important selling advantage is an 18-foot door that allows plenty of in-between space for two cars.



Douglas Fir Plywood Association has outgrown its name

The industry we represent has undergone some big changes in recent years. Our old name no longer fits.

Instead of making plywood only from Douglas fir—and only on the West Coast—the industry now makes a wide range of products from some 20 different species of

wood—and in plants in many parts of the country.

The new name reflects our members' growth and progress.

Even though the name is new, you can still specify DFPA plywood. These familiar letters still stand for quality in plywood certified by the

association and you'll continue to see them in our grade trademarks. Instead of Douglas Fir Plywood Association, though, they now stand for Division For Product Approval.

And we're still headquarters for all kinds of plywood information. Write us at Tacoma, Wash. 98401.

AMERICAN PLYWOOD ASSOCIATION

The new name for Douglas Fir Plywood Association.
Quality-tested by the Division For Product Approval.





short-sited family

They need a real estate agent. So they'll be looking in the Yellow Pages. The chances are 9 in 10 they'll then take action. Will they see your ad?

This over-stuffed clan needs housing so they'll be joining the 7.4 million people who turn to the housing or real estate headings of the Yellow Pages every year. (That's 29% of the entire market!)

When they do look in the Yellow Pages, chances are 9 in 10 they'll either call, write, or visit. (Every 100 references to the housing or

real estate headings of the Yellow Pages bring 91 calls, letters, or visits!)

That's action! With Yellow Pages ads you can expect that kind of action . . . a recent extensive national usage study—consisting of over 19,000 interviews—proved it.

Call your Yellow Pages man. He'll show you what the study

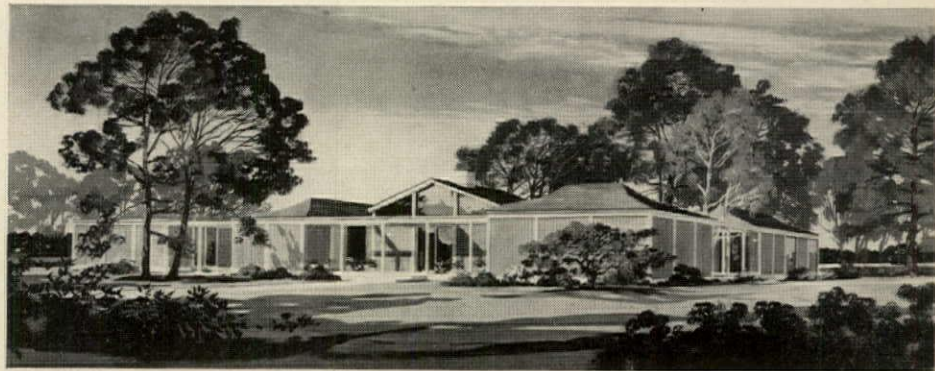
learned about your business. And he'll be glad to help you plan your own Yellow Pages program. You'll find him in the Yellow Pages under "Advertising—Directory & Guide."

Advertise for action...



LENNOX

HGT
HOUSE OF GOOD TASTE
NEW YORK WORLD'S FAIR



NATURE'S FRESHNESS...

Blooms in the New York World's Fair House of Good Taste

LANDMARK® by LENNOX.

Air conditioning fresh as
springtime—year 'round.

Nature's Freshness. Clean,
crisp, gently moving, cool or
warm, dry or moisturized.

Selected for the freshest
concept in home design: The
Contemporary House, by Jack
Pickens Coble.

8,000,000 World's Fair visi-
tors will see the LANDMARK by
LENNOX.

How about visitors to your
display homes? Does your air
conditioning and heating equip-
ment help you sell?

LENNOX does! It is the first
name in comfort.

Write for information on
LENNOX air conditioning and
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LENNOX

AIR CONDITIONING • HEATING



CLIP FOR YOUR BUILDER'S IDEA FILE

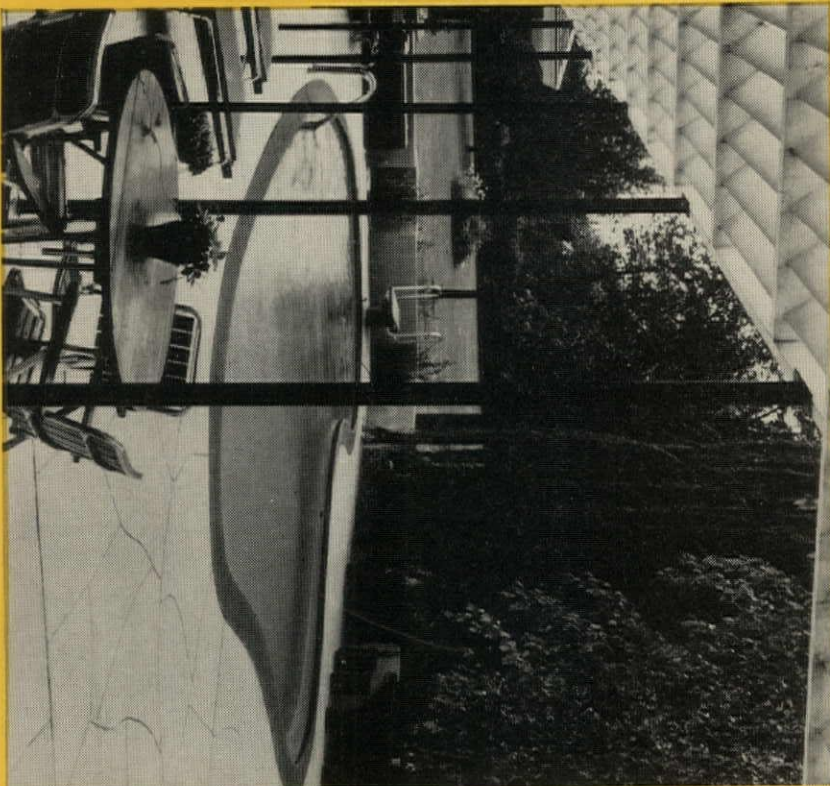
MODERN CONCRETE SWIMMING POOLS

Nothing else can match the dramatic sales appeal of a well-designed concrete pool

Residential pools are rapidly becoming the popular "plus" feature that sells more homes! Modest to luxurious, there's a concrete pool to suit every home style, almost every price range. ■ And the versatility of concrete, today, provides not only beauty in a pool, but exceptional efficiency. Gun-sprayed . . . precast . . . cast in place . . . or built of concrete masonry, there is a concrete pool construction method that fits readily into any building program—large-scale or small. Write for free literature on swimming pools. (U.S. and Canada only.)

Extra personality for a free-form pool. A pool is only as impressive as its setting. Equally important as the pool itself is this deck-patio design with its tooled concrete surface.

New interest with exposed aggregate decks. The severe lines of this formal pool are relieved by the texture and color of the surrounding concrete, treated to expose the special aggregate used.



VERSATILE CONCRETE... THE ONE MATERIAL THAT DOES IT ALL

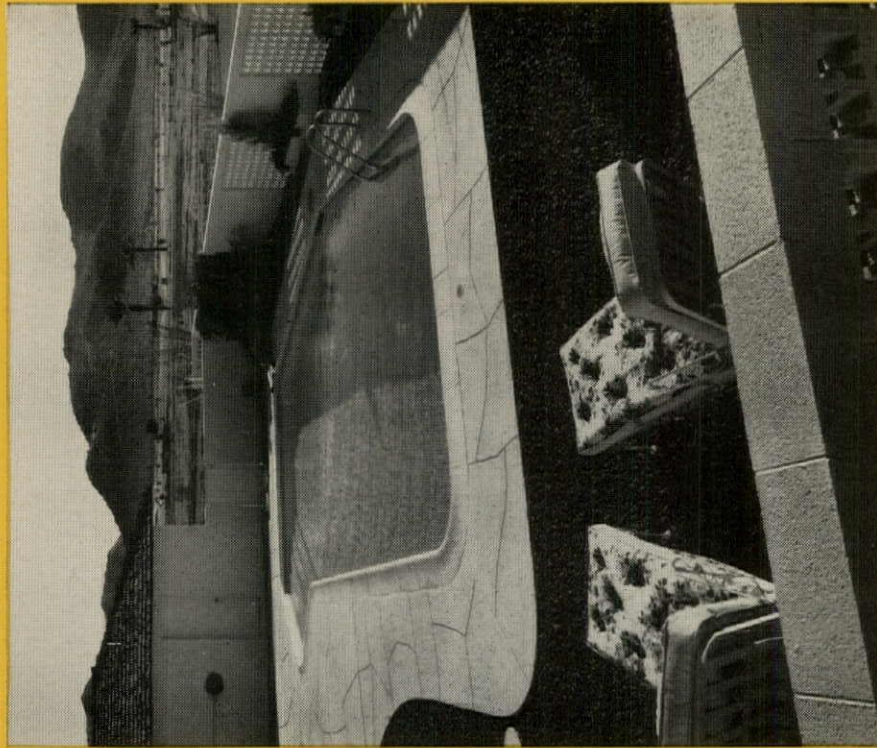
TURN
PAGE
FOR
MORE
IDEAS

MODERN CONCRETE SWIMMING POOLS



Added style for unusual settings. Concrete can be shaped, colored, textured to create unlimited special effects. In any location, concrete provides high strength, assures durability and low upkeep.

Combine outdoor living features for added charm. A handsome pool becomes even more attractive when complemented with concrete sight screens, stepping stones, attractive planters and borders.



VERSATILE CONCRETE . . . THE ONE MATERIAL THAT DOES IT ALL

THE BASIC HOUSE

Walls
Roofs
Floors
Basements
Fireplaces

LANDSCAPE PAVING

Driveways
Patios
Walks

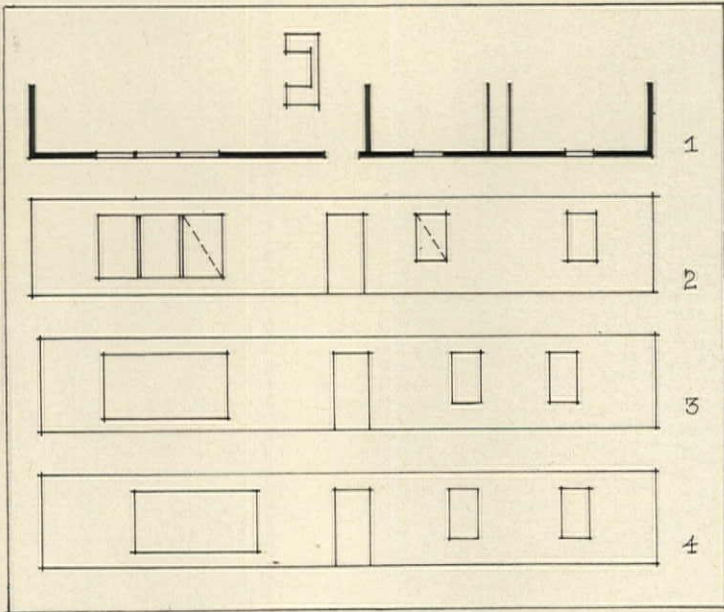
OUTDOOR LIVING

Pools
Sight screens
Planters
Sculpture
Barbecues

PORTLAND CEMENT ASSOCIATION

Dept. 7-94, 33 W. Grand Ave., Chicago, Illinois 60610

An organization to improve and extend the uses of concrete



Good design for merchant-built houses

Housing Design for Production is an unusual booklet: a treatise on architectural principles written for builders. In 36 well-illustrated pages, Architect Leonard G. Haeger explains the principles of good design, notably as they apply to the size, shape and placing of windows (drawings above).

Good fenestration, says Haeger, begins with the floor plan (Fig. 1), and the first step is to lay out windows in the center of each room. These window positions, plus door positions, are then transferred to an elevation drawing (Fig. 2).

The second step is to determine window sizes. To begin with, all window heads are aligned with the door head. Then a size is selected for the basic living-room unit—in the case above, 3' 4" x 5' 6".

Step three is to select the size of bedroom windows. In the drawings above, the bedroom window height chosen is 4' 2", which gives a 30" sill height.

Step four, to determine the width of the bedroom windows, is based on maintaining the same diagonal angle (dotted lines) as in the basic living-room unit. This

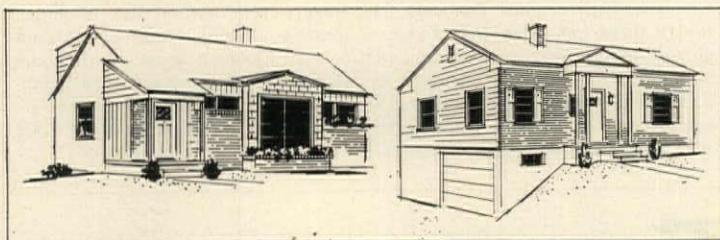
is figured as a simple proportion, which, on the plan above, works out to 2' 6". Since there is no such standard width, the nearest one—2' 4"—is selected.

The position of windows in the walls, says Haeger, should stem from furniture placement in the rooms as well as from aesthetic balance. In Fig. 3 the two bedroom windows have been moved closer together, leaving more clear wall space in the rooms and creating a more attractive facade.

In the final design (Fig. 4) the living-room unit is moved inward to provide more inside wall area, and the two bedroom windows are moved apart slightly to offset this change.

Roofs and chimneys are also covered in the booklet. "The simplest and most satisfying roof results from a rectangular plan," says Haeger. And, he adds, chimneys should be large and high. There is a section on the most common design mistakes that occur in merchant-built houses (samples below), plus photos of ten well-designed houses.

Price of the booklet is \$1.50. Write to: Raymon Harrell, LuReCo, Ring Bldg., 1200 18th St. N.W., Washington 16, D.C.



DESIGN MISTAKES shown in the booklet include mixed window sizes and chopped-up roof lines (left), and an out-of-scale porch, undersized chimney and unattractive siting plan (right).

Publications continued on p. 147



**A CONVERSATION PIECE
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ALUMINUM PRODUCTS. Sliding windows, 4 pages; motorized horizontal rolling windows, 4 pages; single-hung windows, 4 pages; sliding glass doors, 2 pages. Specifications, size charts and detail drawings. Ida Prods, Detroit. (Check No. P1)

SCULPTURAL LIGHTING. 2 pages. Cast-stone fixtures in contemporary shapes with lights inside. Designed for commercial lobbies, motels and offices. Sculptural Lighting Inc., Riverdale, N.Y. (Check No. P2).

IN-A-DOOR BEDS. 8 pages. Recess beds, sidebeds, pivot beds and roller beds. Planning suggestions are given. The Murphey Door Bed Co., Inc. (Check No. P3)

GAS FURNACE. 4 pages. Sealed system has direct through-the-wall vent, handles two tons of air

conditioning, is rated 55,000 BTU. Peerless Heating & Air Conditioning, Indianapolis, Ind. (Check No. P4)

BUILDER'S NAME PLATES. 2 pages. Price list, sizes, order blank. Plates sell from \$4.85 to \$10.75. Gensi Craftsmen, St. Louis, Mo. (Check No. P5)

PIPELAYING MACHINE. 12 pages. Model 411 AD has built-in shoring case to provide cave-in safety and insure accurate grade location for sewers and drains. Buckeye, Gar Wood Industries, Findlay, Ohio. (Check No. P6)

SLIDE-IN GAS RANGE. 2 pages. Data sheet with cabinet and counter cut-out dimensions. Waste King, Los Angeles. (Check No. P7)

AIR CONDITIONING. 5 pages. Split-system units from 19,000 to 177,000 BTU per hour. American Furnace Co., St. Louis, Mo. (Check No. P8)

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STAPLERS FOR HOMEBUILDERS. 2 pages. Pneumatic, electric and hand operated models. Handy chart lists what fasteners to use with different building materials. Fastener Corp., Franklin Park, Ill. (Check No. P14)

SINGLE-HANDLE FAUCETS. 4 pages. Thirty-five models for kitchens, lavatories and shower-bath tubs. Nile Faucet, Royal Oak, Mich. (Check No. P15)

OUTDOOR ROOMS. A variety of folders on patio and pool enclosures made of transparent flexible plastic and aluminum frames. Guaranteed Weather Inc., Bradenton, Fla. (Check No. P16 below)

DOUGLAS FIR ROOF DECKING. 4 pages. Features and sizes. Hemphill-O'Neill Lumber Co., Chehalis, Wash. (Check No. P17)

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Technical literature

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CONCRETE MASONRY WALL REINFORCING. 4 pages. Test results on concrete block walls with and without welded wire reinforcing. Applications and specifications. Lenawee Peerless Inc., Adrian, Mich. (Check No. P24)

STEEL ROOF DECK. 16 pages. Properties, load tables, construction details and specifications. R. C. Mahon Co., Detroit. (Check No. 25)

For more information circle the numbers below (they are keyed to the items described on the New Products and Publications pages) and send the coupon to: HOUSE & HOME, Room 601, McGraw-Hill Inc., 330 West 42 Street, New York 36.

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- 3. Leigh light-diffusing panels
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- 6. U.S. Plywood persimmon plywood
- 7. Forest Fiber primed siding
- 8. National Starch laminated siding
- 9. National Gypsum fireproof siding
- 10. Glidden translucent doors
- 11. Evans knotty cedar siding
- 12. Alcoa architectural screening
- 13. Shaker Town shake panels
- 14. Rock Island turn-around windows
- 15. Guaranteed Weather porch-enclosure
- 16. Travel Equipment mobile office
- 17. Republic-Transcon gas water heater
- 18. Snyder plastic chandelier
- 19. Manor House cupola
- 20. Andy Place vanities
- 21. Fradol ornamental molding
- 22. Celotex gypsum wallboard
- 23. Crane carpet cutter
- 24. Weyerhaeuser framing lumber
- 25. Temple precut studs
- 26. Dow Corning building sealer
- 27. Congoleum-Nairn white adhesive
- 28. U.S. Chemical & Plastics soil-pipe sealer
- 29. Dewey & Almy caulking compound
- 30. Pace blacktop sealer

Publications

- P1. Ida aluminum products
- P2. Sculptural Lighting stone fixtures
- P3. Murphey in-a-door beds
- P4. Peerless gas furnace
- P5. Gensi builder's name plates
- P6. Buckeye pipelaying machine
- P7. Waste King slide-in gas range
- P8. American Furnace air conditioning
- P9. Hastings aluminum gutters
- P10. Mercer Vinyl step nosing
- P11. Long Bell kitchen cabinets
- P12. Logan ornamental iron
- P13. Stanthony warming oven-hood
- P14. Fastener staplers for homebuilders
- P15. Nile Faucet single-handle faucets
- P16. Guaranteed Weather outdoor rooms
- P17. Hemphill-O'Neill roof decking
- P18. Borg Warner plumbing fixtures
- P19. Peerless kitchen cabinets
- P20. Northrop sliding-glass doors
- P21. National Gypsum parting system
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If the kitchen "sells" homes and apartments (you know how often it *does!*), the new Caloric 75 is loaded with lots of 'good sense' features to pull home sales for builders that other double-oven ranges *can't!* Count 'em—

Bigger, better, faster Ultra Ray broiler burner.* Caloric brings infra-red broiling to peak performance, with an exclusive design burner that focuses intense rays over a much larger area. Reaches broiling heat in seconds—no warm-up, no waiting. Cuts broiling time 30%. Seals in meat juices, gives delicious outdoor broil flavor.

80% larger broiling pan. Ends "staggered" broiling. Takes 4 half chickens, four 1½ pound steaks, 20 lamb chops, 25 hamburgers. And Caloric's new broiler "aims" infra-red cooking rays over every inch . . . outer edges of meats cook as perfectly as in center of pan.

Broiler located at ideal height. It's waist-high, where housewife can easily tend meats, turn them, watch cooking through *Observer*® window. No reaching tiptoe to an upper broiler and risking hot grease spatters on hands, face.



No stooping to a floor-level broiler. Broiling becomes as handy as top-of-range cooking.

Broil and bake in same giant oven compartment. Broiler doesn't "steal" space from baking area. Here's a full 25-inch width, 20-inch depth that can take big roasts, feast-size turkeys, biggest casseroles. Ideal oven for all big baking.

Upper oven equally ideal for "smaller" dishes. Perfect for pies, cakes, pastries . . . for frozen foods, portion-pack delicacies. Quick heat-ups or regular baking. It takes roast and poultry, too. Housewife can cook in *two different* ovens at *two different* temperatures—at the same time! And controls are on one side, stay cool-to-the-hand.

Both ovens have Cook and Keep Warm systems. Homemaker can use either oven for automatic cooking exactly to her taste, for keeping food wonderfully dinner-ready for hours without over-cooking.

And that only *begins* to list the 'good sense' features to delight *prospects*, sell more homes for builders.

At last! First double-decker gas range that makes 'good sense' for more home and apartment sales!



Installs easy, too. No problem, no extra cost for you. The Caloric 75 slips right in—has height and width clearances that permit it to fit with conventional cabinetry.

We do big pre-selling job for you! Do it with full page, full color ads in Sunday Supplements reaching 40 key markets—including your immediate area. These ads make sure that people by the millions will know all about the new Caloric 75—and *want* it—*before*—they visit your homes. Ad copy and vivid illustrations highlight all the range's advances and advantages . . . show and explain the 'good sense' features that make this double-oven range so unique, so much more up-to-date, efficient, and convenient. Readers will be pre-sold on it from the inside out! So will millions of TV viewers, coast-to-coast—by compelling commercials on the popular, high-rated Ozzie and Harriet show.

Clinch new home and apartment sales in your kitchens with the new Caloric 75! *Guaranteed for life of range. USA Patent 3,122,197



NEW *Caloric* **75**
CALORIC CORPORATION, Tipton, Pa.

Portrait of a successful builder

Don Geary has been with National since 1949. His sales have risen steadily since that first year, so much so that his firm now operates in two Southern Illinois cities—Centralia and Carbondale. Mr. Geary has never built anything but National Homes.



“National’s complete builder services insure my profit”

—Donald G. Geary, Geary-Boyll, Inc., Centralia, Illinois

Don says, “I like National’s way of building. I don’t like to deal with a lot of different sources.” National’s complete builder’s services have been important to Don’s success. He says, “It’s the over-all operation that’s important to National. You get a good product delivered, you know your costs, you make a profit.”

Want to share the kind of success that Don Geary has enjoyed for fifteen years? Then get full details of National’s complete building services. The best way is to visit our nearest plant. Wire us today and we’ll arrange your visit immediately.



National Homes Corporation

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Tyler, Texas

Horseheads, New York