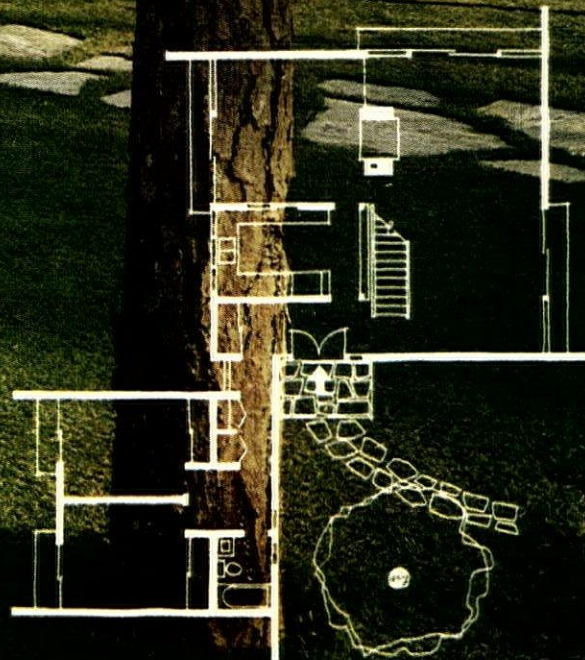
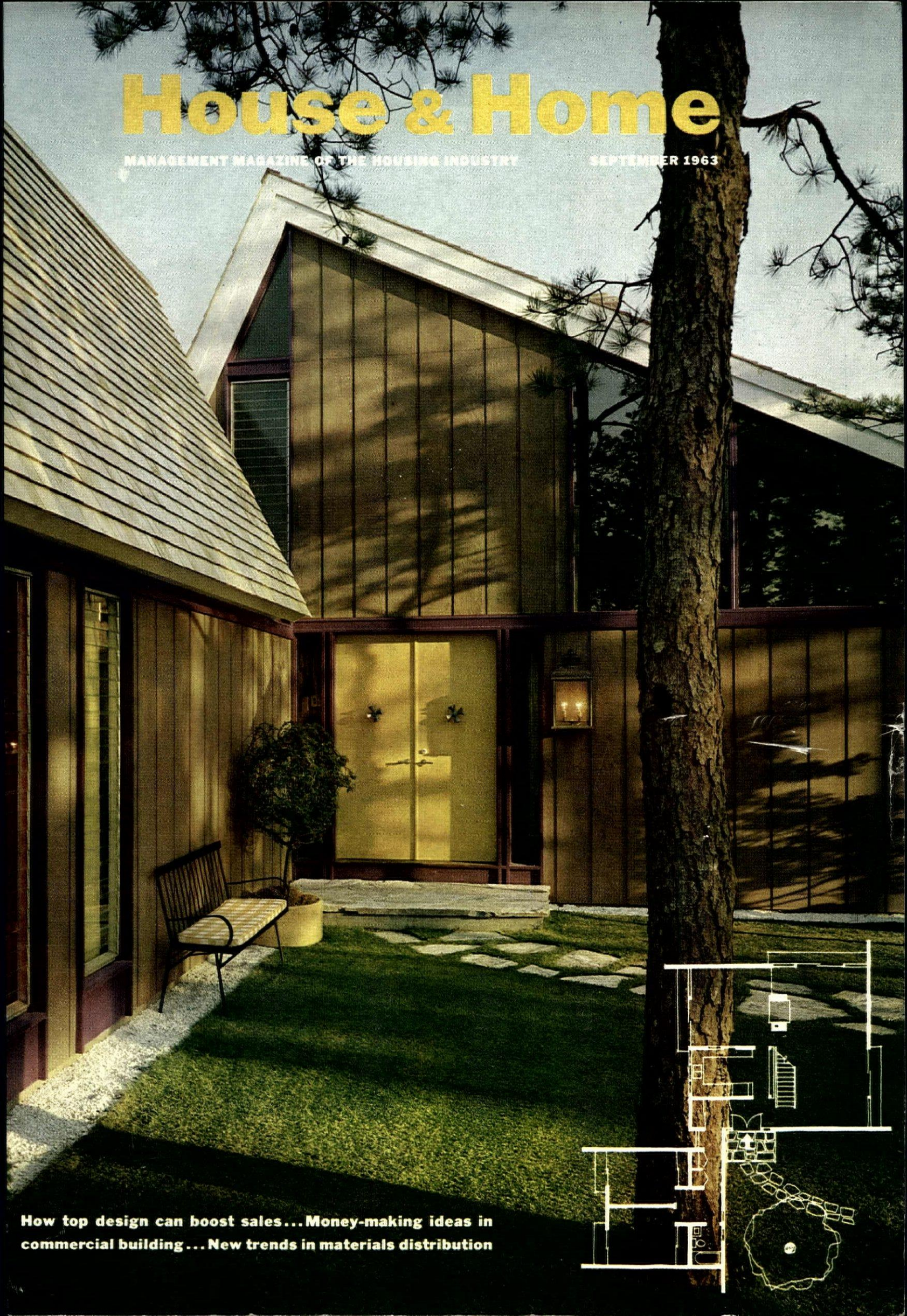


House & Home

MANAGEMENT MAGAZINE OF THE HOUSING INDUSTRY

SEPTEMBER 1963



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NEXT MONTH

Today's best built-for-sale houses—and what makes them sell



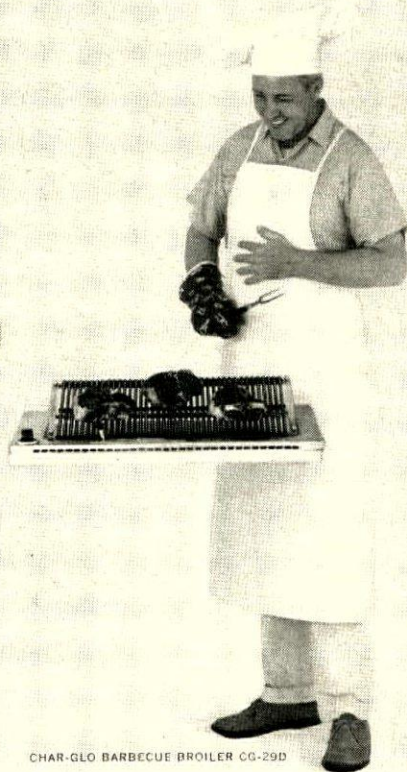
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More new giants emerge in housing—with growing pains

The giant new companies which are capturing an increasing share of housing (H&H, Jan.) are getting bigger—with an unmistakable quickening of the pace.

In mortgage banking, two of the nation's largest companies, Wallace Investments and Citizens Mortgage, have just bought out some smaller brothers (*see p. 39*).

In home manufacturing there is a continuing concentration of ownership (*see p. 40*)—with a discordant note.

In materials' producing, Gulf American Land is trying to follow the same route shell maker Jim Walter took a year ago by buying Celotex Co. Gulf American has bought 46% of Fenestra Inc., architectural materials producer—but is being met by a bristling court fight (*p. 40*).

Other storm clouds are gathering for materials' giants. In Congress, a House committee has set public hearings on reports some producers are directly competing with their customers by selling through their own wholesale and retail outlets. Targets: appliances, plumbing, aluminum storm windows (*see p. 14 and 118*).

NAHB considers major changes to reflect apartment boom

The aim is to revamp the staff organization, membership status, and eligibility requirements of the builder trade group (which is now heavily oriented toward one-family house builders) into a broader organization embracing the fast-growing number of builders doing apartment and light commercial construction. (Rental housing has soared from 19% of private nonfarm starts four years ago to 32.5% last year, and is still moving up: 37% for the first half of this year. NAHB economists predict rental housing will account for one half of what the U.S. builds in the next decade.)

Many of NAHB's 381 local associations have few apartment-builder members, even in boom cities like Chicago (where nearly half a dozen builder organizations remain unaffiliated with NAHB) and Houston (where apartment builders got former HBA Executive Vice President Gordon Nielsen to head a separate apartment group after Nielsen quit his NAHB local post in a row with its directors).

To enroll and keep apartment builders, say veteran NAHB local executives, builder locals must undertake at least two services most do not now perform: 1) develop accurate, detailed and highly localized market data on rental housing, and 2) put on clinics and seminars where builders and other experts can educate each other on such fine points as where to put electric meters, where and how to find mortgage money.

FHA volume sinks; private mortgage insurers gain

Private mortgage insurers are beginning to give FHA serious competition in a few states. And their business volume is soaring dramatically while FHA, hamstrung by red tape and now clouded with uncertainties over racial integration (*see page 17*), is getting a smaller and smaller share of the nation's housing.

Mortgage Guaranty Insurance Corp., Milwaukee-based stock company that went into competition with FHA in 1957, now insures more mortgages on one- to four-family residences in Wisconsin than FHA does under Sec 203. For half of what FHA charges, it insures the top 20% of conventional loans up to 90%. MGIC's volume is more than 70% of FHA's in Kansas, is over 40% of FHA's in seven other states: Hawaii, Iowa, Illinois, Kentucky, North Dakota, South Carolina, and West Virginia. In Indiana, Pennsylvania and Nebraska, MGIC's insured loan volume has reached 24% of FHA's. In all, MGIC insurance written last year was about 15% that of FHA in the 42 states (plus the District of Columbia) where MGIC operates.

This year through June FHA applications on new and existing homes have dropped 15% to 105,177 (MGIC does not insure multi-family apartments so FHA rental applications are here omitted). FHA's share of private non-farm housing starts is sinking even faster. In the first half of this year, FHA accounted for only 13.7% of the total, FHA and VA together for only 18%.

Among private mortgage insurers, MGIC does about 90% of the business. It has three smaller competitors whose business is growing fast also. One of them, Continental Mortgage Insurance Inc. of Madison, Wis., has just voted to increase its capitalization by \$1,700,000 to let it meet the minimum capital requirements of all states where it seeks to do business.

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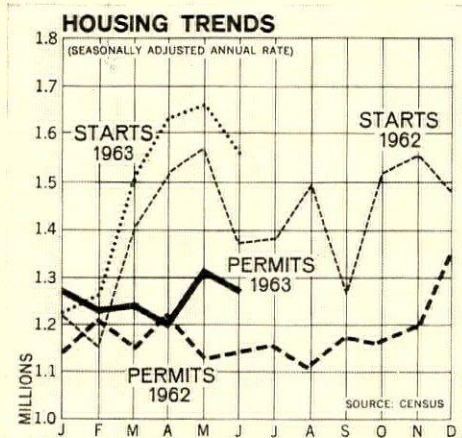
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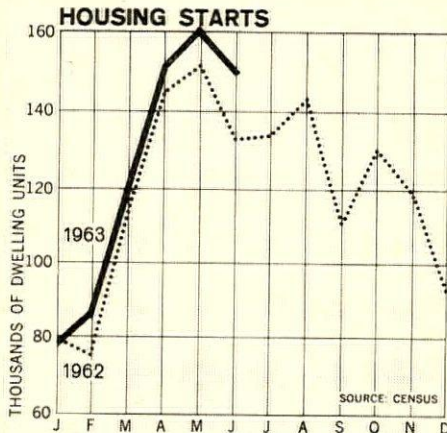
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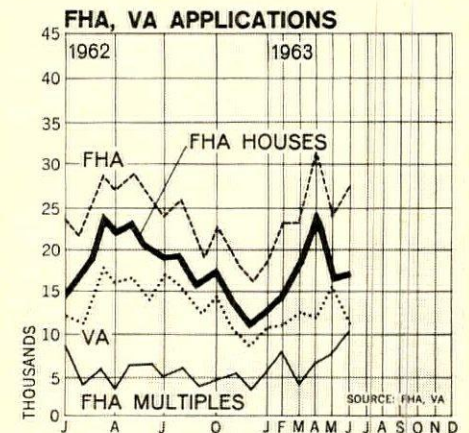
Housing climbs to near-record year—and the figures show it



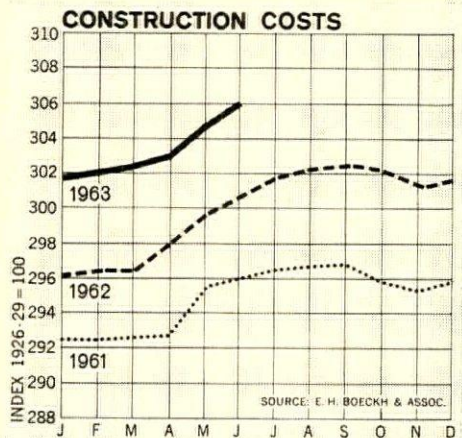
Private non-farm housing starts showed their biggest rise this year in May, when they reached a seasonally adjusted annual rate of 1,663,000. June dipped to 1,568,000. The seasonally adjusted rate for building permits registered a similar pattern, but a slight slump in June is still 13% ahead of June 1962.



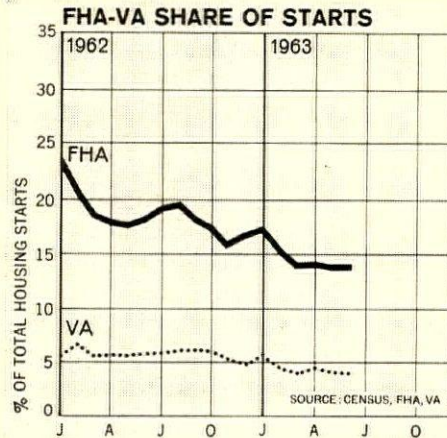
In 1963's second quarter, private builders started 466,700 non-farm dwelling units, 8.2% more than in the same period last year. May set a record with 162,000 private non-farm starts. Only the Northeast failed to take part in the over-all increase through June. The multi-family share of starts shrank from 42% to 34%.



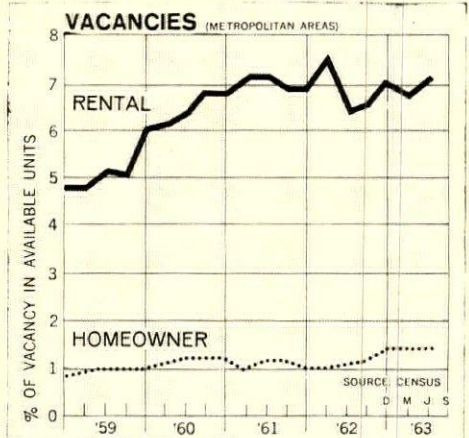
FHA applications for the second quarter are 1.4% ahead of last year—but only because multi-family applications soared 64% to 25,838 units. One-family house applications are off 11.4% to 58,573, and VA houses down 19%. April applications spurted as builders sought to beat a fee increase, while May slumped.



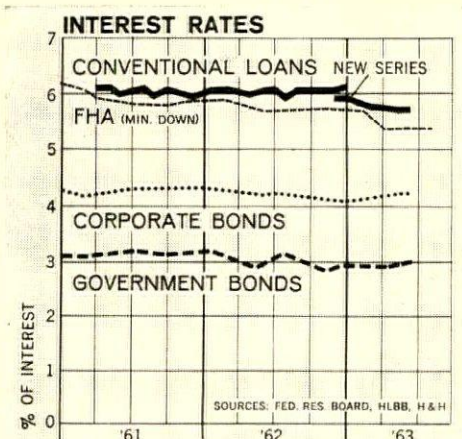
Rising prices on lumber and clay products, along with higher wages, lifted the Boeckh residential building cost index 1.2% to 306 in the second quarter. Col. E.H. Boeckh says a slight reduction in the price of building aluminum may offset labor costs, up 2.3% to \$4.09 for seven crafts. It is first time Labor Dept. average topped \$4.



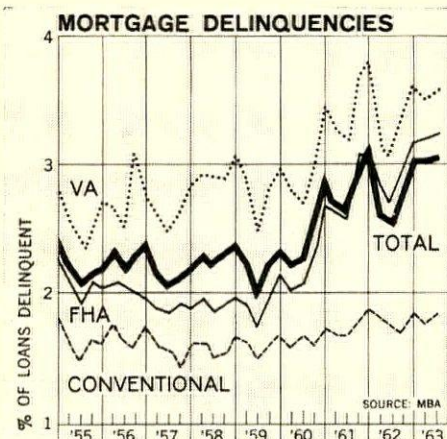
FHA's share of housing starts has dipped close to an all-time low. It hit 13.7% in May and June. Last year FHA accounted for 18.2% of new U.S. housing. VA's share, although not declining as sharply, is 10% behind a year ago. Likely reasons: agency red tape and the executive order banning race bias last year.



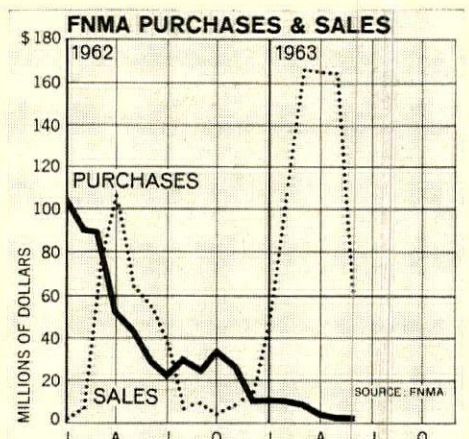
Rental vacancies in metropolitan areas rose a little in the second quarter—from 6.8% to 7.2% of available units. Homeowner vacancies held at 1.4%, but were heaviest in the West at 1.8%. Rental vacancies were highest in the West at 10.9%; the South trailed at 8.3%, North Central was next at 8.0% and the Northeast cut to 4.1%.



Rates on conventional loans have slipped from a March high of 5.86% to 5.82% for May and June. This second quarter reading shows corporate bond interest creeping up from a March reading of 4.19% to June's 4.22%. Yield on FHA minimum-down loans is between 5.43% to 5.52% before servicing—up from 5.47%.



Second quarter ratios of loans more than 30 days behind in payment increased a little over the first quarter. On 3,041,801 total mortgage loans, the overall ratio is up 0.06% for the quarter to 3.09%, VA shows a 0.06% rise to 3.51%; FHA a 0.05% increase to 3.26%. North-eastern states have the highest delinquency.



FNMA's secondary market purchasing fell in May, continuing a downtrend. But sales edged up still farther to \$165.2 million, just below 1958's June record. Authorizations slumped to \$3.8 million; purchases to \$5.3 million. FNMA sales plummeted in June to \$61.3 million; and purchases hit an eight-year low of \$3.1 million.

Hint of new trend in the housing market: one-family homes for rent

The graphs on the opposite page tell the statistical story of a housing industry now heading for a near-record year. It almost certainly will top last year, when 1,429,000 private non-farm housing starts were fourth best on record.

Sizing up the mid-year statistics, economists are slightly less bullish about prospects for the rest of 1963—but they are still optimistic. “This is no boom,” says Walter Heller, chief White House economic adviser. “It is a solid but modest expansion.”

Economist Miles Colean notes that the mid-year level of building permits, seasonally adjusted, “gives promise of a continued high level of housing starts.”

Total non-farm housing starts are now 8% ahead of last year, but NAHB notes that one-family homes are off 1%. “If this trend continues, starts should easily exceed the 1.5 million level in 1963,” predicts the builder group.

But the 1963 housing market bears little resemblance to the 1962 market.

For one thing, FHA's and VA's share of the market is falling fast. Last year, FHA and VA accounted for 24% of private non-farm starts. In the first six months of 1963, they accounted for only 18%. FHA's drop is especially sharp, down from 18.2% a year ago to 13.7% now.

Agency spokesmen blame the drop on the more cautious policy FHA took toward new business when foreclosures began mounting in the spring of 1962. They say conventional lending has taken a spurt in communities where they clamped down.

Others blame the slump on the President's order banning race bias in federally-aided housing. FHA men reply that FHA's share of the market began falling last August. Builders in some cities like Cincinnati say they are simply so fed up with FHA red-tape and slow decisions (a situation FHA Commissioner Philip Brownstein is trying to correct) that they have just quit using the agency. National Homes says its own units account for about half the one-family homes FHA has insured this year.

Coupled with the decline in FHA-VA financing comes a 15% leap in conventional and all-cash building. So strong is this market that the private mortgage insurance companies are now doing nearly as much business as FHA in some states (see p. 5). Conventionals are serving a higher-bracket market; average price is \$19,800 vs. \$15,600 for FHA homes.

Builders are meeting even stronger competition from mobile homes; shipments are 19% ahead of last year—and NAHB now estimates the number of mobile homes occupied will increase 62% to 1.3 million units by 1970. NAHB blames the growing mobile homes market directly on local planners and zoners who do not let builders erect small, compact one-family homes.

Other new forces are now working in the housing market, too.

The biggest surprise is spotted by Real Estate Analyst Roy Wenzlick of St. Louis: 2.8% of new homes built this year are being rented instead of sold. A year ago this percentage was negligible.

Why are builders renting their homes? The trend is so new that answers from builders provide no clear reason. Most builders are renting homes that have remained unsold for a long while simply to keep them from standing idle. A new Census look at house selling shows merchant builders are taking six to seven months to sell a home after completion now.

A new NAHB forecast for housing the rest of this decade indicates the trend to one-family homes for rent may continue. Says NAHB: 9.1 million one-family homes will be built this decade (including ones already built) but only 7.1 million will be sold. The remaining 2 million will either be rented or vacant. NAHB predicts demand for rental and sale quarters will be about equal.

And a new sampling of market prospects among renters shows the rented house might be an important sales tool. A survey of 19,000 renters in all 50 states by Panelboard Manufacturing Co. of Newark shows many renters are fearful about taking on the chores of home ownership and would like trial runs as owners. Some want builders to rent homes on trial before buying; others want builders to take homes back if families decide to move.

But the three top items renters say they want in homes they might buy are: 1) lower down payments, 2) houses that do not look alike but have unique, standout features, and 3) a wider selection of lower-priced homes.

MARKET MURMURS

- Nearly 95% of homes built by its members are now architect-designed, says the Long Island Home Builders Institute. Vice President Sidney Posin of Arbor Homes in Waterbury, Conn. predicts a bright future for scattered-lot building of manufactured homes. His reason: This lets buyers satisfy individual tastes (through optional design changes) while giving them the cost savings of factory construction.
- A materials producer which got into remodeling in 1961 has quietly backed out of the field. Armstrong Construction & Supply Co., subsidiary of Armstrong Cork Co., sold Linden Lumber Co. of Linden, N. J. back to its owner, Les Gottdenker. Reason: remodeling volume fell sharply.
- The Portland (Ore.) Housing Authority has just decided to let students move into subsidized public housing, even though they are not thereby moving out of sub-standard dwellings.
- Builder William J. Levitt has just hired four top-flight architects to design new prototype models: Carl Koch, George Nemeny, Donald Lethbridge, and George Nelson.

MLS ruckus brings another yes-and-no tax-exempt ruling

For ten years Internal Revenue Service and local real estate boards have been feuding over whether a board loses its tax-exempt status by operating a multiple listing service. Now the U. S. Court of Claims has just handed down a clear-as-mud ruling which virtually brings the issue back to where it was a decade ago.

In that time two would-be test cases became so snarled in legal red tape they were withdrawn (NEWS, May, Dec. '59). The new test case involves the Evanston-North Shore (Ill.) Realtors Board, but the ruling boils down to a mere re-reading of a 1959 IRS ruling.

Preliminary study of the court decision leads the National Association of Real Estate Boards to believe local boards still may operate MLS without losing their tax-exempt status. Basis: the court ruled that since multiple listing is not a business ordinarily carried on for gain, “the right to an exemption cannot be defeated on this ground.” Such a ruling does not automatically make all such boards taxable just because such a listing service is one of their activities, NAREB points out.

But the court rejected Evanston's claim that MLS benefitted the entire group of Realtors, another legal test for exemption. MLS rather, “constitutes the performance of a particular service for brokers participating in the service.”

The key word is *the extent* to which a board engages in MLS—whether it can be interpreted as the board's primary activity or not—exactly the point IRS stated in 1959 when it ruled a board forfeited its tax exemption if MLS was its “primary purpose or activity.” But the Claims Court is no more specific.

NAREB now says it has decided to ask the Claims Court for a rehearing. If the Court turns it down (as court attaches believe it will) NAREB can still appeal to the U.S. Supreme Court.

As noted four years earlier, long litigation remains ahead.

Boom in big Western cities; slowdowns in the East

That metropolis on wheels that is Los Angeles parked in one place long enough to build more housing than any other city last year.

It surged past New York by writing 113,000 residential permits for a fantastic gain of 20%—and the curve is still upward. Metropolitan New York issued 94,400 permits in 1962, up two tenths of 1%, but the pace has since turned sharply down. *The situation in five big cities:*

Los Angeles: The metropolitan area (Los Angeles & Orange Counties) will see more new housing units in 1963 than ever before. The record is assured, in the view of statisticians, on the basis of first half building permits alone:

	Los Angeles County	Orange County	Total
1- to 4-family	13,936	9,960	23,896
Multi-family	39,724	11,058	50,782
TOTAL	53,660	21,018	74,678

The trend toward apartments has grown stronger. In all of 1962, 68.5% of all new units were in multi-family structures in Los Angeles County; 45.2% in Orange County. For the first half of 1963, this ratio has risen to 74% in Los Angeles County and 52% in Orange.

Overbuilding of apartments is an oft-expressed fear—but still not a reality. The Apartment Association of Los Angeles now estimates vacancies at 8.8%. But figures on idle electric meters—considered the best gauge of vacancies—shows only 3.59% idle in June compared to 3.46% in January and 4.03% a year earlier. (Figures cover houses as well as apartments.)

But the area seems to be building more houses per capita than ever before—which could portend a glut, notes John Owens, housing statistician with Security First Na-

tional Bank. During the 50s, housing production was at a rate of one new dwelling for every three new people (population gain). Now, the rate is running one new unit for every 1.5 to 2 new residents, Owens says.

"It could indicate a tendency toward smaller families and households," he explains. "But even so the rate seems out of balance."

Homebuilders generally report good sales through the first half—though not exceptional. Production of single-family houses for the year, they estimate, will be up only around 10% against an overall housing gain of 20%.

Several builders in the over-\$30,000 price range report sales well ahead of completions in smaller tracts. One reason: notably easy terms available on expensive homes—as low as 5% down.

San Francisco: Residential permits jumped 19% to 15,513 for the first quarter in the nine-county Bay Area.

In Oakland, the time required to sell a house dropped from 66 days in '61 to 64 in '62. A Marin County multiple dwelling study found a vacancy rate as high as 37% in new condominiums and 27% in new multiples, but both percentages fell to 2% after the buildings had been on the market for six months.

One of the nation's most prominent builders, Joseph Eichler, turned to high rise in San Francisco. The 29-story Eichler Apartments on Russian Hill will reach higher than any other building in the area, towering 73' above the familiar Top of the Mark.

There are some flickering signs that apartment saturation may be in sight. Transcontinental Properties, which runs the Mark Hopkins for Louis Lurie, has quietly shelved plans for a 19-unit community apartment. Vice President John Parsons cautions: "There's an appalling number of co-ops being built. We figure it will take five years to digest them."

Houston was the 14th-biggest city in 1950 and is now sixth, with 1 million residents. Its downtown boom is right behind those of New York and Los Angeles and its new \$60-million space center is equally spectacular.

First-half residential permits came to a record \$95 million, up 13% over the '62 first half. Apartments units are rising three times as fast as single-family units. Apartment units completed in the first six months ran to 8,062, a 25% gain over the same '62 period, and City Planning Director Ralph Ellifrit says: "There's no indication the apartment boom of the last two years is going to drop off."

Boston: Director Robert McPeck of the Home Builders Assn. says people are shopping harder for their new homes than at any time since World War II. The Greater Boston vacancy rate is estimated at 5% by Director Donald Deluse of the Rental Housing Association. And starts for the 72 cities and towns in the metro area are down to 3,871 for the first five months of '63 (vs. 5,027 for the same period last year). Prices are climbing. An apartment boom is in the offing throughout the state.

New York may be building itself into its greatest apartment glut since the depression.

Item: A 16-story FHA co-op called East River Terrace was completed Dec. 28 at 96th Street and 2nd Ave. on New York's upper East Side. It offered from three rooms at \$1,300 plus \$111 a month charges, up to 5½ rooms at \$5,080 and \$260. Three months later 30% of its 158 units were still yawning for tenants and Developers Leonard H. Rapaport and Murray Blumberg were offering six-month look-see rentals with an option to buy.

Item: Realty teams of up to 20 salesmen are soliciting tenants in rented apartments to move elsewhere, using phone calls and home movies and offers of several months' free rent. Some offer to pay moving expenses, help decorate, or even given free maid service (two hours daily, three days a week).

Item: The FHA foreclosed a 106-unit apartment house in the Riverdale section of the Bronx in April and is foreclosing a 171-unit building in the central Bronx. These are the first such actions Director Ralph Morhard can recall.

In spite of such evidence, a just-released Census Bureau survey says New York City has only 1.79% vacancy among its "rentable apartments." But the survey is already under fire. Critics are challenging the veracity of the Census Bureau's rate, saying it gives a false picture by excluding many categories of housing. A drastic decline in construction is already starting to show. The city issued only 21,587 residential permits in the first six months, off 44% from the like '62 period.

The state turned rent control over to the city in 1962. State law stipulates that it be lifted if vacancies in any category reach 5%, but rent control has succeeded the 5¢ subway fare as the city's No. 1 political shibboleth, so Mayor Robert Wagner seems sure to recommend in December that the program remain substantially in effect. The Metropolitan Fair Rent Committee has already announced its intention to fight control in the courts, saying the Census data cannot be considered alone, but must be viewed in context with numerous other factors.



Mechanical core prefab aims at vacation market

National Homes' 1964 line of manufactured homes—20 new models in all—includes this mechanical-core house pitched at the expanding scattered lot and vacation house markets. The core consists of two baths, heating, water heater, air conditioning, and all plumbing and wiring to install kitchen and laundry equipment on the kitchen side of one wall of the core. Core homes will be delivered in a trailer equipped with a small hydraulic crane to lift the core and floor panels onto the foundation. (All wall and floor panels in the house are pre-wired and pre-finished.)

The 973 sq. ft. house—an exciting demonstra-

tion of what today's housing technology can do in markets where it isn't hobbled by building codes and labor restrictions—is designed to sell for \$10,990 fob the owner's lot. Terms: \$100 down on a buyer's lot—with a conventional s.&l. mortgage.

Aiming at another slice of the vacation market, National has also unveiled a 384 sq. ft. sportsman's house priced at \$1,499. It includes a living room, kitchen, bath and two bunk rooms. National says two hunters can erect it on nine posts in two hours. Terms: \$75 down and \$25.98 a month for seven years. Not included: plumbing, wiring, heating, and foundations.

LABOR

Lumber prices soar, then sink, in plywood strike-lockout

West Coast plywood makers have just ended a two-month strike-lockout. How much the settlement pattern of a 30½¢ hourly wage increase for most plywood workers and loggers is going to cost builders—and homebuyers—remains uncertain. Industry sources predict little immediate change from pre-strike levels.

During the shutdown, builders were hit with soaring prices as supplies dwindled. But with the settlement prices dropped abruptly again. Developments during the strike:

Plywood rose \$25 to \$85 per 1,000 sq. ft., a 40% increase.

Green fir 2 x 4s went up from \$68 to \$72 per 1,000 bd. ft., a 6% rise.

Builders could still get materials if they paid the price, but they had to accept substitute grades and submit to delays.

Some postponed construction rather than absorb the big markup.

Canadian plywood producers found the competition easy, even in face of a 20% tariff. The strike began June 4 when the Pacific Northwest's two lumber unions, the ex-C.I.O. International Woodworkers of America and the ex-A.F.L. Western Council of Lumber and Sawmill Workers of America, struck U.S. Plywood and St. Regis Paper for a 33½¢ hourly raise. The unions extended their strike to Georgia-Pacific Corp. and six members of the Independent Timber Opera-

tors Council. Four other companies locked out their 14,000 employees. But after two months they ended the lockout and most of the struck companies settled within days with their 15,000 employees.

Ben Martin, TIME



ARBITER KHEEL
Backer for the 25-hour week

Five-hour day; not so bad as was feared, but costly

The New York electricians' controversial new five-hour day has produced mixed results.

Theodore W. Kheel, the industrial arbiter appointed a guardian of the public interest in applying the agreement, and Efrem A. Kahn,

chief negotiator for the contractors, assess its first ten months of operation this way:

- From 800 to 1,000 new jobs were created, as the union intended. The prediction had been for 1,600, but a building decline intervened.

- Overtime spurted for three months after the city's 10,000 construction electricians went on the 25-hour week July 1, 1962, but this was because of failure to adjust vacations. Overtime is now below pre-contract figures.

- Labor costs increased 6% on an average apartment unit. Kahn explains that wages jumped about 13%, but contractors held down the total labor cost increase by using more apprentices.

The same contract that set the five-hour day eased the impact for smaller builders by establishing a secondary wage of \$3.25 to \$3.50 an hour on one and two-family homes and repair work. The commercial rate: \$4.96.

Pro and con. Secretary of Labor Wirtz still opposes the shorter week. "It could, in a great many industries, mean higher prices," he says, "and these could price many industries out of the market."

But Kheel contends that the 25-hour week, sought by the union to cushion the industry in slack periods, has succeeded. He says it has done this without the "drastic effects" on costs that were generally predicted when the contract was negotiated (NEWS, Feb.).

MATERIALS & PRICES

Campaign for new lumber rules picks up speed

Proposals to reform national standards for light framing lumber to cut both waste and building costs have been given a major nudge ahead.

The American Lumber Standards Committee has just approved the final wording of a new standard calling for 1½" kiln-dried lumber with a maximum 19% moisture content to replace the 1⅝" standard that now applies to both dry and green lumber.

The change is expected to save builders and homebuyers as much as \$100 million a year. Requiring the same dimension for green and dry lumber, as experts agreed at a HOUSE & HOME Round Table on the engineered use of wood in tomorrow's house (H&H, June), inflates drying costs, wastes stumps, adds \$40 million a year to shipping costs, and raises maintenance bills.

The new standards now go to the Commerce Dept., which will poll its 2,500 to 10,000 acceptors—a cumbersome procedure.

Meantime, opposition inside the industry to the new standards has been drying up.

Directors of the National Lumber & Building Materials Dealers Assn., who instructed their representatives to vote against the change at the ALS committee's May meeting, swung to a neutral stand at their own spring meeting in Washington. Local opposition from southern California, the Northwest, and New York State has nevertheless prevented the association as a whole from supporting the reform. Objections, expectably, come chiefly from pro-

Ellen Shaffer



MORE THAN A PINT of water is shipped in an undried 2x4, says W. R. Johnston of Weyerhaeuser in trying to convince lumbermen to adopt dry standard.

ducers of green softwood lumber who feel the change would hurt them competitively.

They get the back of the hand from President N. B. Giustina of the National Lumber Manufacturers' Assn., who decries "a provincialism unbelievable in this century of business enlightenment." Giustina, himself a pro-

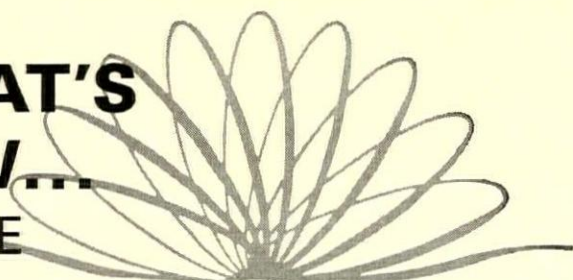
ducer of green studs, adds: "Too many lumbermen would rather lose their business than contribute one thin dime which might, in some way, benefit their neighboring lumbermen."

NLMA itself has steered away from an all-out campaign for the new rules, but it is distributing a formal brochure backing the idea. Instead, Weyerhaeuser—the nation's No. 1 timber producer and No. 1 producer of green lumber—has just started to rally grass roots backing among lumber retailers (chiefly), architects, and builders. Retailer support is crucial for they dominate the Commerce Dept's acceptors list. "It's not our intention to hurt the green market," says W. R. (Bob) Johnston, Weyerhaeuser merchandising manager. "It's a battle for the survival of wood as a building material."

Johnston has been making his point in demonstrations that include a telling piece of showmanship. Johnston picks up a trick 12" length of West Coast hemlock 2x4. He tilts it on end. Out pour 1.2 pints of water. Asks Johnston: "Why pay for shipping all this water from West Coast mills?"

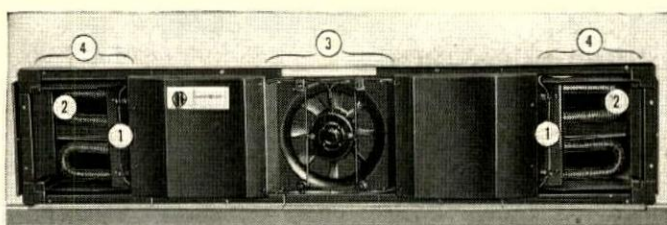
Before the HOUSE & HOME Round Table was held early this year, the Southern Pine Assn. opposed the 1½" standard. But between then and the time the ALS met in San Francisco in May, Southern Pine shifted its stand and voted for the change. The Southern Pine Inspection Bureau came around in July, is now circulating an attractive brochure backing the new rules. *NEWS continued on p. 13*

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NEW...
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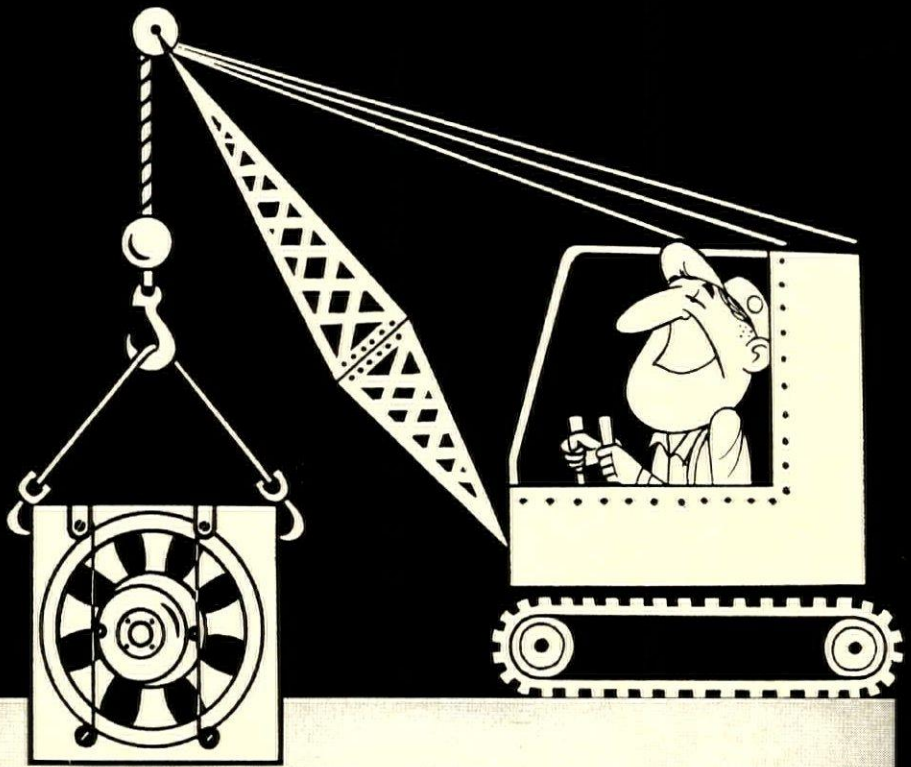
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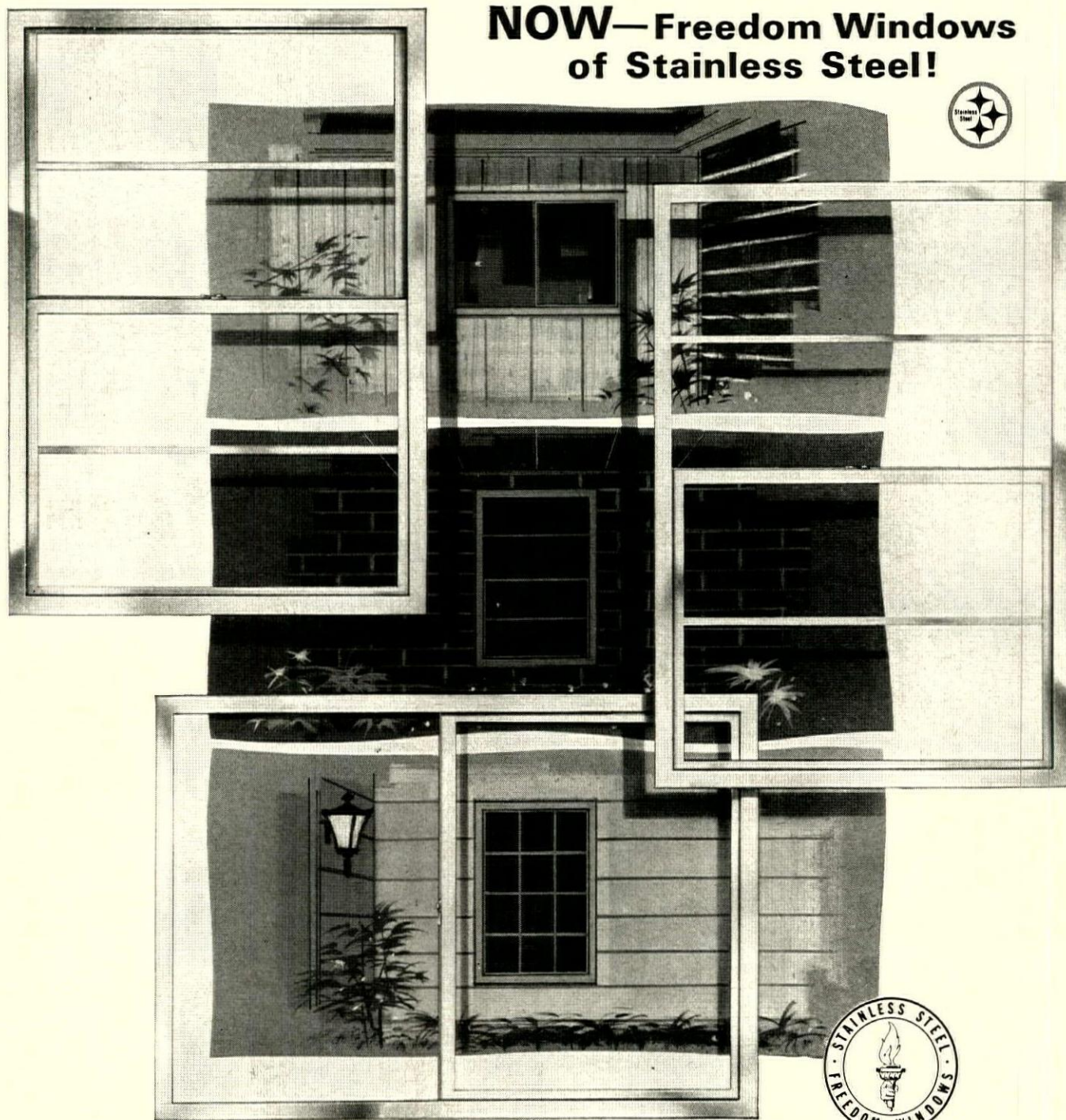
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HOUSING POLICY

What housing can expect from Congress this year

After seven-plus months, the session of Congress widely advertised as a non-housing year is shaping up to produce some significant changes for housing. No over-all housing bill or any controversial housing legislation which might stir a fight over civil rights is in sight. But Congress so far has:

- Taken a first step toward revising income tax laws in ways which would both help and hurt builders.
- Approved in the Senate a measure to crimp the flow into the U.S. of cheaper lumber from Canada and other foreign countries.
- Extended for two years the life of FHA Secs. 221d2 and 221d4 housing for moderate-income families.
- Killed any hope for new money for elderly housing and farm housing loans.
- Backed away from an inquiry into rising FHA and VA foreclosures, but scheduled an inquiry into how some building materials producers sell their goods.
- Tackled the explosive civil rights issue in ways which may have far-reaching impact on builders and labor unions. (see p. 15).

Long before the race turmoil boiled into Congress this summer, President Kennedy's order of last November banning bias in federally-aided housing had made it certain that Congress would pass little controversial housing legislation this year. Reason: two Southerners, Rep. Albert Rains (D., Ala.) and Sen. John J. Sparkman (D., Ala.), hold the reins in the housing subcommittees in both houses and neither want to be identified with any bill which could give Alabama voters the idea they favor integrated housing.

So only minor and non-controversial extensions of existing programs are expected to emerge from their committees this year. So far they have ushered through Congress only a bill to extend FHA Sec. 221d2 for sale housing and Sec. 221d4 for rental housing to June 30, 1965. Republicans assented.

The two programs give liberal loans to moderate-income families and displaced families. Moderate income families can borrow the smaller of 1) 100% of appraised value or 2) 97% of appraised value or prepaid expenses. Displaced families can get the smaller of 1) 100% of appraised value or 2) 100% of appraised value plus prepaid closing costs less \$200. Loan terms can run to 40 years if the borrower cannot meet the monthly payments for a 35-year loan. Maximum owner-occupant mortgage is \$11,000.

Non-controversial extensions of FHA Sec. 809 and 810 for civilian defense employees and military personnel are expected before they expire Sept. 30.

Slamming the backdoor. But Rains could not get Republican support for pumping up spending for two other existing programs: direct loans (at 3½%) of taxpayers money to build housing for elderly persons and 4% loans to buyers of farm housing. The Administration has talked of wanting another \$75 to \$100 million for the aged housing loans under HHFA Sec. 202 and another \$100 million for the Farmers Home Administration. Mentioned informally were \$25 million each for urban planning grants and public works advances.

But when Rains introduced a bill "for discussion"—with the dollar amounts blank—to extend authorizations for these programs, Republicans balked at giving the unanimous consent Rains needed to keep the bill bi-partisan.

Reason: the higher spending authorizations would let the Administration contract to spend money without requiring Congress to appropriate the money—the classic pattern of back-

door spending in Washington. Rains is equally adamant against putting the programs on an appropriated-fund base. He argues with some logic that no matter how much his committee authorized, the appropriations committee would not vote a dollar.

The upshot: more money for the loan programs is virtually a dead letter this year. HHFA and Farmers Home say they have enough money to keep going until early 1964.

Tax package. After months of hearings and tentative votes, the House ways and means committee has finally given the real estate

Paul Schutzer, LIFE



WASHINGTON'S MAGNUSON
Waiting for the right moment

industry a partial victory in its fight over tax treatment of depreciation.

Early this year (News, Mar.), the Treasury proposed ending all fast tax write-off for apartments and other real estate. Under present law, profits from resale of a building owned six months are taxed at capital gains rates (25% now and as low as 21% in the new plan) instead of ordinary income rates running up to 91%. With fast write-off (double the straight-line method for new buildings, 150% for existing ones), depreciation can be used to offset operating profits, so building owners usually could show a bookkeeping loss during the first six or seven years they owned a building, while pocketing a sizeable return.

The Treasury urged ending all depreciation for a building held less than six years. After that owners could pay capital gains tax on sale profits a sliding scale increasing 1% a month. A building would have to be held 14½ years before full depreciation benefits could be gained.

The house committee threw out this plan in its first tentative look at the Treasury plan (News, June), substituting a sliding formula

based on the number of years a building is held.

Now the committee has just scrapped that plan for a third one. Realty lobbyists call it a partial victory—even though it would boost taxes and raise about \$15 million annually. The plan the committee is sending to the House floor:

Owners will have to pay ordinary income tax rates on all profit over normal straight-line write-off if the building is resold within 20 months. If the building is sold in the 21st month, 99% of the profit over the straight-line yardstick would be treated as ordinary income. This would decline 1% each month the building is held after that. In 10 years, all profit over straight-line depreciation would be a capital gain. The formula would take effect in 1964.

In sending the bill to the floor, the committee defeated, as expected, an Administration plan to keep home owners from deducting mortgage interest and local real estate property taxes on their income tax returns. Realty men and builders assailed the plan. The committee voted to end deductions for local and state gasoline and sales taxes instead.

Locked-in elderly. The committee revived a plan which passed the House last year but died in the Senate to exempt elderly persons once in their lifetime from paying capital gains tax on selling their personal home.

Builders say that the tax—which may be substantial if a home was bought at a low price many years ago—keeps some senior citizens from moving into retirement apartments.

The committee plan would forgive the capital gains tax if 1) the selling homeowner is 65 or over, 2) he had owned the home for five of the last eight years and 3) the house sold for \$20,000 or less. Over \$20,000, the ratio of the sales price to \$20,000 determines the amount of profit treated as a capital gain. Example: a home sold for \$40,000 with a \$10,000 profit would pay capital gains on half the profit since the \$20,000 benchmark is half the sales price.

Lumber marking. Sen. Warren Magnuson (D., Wash.) quarterbacked a maneuver which won Senate approval of his plan to require foreign sawn lumber to be marked with the country of origin. This sets up a potentially embarrassing moment for President Kennedy.

Magnuson started pressing his plan in March, when the Senate finance committee started hearings on a House-passed bill to require country-of-origin markings on some non-housing items. The committee killed his scheme in June, saying it might strain U.S.-Canada relations over Canadian lumber.

But when the Senate started debating the House bill, Magnuson waited until only about a dozen Senators were on the floor and re-introduced his amendment. After brief debate it passed by voice vote. At mid-month, a Senate-House conference committee was pondering whether to retain the Magnuson amendment. U. S. lumber producers are prodding the committee to accept the plan. The National Association of Home Builders, an early foe of the plan, protests it would produce an artificial price rise for building by cutting Canadian lumber imports.

OPPORTUNITY

FOR BUILDERS THRU IEH

MR. BUILDER:

Here, briefly, is the new IEH Program for home builders:

- A Liberal Mortgage Financing Program (as much as 95%) thru local Savings & Loan Associations at regular interest rates and terms up to 30 years.
- Architectural and working drawings of homes ranging from \$10,000 to \$30,000.
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BESTWALL

CERTAIN-TEED

New rules for producers? The House small business committee is scheduling hearings this month into so-called dual distribution systems in the building industry. A Sept. 16 hearing in Washington on appliances is certain. Tentatively, the committee will probe aluminum storm windows on Sept. 9 and plumbing supplies and fixtures Sept. 26 in Los Angeles.

Rep. James Roosevelt (D., Calif.) and Sen. Russell Long (D., La.) want to crack down on producers who sell directly through wholesale or retail outlets that compete with non-captive sellers. They would require separate financial reports for these outlets.

The subcommittee wants to find out how much builders buy directly from producers

and what effect this has on traditional distribution patterns. And it will probe charges that some appliance producers sell builders models inferior to the maker's standard product.

FHA is taking a crack at builders' models, too. The agency is trying to require hardwood plywood to meet the same rigid testing standards it now requires for softwood plywood used in structural members—exteriors, interior members, floors. FHA says some interior plywood panels have failed. Decision: pending.

FHA technicians also are toying with setting standards for almost everything in the house—especially appliances like ranges, refrigerators, garbage grinders, and air conditioners. They say that standards are one way to assure that all appliances will perform up to par.

PUBLIC HOUSING

New face for public housing in '64?

The major overhaul of public housing, which the Kennedy Administration is blueprinting for presentation to Congress next year, may include two provisions letting public housing compete much more directly with new private housing. PHA officials make it clear they hope to persuade Congress to repeal laws which:

1. *Limit tenant eligibility in public housing to families with incomes at least 20% below the level which can afford decent and sanitary nonsubsidized housing.*

2. *Tie public housing to slum clearance* (an appeal that persuaded Congress to enact the program in the first place during the 30s) by requiring cities that want to build public housing on vacant land to wipe out an equivalent amount of slum housing within five years via code enforcement or demolition.

Public housers are also promoting the idea that the high cost of buying and clearing slum land should no longer be assessed against any public housing project now that the Urban Renewal Administration runs a program providing subsidies for this express purpose. Under the 1961 Housing Act, URA can provide a land write-down for a public housing site inside a renewal project. In such cases, the required one-third local contribution to the land write-down subsidy can be met by the 10% of rental income that public housing projects pay in lieu of local real estate taxes. But projects built outside Renewal areas must bear the whole slum clearance cost. Now, government housing people want Congress to go further, give PHA a device to separate the cost of buying and clearing slum sites from other project costs.

This is a reaction to complaints directed by foes of public housing at its high cost (e.g., \$18,000 a unit for recent Philadelphia projects, \$20,000 a unit or more for recent New York City projects—and New York City has one-tenth of the federal public housing units built, under construction or planned). Nationally, public housing costs an average of \$14,105 per unit last year but \$4,791 of this was for buying and clearing land.

Background for battle. By next year, the federal public housing program will have exhausted its authorization for new construction. The last 100,000 of the units authorized by the Housing Act of 1949 are now being allocated to cities with special needs, usually for relocation. By year end, about 620,000

federal public housing units will have been built since 1937. The Administration is expected to ask Congress to vote authority to build 500,000 more, perhaps over ten years.

But public housing supporters concede that the whole future of the much criticized program may be in jeopardy. Even many of the strongest advocates of federal subsidies to house low-income families are critical of the present program—as are many of the low-income families it is designed to serve. (Four years ago, more than 33% of low income families uprooted by government action chose to move into public housing; now, less than 15% do so.)

New recipes for old problems. Next year's public housing program also will:

• *Put more emphasis on existing housing.* But public housing officials caution that rehabilitated older houses would be suitable only for carefully picked public housing families. "The average run of families in public housing would not measure up to such housekeeping responsibilities," they say.

• *Weave public housing in with other programs* such as FHA's controversial Sec. 221d3 and increased social services provided by the Department of Health, Education, and Welfare. HHFA and HEW already are trying out this approach in St. Louis, where the 12,000 unit Pruitt-Igoe project developed such a record of crime and vandalism that low income families balked at living there and the vacancy rate rose to 15%. PHA officials talk about cutting the interest rate on FHA Sec. 221d3 to 2% so lower and lower income families could be housed under it—but this notion is far from winning official endorsement at the higher levels of the Administration. Indeed, the law which ties the interest rate on 221d3 to the cost of government borrowing has just forced the FHA to boost the interest rate from 3 1/8% to 3 3/8%.

• *Propose rent supplements to let selected low income families move into privately operated apartments.* This is being tried experimentally this year in New Haven and Washington.

SEGREGATION

Negro drive to integrate housing yields more turmoil

Housing is more and more caught up in the nation's spreading civil strife over Negro efforts to end racial discrimination.

More mass picketing of merchant builders, more suits under anti-bias laws, and in some spots rioting and street fighting are producing patterns of business-crippling disturbance in the North and South alike.

White resistance gradually grows. One southern California town has sued CORE picketers and others on the ground they constitute a public nuisance.

Negro efforts to win more jobs in construction have led to violence in New York City, Philadelphia, Newark and Elizabeth, N.J. Nowhere is the mounting tension between races better illustrated than in a series of move-ins and attempted move-ins.

When three families moved into a white neighborhood on Chicago's seamy South Side, unrehearsed and spontaneous reaction flared into a week of ugly mob fighting that brought 139 arrests. Bullets whined, and a white fireman and his two-year-old son were injured when Negroes attacked his car. Nearly 200 police stood guard for eight nights.

There were 12 more vacant apartments in the 30-flat building at South 57th and Morgan. More Negroes were expected—and more rioting.

Attempt in Pittsburgh. When Dr. Oswald Nickens insisted on buying a \$35,000 home in Pittsburgh's Stanton Heights Manor, the city's Human Relations Committee ordered Developer Francis Totten to sell. His Stanton Land Co. went to court. A realty broker testified that those persons who are better educated and have higher living standards are the least likely to accept colored neighbors, and he estimated that 99 of 100 persons in Stanton Heights would reject a Negro.

The city produced Builder Morris Milgram, pioneer developer of inter-racial housing in Philadelphia, Princeton, N. J., and elsewhere, to testify that "selling to all people is good business." Judge Frederick Weir heard arguments for two weeks and promised a decision Oct. 31 in this first legal test of the city's fair housing ordinance. No matter which way the ruling goes, it will be appealed.

Negroes picket Levitt. Sixteen marchers appeared at the Builder William J. Levitt's Belair subdivision in Bowie, Md., outside Washington. The company closed the office and all model homes in the face of Negro demands to buy.irate white prospects left the scene in disgust. Next weekend, 50 pickets marched, but salesmen stayed on the scene and told visitors the picket-filled sales office was "crowded."

Negro leaders, still smarting from a bitter fight with Levitt over selling to Negroes four years ago (NEWS, Sept. '59), have made his company a special target. Two Negro federal employees this spring asked the President's Committee on Equal Opportunity to get the Justice Dept. to act against Levitt for refusing to sell. So far, Levitt has refused to sell to Negroes. His FHA and VA commitments predate the President's anti-bias order, so the agencies lack power to compel him to do so. Levitt says he follows local custom. He has just called on President Kennedy to extend the antibias order to homes with conventional loans.

The first VA penalty against a builder under President Kennedy's mandate against bias in the sale of houses under federally aided programs came in Orlando, Fla. The agency said it would no longer appraise the property of

House and Home Ltd. because the company had refused to sell to a Negro in a white neighborhood. The company (which has no connection with this magazine) would thus be blackballed from future use of VA.

In California, Builder Don Wilson turned down an application by a Negro attorney to buy a \$31,250 home in his Torrance tract southwest of Los Angeles. Pickets had harassed the enclave for weeks (NEWS, Aug.), and Wilson had compromised by accepting a \$500 down payment. He called off the deal when the check came back marked "insufficient funds." The lawyer then claimed Wilson had presented the check while he was transferring funds to cover it. Wilson retorted that the lawyer's application overstated his bank accounts.

The Torrance council passed an emergency ordinance to protect the tract residents by restricting the picketing. "It disturbs children and upsets our lives," one young mother said. But the Congress of Racial Equality went to court over the ordinance and the little community was again besieged by massed marchers. The city in desperation filed a public nuisance suit against CORE, NAACP, and Hollywood personalities Marlon Brando and Rita Moreno, who had joined the picketing.

Builders fight back. Some realty men and builders in California are uniting behind an effort to block operation of the new Rumford Fair Housing Act (NEWS, Aug.), the controversial measure forbidding racial bias in 1) all publicly-assisted one-family homes, 2) all publicly-aided apartments except duplexes, and 3) all apartments—however financed—of four or more units. The campaign is led by the Citizens League for Individual Freedoms. It was trying for 292,662 signatures by Aug. 30 to throw the issue to a public referendum in 1964. This would prevent the act's taking effect before the balloting.

The league is headed by San Francisco Adman Robert D. Weinmann, who claims a membership of 15,000 builders, realtors, and lenders. He conceded he faced a Herculean task getting the signatures. One reason: Acting Gov. Glenn M. Anderson attacked the referendum plan and the California Real Estate Assn. disavowed support.

California lawmakers this year rejected a bill that would have required revocation or suspension of the license of anyone licensed by the state, including contractors, who discriminated racially. But Gov. Edmund G. Brown, after signing the Rumford bill, proclaimed a fair practices code that does what lawmakers refused to do. California now will require a contractor to give written notice of no-bias commitment to any labor unions with which he is dealing. Any breach, says the



NEW ARRESTS of pickets troubled Don Wilson's Torrance tract near Los Angeles. Reason: a dispute over a bad check broke a truce.

code, "shall be regarded as a material breach of the contract." The code apparently will empower the State Real Estate Commission to suspend or revoke the license of realty men held guilty of violating it. But a member of the governor's staff predicts "fabulous legal problems" enforcing the order.

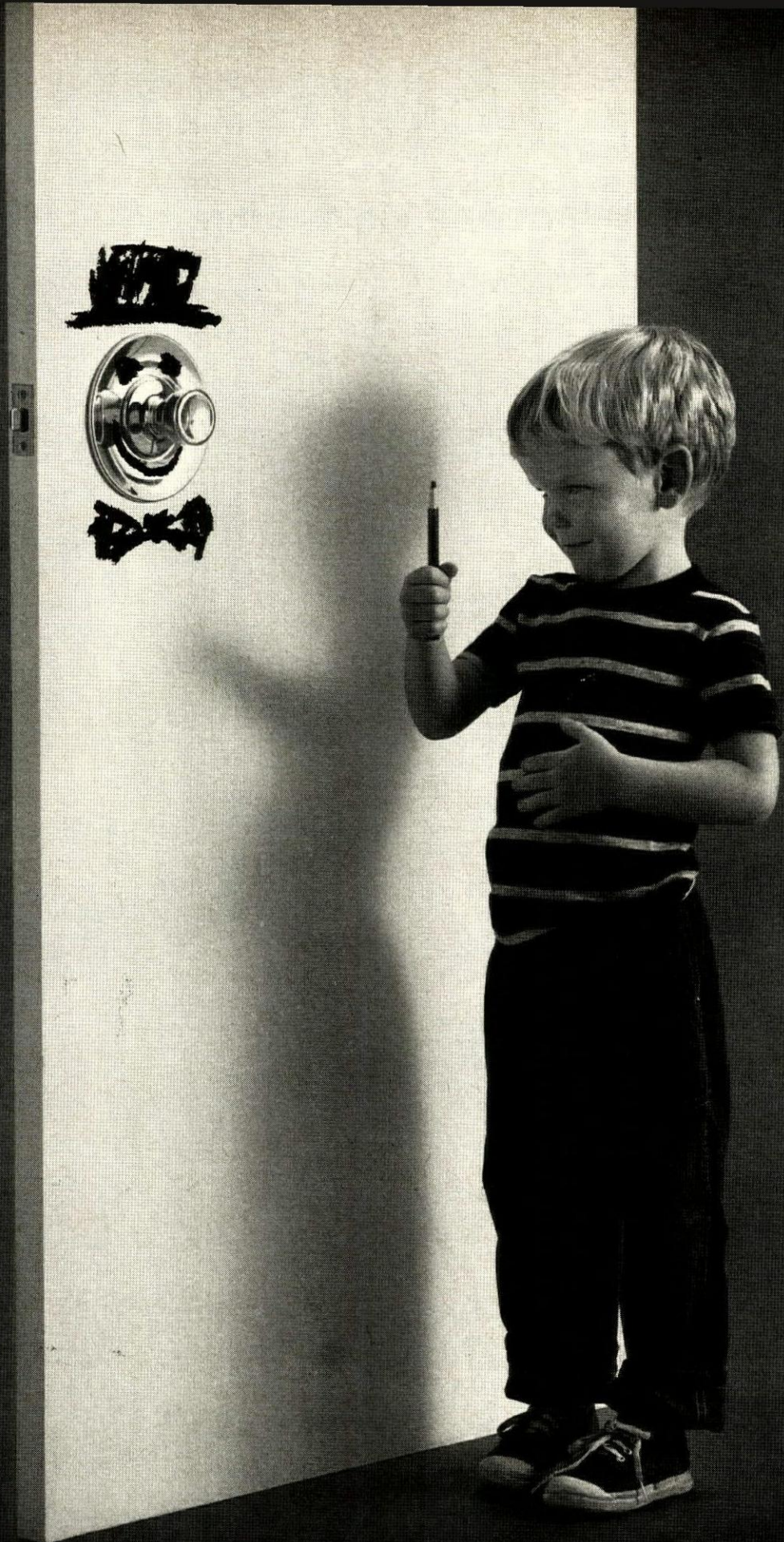
New Jersey announced that its Real Estate Commission plans to adopt new rules to lift or suspend broker and salesmen's licenses if they agreed to sell for any owner opposing the state's law against discrimination, engaged in panic selling, or refused to transmit every formal offer to buy to the seller.

Gov. Otto Kerner of Illinois also issued a fair practices code. It relies on the state's licensing power to police bias in realty sales.

War on building trades. Battles between Negro leaders and the building trades unions went on in Newark—where Negro workmen demanded 65% of the jobs—and in Philadelphia. Pittsburgh rights organizations called for mass demonstrations against the building industry, although the AFL-CIO Building Trades Council had just announced plans to open apprenticeships to Negroes.

But it was in New York that Negroes waged their bitterest campaign. Mayor Robert Wagner had anticipated their demands, and a city panel of three labor experts suggested a voluntary-compliance program to open jobs and apprenticeships. The panel had studied 122 unions and found that many locals already had a large number of Negro members, but it proposed a speed-up to let the U.S. Labor Dept. instead of the union pass on apprenticeship applications. The panel's report was a virtual ultimatum to the trades to open their lists freely to Negroes or face legislative action.

President Peter J. Brennan of the Building



Home decorators everywhere prefer the beauty of Kwikset

Undeniable. There's a Kwikset to blend beautifully with any fine decorative scheme... contemporary, French provincial, regency, Early American, or Early Crayola. It's marvelous what gifted decorators can do with Kwikset's wide range of styles and trim rosettes. Maybe that's why Kwikset is still America's largest selling residential lockset.

Other things count too, of course. Technical things like pin-tumbler security and matchless construction. Builder-oriented things like easy installation, trouble-free performance and a finish that lasts for years and years. Oh yes, makes great clown noses, too.

kwikset  *locksets*

America's largest selling residential locksets

United Press International



TWENTY POLICE were needed to dislodge pickets clinging to a crane during a demand for more jobs at Brooklyn's Downstate Medical Center.

and Construction Trades Council said no only to the apprenticeship gimmick.

"We won't give authority to any outside group to say who qualifies," he said. "We don't need a lot of politicians to tell us how to run our unions." Under pressure from City Hall, however, he backed down even on this point and offered to let an outside agency review any union rejections.

Reverse bias by quota. Brennan said, for perhaps the tenth time, that his 122 unions did not discriminate. Any Negro can join any union if he's qualified by education and ability. His unions unanimously set up a committee to pass on qualifications of any Negro seeking papers, and Brennan even bowed to demands for outright Negro preference.

"We will have to ask some unions to jump them over whites," he said. "I realize this is another form of discrimination, but it may be necessary."

Mob in the streets. None of it was enough. Pickets lay down in front of cement trucks to halt construction at the Downstate Medical Center in Brooklyn. Others hung on cranes. Rev. Dr. Gardner C. Taylor, a moderate turned militant with a vengeance, said, "Blood may flow in the streets." He demanded that a flat 25% of all workmen on the project be Negro.

Forty pickets were arrested the first day,

then 250, but the near-hysterical demonstrations stretched over weeks. Construction workers inside the gates pleaded that "plenty of Negroes" were already at work, and colored bricklayers said they had found jobs there with no difficulty. The project counted 210 Negroes among 1,350 workmen and Gov. Nelson Rockefeller spoke out against an outright 25% quota system but still the restless black tide flowed around the site each day. When courts began handing out 60-day prison terms, screaming demonstrators chained themselves together and lay praying in driveways until police cut them apart. More than 689 were arrested in three weeks, but the Negroes called in the children. A girl of two years was gently carried from the path of a truck after having been deposited there by her parents.

Danger signs. The tactics tried the patience of almost everybody, but of nobody more than the Teamsters. President John J. O'Rourke of the Teamsters Joint Council called the demonstration an absurdity. He said unemployment was up by 23,000 to 442,000 in New York State, and he said it was demagoguery to promise non-existent jobs to Negroes. AFL-CIO President George Meany snapped: "There is not much future in a program of adversity." O'Rourke's warning brought a basic reminder to the militants—it is almost impossible to shut down a building job without Teamster support.

FHA asks blank check on job bias

Even before the rules were written, FHA rushed out orders demanding that all its builders and contractors subscribe in writing to President Kennedy's no-job bias mandate on insurance commitments issued on or after July 22.

The President's broad executive order forbids racial bias in employment on any construction program aided by the government via "any grant, contract, loan, insurance or guarantee" (NEWS, Aug). FHA's new ruling applies to new homes and apartments, and to long-range home-improvement loans. Contracts and sub-contracts not exceeding \$10,000 and commercial contracts not exceeding \$100,000 are excluded.

The policy is almost certain to slow building under FHA programs, already down to 13% of all starts.

FHA is officially silent about builder fears that FHA might cancel commitments involving builders who discriminate in hiring. Attorneys familiar with FHA say the most likely penalty would be blacklisting violators on future jobs. Agency men are extremely reluctant to cancel commitments and hence jeopardize the faith private lenders put on the agency's promise to insure a loan. But commitments can be cancelled "for cause" now—and this might be used as the ultimate weapon against the most flagrant violators, even though in practice commitments now are cancelled involuntarily only for fraud.

FHA's order went into effect the same day separate operating specifics were to be put in effect by the President's Committee on Equal Employment Opportunity (headed by Vice President Lyndon Johnson), enforcer for the anti-bias clause now in all federal contracts.

Confusion on code. But the Johnson Committee deferred the rules in the face of vigorous protests from major employer associations, including the National Association of Homebuilders.* The code was bucked back to a subcommittee for new conferences with the contractors, and the full committee is not expected to reconvene for two months.

The proposed standards were drafted by a Labor Dept. civil rights specialist, N. Thompson Powers, and had been handed to trade associations July 8—with curt instructions to submit views "by the close of business July 11." Powers' rules:

Subcontractors. Contractors must require periodic compliance reports of all tiers of subs, deal with none declared ineligible for government work, and impose sanctions ordered by the Johnson Committee.

Contractor associations. Contractors would be restricted from "participation in contractors' associations for collective bargaining and apprenticeship purposes" if the association did not submit a no-bias statement.

Labor suppliers. Contractors would obtain no-bias statement from all unions, apprenticeship committees, and employment or referral agencies and deal with none who refused it. If under contract to a union, the contractor would be required "to seek amendment of his legal obligations. . . ."

Quota hiring. The code required "the taking of whatever steps are necessary, in

*Others: Associated General Contractors, National Contractors Association, National Electrical Contractors Association, Mechanical Contractors Association of America, and National Association of Plumbing, Heating, Cooling Contractors.

acting upon application lists developed prior to this time, to offset the effects of previous practices under which the discriminatory patterns of employment have resulted." This was widely interpreted to mean outright hiring of quotas of Negro artisans.

Contractors termed such a blue-sky code completely unworkable, and they objected particularly to the demand that they violate referral agreements with unions. They pointed out that this would in turn be a violation of the National Labor Relations Act.

Unions, too were approached. The committee asked them to fill out questionnaires on the extent of membership discrimination in their ranks. Some answered, but many simply told the committee it had no right to ask.

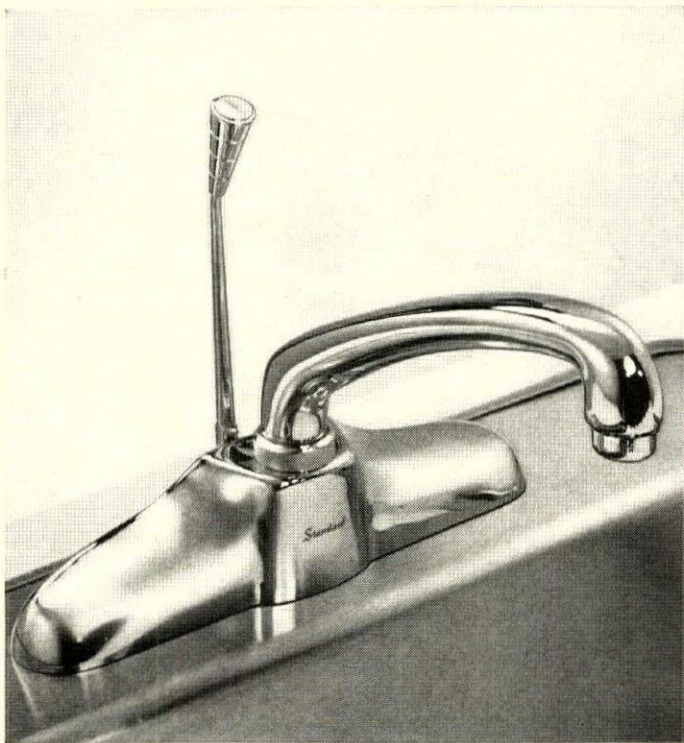
Judge bars bias in motel in urban renewal project

A federal district judge in Nashville ruled that private business in urban renewal projects may not refuse service to Negroes even though the land was bought before last Nov. 20's ban on race bias in federally-aided housing.

Dr. Vasco A. Smith Jr., a Memphis Negro dentist, sued to desegregate a Holiday Inn motel opened in 1960 on property acquired from the Nashville Housing Authority. The authority bought the land with federal slum clearance aid.

Judge William E. Miller held that the government, through the authority, retained control over the future use of the property. His ruling is the first on applying the anti-bias order to business operating in a renewal area.

NEWS continued on p. 27



CLOSE SALES IN THE KITCHEN



End your model home tours in the kitchen, where the big name in plumbing can work for you. Your selection of American-Standard sinks, fittings and disposers proves that you build for the years as well as for immediate beauty and convenience. □ American-Standard quality is practicable for any budget. There are full lines of sinks in cast iron and stainless steel. Three models of disposers. And a complete range of fittings, headed by the patented Single Lever Sink Faucet. Ask your American-Standard representative for details. Or write American-Standard, Plumbing and Heating Division, 40 West 40th Street, New York 18, N. Y.



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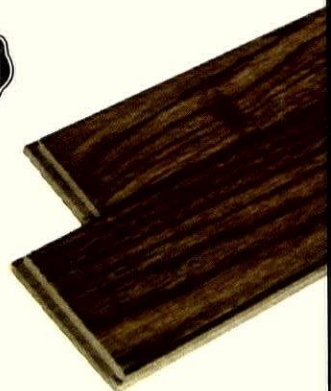


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There's dramatic appeal in the dark finish of Bruce Fireside Plank . . . a low-cost solid oak floor with charm for any home. Alternating 2 1/4" and 3 1/4" strips create the interesting plank effect that is accentuated by wide but shallow side bevels. Bruce Fireside Plank is completely finished at the factory for beauty, durability, and on-the-job cost savings. Write for color booklet. See our catalog in Sweet's Files.

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More and more, electrical equipment and appliances are being provided and promoted as an integral part of the home. It takes adequate wiring to provide for these "built-in" electrical features and others that will be added later on.

You have a real, merchandisable selling feature when you install QO "quik-open" circuit breakers in your homes. You're providing far more than adequate wiring. You're providing a convenience that's easily demonstrated and readily appreciated. In fact, many buyers have come to consider circuit breakers "stand-

ard equipment" in the modern home. There are no fuses to replace. Even a child can restore service, quickly and safely. You're providing modern protection against overloads and "shorts." And—you're providing for future circuits as they're needed.

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BUILDER ULLMANN
Pioneer for dry wall

H&H staff



BUILDER WEINER
An economist's eye for land

Four seek bottom rung on NAHB's ladder to presidency

One of the most crowded races in recent years is shaping up for a spot on the ladder which traditionally leads to presidency of organized builders.

The bottom-step job is vice president-secretary, and under a 1961 by-law change only men with one year's experience as a national officer can shoot for the spot. That opens the door to the twelve NAHB regional vice presidents. So far, four are actively campaigning.

The quartet: Builders **Vondal Gravlee** of Birmingham, Ala.; **Kimball Hill** of Rolling Meadows, Ill.; **Siegfried J. Ullmann** of Stratford, Conn.; and **Leon Weiner** of Wilmington, Del.

Gravlee, 45, is a former accountant who has spoken at NAHB meetings on the accounting methods he has devised for his 50 to 75 house yearly operation. Last

year he chaired the small volume builders committee. Gravlee began building in 1950 after seeing the profit potential of the business while doing accounting for another builder. Last year he built 60 homes and may hit 75 this year. He sells—mostly FHA—two in Birmingham subdivisions (\$12,000 and \$24,000 price ranges) and two in Huntsville (one \$12,000 to \$16,000 and the other \$15,000 to \$18,000).

Hill, 52, is a law graduate of North Carolina University who says his law training has helped him in arguing before planning commissions. In addition Illinois homebuilders have used him as a dollar-a-year man before the state legislature, and his experience landed him a spot on the committee of former NAHB president **Richard Hughes** seeking new ways to house low-income families

(NEWS, July '61 *et seq.*). This involved Hill in builder reaction to President Kennedy's order banning race bias in federally-aided housing, and last spring Hill represented NAHB at a National Committee Against Discrimination in Housing rally (NEWS, June). A builder since 1942, Hill began developing Rolling Meadows northwest of Chicago in 1953 and has built about 3,500 homes and apartments in the town now grown to 11,500.

Ullmann, 49, entered building in 1938 as a subcontractor pioneering the use of dry wall. Ten years ago he set up his own homebuilding operation, now builds between 75 and 100 homes yearly all over Connecticut. He has subdivisions going in Newton, Ansonia, and Milford. His homes run from \$14,200 to \$21,000, and about 90% are sold FHA.

Last year he built 65 apartments.

Born near Kiel, Germany, Ullmann came to the United States at the age of seven. He studied accounting and law.

Weiner, 43, has been a pusher behind NAHB efforts to get better land planning and zoning tools for builders. He has chaired NAHB's joint committee with the Urban Land Institute for the past two years. Weiner's interest in land stems from his study of economics at the University of Pennsylvania. He builds in four Delaware locations. He started 400 units last year, will build between 150 and 200 houses ranging from \$11,000 to \$40,000 this year. Weiner is also contractor for part of Philadelphia's Eastwick renewal project (the nation's largest with 2,500 acres) and heads a group building Wilmington's first renewal apartments.

Horne replaces Williams on Home Loan Bank Board

Pressure from the White House staff has forced out **John E. Horne**, 55, as small business administrator.

He has been confirmed by the Senate as one of the three Home Loan Bank Board members at a \$1,000 cut in salary (to \$20,000). In his new post, he replaces **Joseph J. Williams Jr.**, an Eisenhower appointee whom President Kennedy refused to rename when his term expired June 30 (H&H, Aug.).

Chairman **A. Willis Robertson** (D., Va.) of the banking committee, and a friend of Williams, and Sen. **John Sparkman** (D., Ala.) who gave Horne his first political job as administrative aide, say openly they wanted Horne kept at SBA. He was supported by the chairmen of both the Senate and House small business committees.

But Horne, a Navy war hero, had irritated White House staffers, and the Administration



HLBB'S HORNE
Shuffled to a new post

shifted Horne and brought in **Eugene P. Foley**, 34, close friend of the whip **Hubert Humphrey** (D., Minn.) and deputy to the Secretary of Commerce.

The President is also expected to nominate **Joseph Walker Barr**, 45, an Indiana Democratic Congressman defeated for reelection in 1960, as the \$20,000 chairman

of the Federal Deposit Insurance Corporation. Barr is now a Treasury staffer—and the Administration wants someone in the bank regulating agencies who can carry its philosophy to the industry. It is an open secret in Washington that the President's anti-bias executive order was not extended to conventional lending because former FDI-Chairman **Earl Cocke** opposed it. That could change now.

ASSOCIATIONS: **David Gillogly** has shifted from associate director of NAHB's economics department to private economics consulting with Economist **Robinson Newcomb** of Washington. Stepping up to Gillogly's place is **Michael Sumichrast**, formerly with Builder Ernest Fritsche in Columbus, Ohio. **Norman Farquhar** has been named assistant.

The American Institute of Architects has three new department directors: **C. Henri Rush** of

Washington, head of institute relations; **John F. Dawson** of Ann Arbor, Mich., head of state and chapter affairs, and **Ben H. Evans** of College Station, Tex., head of research.

Albert W. Noonan has quit after 28½ years as executive director of the International Association of Assessing Officers. He has joined the board of assessors in Detroit.

ELECTED: **John E.** (for **Edward**) **Bohman**, as president of NAHB's executive officers conference, succeeding **Herbert Deshong** of Dallas. The veteran E.O. from St. Paul (Minn.), whose almost white crew cut tops a youthful face more cut to his 43 years, came from the ad specialty house of Brown & Bigelow to the builders in 1952, has doubled the St. Paul membership (to 320) since taking over. Bohman won in a four-man race.

NEWS continued on p. 30



VERNE H. EGGERS
GENERAL CONTRACTOR
MACOMB, ILL.

"IN MY THIRTEEN YEARS as a builder, I've never seen anything like electric heat for cutting costs and improving on quality at the same time," says Verne Eggers, shown here in front of one of his electrically heated apartment houses now under construction. A similar building put up last year has proved so popular that there is already a waiting list for this new unit.

"AS A BUILDER AND A LANDLORD, I'M SOLD 100% ON FLAMELESS ELECTRIC HEAT"

Builder-owner Verne H. Eggers of Macomb, Illinois, tells how using electric home heating in his new apartments helps him construct and rent them faster

"Whether I'm building a rental apartment or a residential home, I'm convinced that there isn't anything around that can beat flameless electric home heating," says prominent Illinois builder Verne Eggers.

"First of all, electric heat is faster and easier to install than any other type of heat I've ever worked with. In fact, even allowing for taking extra care in insulating, my installation costs are down as much as 40%. And since I can apply this saving to building in extra value and sales appeal, this puts me in a strong competitive position.

"Of course, electric heat itself is a tremendous sales feature, judging from the way it's helping me rent my apartments. And since I'm a landlord as well as a builder, I sure like electric heat's dependability and low maintenance.

"For me at least, it's pretty clear that flameless electric heat is what more and more people in this area are look-

ing for. That's why I figure that I'm way ahead by being in a position to offer it to them now."

Verne Eggers is typical of the growing number of builders all across America who are discovering how well it pays to build and promote electric heating in their new homes and apartments. Already, more than a million homes are heated electrically, and this year it is estimated that 20% of all new homes will be heated electrically.

Why not find out how you can profit more by using flameless electric home heating on your jobs? First chance you get, talk it over with your local electric utility company.

THE TOTAL ELECTRIC HOME that displays this Gold Medallion* helps you to capitalize on the fast-growing customer preference for total electric living. And because a Gold Medallion Home uses a *single source of energy* for heating, cooling, lighting and power, you will profit more.



*Certification mark—NEMA

LIVE BETTER ELECTRICALLY • Edison Electric Institute, 750 Third Avenue, New York 17, N. Y.



INDIVIDUAL ELECTRIC METERS for each apartment let tenants pay only for the heat they use themselves. Comments Eggers, "When tenants are paying for their own heat and still have no complaints on comfort or costs, you know the heating system has got to be good."



SPACE-SAVING ELECTRIC BASEBOARD UNITS like these help Eggers to speed construction and save on installation time. First, his electrical contractor puts in the heating circuits at the same time he puts in other wiring. Then after plastering, final hook-up is quickly accomplished.



NAHRO'S ROBBINS
Top spot for a veteran

NAHRO picks a public housing veteran

The National Association of Housing & Redevelopment Officials has just nominated one of public housing's most outspoken leaders to be its president for the next two years.

He is **Ira S. Robbins**, 63, vice chairman and member since 1958 of the New York City Housing Authority, whose sprawling (121-000 units now occupied) empire is public housing's largest. If elected at NAHRO's annual meeting later this month in Denver,

he will be one of the very few men ever to head both the National Housing Conference, (public housing's No. 1 lobbying group) and NAHRO (which includes urban renewal and code enforcement officials as well).

In picking Robbins, the NAHRO nominating committee passed over three divisional vice presidents—as it has done in all post-war years except the last election in 1961.

Nominated as new divisional vice presidents are: for housing, Executive Director **Frederic A. Fay**, 52, of the Richmond, Va., Housing & Redevelopment Authority; for renewal, Executive Director **Robert B. Pease**, 38, of Pittsburgh's Urban Redevelopment Authority; for codes, **Jack E. Taylor**, 45, building and housing administrator of Oakland, Calif.

General Development changes presidents

James L. Rankin, 50, who resigned in 1962 as president of Foremost Dairies, is the new president of General Development Corp., the huge Miami-



GD'S RANKIN
A salesman for a sales job

based development company promoting the land and house sales in four Florida communities totalling 190,000 acres. He succeeds **H. A. Yoars**, who resigned unexpectedly after leading the corporation through two years of financial reorganization.

Company spokesmen did not explain Yoars' departure but noted that Yoars, former vice president for real estate of First National City Bank of New York, was primarily a financial authority, while Rankin's principal experience has been in sales.

It was GD's second major management change this year. In

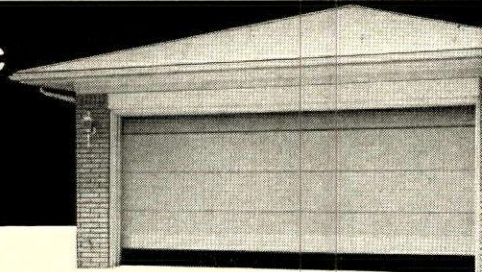
May, **Charles H. Kellstadt**, retired chairman of Sears, Roebuck & Co., became chairman and in place of Yoars, chief executive officer. **Gardner Cowles**, publisher of *Look* magazine, stepped down from chairman to vice chairman.

General Development lost \$515,892 in 1962, Yoars' one full year as president, but cash income topped spending for the first time. The company earned \$6,868,612, or \$1.05 a share, in 1961. Sales fell from \$68,400,752 in 1961 to \$54,245,895 in 1962. The company blamed the Cuba crisis and the midyear stock market selloff for the drop.

'Profit or close,' vows new boss of Briggs

Financier **Milton J. Stevens**, who was elected chairman and chief executive only last April, has ousted **Paul M. Corp** as president and chief operating officer of Briggs Manufacturing Co., Warren, Mich., plumbingware maker. Stevens, whose Republic-Transcon Industries is one of the industry's biggest appliance makers (water heaters, dryers, disposers, air con-

STYL-O-MATIC new Crawford automatic garage door makes your garage as modern and convenient as the rest of your home



* Styl-o-matic AUTOMATICALLY OPENS and CLOSES at a touch on a control button—located in your moving car or in your garage.

* Beautifully styled IN-YOUR-CAR CONTROL operates your Styl-o-matic by radio. Portable; NO permanent installation—move it from car-to-car or have one for each car.

* Styl-o-matic AUTOMATICALLY TURNS ON GARAGE LIGHTS as it opens; lights your way safely into your garage after dark.

* Styl-o-matic AUTOMATICALLY ALLOWS YOU UP TO 2½ MINUTES to go from the garage into the house AFTER the door has closed; switches lights off automatically when you are safely inside. Switches off lights automatically if door is left open.

* Styl-o-matic AUTOMATICALLY REVERSES TRAVEL if it meets an obstacle.

* Styl-o-matic can be INSTANTLY CONVERTED to HAND OPERATION in case of power failure in your area; you are never "locked in".



Styl-o-matic comes as a complete budget-priced package, sold, installed and warranted by Crawford Door Co., world's largest builders of garage doors. It includes the famous Stylist Flush-both-sides Door (single or double width) and the sensational New Magi-matic Door Operator with automatic remote control.

This matched combination gives you the beauty of the newest flush-panel door and, the wonderful convenience of automatic control—being able to drive in and out of your garage in any weather, day or night, without leaving your car and without having to raise and lower an old-fashioned door by hand. Whether you are modernizing or building, ASK YOUR CONTRACTOR, about Crawford Styl-o-matic or call your local Crawford Dealer (listed in the Yellow Pages under DOORS). Or, write for free literature to CRAWFORD DOOR CO., 20263-49 Hoover Road, Detroit 5, Michigan.

ditioners), took over as president of Briggs himself.

Republic-Transcon got control of Briggs last winter, now holds 35% of its stock. Stevens, who works out of offices in New York and Beverly Hills, says he will commute to Warren alternate weeks. He promoted **Charles W. Betz** to executive vice president and named him boss of day-to-day operations.

The Briggs plant, which has been in the black only one of the past six years, "will either show a profit or I'll close it," says Stevens. Briggs had a loss the first quarter of 1963—but rising sales turned this into a first half profit of 44.-539—or 4¢ a share (vs. a \$356.-755 loss for the first half of 1962).

Says Corp, who has been president of Briggs since 1961: "My primary purpose when I went to Briggs was to wrench it out of a sick-house and get it in a solid condition again. I feel this primary job has been accomplished." He blames policy differences for his departure. Corp plans to devote full time to Advance Village Housing Co., Oak Park, Mich. developer of garden co-ops of which he is president.

Automation expert heads Westinghouse

Donald Clemens Burnham—variously described as an intense fellow with coattails flying, perhaps the most cost-conscious executive in the company, and



WESTINGHOUSE'S BURNHAM
Nine years to the top

as "Mr. Automation himself"—is the new president of Westinghouse Electric Corp. Burnham, 48, succeeds **Mark W. Cresap Jr.**, who died in July (see below).

Like Cresap, Burnham did not spend his entire industrial life at Westinghouse. He left General

Motors' Oldsmobile Division only nine years ago, and his former associates say his quick rise to WE president came as no surprise.

Picked as vice-president in charge of Westinghouse's industrial group in 1962, Burnham turned a sluggish division into one of the company's most profitable operations.

Close sources expect no sharp change in Westinghouse policy. They expect Burnham to continue Cresap's "province system" of autonomous divisions.

In the same change that brought Burnham to top post, the Westinghouse board of directors moved **John K. Hodnette**, formerly executive vice president, to vice chairman of the board. **Gwilym A. Price** continues as board chairman.

DIED: Mark W. Cresap Jr., 53, July 28 in Pittsburgh, two weeks after resigning as president of giant Westinghouse Electric Corp. A forward-looking management consultant, Cresap took over Westinghouse at the age of 48. He gave the company's far-flung divisions more autonomy to push them into closer contact with

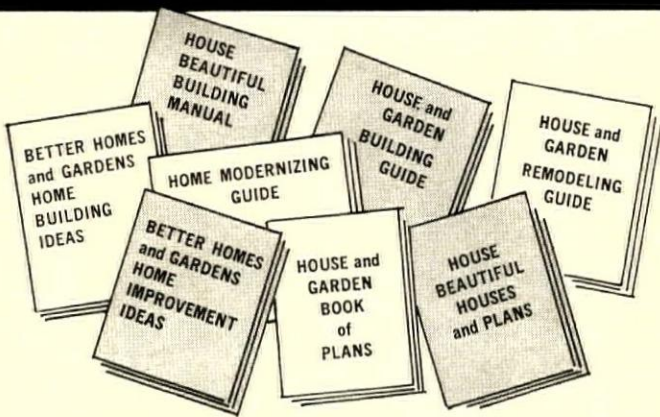
their markets. He died after an operation for a stomach ailment.

DIED: Vice President Carl W. Bahr, 62, of Pacific Lumber Co., was killed in a 50-foot fall from a cliff while on a hunting trip near Scotia, California terrain. He was chairman of the American Lumber Standards Committee and president of the California Redwood Association. In 1933-34 he helped draft the National Recovery Administration's NRA code for the lumber industry.

DIED: Lionel Wachs, 76, Oakland realty man and former instructor in real estate at the University of California, July 16 in Oakland, Calif.; **Auvergne Blylock**, 53, partner in the development company of Brown & Blylock, July 20 in Memphis; **Logan Billingsley**, 80, real estate developer who served on Mayor James J. Walker's planning commission for New York City in the 1920s, Aug. 4 in Mount Kisco, N.Y.; **J. Alston Adams**, 59, former (1948-53) HLBB member and president since 1953 of the San Francisco Home Loan Bank, Aug. 7, in Menlo Park, Calif.

NEWS continued on p. 37

STYL-O-MATIC Crawford's new, low-cost Door-and-Operator package . . . advertised to millions in the home-building books that home-buying prospects buy and read



This year, home-buying prospects will be reading about STYL-O-MATIC, the beautifully styled, fully automatic door that makes the garage as modern, as convenient, as enjoyable to use as the rest of the modern home.

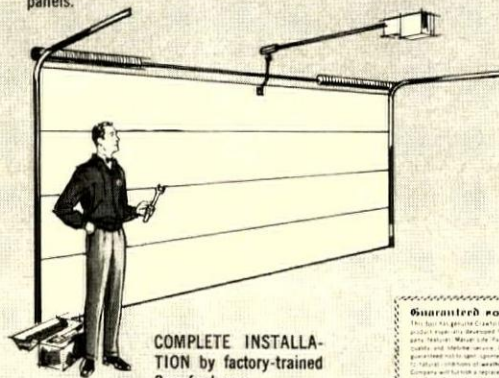
And, with all other appliances in the house automatic, why should a buyer be satisfied with anything less than STYL-O-MATIC? The garage door IS the largest and heaviest piece of moving equipment in any home; it makes sense to make it automatic. STYL-O-MATIC puts on a wonderful demonstration. Hand the wife the little transistorized remote control unit and let her enjoy the thrill of operating the STYL-O-MATIC from away down the driveway. That alone makes ordinary doors seem old-fashioned and that's just one of its features.

And, there's a complete merchandising kit to help you dramatize STYL-O-MATIC at point-of-sale. Ask your local Crawford Distributor, or, write us direct. Crawford Door Company, 20263-49 Hoover Road, Detroit 5, Michigan.

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CRAWFORD STYLISH DOOR: single or 2-car size; flush-2-sides; honeycomb core; lifetime warranty on panels.

CRAWFORD MARVEL-MATIC GARAGE DOOR OPERATOR: 5-year warranty on mechanical parts; 1-year on radio parts



PURSE-SIZE RADIO REMOTE CONTROL UNIT: operates door and lights from moving car. NO electrical connections. Clamps to car dash by magnets.

PUSH-BUTTON WALL CONTROL for in-garage use.

COMPLETE INSTALLATION by factory-trained Crawford men.

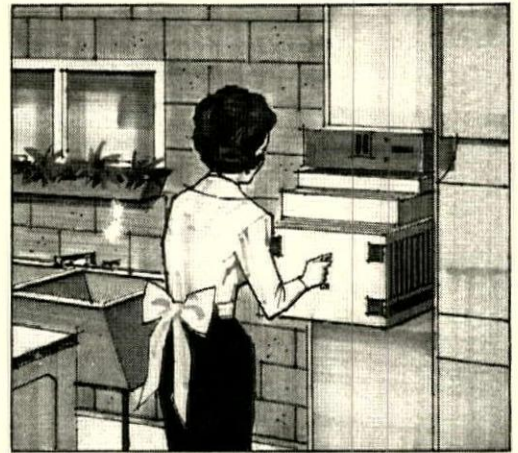
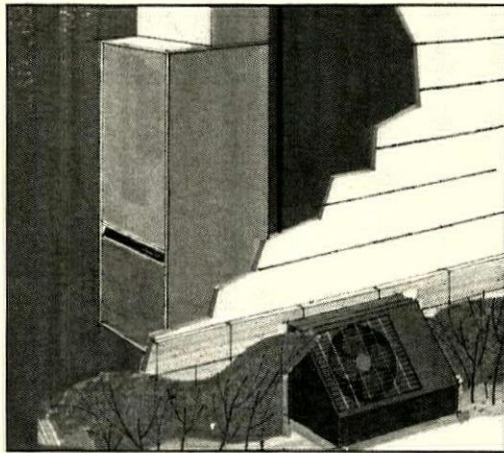
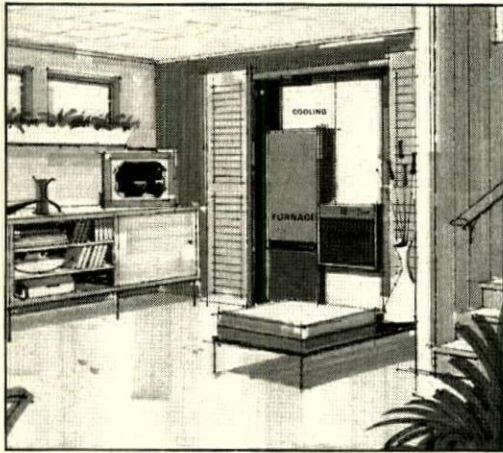
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The Crawford Door Company's Honeycomb Core is made of a special plastic material that is completely non-combustible and is guaranteed to last for the life of the door. It is also guaranteed to be completely fireproof. Crawford Door Company will furnish a replacement panel if a Crawford Marvel-Matic Door Panel does not comply with the guarantee.

WARRANTIES backed by Crawford and Crawford distributors. Centralized responsibility and service.

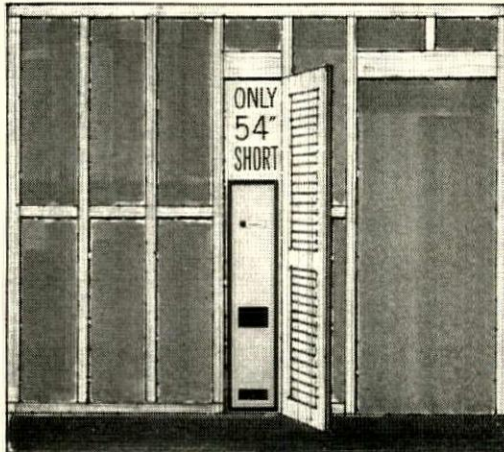


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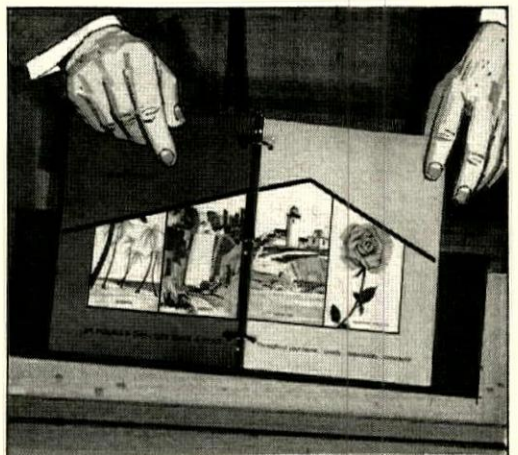
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Deluxe heating, integrated with...Consumer-demanded cooling and...NEW, wife-saving electronic air cleaning.



Time-saving, cost-cutting product design...compact, versatile equipment...practical even on low-cost models.



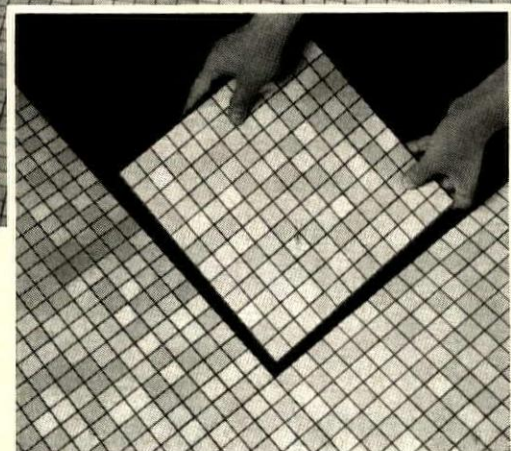
Consumer promotionand rock-solid guarantees help you make more sales.

Good comfort is never out of style: cooling is in greater demand every day: electronic air-cleaning is a new attention-getter. Only your local Luxaire representative is so well-prepared to help you cash in . . . with design help, promotion support and new product knowledge. See him today and ask for the Luxaire Builder Brochure, or write direct. The C. A. Olsen Manufacturing Co., Elyria, Ohio.





NOW... CERAMIC TILE THAT INSTALLS LIKE VINYL!



STYLON VB combines the permanent beauty of ceramic tile with vinyl's underfoot comfort. Each 12" square contains 144 real ceramic stones, embedded in pure vinyl. These panels set quickly in Stylon VB adhesive, contour over uneven areas; have no dirt-catching grouting. Install Stylon VB flooring to add lifetime beauty and sales appeal, at no extra cost, in your kitchens, bathrooms . . . in any room. Available in quantity, in rich blends, from your local building supply, tile or resilient dealer.

Stylon vb
VINYL BOND CERAMIC TILE

Stylon ceramic tile works all around your new homes! Inside, outside, Stylon gives today's home buyers the carefree elegance they're looking for: eye-catching floors, walls, counters, colorful patios, pools . . . as a bold decorative touch around fireplaces . . . for half-walls, room dividers.

Home buyers know Stylon ceramic tile never scratches, dents, ages, fades or discolors; is acid resistant; never needs waxing. Over 125 wall and floor colors harmonize with each other and with leading brands of plumbing fixtures. Many sizes and textures, with matching trim shapes.



STYLON HELPS YOU CLOSE SALES 8 WAYS

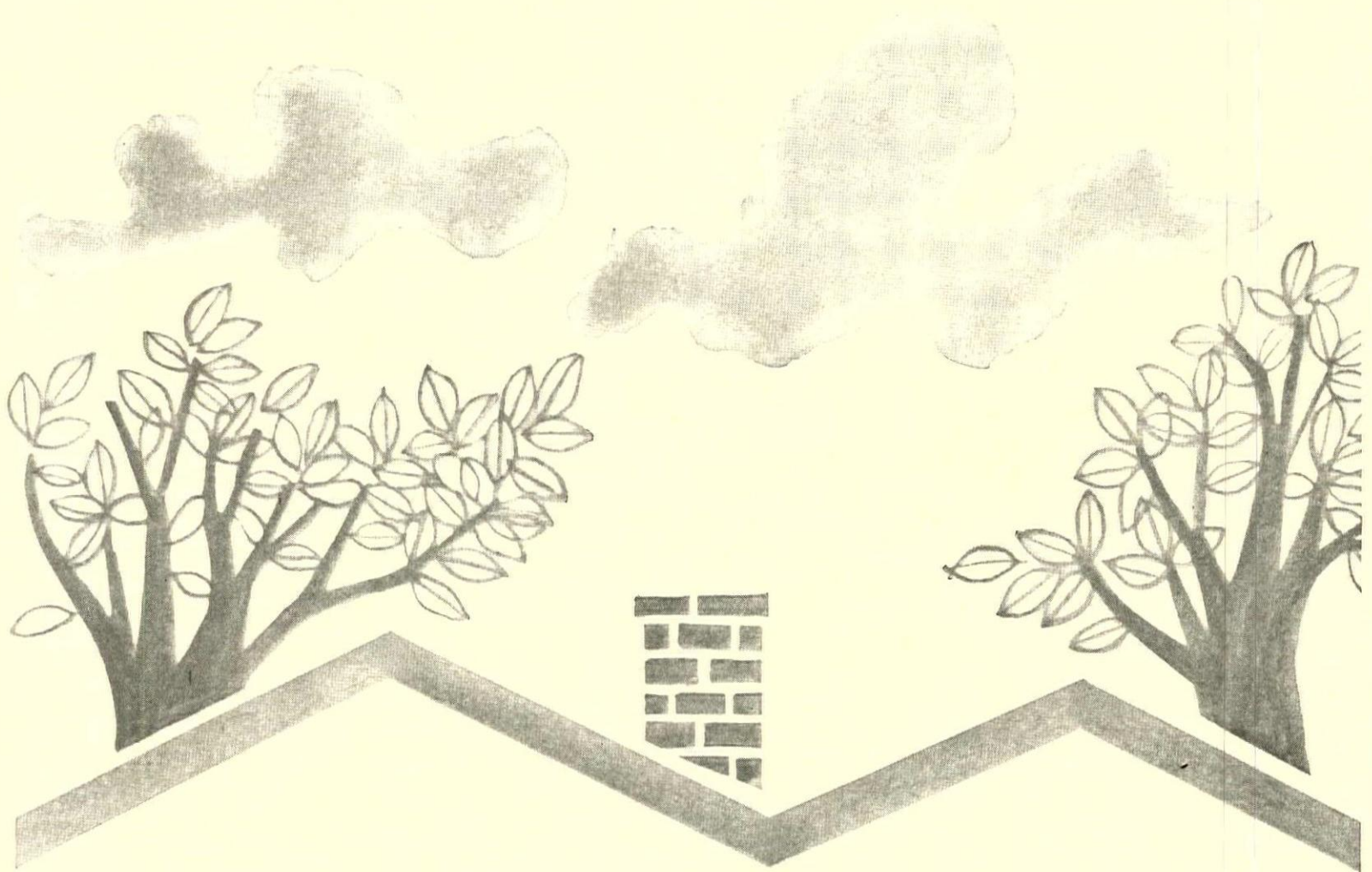
Get the facts! — right in your model homes, Stylon helps you SELL with TileColor Wheels, Color Planners, Giveaway Literature, Idea Booklets, Design Award Plaque, Outdoor Shingles, Proven Ad Mats plus pre-selling full-color ads in top consumer magazines! Mail coupon today: Stylon, Dept. HH, Milford, Mass.

Name

Firm

Street

City Zone State



A PRACTICAL TIP FOR HOME BUILDERS



GOOD COOLING SYSTEMS BEGIN WITH THE FURNACE SELECTION!

In modern split systems that provide cooling for homes and garden apartments, the furnace is the cornerstone of the air distribution system. And first-class air distribution is absolutely essential to the success of any kind of year-round air conditioning.

The furnace fan must have enough muscle to handle the bigger air quantities that the cooling cycle demands. It must be able to do this quietly. And the fan assembly must have the guts to operate in all seasons, year after year, without complaint.

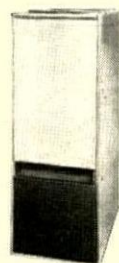
But that's not all. Any furnace that becomes

CARRIER WEATHERMAKER FURNACES

OIL-FIRED:



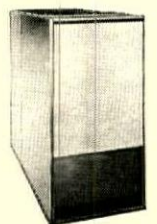
Horizontal Flow Output capacities 85,000 to 335,000 Btuh.



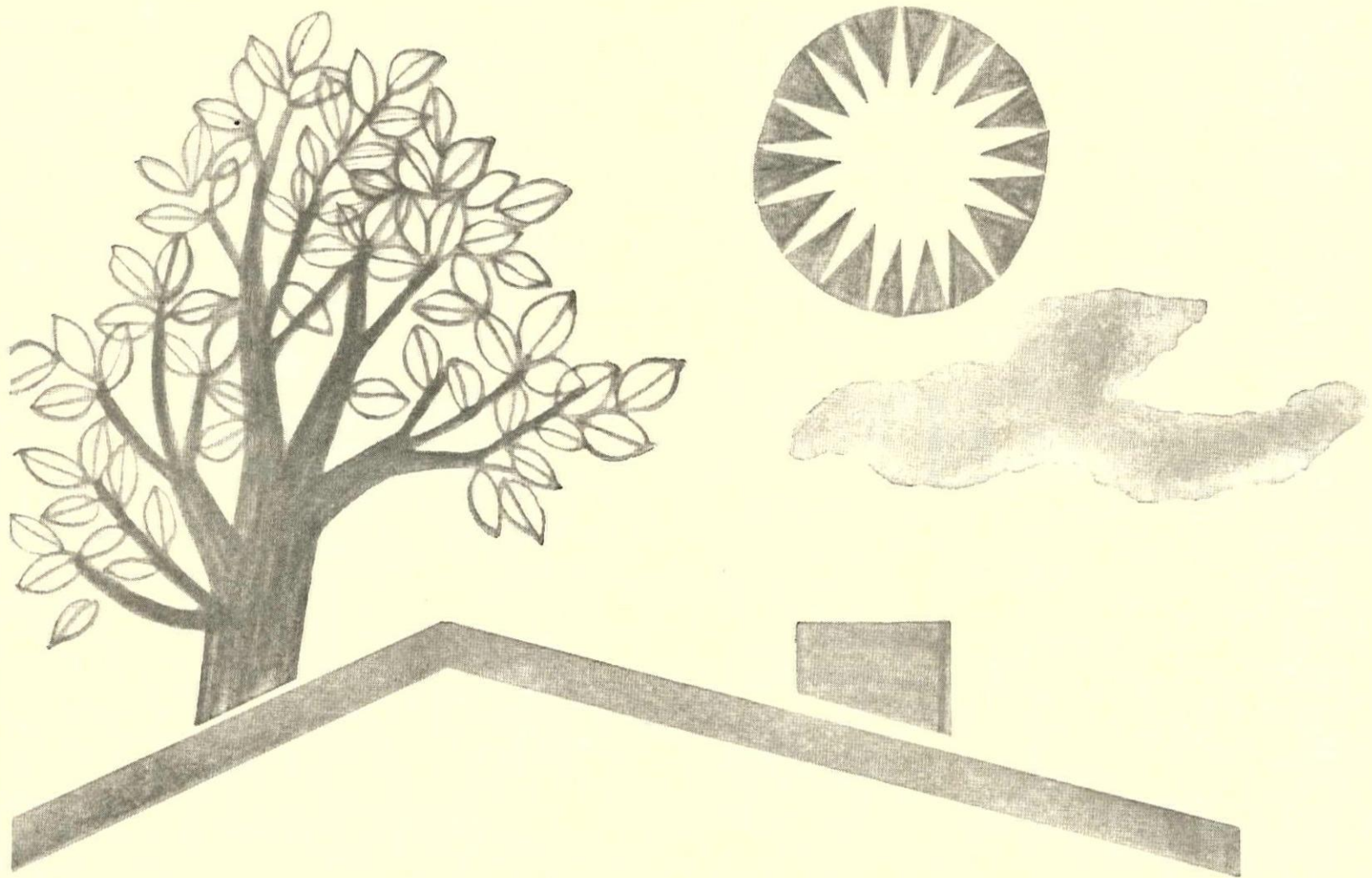
Upflow Output capacities 85,000 to 250,000 Btuh.



Downflow Output capacities 85,000 to 250,000 Btuh.



Lobby Upflow Output capacities 100,000 to 250,000 Btuh.



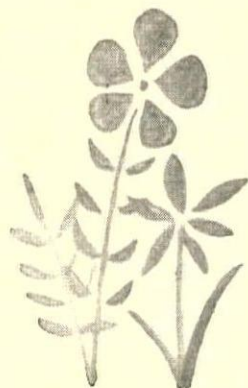
a part of an air conditioning system should have appropriately big air passages. And the heat exchanger should be of a type that withstands constant contact with moisture-laden air during warm weather.

Carrier Weathermaker® Furnaces meet all these requirements, and then some. Carrier furnaces and their controls have been designed to match the companion Carrier cooling coils and outdoor condensing units that complete year-round split systems. They are compact. And they are available in an extremely wide range of capacities—note the selection below.

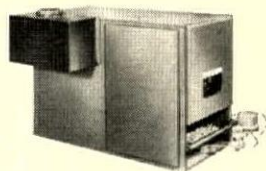
Equally important, they are sold, installed and serviced by Carrier Dealers schooled in air systems—people capable of helping you with duct design, equipment location, wiring and controls.

So when you begin thinking about *cooling* for your homes and apartments—start thinking about the *furnace*. Then reach for the phone book and look for your nearest Carrier representative. You'll be glad you did. Carrier Air Conditioning Company, Syracuse 1, New York.

Carrier Air Conditioning Company



GAS-FIRED:



Horizontal Flow Belt drive—input capacities 105,000 and 125,000 Btuh. Direct drive—80,000 to 125,000 Btuh.



Upflow Belt drive—input capacities 80,000 to 360,000 Btuh. Direct drive—70,000 to 120,000 Btuh.



Downflow Belt drive—input capacities 80,000 to 300,000 Btuh. Direct drive—80,000 to 120,000 Btuh.



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MGIC/63/E

MORTGAGE MONEY

Discounts inch higher on West Coast; Fed rate cut promises a flat market

Builders on the West Coast are paying ½-point more discount for FHA Sec. 203b minimum down, 30 year loans now. Mortgage men in the booming Los Angeles and San Francisco markets—where 15% of all U.S. housing is built—now want 1½% discount for handling loans. A month ago some loans were moving at only 1-point discount. And builders are wondering what happened.

In a nutshell, some West Coast mortgage men were giving builders smaller discounts than they themselves could get when they resold the loans to Eastern investors. They absorbed the difference as a cost of keeping business volume high.

Now, West Coast originators are finding more resistance to prices yielding investors 5.06% after servicing—the market since May. East Coast investors are talking 5.12% now—although evidence that the general market has climbed this high is miniscule. But West Coast mortgage men have quit giving builders the extra margin. Says one Eastern investor: "They're coming into line with the U.S."

The Federal Reserve's hike of its discount rate is producing a stalemate.

Since West Coast mortgage discounts increased at about the same time the Federal Reserve Board increased its rediscount rate on loans to member banks from 3% to 3½% (a move to keep U.S. gold from flowing overseas), some observers blame one on the other. Such is not the case. Mortgage men in HOUSE & HOME's monthly survey of the market in 18 cities say other forces in the market were already nudging yields upward.

For one thing, a scattering of small local investors, notably West Coast S&Ls, some commercial banks on Long Island and elsewhere, and even some mortgage companies began selling loans they were holding in portfolio or warehousing. Why? Some S&Ls wanted money to put into higher-rate conventional loans. And some mortgage bankers became convinced—with the added evidence of the Fed's action—that mortgage prices had reached a peak.

Most of the sales were small—some went as high as \$30 million packages—and not enough in themselves to turn the market. But at the same time mortgage volume picked up "beyond what we had expected" in California, Texas, and miscellaneous areas like Cape Canaveral and northern Alabama.

"Supply is tending to balance demand," says President Robert Morgan of Boston's 5¢ Savings Bank and representative of the Massachusetts Purchasing Group of savings banks. "With this you have to look with a fine tooth comb to find any changes in the market," he adds. "It's really a reversal of psychology, a change in attitude that means you won't reach for deals you might have made 90 days ago."

Others agree: "Flat, flat, flat," says one. "The rate increase should not bring increases in mortgage interest rates during the next six months," predicts NAHB.

But the Fed may have triggered higher rates on construction loans.

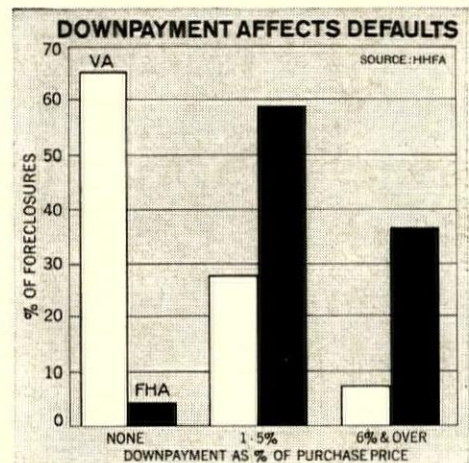
Since last spring officials of the Home Loan Bank Board have been trying to persuade S&Ls to cut dividend rates they pay shareholding depositors (NEWS, May *et seq*). Some went down, but some also went up to as high as 4.9% in California on July 1.

But the Fed, in a second and little noticed part of its move, let commercial banks boost the interest they pay on time certificates and other time deposits from 90 days to one year from 3½% to 4%. They already can pay 4% for longer-term money. One reason for the change: despite a record torrent of \$3 billion in personal new savings in the first half of the year, commercial banks are running 10% behind their record 1962 growth rate.

Few banks have moved up quickly behind the Fed's lead—but already the wraps are being taken off competing investors. New York's giant savings banks—shackled at 3¾% for money less than one year and a maximum 4¼% for money over that—got the green light to go higher on short-term money. One mortgage man predicts they will go to 4¼% across the board in the next few months.

One result: by boosting the interest rate on short-term money, mortgage men foresee higher rates on construction loans. Short-term lending by mortgage bankers to warehouse loans may also cost more.

Now, the Home Loan Bank Board is quietly talking about letting S&Ls offer split-level dividends like commercial banks. The idea: make it easier for S&Ls to cut their high dividends. But U.S. S&L League men say the Fed's action instead only makes it harder for S&Ls to cut dividends.



FORECLOSURES were primarily cases where home purchase involved 1% to 5% down (59%). For VA cases, no downpayment predominated (65%).

Foreclosure study reveals how much low downpayments, Negro buyers boost default risk

An exhaustive HHFA survey of a year's mortgage foreclosures affirms the economic truism that an owner loses his home most often because he loses his income. But the study's hard look at other reasons behind the rising tide of defaults discloses some more remarkable items.*

The sampling in six metropolitan areas (Chicago, Dallas, Detroit, Los Angeles, New York, Philadelphia) found 63% of all FHA and 93% of all VA foreclosures involved no downpayment or a payment of 1 to 5%. Conventional loan foreclosures generally involved higher downpayments, but Dallas conventional defaults involved primarily no downs and Los Angeles foreclosures were predominantly 1 to 5% cases.

Negro loans risky? In four of the six areas, the Negro foreclosure rate was much higher than among white owners. In New York, 35% of FHA and 31% of VA foreclosures involved nonwhite owners. Philadelphia's foreclosures among Negroes accounted for 26% of its FHA and 42% of its VA cases.

"These percentages . . . were well above the percentage of non-white mortgaged home ownership indicated in the 1960 census of housing," says HHFA. In the 1960 census, non-white owners had 5.6% of FHA mortgages in New York, 3.8% of VA mortgages. In Philadelphia, non whites had 5.5% of FHA mortgaged homes, 15.4% of VA.

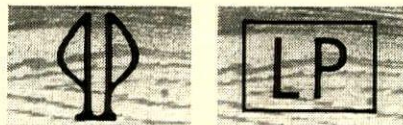
HHFA found a similar pattern in Detroit and Los Angeles, but not in Chicago and Dallas.

Among VA foreclosures, 62% of the Negro homes had no downpayments, a percentage identical with that for white families.

Small homes lost. Of FHA and VA homes foreclosed, 24% were below \$10,000 in price, and 59% of the VA and 63% of the FHA defaults were in the \$10,000-\$14,999 range.

Housing expense-to-income ratios of 30% or more represented 33% of the FHA and 41% of the VA foreclosures. They also ac-

* The survey, *Mortgage Foreclosures in Six Metropolitan Areas*, cost \$65,000. It is "not yet available for general distribution," but may be seen at HHFA's Washington office.



LIGHT IN WEIGHT & COLOR

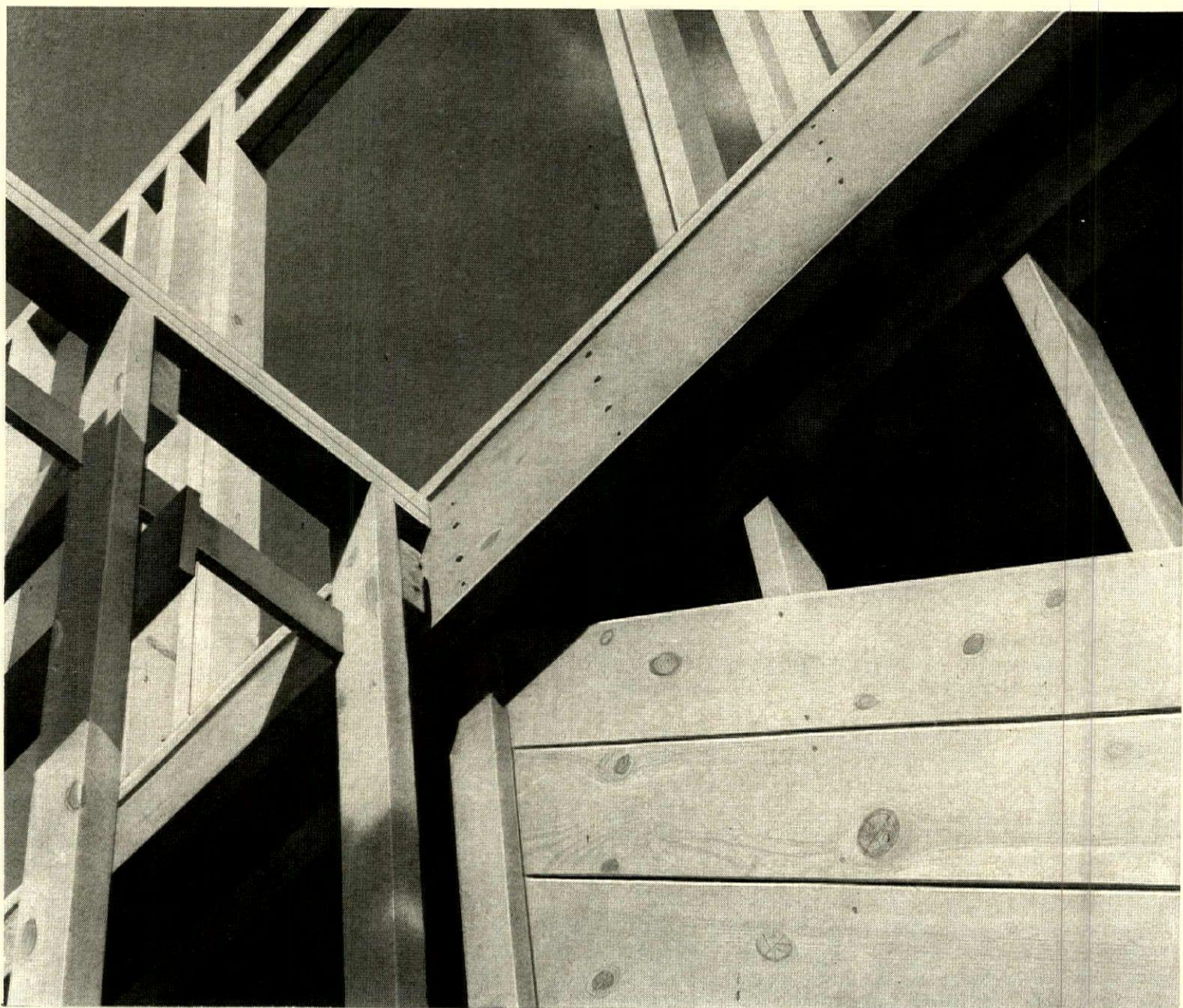
PRE-SEASONED PONDEROSA PINE

LODGEPOLE PINE

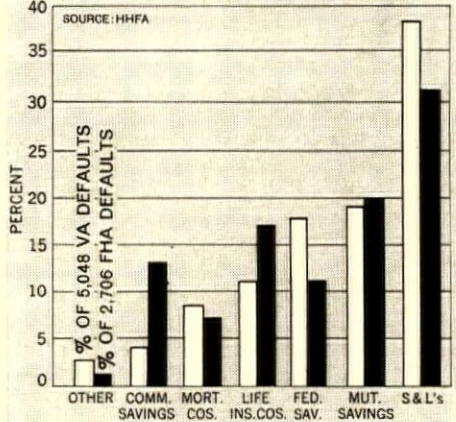


For light construction uses with both carpenter appeal and eye appeal . . . use pre-seasoned Ponderosa Pine and Lodgepole Pine produced by Western

Pine Association mills. These woods are exceptionally easy to work with . . . from carrying to cutting to toe-nailing! And homebuyers love to see bright, clean-looking lumber when they inspect a home during construction. Western Pine member mills pre-season these woods for stability, and then carefully grade them. The homebuyer's search for satisfaction . . . and your search for homebuyers . . . will be rewarded when you use pre-seasoned WPA grade and species marked lumber from Western Pine Region mills.



WHO HOLDS THE LOANS?



S&L's held half the conventional loans foreclosed in Dallas and Detroit, two thirds in New York and 90% in Chicago, Philadelphia and Los Angeles. The survey says this reflects the high percentage of loans made by S&L's and not necessarily a higher relative frequency of foreclosures among S&L loans.

counted for half to two thirds of the conventional foreclosures in three cities, one third in two and one fifth in the other.

Junior financing perils. Three fourths of the foreclosure cases involving conventional first mortgages were found to have seconds and in some cases thirds at the time of origination. About a third of the survey's conventional loan foreclosures in Dallas and New York also had junior mortgages. FHA and VA foreclosures involved relatively few seconds.

A wide variance was evident in explanations given by lender and borrower. The borrower blamed curtailment of income—from unemployment and wage cuts—as the primary cause in 35% of cases, followed by death and illness in 22% of the cases. Buyers generally felt they could have saved their homes, and preferred to do so, if they had not become jobless.

Urge to merge still strong among mortgage bankers

A new wave of mergers and sales is creating a few new giants in mortgage banking. Items:

In Detroit, Citizens Mortgage Corp. has bought Union Mortgage Co., pushing Citizens servicing portfolio to \$420 million. Purchase price was not disclosed by President Stanley M. Earp.

Wallace Investments of Dallas paid \$5 million (through a subsidiary) for Lomas & Nettleton of New Haven. Addition of the concern's mortgage servicing, plus insurance business, gives Wallace an estimated \$712 million servicing. Wallace also paid \$2.5 million for Admiral Fire Insurance Co. of Houston.

Union Bank of Los Angeles became the first big California commercial bank to buy a mortgage company. For a reported \$1 million, it acquired Cooly Mortgage Co. (\$50 million servicing), whose owners, John L. and Ted Cooly, are retiring. Last year, a Union deal to buy Winter Mortgage Co. collapsed.

The new Associated Mortgage Cos. (NEWS, Feb.) of Washington says it is negotiating to buy another company to add to its \$400 million servicing. And six-year-old Mortgage Associates Inc. of Milwaukee (servicing \$156 million) has asked stockholders to approve its sale to an undisclosed buyer.

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending Aug. 9, 1963.

City	Conventional Loans ^w		Construction Loans ^w		FHA 207 Firm Commitment	FHA 220 Firm Commitment 35 years	FHA 203 ^b Min. Down 35 year Immed
	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Banks, Ins Cos. & Mtg. Cos.	Interest + fees Savings banks, S & Ls			
Atlanta	5 1/4-6	5 3/4-6	6+2	6+2	a	a	97 1/2-98
Boston local	5 1/4	5 1/4 ⁿ	5 1/4-5 3/4	5 1/4-5 3/4	a	a	a
out-of-st.	—	—	—	—	a	a	97 1/2-98
Chicago	5 1/4-5 3/4	5-6	5 3/4-6+1-1 1/2	5 3/4-6 1/4+1 1/2-2	98 1/2-par	98 1/2-par	97-98
Cleveland	5 1/2	5 1/2-6	6+1	6+1	99-par	99-par ^h	97 1/2-98 1/2
Dallas	5 1/2-5 3/4	6 ^j	6+1	6+1	99-100	a	98-99 1/2 ^p
Denver	5 1/2-6	5 3/4-6 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	98-98 1/2
Honolulu	6-6 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	98-99	98 ^h	98
Los Angeles	5 1/2-6	5 3/4 ^h -6.6	6-1 1/2	6-6.6+2-3	98 1/2-99	99	98 1/2
Miami	5 1/2-5 3/4	5 1/2-6	5 3/4-6+1 1/2-1	5 3/4-6+1 1/2-1	99 ^h	a	97 1/2
Newark	5 1/2-5 3/4	5 1/2-6	6+1	6+1	99-99 1/2	99-99 1/2	98 1/2
New York	5 1/2-6	5 1/2 ^r -6 ^r	6+0-1	5 3/4-6 ⁿ	99-par	99 1/2-par	99-par
Okla. City	5 1/2-6 ^h	5 3/4-6 1/2	6+1-2 ^h	6+1-2	a	a	97 1/2-98 1/2 ^h
Philadelphia	5-5 3/4	5 1/4-6	5 1/2+1	5 3/4+1	99 1/2	par	99
San Fran.	5 1/2-6 ^h	5 3/4-6.5	5 3/4-6+1-1 1/2	6-6.6+1 1/2-3	99-99 1/2	99 1/4-99 3/4	98
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	par	par-1/2	99

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

City	FNMA Scdry Mkt ^{z,y}	New Construction Only			Existing ^r 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	98-98 1/2	98 1/2 ^h	98 ^h	97 1/2-98 1/2
Boston local	98 1/4	par-101	par-101	par-101	par-101	par-101
out-of-st.	—	97-98	97 1/2-98	a	a	97 1/2-98
Chicago	97 1/4	99-par	98 1/2-99 1/2	98 1/2-99	98-99	99-100
Cleveland	97 1/4	98 1/2-99	98-99 ^h	99-par	98 1/2-99	98-98 1/2
Dallas	97 1/4	98-99 1/2	97 1/2-98 1/2	98-99 1/2	98-99 1/2	97 1/2-99
Denver	96 3/4	95-99	97 1/2-98 1/2	98-99	97-98	98-99
Detroit	96 3/4	98 1/2-99	a	99-par	a	98-99
Honolulu	96 3/4	97 1/2	97 1/2	98	97 1/2	97-97 1/2
Houston	97 1/4	98-99	98-98 1/2 ^h	99	a	98 1/2
Los Angeles	96 3/4	98 1/2	98	98 1/2 ^h	98 1/2	98 1/2 ^h
Miami	97 1/4	98	a	99 ^h	a	98
Newark	97 3/4	99-par	99	par	99	par
New York	98 1/4	99-par	99-par	99-par	99-par	par
Okla. City	96 3/4	98-99	98-99	98-99 1/2	a	97 1/2-99
Philadelphia	97 3/4	par	par	par	par	99 1/2
San Fran.	96 3/4	98 1/2	98-98 1/2	99	98 1/2	98-98 1/2 ^k
St. Louis	97 1/4	97-99	97-99	97 1/2-99	97 1/2-99	97-99
Wash. D.C.	97 3/4	99	99-99 1/2	99-99 1/2	99	99

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

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert M. Morgan, pres., Boston Five Cents Savings Bank; Chicago, Robert Pease, vice 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 C. Bradley, asst. vice pres., Mortgage Investments Co.; Detroit, Harold Finney, exc. vice pres., Citizens Mortgage Corp.; Honolulu, Howard Stephenson, asst. vice pres., Bank of Hawaii; Houston, Everett Mattson, exc. vice pres., T. J. Bettes Co.; Los Angeles, Christian Gebhardt, vice pres., The Cowell 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, E. L. Tagwerker, vice pres., Bankers Mortgage Co. of Calif.; Washington, D.C., James C. Latta, vice pres., Frederick W. Berens, Inc.

Footnotes: a—no activity. b—limited activity. c—for local portfolios. d—on spot basis. e—FNMA is only purchaser. g—depending on location. h—limited 6%. j—some 5 1/2 and 5 3/4 available. k—for 25 or 30 years. m—no fee if permanent loans included. n—limited 5%. p—1/2 point differential has generally disappeared. r—depending on % of loan. s—no fees to 1%. 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.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA, VA 5 1/4s

Immediates: 97-98 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.

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

Immediates: 96 1/2-98

Prices cover out-of-state loans, reported the week ending Aug. 9, by Thomas P. Coogan, president, Housing Securities Inc.

NET SAVINGS DEPOSIT CHANGES

(in millions of dollars)

	June '63	% change from June '62	Year to date	% change from 1962
Mut sav banks ^a	\$407	—4	\$1,621	19
S&Ls ^b	1,675	17	6,143	34
Commercial banks ^c	600	—17	8,400	—10

^a—National Association of Mutual Savings Banks. ^b—U. S. Savings & Loan League projections. ^c—Federal Reserve Board.

CONVENTIONAL LOANS

(combined averages)

	Apr.	May	June
New Homes	5.84	5.82	5.82
Existing homes	5.99	5.95	5.94

(Interest charged by various lenders, new homes)
S & Ls 5.97, 5.95, 5.94
Life ins cos 5.51, 5.57, 5.53
Mortgage companies 5.63, 5.67, 5.69
Commercial banks 5.72, 5.65, 5.67
Mut sav banks 5.57, 5.58

Source: Federal Home Loan Bank Board.

Materials producer resists takeover by land developer

Gulf American Land Corp. of Miami is locked in a complex court battle with officers of Fenestra Inc. over control of the Detroit-based maker of building products and automobile springs.

The fight is a new type for the housing industry—and a kind that promises to become more and more common as the industry moves into an era of mergers and consolidations.

Gulf American, through a wholly-owned subsidiary, G.A.L.C. Co., charges that Fenestra and six of its 11 directors headed by President Orren S. Leslie want to pay \$2.2 million—"substantially in excess of the reasonable value"—for a farm-implement company. Gulf American's reason for concern: it has just bought 46% of Fenestra's stock and claims the purchase would "substantially and irreparably lessen the value" of its stock.

Fenestra charges that Gulf American entered a "plan, scheme and conspiracy" with five dissident Fenestra directors headed by Harry Brainin to help Gulf American gain control of Fenestra, and afterward use Fenestra's \$10.9 million of liquid assets to pay Gulf American's "huge, pressing, and fast maturing obligations." Fenestra says the ultimate plan is to merge Gulf American and Fenestra so that "the payment of such purchase price would be unlawfully financed, directly or indirectly, with funds of plaintiff [Fenestra]."

To date: a Wayne County (Detroit), Mich. court has temporarily enjoined Fenestra officers from buying the farm implement company, Freeman Industries Inc. of Peru, Ind., and restrained Gulf American and the five Fenestra directors from voting their stock or buying additional shares.

Behind the battle. Fenestra is an old-line manufacturing company in the throes of diversification. In 1904 it started making steel window frames and casements for factories, and did well until the late 1950s, when extruded aluminum windows began to give Fenestra strong competition.

In December 1961, deciding the concern was slowly slipping on one product—and faced with a 1961 loss of over \$4 million—Fenestra's directors hired Orren Leslie, manufacturing vice president for Fairbanks Morse Spring & Wire Co., as president, and told him to seek mergers or acquisitions so Fenestra could diversify.

Under Leslie, Fenestra began getting into the ballooning market for fabricated steel in building construction and now makes steel decks and building panels, a load-bearing steel curtain (Fenmark) used in building enclosures, steel doors for homes and apartments, porcelain enamel architectural panels, and automobile leaf springs.

Under Leslie the company earned \$70,000 last year and says it earned \$198,000 in June, its best month in many years.

But in mid-1962 Fenestra's principal owner, wealthy investor Frank Wyman, sold 123,190 shares to Brainin and his associates. In July, 1962 Brainin and two associates were elected Fenestra directors. Later a third associate joined the board. Fenestra charges Brainin's group accumulated 293,682 Fenestra shares.

Brainin's group and other Fenestra directors, including Leslie, soon began feuding



DEVELOPER LEONARD ROSEN
To boost cash flow, buy?

over the company's future. Several contemplated acquisitions were vetoed.

Meanwhile a family group headed by Jay Pritzker of Chicago bought 8,400 Fenestra shares and sought a director's seat. Refused, Pritzker suggested Fenestra merge with several unlisted corporations controlled by his family. This was refused.

At this point, with the Fenestra board split 6-5 over Fenestra's future, the Leslie group now charges the Brainin group went looking for a buyer of their stock—and found Gulf American. Gulf American agreed to pay \$21—well above the stock price on the market of between \$14 and \$17 in June and July.

And, says Fenestra, Gulf American and its two principals Julius and Leonard Rosen, who together own two-thirds of its stock, borrowed the \$6 million to buy the Fenestra stock. Fenestra points to a Gulf American statement filed with the American Stock Exchange (where its stock is traded) showing:

- Gulf American borrowed \$1,750,000 (giving a \$1,995,000 note) during June from Atkinson Corp. and Vice President Julius Rosen pledged 1,203,100 shares of his stock holdings as collateral. Fenestra charges: Atkinson Corp. is controlled by the Pritzker family, and the note covered the \$1,750,000 cash payment for Fenestra stock plus "a bonus of \$245,000, or 14% of the \$1,750,000 loan."

- Gulf American borrowed \$4,417,322 from Argus Corp. at 6% interest, for which President and Chairman Leonard Rosen pledged 500,000 shares of his Gulf stock. Fenestra charges: Brainin's group controls Argus.

- "For services rendered to procure the financing referred to," Gulf American issued a note payable to the bearer and pledging 300,000 shares of Julius Rosen's stock as collateral. Fenestra charges the note was given "to a person not known or disclosed in Gulf American's report" and "represents a bonus of 32% of said \$1,750,000 loan obtained from Atkinson Corp. Adding thereto the \$245,000 bonus to be paid to Atkinson Corp. . . . Gulf American agreed to pay aggregate bonuses of \$845,000, or 46% of said loan, . . . most unusual and extraordinary."

Appetite for cash? Fenestra and Gulf American are also at odds over the soundness of Gulf American's land development operation on the west coast of Florida.

Fenestra calls it an "extremely speculative, extra hazardous business based upon promotional selling of lots . . . Approximately 68% of the purchasers do not see the prop-

erty before signing the land contract to purchase."

The business of buying, draining, and otherwise developing land (54,000-acre Cape Coral near Ft. Meyers, an equal tract called Golden Gate Estates near Naples, and 42,000 acres in Polk County) created "great, continuing, and insatiable demands and requirements of Gulf American for cash," says Fenestra. The company "has been required to pay usurious rates of interest of between 12% and 15% per annum . . . Pritzker and their family-controlled company, Atkinson Corp., have loaned . . . approximately \$4 million at the usurious interest rate of 12% per annum."

Fenestra charges that even before borrowing to buy its stock, Gulf American owed \$10.7 million, "all but \$900,000 maturing prior to Jan. 16, 1964."

President Leonard Rosen of Gulf American indirectly confirms some of Fenestra's charges in his public statements. "Last year we ran short of cash somewhere in the neighborhood of \$11 million. In other words our cash outgo was \$11 million more than our cash income." But Rosen thinks Gulf American has turned the corner; he points to acquisition of Congress International Inc., a motel franchise operation, and increasing interest income from \$125 million of sales contracts as means of bolstering cash flow. "This year—and I refer to calendar 1963—we should run about \$1 million or \$1.5 million on the plus side. We can easily boost the sales of land whenever we want."

But Gulf American's latest earnings report, for the nine months ended May 31, shows company sales are down 7% to \$52.9 million and net income down 33% to \$5.2 million.

More mergers—and some of them fray tempers

Two former leaders of the Home Manufacturers Assn. are at odds over the stock interest one has just bought in the other's company.

President Charles Kurtz of Inland Homes Corp. promises to fight any takeover attempt following purchase of 30% of Inland's stock by President Hamilton Crawford of Crawford Corp. (NEWS, Aug.). Kurtz brands the Crawford holding "inimical to the best interest of Inland and its stockholders."

Another prefabricator, General Homes of Fort Wayne, is wrapping up a deal in which its 50% owner, Koppers Co. of Pittsburgh, will nominally become its full owner. The move puts Koppers' AAA credit rating behind General—but Founder-President William Hall says he still retains 50% control through stock options.

And Consolidated Mortgage & Investment Corp., New York City real estate and building company, has acquired a majority interest of 576,894 shares (of 1,024,600 outstanding) in shell-home builder Outdoor Development Co. of Augusta, Ga. Consolidated got 400,000 shares in exchange for \$500,000 of Outdoor's 8% debentures and bought the rest from other shareholders. Consolidated President Chester M. Goldman and an associate have been elected directors, along with Outdoor President William R. Mills and two associates. Five other Outdoor directors have resigned.

Big housing companies seek listing on little board

More and more of the stronger building and real estate companies are going on the big national stock exchanges. Listing serves to separate them from the over-the-counter stocks, tends to create more investor confidence in them, and simplifies the job of raising capital in the future.

Newcomers who have just started or have been approved for trading on the American Stock Exchange: Levitt & Sons, Louis Lesser Enterprises, and Del Webb Corp. These moves mean 23 of the 113 housing stocks in HOUSE & HOME's table are now listed.

Four publicly-held housing companies show handsome gains for their fiscal years just ending, but two others report losses.

Net income of LEVITT & SONS, former Long Island builders now building in France and Puerto Rico as well as three U. S. locations, zoomed 58% to \$1,389,000 in the year ended Feb. 28. This was a turnaround from a \$763,000 deficit in fiscal 1961. Predicts President William J. Levitt: "Next year's sales and earnings should be even better." As in past years, the company does not report the number of homes sold, but says real estate and land sales climbed 25% to \$39 million. The company has begun trading on the American Stock Exchange.

KAUFMAN & BROAD, with the fastest growth of any publicly held building company since it went public in 1961 (H&H, Apr.), reports sales of \$11,970,743 for the six months ended May 31, a 25% gain over \$9,519,443 for the same period a year earlier. Net after taxes was \$330,370, up 35% from \$245,184 in the same period of 1962.

DISC INC., Washington-based land development concern, says net income rose 32% to \$1,079,450 in its fiscal year ending Feb. 28. The company owns 2,500 acres in Prince Georges County, Md., for a planned community called Northhampton. It also owns 1,032 apartments, 793 homesites, and six vacant sites near Washington, 120 apartments near Los Angeles, and four Florida tracts. In Melbourne, Fla., nearest city to Patrick AFB, 395 acres have just been zoned for 1,400 apartments and 582 homes. At Ft. Pierce, 774 waterfront homesites are underway.

ADVANCE MORTGAGE CORP. of Detroit shows income up 51% to \$628,648 for the year ending April 30. Advance's mortgage originations of \$144.4 million were almost double its 1962 pace. The company now services \$406 million, and has 13 offices in southern California, Illinois, Ohio, Indiana, Wisconsin, and Pennsylvania.

UNITED IMPROVEMENT & INVESTING of New York City reports a \$415,853 loss for 1962, compared to \$491,000 profit the year before. The company's mortgage banking arm originated \$94 million in mortgages and now services \$15 million.

GENERAL DEVELOPMENT CORP. turned in a "disappointing" \$515,892 loss on sales of \$54.2 million, down 20.6%, says the annual report. GD sold 1,123 homes and 29,077 homesites in calendar 1962. Cancellation of customer contracts increased unexpectedly in the year, and as a result the reserve for cancellations was increased \$6.4 million to \$14.4 million. Contracts due now total \$133.7 million, and for the first time GD's cash flow exceeded cash spending—by \$1,855,000 the com-

pany reported. Long term debt fell \$7 million.

HOUSE & HOME's index of housing stocks slipped a miniscule 0.01 from 10.45 to 10.44 while the Dow-Jones industrial average sagged 1.7% to 703.92. The National Quotation Bureau average for over-the-counter stocks was up 0.4% to 137.75.

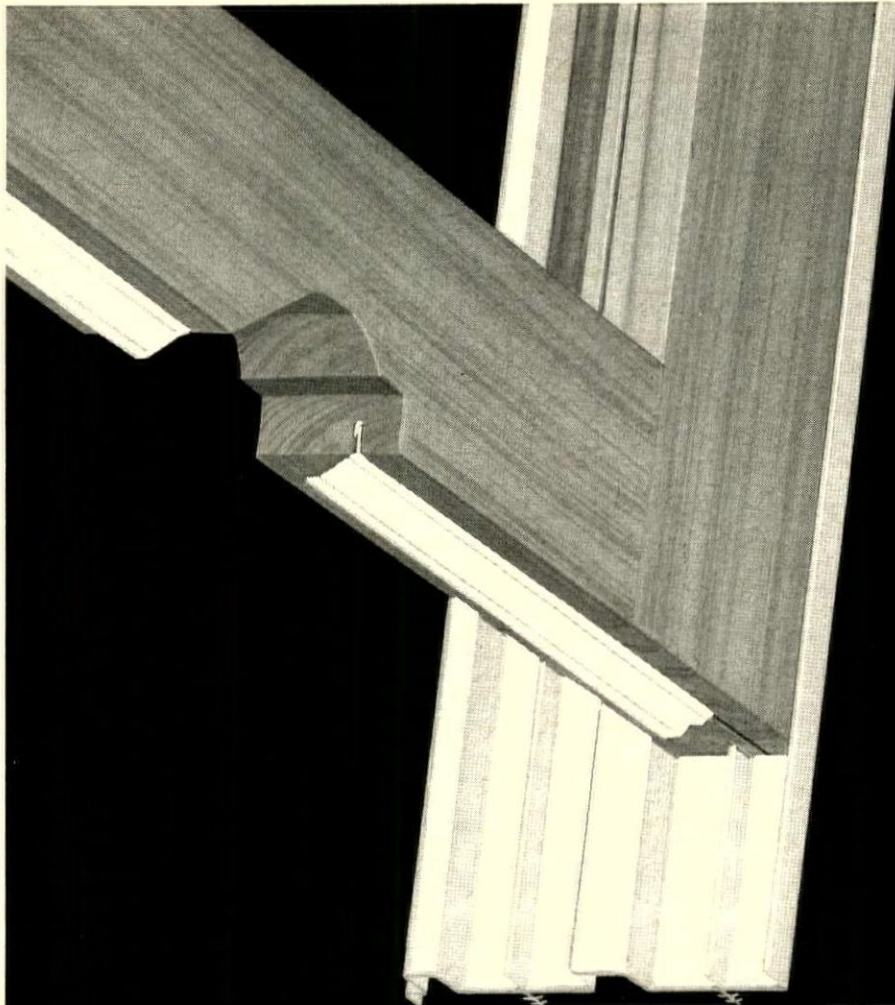
Mortgage banking stocks fell 4.2%. Real estate investment trusts rose 4.3% and building companies advanced 3.9%. A big S&L gainer was First Western Financial, up 8% to 46 3/8.

Here are House & Home's averages of selected stocks in each housing group:

	June	July	Aug.
	5	5	7
Building	6.32	6.21	6.45
Land development	5.16	5.25	5.22
S&L's	22.53	22.53	22.50
Mortgage banking	11.48	11.46	10.98
Realty investment	5.68	5.86	5.91
REITS	9.02	10.40	10.85
Prefabrication	6.00	6.28	6.08
Shell Homes	9.34	9.40	9.34
AVERAGE	10.33	10.45	10.44

HOUSING'S STOCK PRICES

Company	June 5		July 5		August 7		Company	June 5		July 5		August 7	
	Bid	Ask	Bid	Ask	Bid	Ask		Bid	Ask	Bid	Ask	Bid	Ask
BUILDING													
Adler-Built Inc.	20c	30c	20c	25c	25c	35c	Advance	9 3/8	9 7/8	10 1/8	10 1/2	9 1/2	9 7/8
Capital Bid. Inds.	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	Associated Mtg Cos.	a	a	a	a	a	a
Cons Bldg (Can)	9 3/8	9 1/2	9 1/4	9 3/8	8 1/2	8 5/8	Charter	2 3/4	1 7/8	2 3/8	2 7/8	2 1/2	2 3/8
Dev. Corp Amer.	3/8	1	1/2	7/8	3/8	7/8	Colwell	18	19	17 3/4	18 1/2	17	18
Dover Const.	5 1/2	6	4 5/8	5 1/8	4 3/4	5 1/4	FNMA	92 1/4	95 3/4	88	91	88 7/8	91 7/8
Edwards Eng.	6 3/8	6 7/8	5 5/8	6 1/8	6 3/4	7 1/8	MGIC	27	27 1/2	26 3/4	27 1/4	25 3/8	25 3/4
Edwards Inds.	7/8	1 1/8	5/8	1	5/8	1	Palomar	5 3/4	6 3/8	5 3/4	6	5 3/8	5 3/4
Eichler Homes	9	9 3/4	8 1/2	9 1/4	9	9 3/4	Stockmar, Whatley	10 1/2	11 1/4	10	11	10	10 3/4
First Natl Rlty ^b	3	3	3	3	3	3	Wallace Invests	7	7 7/8	7 1/4	8 1/8	7 1/2	7 1/8
Frouge	2 3/4	3 1/8	2 7/8	3 1/8	2 9/8	2 7/8	REAL ESTATE INVESTMENT TRUSTS						
General Builders ^b	3	3	3	3	2 7/8	3 1/8	American Rlty Trust	10 3/8	10 3/4	9 3/4	10 5/8	9 7/8	10 3/8
Hawaiian Pac Ind.	4 1/4	4 3/4	2 5/8	3	2 5/8	2 7/8	Contl Mtg Inv	11 3/8	12 3/8	14 3/4	15 1/4	14 3/4	15 3/4
Kavanagh-Smith	4 1/2	4 7/8	4 3/4	4 3/4	4	4 3/8	First Mtg. Inv	10	11	13 3/8	14 5/8	14 3/8	15 3/8
Kaufman & Broad ^b	27 5/8		28 1/4		29 1/4		First Ntl	7 3/4	8 1/4	8 1/2	8 3/4	9 5/8	10 1/8
Louis Lesser Ent.	8 1/2	9 1/4	8 1/8	8 5/8	9 3/8	9 3/8	Liberty	7	7 3/8	7	7 3/8	6 7/8	7 1/8
Levitt	4 1/2	5 1/8	5 1/8	5 3/4	5 1/2		U.S. Realty Inv.	9	9 3/4	8 5/8	9 1/2	8 5/8	9 1/4
Lusk	1 1/2	1 3/4	1 1/2	1 3/4	1 5/8	1 7/8	PREFABRICATION						
Pacific Cst. Prop ^b	10 3/4		10 1/2		10 3/4		Admiral Homes	1 1/2	1 7/8	1 1/2	1 7/8	1 1/2	1 3/4
U.S. Home & Dev.	7/8	1 1/4	1 3/8	1 5/8	1 1/2	2	Crawford	4 1/8	4 5/8	3 3/4	4 1/4	3 3/4	4 1/4
Del E. Webb	11 1/8	12	10 1/2	11 3/8	12 1/2	13 1/2	Great Lakes Homes	5 3/8	5 3/4	7 1/4	7 5/8	5 3/4	5 3/4
Webb & Knapp ^b	9 1/8		11 1/8		1 1/2		Harnischfeger ^b	16 7/8		16 3/4		16 1/4	16 1/2
S&Ls													
American Fin.	17 1/2	18	16	16 3/4	18 1/2	19 1/4	Hilco Homes	1 1/8	1 3/8	1	1 1/4	1	1 1/4
Brentwood	11 3/4	12 1/4	11 3/8	12	12 3/8	12 3/4	Inland Homes ^b	10 3/8	10 7/8	11	11	10 1/4	
Calif Fin ^c	8 7/8		8 7/8		8 3/8		Madway Mainline	11 1/2	12 1/2	13	14	12 1/2	13 1/4
Empire Fin	16 1/4	17 3/8	15 1/2	16 5/8	15	16 1/2	Natl Homes A	5 7/8	6 3/8	5 1/4	5 7/8	5 3/4	6 3/8
Equitable S&L	32 1/2	33 1/4	32 3/4	32 1/2	32 5/8	32 3/8	Richmond Homes	2 3/4	3 1/4	4 1/4	4 3/4	5 3/8	5 7/8
Far West Fin	19 1/2	21	22 3/4	24 3/8	21	22 3/2	Seaboard Homes	1 1/4	1 5/8	1 1/8	1 1/2	1 1/8	3/8
Fin Fed ^d	53 3/4		54		51		Steel Crest Homes ^e	5	5 3/4	5 1/4	5 5/8	5	5 1/2
First Charter Fin ^e	37 3/8		39 1/2		39 1/4		LAND DEVELOPMENT						
First Fin West	13 1/2	13 7/8	13 3/8	13 3/4	13 5/8	13 5/8	All-State Props ^b	2 1/2		2 1/2		2 1/2	
First Lincoln Fin	18 1/2	19 3/4	17 5/8	19	17	18 3/8	American Land	1 1/8	1 3/8	1 1/8	1 3/8	1 1/2	1 3/4
First Surety	18	19 1/4	18 3/8	19 1/2	17	18 1/8	Amer. Rlty & Pet ^b	4 1/8	4 1/4	4	4 1/8	3 5/8	
First Western Fin	36 3/4	38 7/8	37 1/2	39 5/8	46 3/8	48 7/8	Arvida	5 1/8	5 1/2	5 3/4	6 3/8	5 1/2	6
Gibraltar Fin ^e	29 1/4		28		25 1/2		Atlantic Imp	16 1/2	17 1/2	16 1/4	17	15 1/4	16 3/4
Great Western Fin ^e	19 3/4		19 7/8		18 1/8		CKP. Dev.	11 1/8	11 7/8	13 1/4	13 1/2	13 3/8	
Hawthorne Fin	8 7/8	9 1/4	9	9 1/2	9 1/2	10	Canaverl Intl ^b	4 1/2		6 1/8		5 3/4	
Lytton Fin	35 3/4	37 7/8	34 1/4	36	35	37 1/8	Cons. Dev	1	1 3/8	1 3/4	2 1/4	1 1/2	2
Midwestern Fin ^b	5 1/2		6 1/2		6 1/8		Coral Ridge Prop.	1 1/8	1 7/8	1 1/8	1 3/8	1 1/4	1 1/2
San Diego Imp ^e	11 1/4		12 1/4		12		Cousins Props	8 1/4	8 3/4	8 5/8	9	9	9 1/2
Trans-Cst Inv	15	16 1/4	13 7/8	15	14 5/8	15 7/8	Christiana O. Corp. ^b	6 1/2		7 1/2		6 1/4	
Trans World Fin ^e	17 3/8		17		16 1/4		Fla Palm-Aire	2	2 1/4	2 1/8	2 3/8	1 3/4	2
Union Fin	7 7/8	8 3/8	7 7/8	8 3/8	7 1/4	7 3/4	Forest City Ent ^b	5 1/2		5 3/4		5	
United Fin of Calif ^e	23 5/8		24 3/4		24 3/4		Garden Land	4	4 3/8	4 5/8	5	4 7/8	5 1/8
Wesco Fin ^e	46 1/2		43 3/4		44		Gen Devel ^b	6 1/8		6 1/4		5 7/8	
SHELL HOMES													
Albee Homes	8 7/8	9 3/4	8 5/8	7 3/4	5 1/2	6 3/8	Gulf American ^b	5		5		4 5/8	
Modern Homes Const.	5 5/8	6	4 1/4	4 5/8	5 3/8	5 3/4	Holly Corp ^b	1 1/4		1	1 1/8	1 1/8	
Morris Homes Corp.	1/4	3/8	e	r	1/8	r	Horizon Land	5 7/8	6 1/2	4 7/8	5 1/2	4 1/2	5 1/8
Nationwide	1	1 3/8	1 1/4	1 1/2	1 1/8	1 1/2	Laguna Niguel	10 1/2	11 3/8	10 5/8	11 1/2	10 5/8	11 1/2
U.S. Finance	7 5/8	8 1/8	7	7 1/2	6 3/4	7 1/2	Lake Arrowhead	3	3 1/2	3	3 3/8	3	3 3/8
Jim Walter	19 7/8	21 1/4	20 3/4	22	24	25 1/2	Lefcourt ^b	3 1/2		3		3 3/8	
Western Shell	1/4	1/2	1/8	3/8	1/8	3/8	Macco Rlty	7 1/2	8	7 1/2	7 7/8	12 5/8	13
REALTY INVESTMENT													
Brookridge Dev	1/16	3/16	e	3/16	e	3/16	Major Rlty	1/4	3/8	1/4	3/8	35c	45c
Disc Inc	4	4 1/2	4	4 1/2	3 5/8	4 1/8	Realtite Inc.	11 1/16	11 1/4	11 1/16	3 1/16	2 1/2	2 5/8
Gt. Amer. Rlty.	35c	50c	3/8	1/2	3/8	1/2	So Rlty & Util. ^b	3 1/8	3 1/4	3	3 1/8	3	3 1/8
Herman & Appley	3 1/2	4	3 1/2	4	3 3/4	4 1/4	Sunset Int. Pet ^b	6 3/8		6 1/4		6 1/4	
Income Props	3 1/8	3 1/2	3 3/8	3 3/4	3 1/2	3 7/8	United Imp. & Inv. ^b	3 5/8		3 5/8		3 5/8	
Kaymarq Cons	1/4	3/4	3/8	3/4	3/8	3/4	PROFITS AND LOSSES						
Kratter ^b	8 3/4		9		9 5/8		Company	Fiscal year ends	1963 revenues (000)	% change '62	% change from '62	% change net '62	
Mensh Inv & Dev	12	13	12 1/2	13 1/2	12	13	Amer. Fin. Corp	June 30	NA	—	—	\$778 ^e 17	
Presidential Rlty ^b	7 5/8		7 3/4		8 ^d	8	Amer. Rlty & Pet.	Apr. 30	\$14,602	24	2,615	1.3	
Rlty Equities ^b	6 3/4 ^b		6 3/8		6 1/2 ^d	6 3/8	Dover Const. Co.	Mar. 31	8,972	42	595	21	
NEW ISSUES REGISTERED													
Date Company Proceeds to company Offering price of securities													
July 25	Uris Buildings Corp.	\$1,025,000		\$20.50									
^a —stock newly added to table. ^b —closing price (ASE). ^c —closing price (NYSE). ^d —not traded on date quoted. ^e —no bids. ^f —no offer. Sources: New York Hanseatic Corp., Gairdner & Co., American Stock Exchange, New York Stock Exchange. Listings include only companies which derive a major part of their income from housing activity and whose stocks are either listed or actively traded.													



3

REASONS WHY ANDERSEN WINDOWS SWITCHED TO RIGID GEON VINYL



Rigid vinyl parts used by Andersen are made by Crane Plastics, Inc., Columbus, Ohio.

Actually, there are many reasons why Andersen now uses rigid Geon vinyl for jamb liners and weather stripping in their newest Narroline double-hung windows. Most important are these three: **1.** Rigid Geon PVC holds its shape. If bent or twisted accidentally during installation, it snaps right back. **2.** Windows open and close more easily because of the smooth surface and low friction of Geon vinyl. **3.** The amount of maintenance is reduced. For example, the built-in color eliminates the need for painting—a most troublesome cause of sticking with double-hung windows.

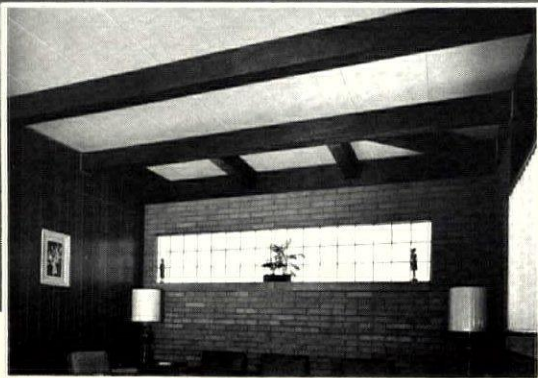
In windows and in many other products for construction, Geon vinyl is fast becoming a basic building material. It offers strength, color and long life. It is easy to keep clean, won't stain, resists fire, and is easy to work with. For more information on Geon vinyl, write B.F. Goodrich Chemical Company, Department CJ-4, 3135 Euclid Avenue, Cleveland 15, Ohio. In Canada: Kitchener, Ontario.

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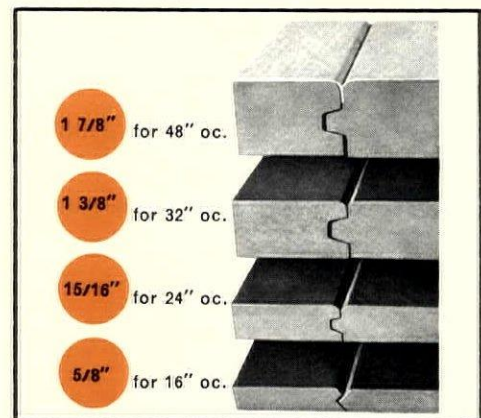
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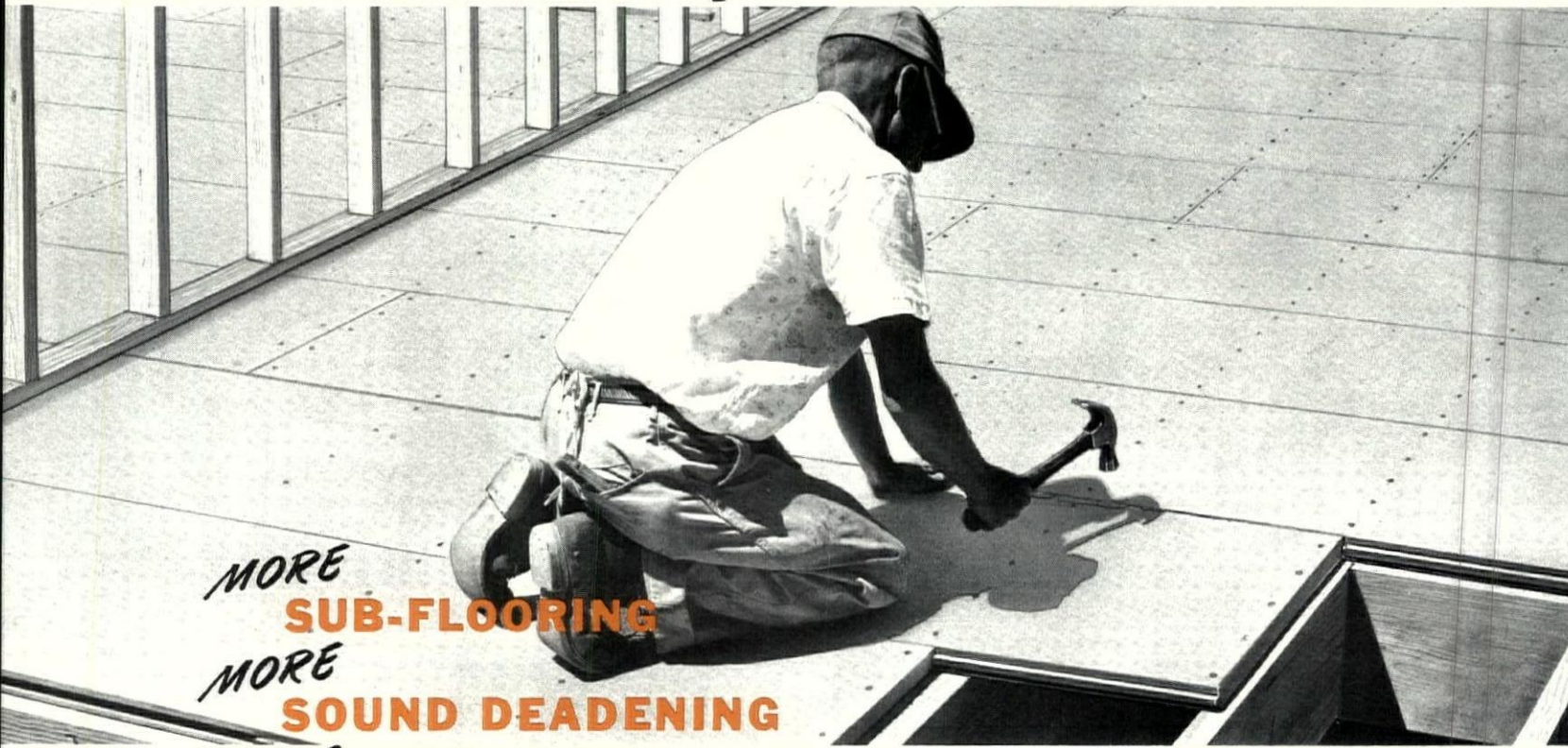
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Approved by B. O. C. A. (# 54-15)
and S. B. C. C.

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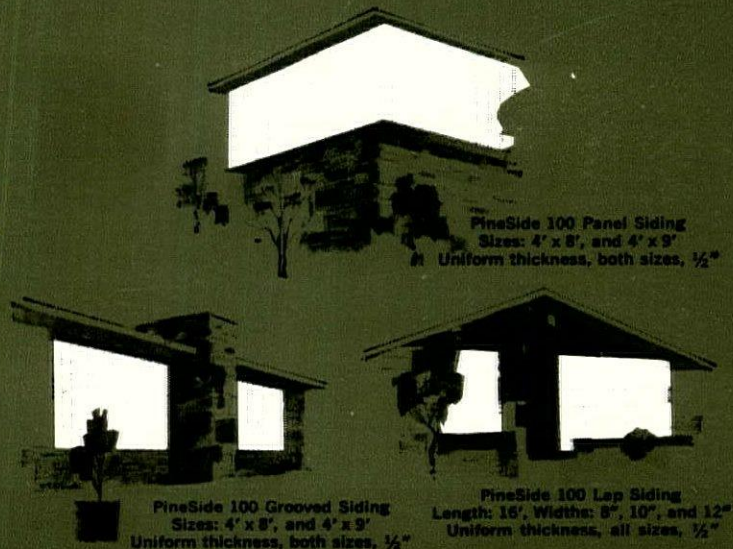
KEMPER BROTHERS, INC. RICHMOND, INDIANA

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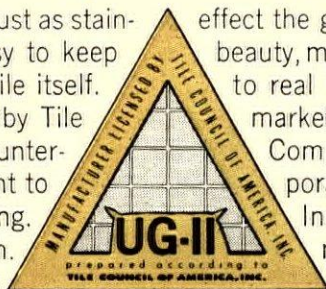
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This tops them all! Now, a new kind of grout makes ceramic tile countertops even better sales clinchers for you.

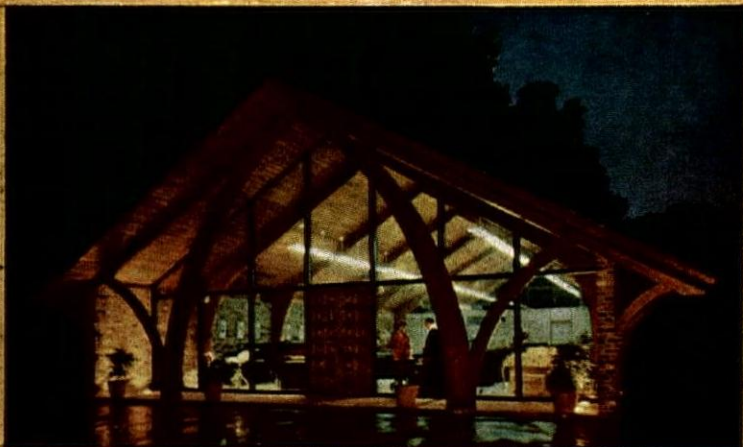
Yes, now there's a new kind of grout that's just as stain-proof, just as "hot pot" proof, just as easy to keep clean, just as permanent as the ceramic tile itself. It's new, epoxy-based UG-II*, developed by Tile Council of America especially for kitchen countertops. ▲ New UG-II is exceptionally resistant to food and household chemicals—and scorching. It forms a dense, tight joint of lasting strength. Gives countertops such a strong, seamless



effect the grout becomes a part of the tile. Adds more beauty, more long-range economy—more sales appeal to real tile than ever. ▲ These manufacturers are marketing UG-II: Cambridge Tile Manufacturing Company; International Pipe and Ceramics Corporation; Hydroment, Inc.; L&M Tile Products, Inc.; and The Upco Company. For further information write: TILE COUNCIL OF AMERICA, INC., 800 Second Avenue, New York 17, N.Y.

Participating Companies: American Olean Tile Co./Atlantic Tile Manufacturing Co./Cambridge Tile Manufacturing Co./Carlyle Tile Co./Continental Ceramic Corporation/General Tile Company/International Pipe and Ceramics Corporation/Jackson Tile Manufacturing Co./Jordan Tile Manufacturing Co./Lone Star Ceramics Co./Ludowici-Celadon Co./Monarch Tile Manufacturing, Inc./Mosaic Tile Co./Murray Tile Co., Inc./National Tile & Manufacturing Co./Oxford Tile Co./Pomona Tile Mfg. Co./Ridgeway Tile Co./Summitville Tiles, Inc./Texeramics, Inc./Wenzel Tile Co./Winburn Tile Mfg. Co.

Modern...
in beauty and
design efficiency



Capitol Music Center, Baton Rouge, La., A. Hays Town, A.I.A.



Camillo's Restaurant, New Orleans, La., Paul J. Mouton, Architect

A new freedom of design and economy in commercial buildings with *SPA Southern Pine.

Camillo's lends a cordial atmosphere for leisurely dining. The design takes full advantage of the structural values and beauty of SPA Southern Pine. Unique columns, solid roof decking and laminated beams form a highly efficient two-story frame.

SPA Southern Pine is ideal for modern engineered construction, because of high stress values, full length grading and dimensional stability.

Capitol Music Center creates a feeling of spaciousness in a small area. Graceful laminated beams and solid decking of Southern Pine, warmly beautiful with high acoustical value, create an inspirational setting.

Send for free copy of "New Dimensions of Design" with color illustrations and descriptions of new techniques for many forms of building. Address: Southern Pine Association, HH-9, Box 52468, New Orleans 50, La.

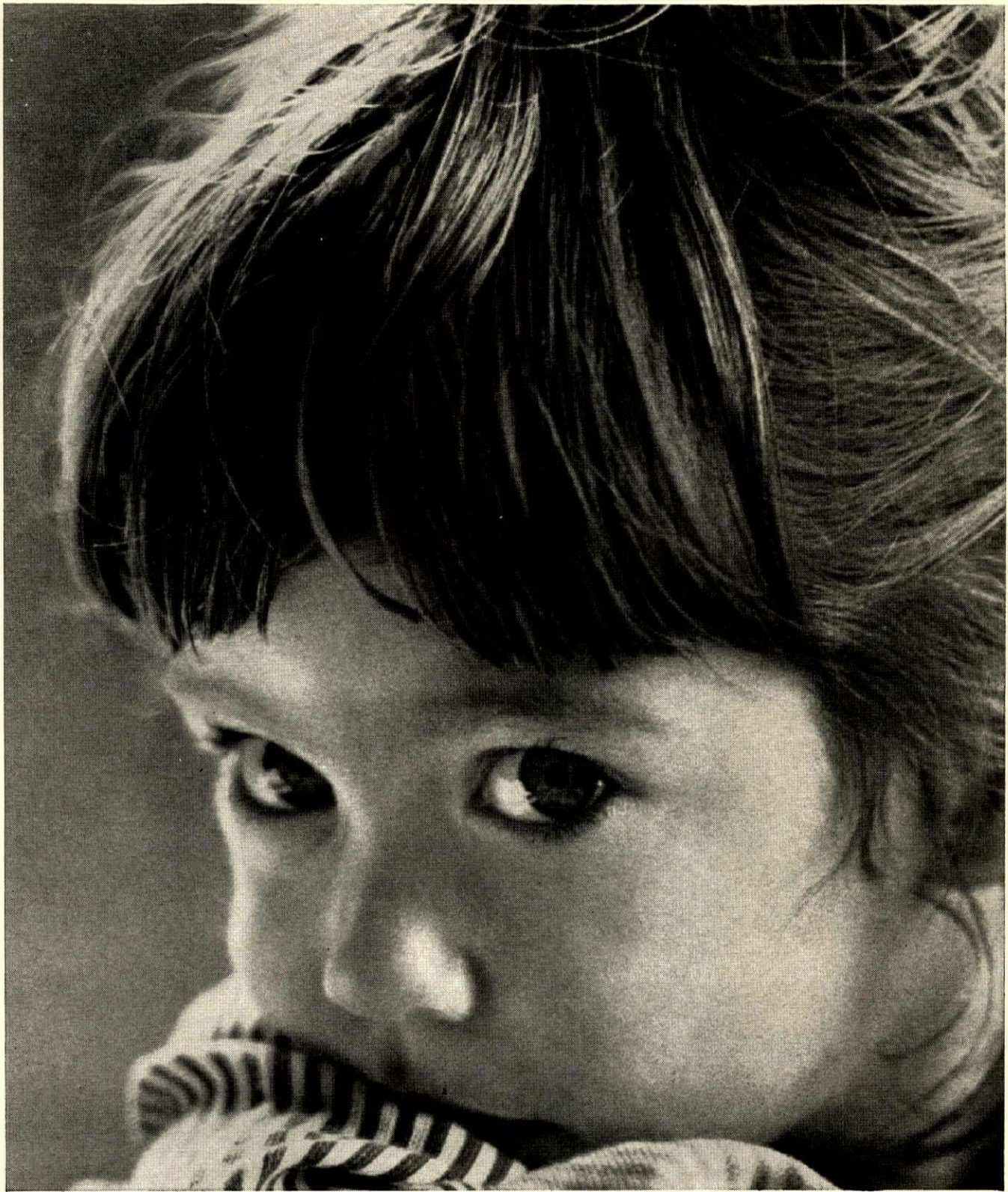
*Trade-Marked and officially Grade-Marked



SOUTHERN PINE

Pre-Shrunk for greatest structural strength

FROM THE MILLS OF THE SOUTHERN PINE ASSOCIATION



She has her eyes on you

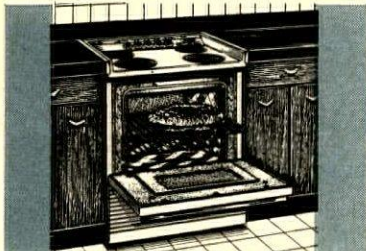
And her wonderful, story-telling eyes are saying that there are a great many people, a lot of them helpless youngsters, who are desperately in need of your help. Some of them are sick, some are handicapped, and many are homeless. There are puzzled teen-agers in need of a guiding hand, troubled families in need of counseling, and people who are too old to work but too young to sit around doing nothing. When you look into this little one's eyes, we hope you will get the message—from the many people whose only hope for help is the once-a-year pledge you make to your United Fund or Community Chest. **One gift works many wonders / GIVE THE UNITED WAY**

Space contributed as a public service by this magazine

On this page there's a built-in or slide-in range for all the homes you build—in the right size, at the right price and with more of the features your customers want!

30" Slide-In Ranges (30" x 36" x 25")

20" (20¼" x 36" x 24½")



ECONOMY MODEL RB-321

has exclusive Throw-Away Oven Linings, multiheat broiling, lift-off oven door, automatic oven light.



DELUXE MODEL RB-341

comes with automatic oven timer, clock and minute reminder that adjusts front to back for back-splash.



TOP MODEL RB-381

features automatic surface cooking and rotisserie, plus all the features listed for the other models.



MODEL RB-120

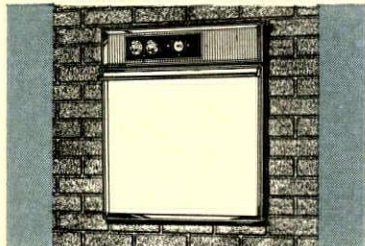
also provides Throw-Away Oven Lining, recessed top, multiheat broiling—plus hinged, lift-up surface top.

24" Ovens (ROUGH-IN DIM. 21½" x 25¾")



ECONOMY MODEL RO-320

has exclusive Throw-Away Oven Linings, multiheat broiling, fast preheat, drop-down door.



STANDARD MODEL RO-340

also includes an automatic oven timer, clock, minute reminder and automatic oven light.



DELUXE MODEL RO-360

adds a window in the oven door, plus an oven light with both automatic and manual control.



TOP MODEL RO-360R

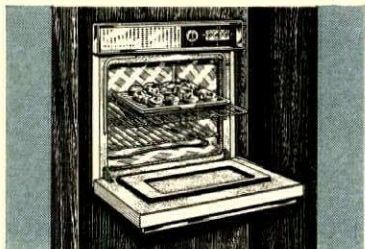
combines a deluxe rotisserie with the multiheat control for the finest possible broiling.

27" Ovens (ROUGH-IN DIM. 25" x 24¼")



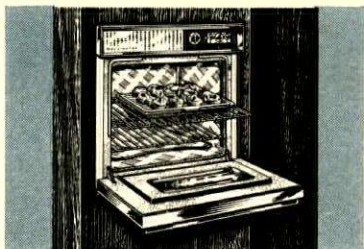
ECONOMY MODEL RO-520

has exclusive Throw-Away Oven Linings, multiheat broiling, lift-off oven door, automatic oven light.



STANDARD MODEL RO-540

adds an automatic oven timer, clock and minute reminder for easy, care-free baking.



DELUXE MODEL RO-560

includes window in oven door and oven light with both automatic and manual control.

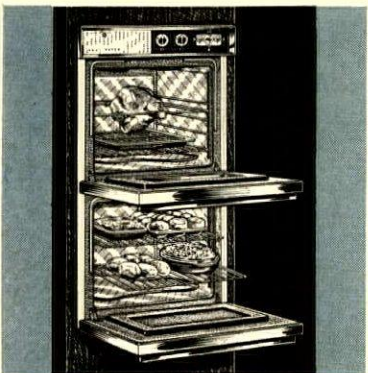


TOP MODEL RO-560R

provides a deluxe rotisserie combined with multiheat control for finest possible broiling.

27" Double Oven

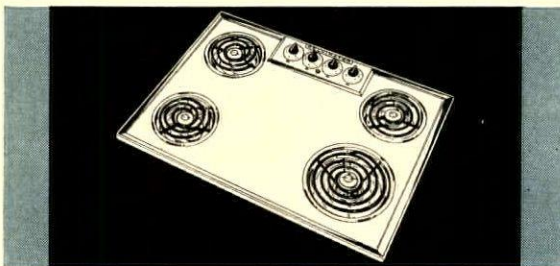
(ROUGH-IN DIM. 25" x 44¾")



MODEL RO-560D

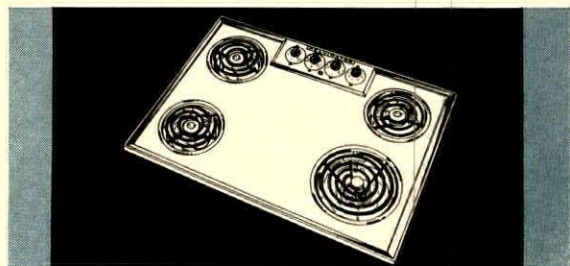
comes with two full-size ovens with top features in upper oven and economy features in lower oven.

Surface Tops (29¾" x 21¼" x 3¼")



DELUXE MODEL RS-331

has exclusive Throw-Away Lining under units, infinite-heat switches, raised rim around top.



TOP MODEL RS-331A

features automatic surface unit that makes an automatic pan out of any cooking pot or skillet.

Send for specifications and prices today!

Slide-In ranges come in four colors and white; built-in ranges are available in five colors, white and brushed chrome.

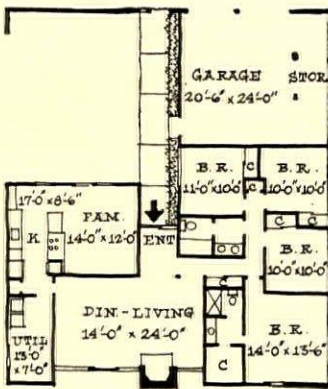
Kelvinator

Division of AMERICAN MOTORS CORPORATION, Detroit 32, Michigan
Dedicated to Excellence in Rambler Automobiles and Kelvinator Appliances

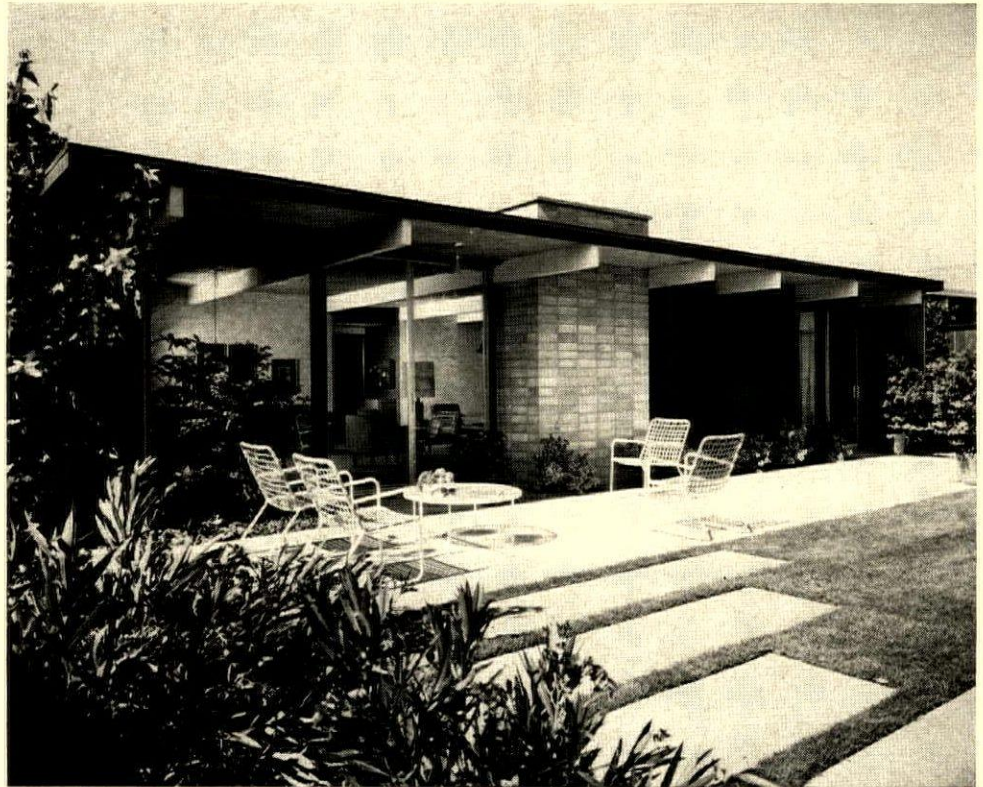
Three taste makers from the consumer magazines

1. Better Homes & Gardens shows a glass-walled contemporary

Eichler Homes is the builder and Claude Oakland the architect of this house in San Raphael which will be BH&G's "editor's choice" for October. True to the spirit of California living, it has two big outdoor living areas: one in the rear (see photo) open to the living room and master bedroom, and one in front off the family room, screened from the street by a high masonry wall. The house has 1,713 sq. ft. of living area, and its price, without land, is \$20,950.



PLAN provides maximum privacy by turning garage and blank garden wall (top) to the street.

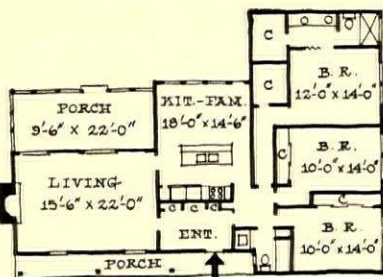


REAR ELEVATION integrates indoor and outdoor living areas with a wall of sliding glass. Deep overhang shades windows from glare, lets doors stay open in rainy weather.

2. . . . and a hip-roofed traditional ranch with a fresh plan

Designed by Architect Kenneth Scott and built by Frank Walsler of Raleigh, N.C., the house is featured in the September issue of BH&G. Behind its shuttered facade it has 1,605 sq. ft. of living area laid out in a completely contemporary plan. Both the living and family rooms open to the rear yard; the living room through a 200-sq. ft. screened porch. Price of the house without land: \$20,000.

Presented as part of BH&G's Better Homes for All America program, this "editors' choice" house (and the one shown above) is getting strong promotional support from the magazine, including newspaper and radio ads, brochure layouts, and suggested landscape and decorating plans for buyers of repeat models. Also included in the magazine's marketing package: suggestions on how salesmen should demonstrate the house, and research questionnaires to help the builder make his own customer preference surveys.



PLAN centers on a large front entry which sets up good circulation, eliminates cross-traffic.



CLEAN FACADE opens only the living room to the street, while bedroom wing at right opens only to the side yard. Strong eave line helps make the house look longer.

For the third consumer magazine house, see page 55



only a whisper in the night...

Yet, in sales and profits it speaks clear as a bell. The rush and roar of yesterday's cooling is gone. Simplified design makes Lennox Air Conditioning whisper-quiet, easiest to install, low in cost (and low in power consumption).

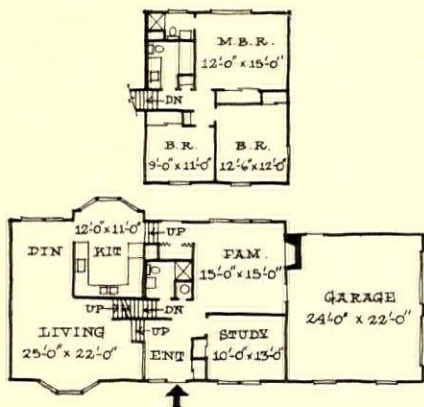
The new Lennox RFC™ system provides you with the shortest, most direct route to making home air conditioning as common as the kitchen refrigerator—and just as affordable. An integral part of this system is the metered refrigerant line which we call the Freon Freeway. It not only cuts installation costs to a minimum but eliminates the causes of many operational troubles to assure years of trouble-free cooling. This combination of design and engineering features make it practical and affordable for you to include Lennox year 'round comfort in your homes and apartments—of any size. Find out how easy it is to put these Lennox sales features to work for you. Write LENNOX, 20 S. 12th Avenue, Marshalltown, Iowa.

AIR CONDITIONING • HEATING

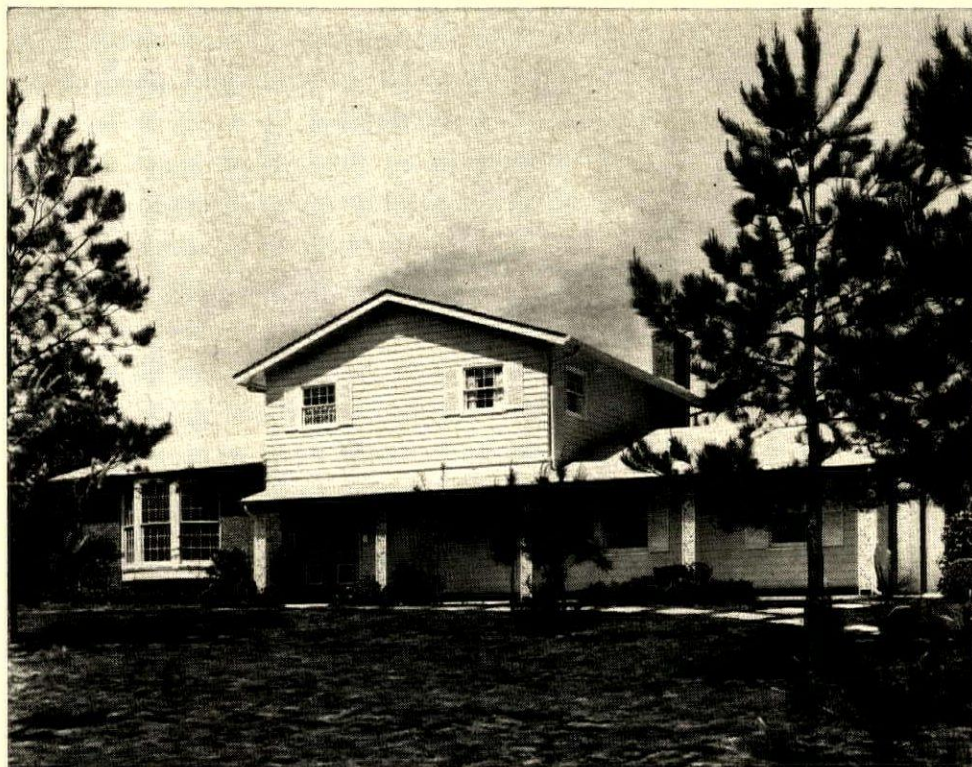
LENNOX

3. Good Housekeeping shows an unusual split-level

The entry is on the lowest level, and the mid-level (living room and kitchen) is just three steps up, so the house looks and lives as much like a two-story as a split. The house appears in *Good Housekeeping's* September issue as its all-gas promotion house. It was designed by Architect Herman York for Kingsberry Homes, which offers it as one of its standard manufactured models.



PLAN has four bedrooms, three baths, family room, kitchen with bay-window dining counter.



FRONT ELEVATION has a covered walkway from the garage (right) to the front door, a big bay

window in the living room. King-Williams Co. in Smyrna, Ga. offers it for \$23,000 without land.

Marketing roundup continued on p. 60

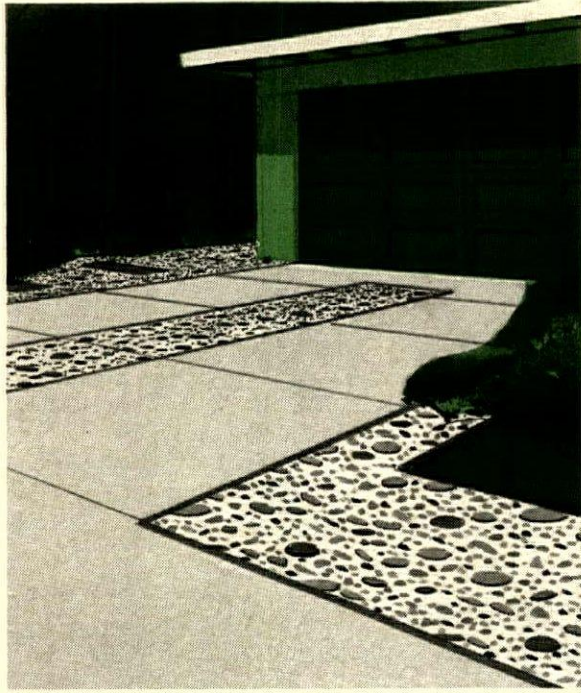


spray
paint
a house
exterior
in half
a day!*

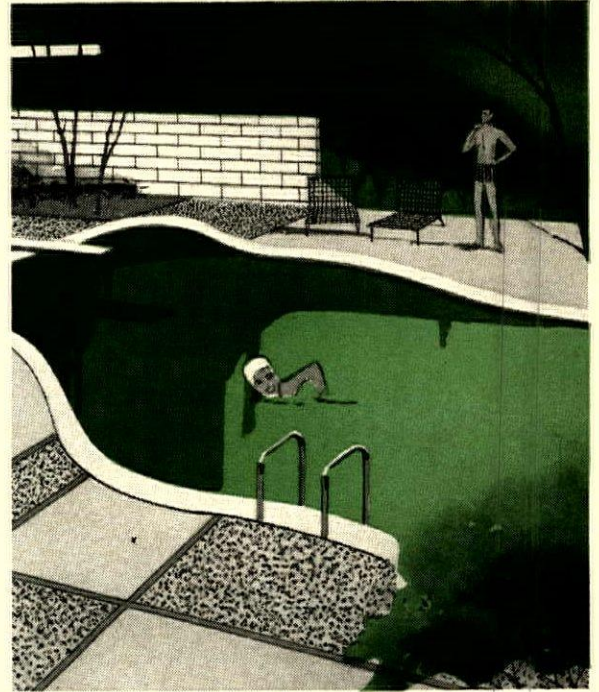
One man can do it using the new DeVilbiss high-production 5-gallon portable airless spray outfit. It's *easy to use*. Painters can spray all surfaces while the paint pail stays on the ground. It's *compact*. You don't need a truck to move compressor and pump from job to job. It *saves time*—two ways. By spraying house paints at a rate of better than 5 gallons an hour. By eliminating elaborate masking (airless spray cuts a clean edge). It *saves materials* because overspray and spray rebound are almost nonexistent. Call the DeVilbiss representative nearest you and ask for a demonstration of airless spray outfits. See firsthand how you can trim painting time on your jobs. The DeVilbiss Company, Toledo 1, Ohio. Offices in principal cities.

FOR TOTAL SERVICE, CALL
DEVILBISS

*Paint application time for average one-story 6-room house—single color over siding and trim.



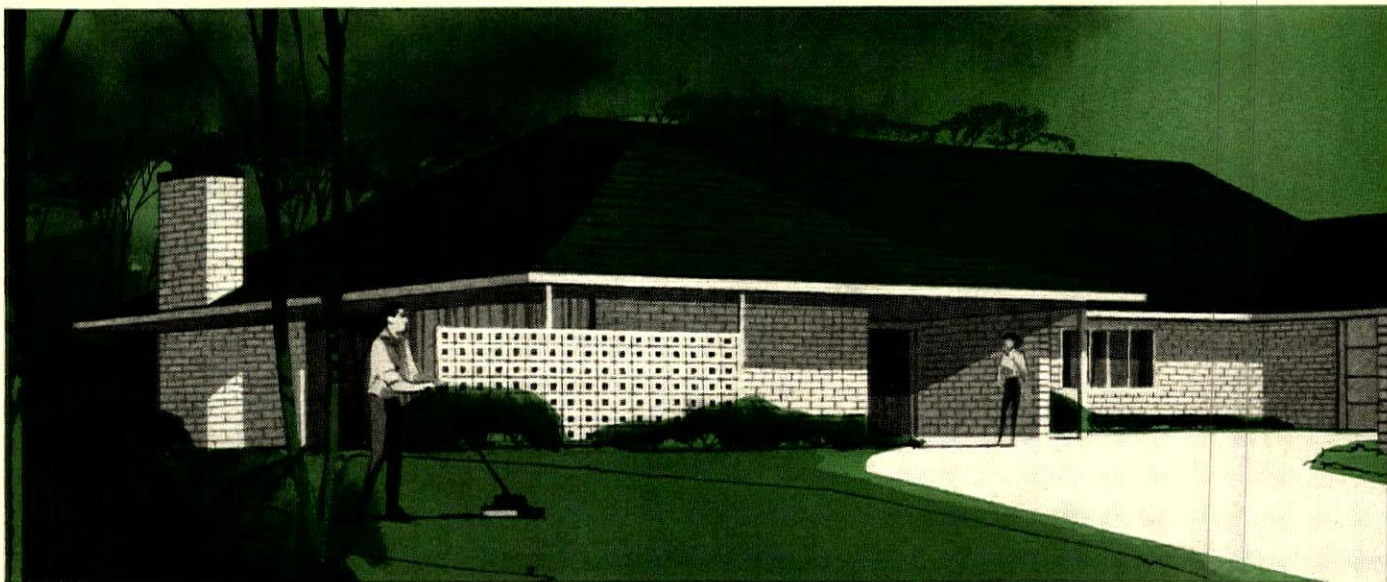
HANDSOME APPROACH TO A MODERN HOME is this distinctive concrete driveway. Concrete offers custom-designed smartness, opportunity for imaginative color and design treatments. Concrete is durable; the beauty lasts.

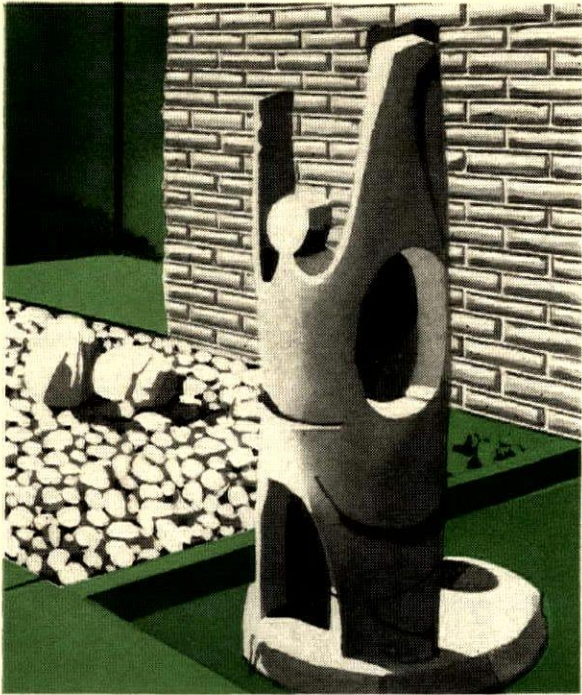


NEW PATTERNS IN OUTDOOR LIVING—casual or formal—are easily achieved with concrete. The pool serves as the focal point of activity, complementing a warm spectrum of colors and textures in the patio and garden.

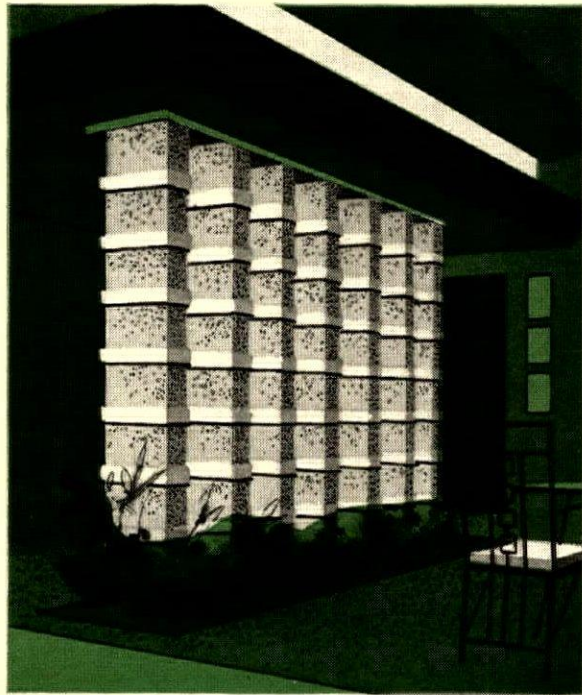
Out of the Horizon Homes Program . . . these exciting new ideas in modern concrete help builders sell homes

Outstanding home design from 1962 Horizon Homes Program features concrete slump block for beauty and textural interest.





MODERN CONCRETE SCULPTURE by Charles Clement sets the theme for this smartly contemporary western garden. Precast or cast in place, concrete gives landscape architects unusual opportunity for patio and garden design.



CONCRETE MASONRY DIVIDER is laid in a dramatic pattern and painted in two tones, providing a tropical motif for this house designed in the style of South Seas architecture. Here is a gracious, easy-to-care-for interior.

Dramatic uses of concrete in and around new homes are exciting enthusiastic response from home buyers. Good evidence of this are the outstanding success stories reported by builders who have participated in the annual Horizon Homes Program, sponsored by the nation's concrete industries.

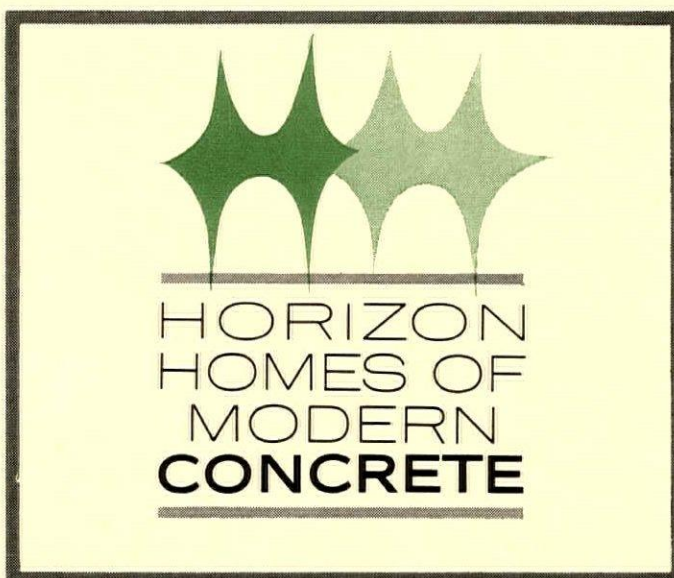
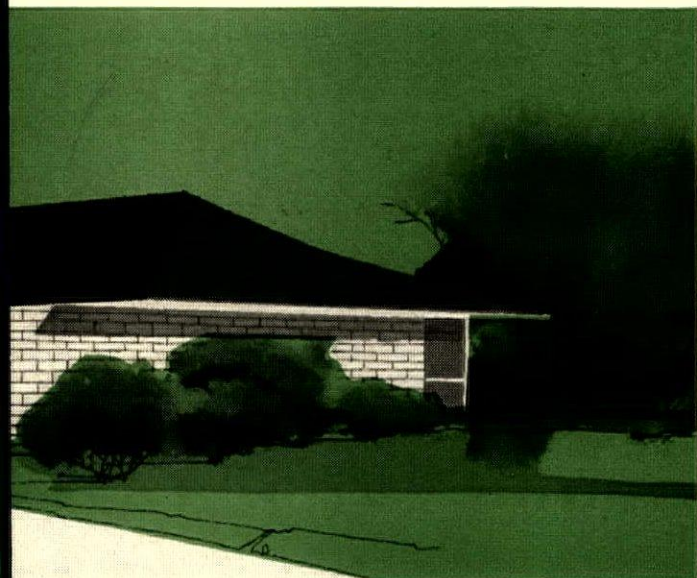
Concrete, today, opens a whole range of fresh home-building ideas. It offers new, vital structural elements, intriguing decorative effects that improve quality and appeal. No other basic material is so

versatile or provides so many ways to build in "sell." In its many forms, concrete offers virtually unlimited colors, textures, patterns and shapes.

Concrete's "new look" provides builders with a real opportunity to attract and sell discriminating home buyers. Plan to enter the 1963 Horizon Homes Program, designed expressly to help sell homes.

Portland Cement Association

A national organization to improve and extend the uses of portland cement and concrete
Better living begins when you own a new home



Find out how the
RCA WHIRLPOOL
 appliance
 "package" plan
 can cut
 your building cost
 and paper work!

The unique RCA WHIRLPOOL appliance "package" plan gives you a *full line* of both *gas* and *electric* appliances from *one source*. You deal with a single supplier to equip your homes with design and color co-ordinated kitchen and laundry appliances your prospects know for quality. You cut procurement costs and red tape because you place one order, pay one invoice. And you enjoy longer discounts when you buy in quantity from a single source. Let your distributor show you how the RCA WHIRLPOOL appliance "package" plan can help you cut costs while you increase the value of your homes. Join up! . . . it's easier to sell homes with RCA WHIRLPOOL appliances than sell against them.



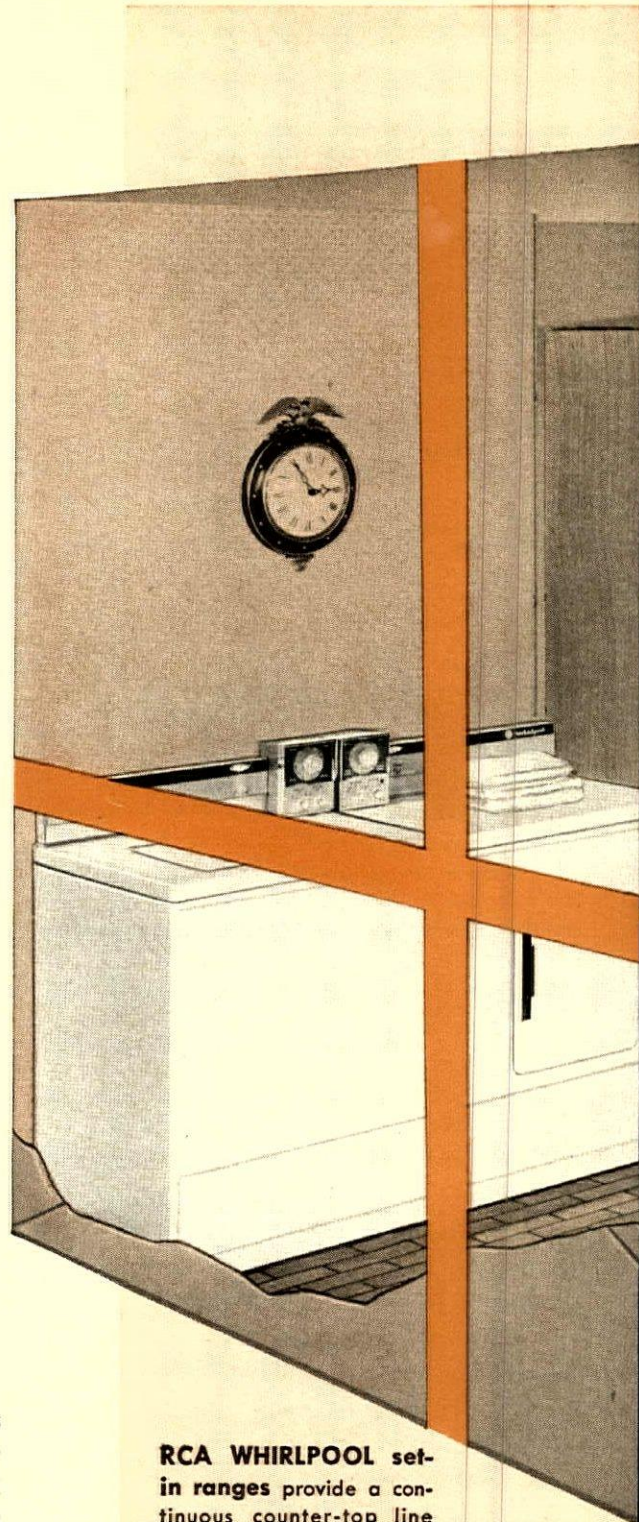
**Your greatest asset
 is our quality performance!**

Whirlpool CORPORATION

Contract and Builder Sales Division, Administrative Center, Benton Harbor, Michigan

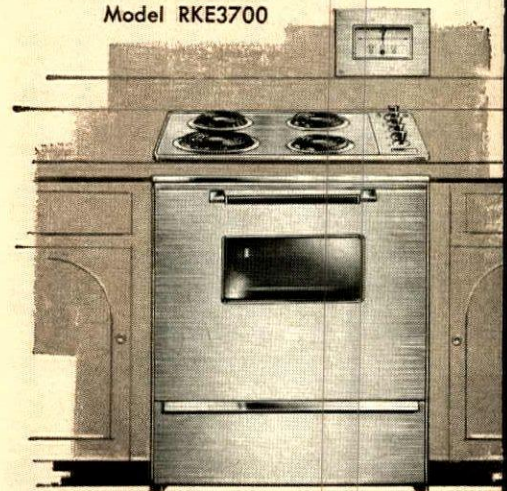
- Manufacturer of RCA WHIRLPOOL Automatic Washers • Wringer Washers
- Dryers • Washer-Dryers • Refrigerators • Freezers • Ice Cube Makers • Ranges
- Air Conditioners • Dishwashers • Food Waste Disposers • Dehumidifiers

Use of trademarks and RCA authorized by trademark owner Radio Corporation of America



RCA WHIRLPOOL set-in ranges provide a continuous counter-top line without custom cabinetry. Many have drawers to help meet FHA storage requirements. All are easy to service and easy to clean. Gas and electric models available.

Model RKE3700





Model RKE2700



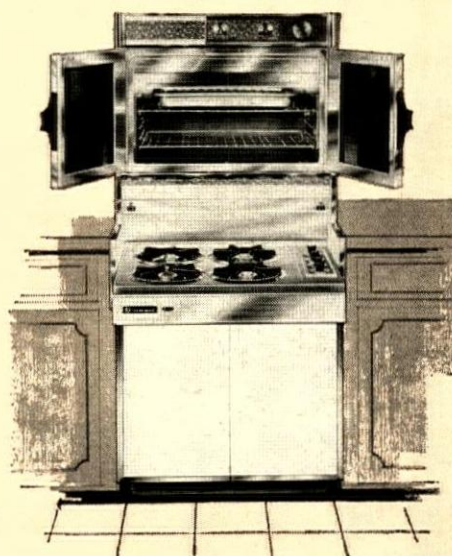
Other set-in ranges combine the good looks of built-ins with the installation economy of free-standing types. Compact unit shown is counter-top hung, requires no special bracing or pedestal. Takes only one connection.

RCA WHIRLPOOL food waste disposers have extra-hard stainless steel grinding elements to size and shred wastes quickly and quietly. Easy one-man installation. Continuous or batch feed models available.



Model SJD-40

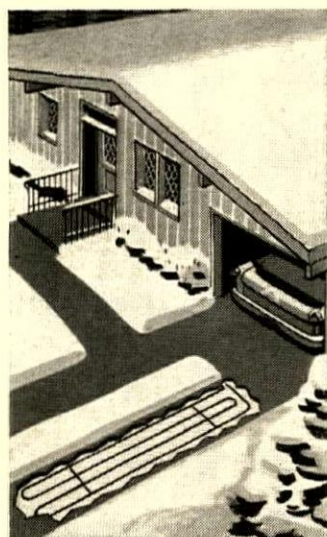
Model RKG9750



New Connoisseur ranges feature popular eye-level ovens and pull-out cooktops in free-standing ranges that look built in. Gas models in 30" and 39" sizes, electric models in 30". Accessory base cabinets and vent hoods also available.

Upgrade your homes "outside" too!

Rugged, Metal-Sheathed **SNOW-BAR** CHROMALOX ELECTRIC



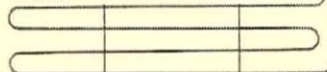
Give your homes that extra touch with automatic snow and ice removal

Imagine the sales appeal to new homebuyers — automatic snow and ice removal from sidewalks and drives! Yet you can offer this "extra touch of luxury" easily and economically with Chromalox electric Snow-Bar in the homes you build. Metal-sheathed Snow-Bar installs right in blacktop pavements as they are laid; takes little extra labor or wiring; melts snow at the flip of a switch.

- Metal sheath takes tough handling
- Preformed units fit most jobs
- Lowest installed cost of any system

Send for Bulletin M 60103

It details application and installation data for Snow-Bar in blacktop sidewalks, driveways and other areas.



CHROMALOX

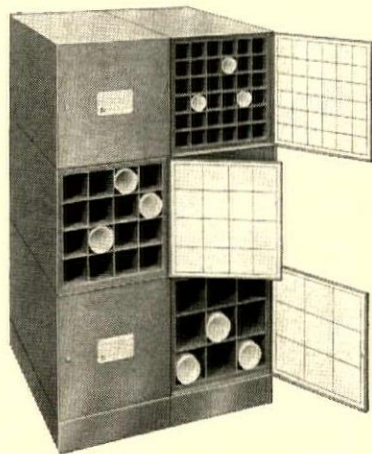
electric SNOW-BAR

Edwin L. Wiegand Co.

WM-33B 7770 Thomas Blvd., Pittsburgh 8, Pa.



Square Holes for Round Drawings



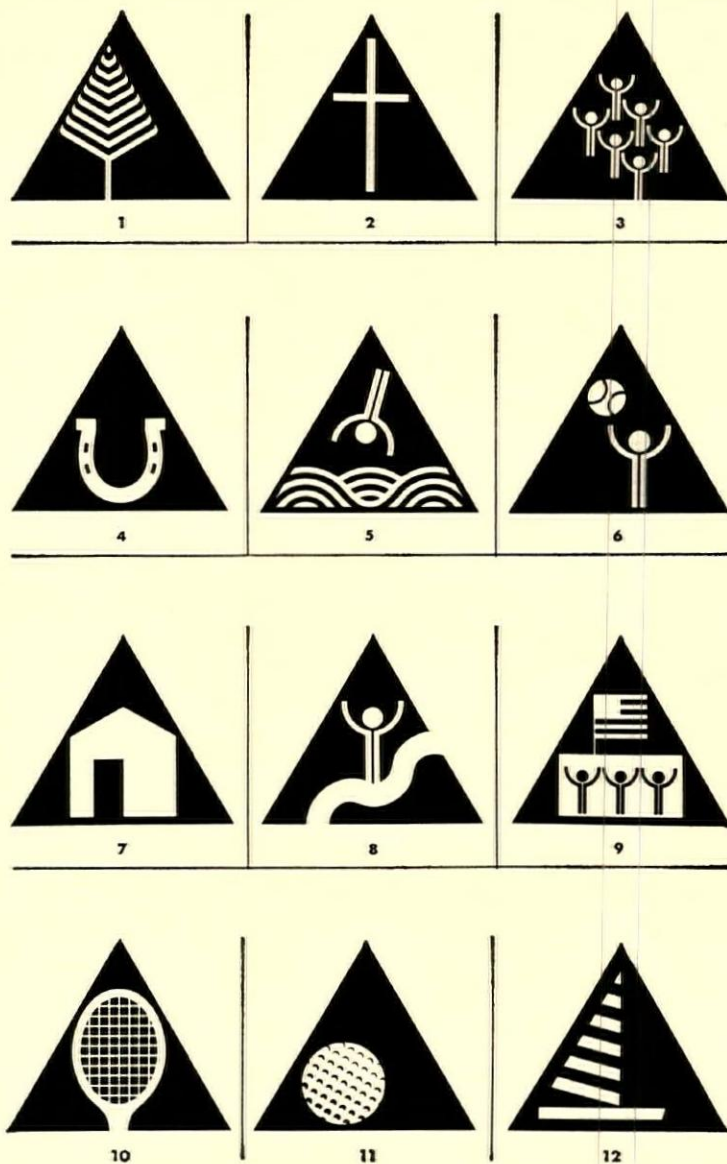
Employing square tubes, PLAN HOLD has engineered a new file for rolled plans and drawings that makes filing fast and easy. Saves space, too. The steel units can be used singly on a desk or stacked into master files. In 3 tube sizes: 2 1/8", 3 3/8" and 4 1/2" with 36, 16 or 9 tubes respectively per unit, and in lengths to 44". Price per unit is the lowest ever for a complete engineering file. Ask your engineering supply dealer to show you the new PLAN HOLD Square Tube File or write for specification literature.



PLAN HOLD CORPORATION

21613 Perry Street, Torrance, California
253 South River Street, Aurora, Illinois

World's largest manufacturer of plan filing systems



Wordless signs identify community areas and facilities . . . Can you read them?

Like road signs throughout Europe (though not for the same reason: language differences), these signs use simple symbols* to identify—at a glance—neighborhood functions in Reston, a satellite city being developed 18 miles west of Washington, D.C.

The signs, 24" on a side and mounted on 7' posts, are 1/8" aluminum with a maintenance-free enamel finish. Each is two-color—white symbols on a background color that relates to the subject of the sign (purple for churches, deep blue for sailing, bright red for schools).

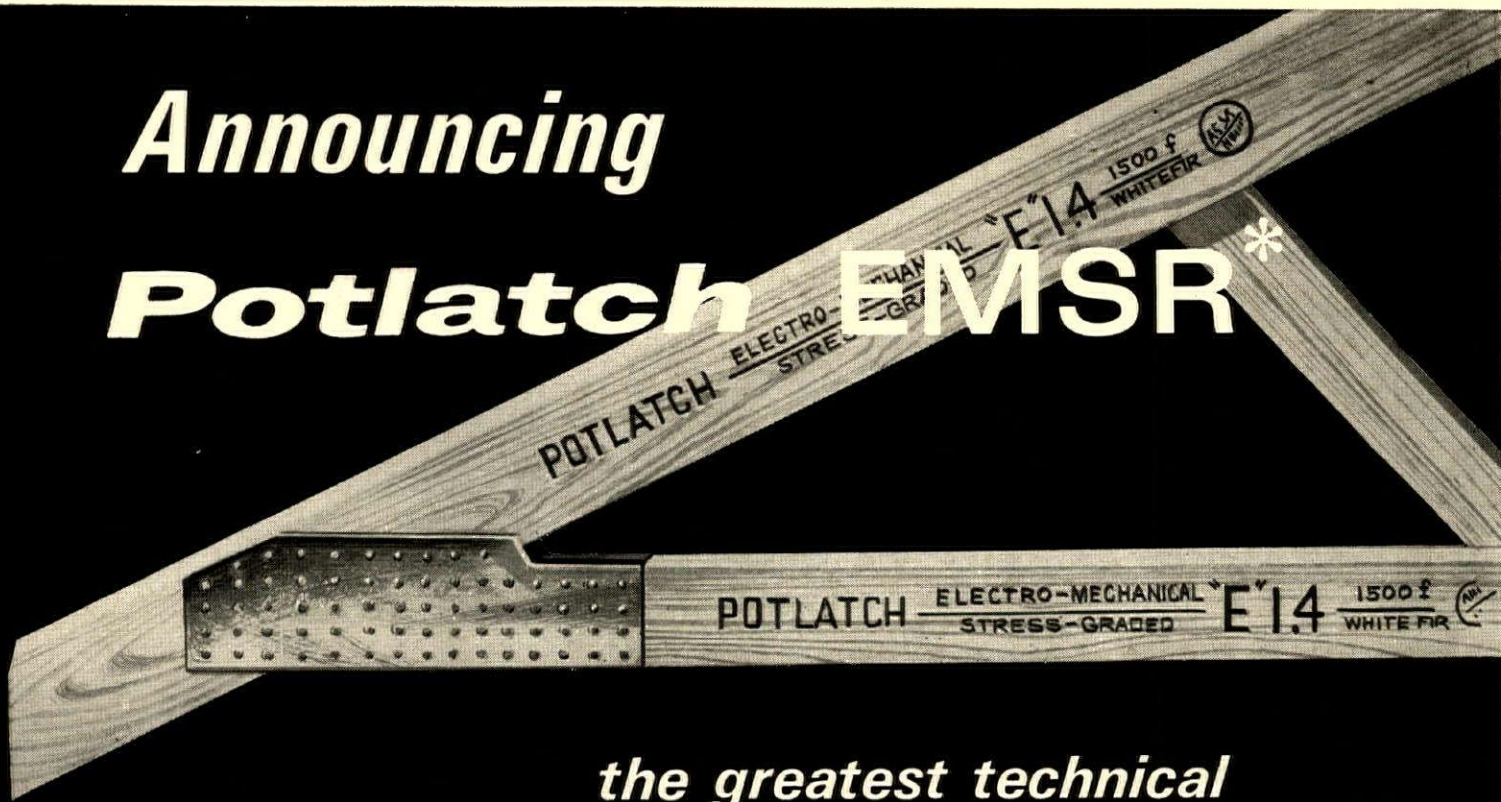
The idea for the original signs was developed by Victor Weingarten Co., public relations and sales promotion counselors to Reston's developers. The signs were designed by Robert P. Gersin Associates, design consultants.

Reston itself, 6,800 planned acres in Fairfax County, Va., is scheduled for completion in 1980. By 1965, its owner-developers—Simon Enterprises—hope that a junior complex of homes, industry, recreation facilities and commercial buildings will be filling out the master plan developed by Architects Whittlesey & Conklin. Housing will be designed by a number of different architects—including Geddes, Brecher, Qualls & Cunningham; Charles M. Goodman Associates; Satterlee & Smith; and Whittlesey & Conklin—to create variety and design interest through the project.

*If you didn't get 10 out of 12, you should be ashamed of yourself: 1) Park. 2) Church. 3) Community center. 4) Riding stable and bridle path. 5) Swimming pool. 6) Playground. 7) Residential area. 8) Walkway. 9) School. 10) Tennis court. 11) Golf course. 12) Yacht club.

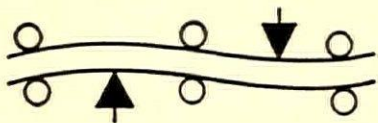
Marketing roundup continued on p. 62

Announcing Potlatch EMSR*



*the greatest technical
advance in STRUCTURAL
LUMBER history!*

*ELECTRO-MECHANICAL
STRESS RATED



Electro-mechanical stress rating (machine grading) increases the availability of lumber strength grades, simplifies grade standardization problems, takes the guesswork out of stress values.

And it ends the need to build-in big safety margins to allow for error in visual grading.

SOURCE: Round Table Report on "Engineered Use of Wood in Tomorrow's House," June, 1963, House and Home.

TAKE A NEW LOOK AT POTLATCH

Lumber Service Manager, Dept. HH-350

Potlatch Forests, Inc., 2590 E. Devon Avenue, Des Plaines, Illinois
Please send information on Potlatch EMSR Lumber:

NAME _____
FIRM _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____
Architect Builder Dealer Wholesaler Other

LENGTHENS SPANS WIDENS SPACING REDUCES SIZES

Machine grading of structural lumber is rated by strength . . . not by appearance or species. Now, for the first time wood can be used as a real engineered product and can compete with other engineered material on even terms.

EMSR Lumber (2" dimension in widths of 4", 6", 8", 10" and 12") is electro-mechanically tested and rated by the PFI Continuous Lumber Tester. Each piece is stamped for "E" and the related "f" value. EMSR Lumber meets FHA Directive No. 1930 and is now appearing on architectural specifications, in both residential and commercial construction. For all facts and governing span tables, mail coupon for EMSR Manual.

Look to Potlatch for Everything in Lumber...

POTLATCH FORESTS, INC.



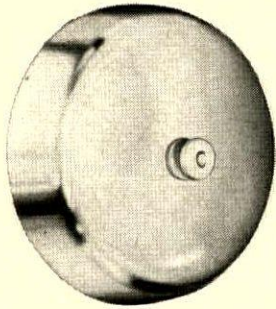
symbol of
quality
since 1906

National Sales Offices: 2590 E. Devon Avenue, Des Plaines, Illinois
Bradley-Southern Division: Warren, Arkansas

Specify the very latest for safety and convenience

new convenience—

Concealed BATHROOM CLOTHES LINE



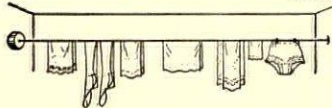
To use—grasp knob and pull out cord—then hook knob in retainer plate on opposite wall.



Wall Retainer Plate

UP TO 10-FT. WHITE NYLON CORD GIVES EXTRA DRYING SPACE

This new Hall-Mack clothes line provides added convenience for all bathrooms, service porches and kitchens—for apartments, motels and hotels. Attractive and small, the chrome-plated case is easily mounted on any wall surface. A strong nylon cord is fed out or retrieved by a spring concealed inside. Simple installation over the tub furnishes ample space for overnight drying of nylons, lingerie and other items.



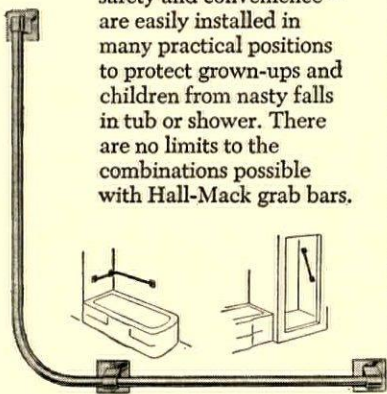
HANDY — ATTRACTIVE — EASILY INSTALLED

new features by **HALL-MACK®**

for safety's sake—

INSTALL GRAB BARS

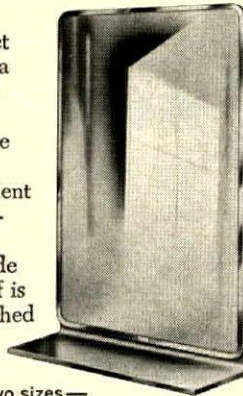
Hall-Mack grab bars add safety and convenience—are easily installed in many practical positions to protect grown-ups and children from nasty falls in tub or shower. There are no limits to the combinations possible with Hall-Mack grab bars.



new utility—

COMBINATION MIRROR AND SHELF

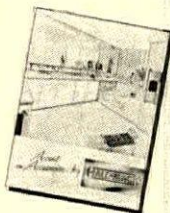
For guestrooms, washrooms or toilet rooms—wherever a mirror and shelf is needed. Easily installed. There are no obstructions to prevent easy, efficient cleaning by housekeeper, maid or janitor. The 5" wide stainless steel shelf is permanently attached to mirror back.



Available in two sizes—
16" x 23 3/8" and 18" x 27 3/8"

new ideas—
**ON BATHROOM
PLANNING**

Hall-Mack's colorful new brochure, "Accent on Accessories" is full of original bathroom ideas designed and produced by Hall-Mack. Write for your free copy today.



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Sold by leading plumbing, tile and hardware dealers everywhere.

Homebuyers' clinic spots three common complaints

Thirty women invited to a Washington idea clinic sponsored by NAHB and *House & Garden* magazine agreed on these three points:

1. *They want the pantry back.* All of the women agreed that they needed more kitchen storage space than they had in their houses. Said one: "Give us as much (storage) as is humanly possible." Said another: "I'd like to go backward and have an old-fashioned pantry"—a statement that won quick support. The conferees agreed it should be a walk-in space, with shelves on all sides. (For one example, see H&H, May, page 139.)

2. *They want a bigger master bedroom.* The idea of a master bedroom large enough to accommodate a work desk rated high with the group. One woman complained that her husband takes work papers to the bedroom and uses the dresser as a desk. Said she: "Our next master bedroom will be big enough for a desk and a lounge chair—a place to work and to escape to read the newspaper in peace and quiet."

3. *They don't want front lawns.* During a discussion of outdoor living areas, one participant commented that "front lawns are ridiculous for most of us in the suburbs. They require maintenance but do not provide privacy." This comment was seconded by many of the group, who agreed they'd like less open space in front of the house, more in the back. Trouble is, of course, that most suburban zoning laws force front setbacks, making the front-lawn almost inevitable. But the light is dawning.

The clinic was the first of six, all on the subject of how homeowners think their houses could be improved. The others are to be held in Boston, Cincinnati, Fort Worth, Los Angeles, and Portland, Ore.

Texas builder offers 20-year warranty

Just two months ago (H&H, July) Columbus Builder Ernest G. Fritsche began offering a 10-year warranty on the structural parts of his house. Last month (H&H, Aug.) Houston Builder Downey Bros. announced a 10-year warranty. Now, Dal-Mac Climax Inc. of Plano, Tex. has announced a 20-year warranty. Like other builders who have extended their warranty period far beyond the one-year FHA-VA requirement, Dal-Mac makes clear that the warranty covers structural parts only. Dal-Mac's warranty is actually made by its supplier, Irving Lumber Co. of Plano and in turn guaranteed by Weyerhaeuser Co. The houses are merchandised as "Weyerhaeuser registered."

Dal-Mac began issuing warranties only three months ago. So far, nine houses have been completed under the program, four of them models. The other five were sold on contract. Says Sales Manager James R. Forrester: "We think the 20-year warranty influenced the sale of all five contract jobs and we know the sale of at least two was largely attributable to it."

Letters start on p. 73

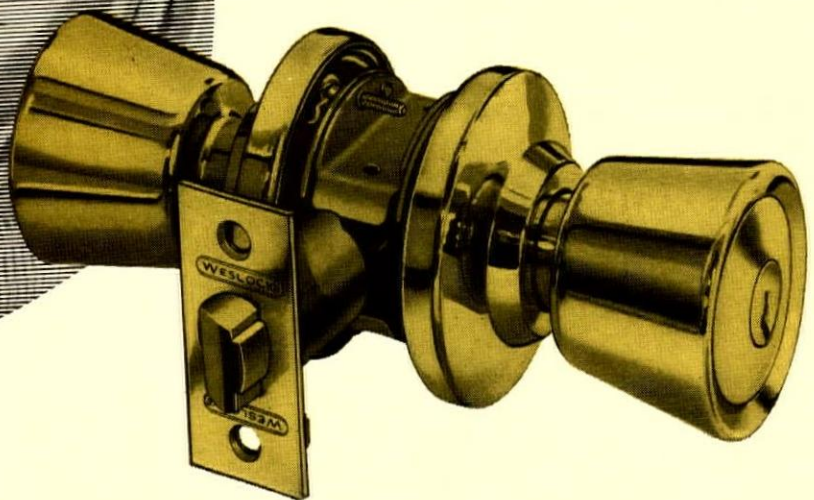


time saver!

Every tick of the clock costs money! **VANGUARD** saves you time and money. Takes less time to install; reduces your installation costs.

VANGUARD'S smart design and smooth operation start selling prospects right at the front door; keep on selling all through the house. This is solid quality...dependability...lasting performance.

You profit on every door. Install **VANGUARD** by Weslock now.



WESLOCK® *does more for every door!*

Huntington Park, California

Why this sign will help you sell more homes!

When your homes are Blue Star Homes, things happen.

American Gas Association's million dollar-plus Blue Star promotion goes to work for you. Powerful advertising, both national and local, is beamed at potential home buyers. A complete kit of tested selling tools is placed at your disposal.

House hunters are told and sold on the extras found only in a Blue Star Home . . . they're made familiar with the Blue Star Home sign . . . they're reminded in ad after ad to "look for this sign of a quality home."

House hunters are pre-sold on the advantages of the modern Gas appliances they will find in a Blue Star Home.

Your local Gas company representative will give you full details about how the Blue Star Home promotion will help you sell more homes. Ask him.

AMERICAN GAS ASSOCIATION



GO MODERN—GO GAS

Home buyers' favorite . . . GAS HEAT!

8 out of 10 new home buyers across the U.S. choose economical, quiet, efficient, clean, modern Gas heat . . . enjoy lower fuel bills, proved performance. More than 26½ million satisfied homeowners use Gas heat. Gas units can be planned to use the same ducts for both heating and cooling, so that Gas cooling easily can be added at any time.



Home buyers' favorite . . . GAS COOKING!

Gas ranges . . . built-in, wall hung, free standing, or slide-in . . . are far and away the most popular. Cost you less to install, too. And they feature modern advances like the Burner-with-a-Brain* that turns itself up and down automatically to hold the correct temperature. No finer ranges are made than those built to Gold Star standards.



Home buyers' favorite . . . GAS WATER HEATING!

With economical, dependable Gas, homeowners are sure of all the hot water they need, when they need it. No wonder a Gas water heater is preferred. And a Gas dryer is faster, more economical, leaves clothes soft and fluffy, white and bright.



*A.G.A. Mark ©Am. Gas Assoc., Inc.

PLUS these modern features that make your homes more appealing to prospects: Smokeless, odorless Gas incinerators eliminate daily garbage and trash carrying, place your home in a cleaner, quieter, more modern setting. Gas refrigerators cost less to run, have less moving parts to break down, give new convenience in ice making with no trays. Outdoor Gas Lights add beauty, warmth, distinction to your driveway, patio, yard, doorway . . . impress prospects coming and going.

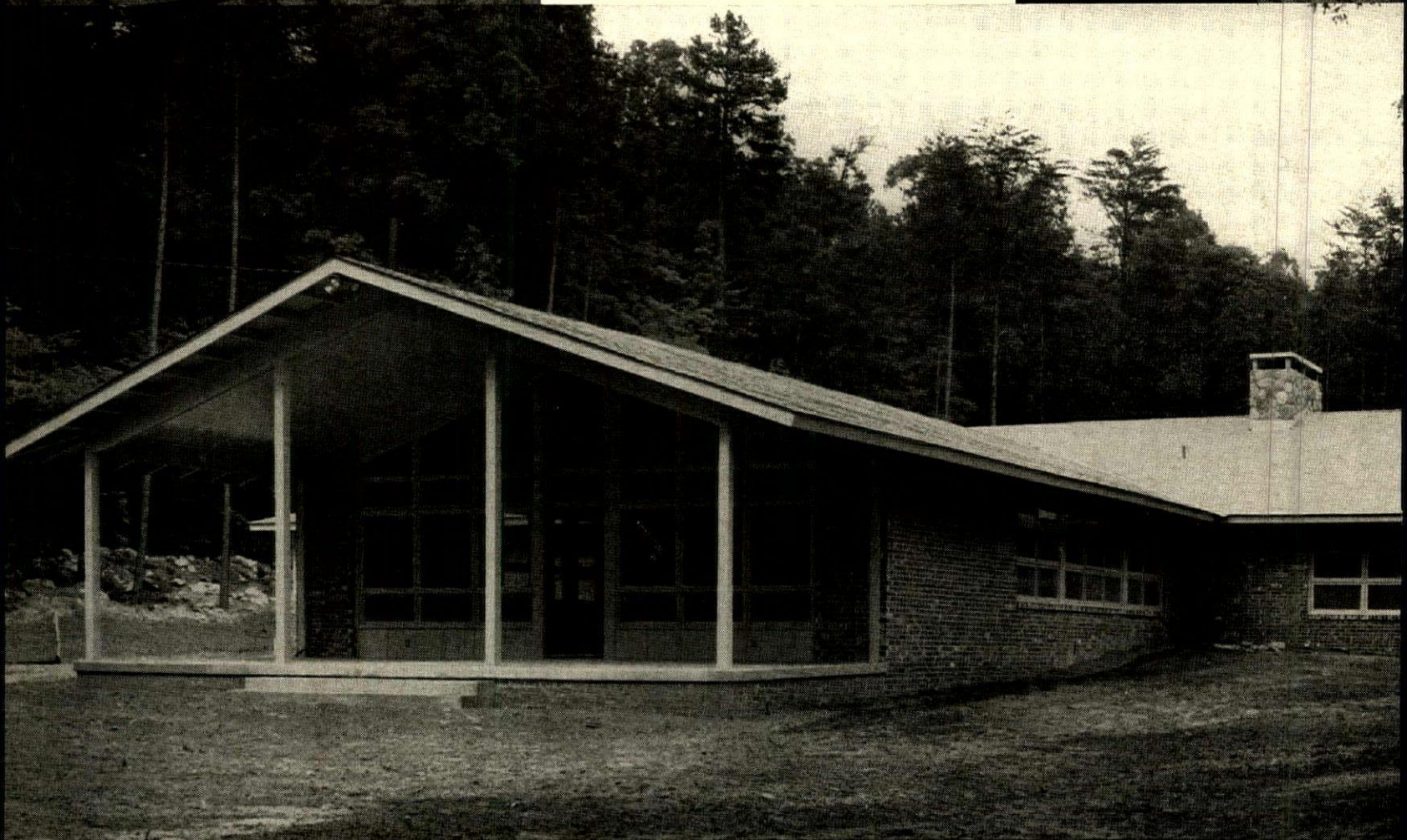
**ONLY HOMES OFFERING BUYERS
THE ADVANTAGES OF MODERN
GAS APPLIANCES CAN BE
CALLED BLUE STAR HOMES.**

**Blue Star Sign means
home buyers can
LIVE MODERN
FOR LESS
WITH . . .**

GAS

SUPERIORITY

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OUR PRODUCT

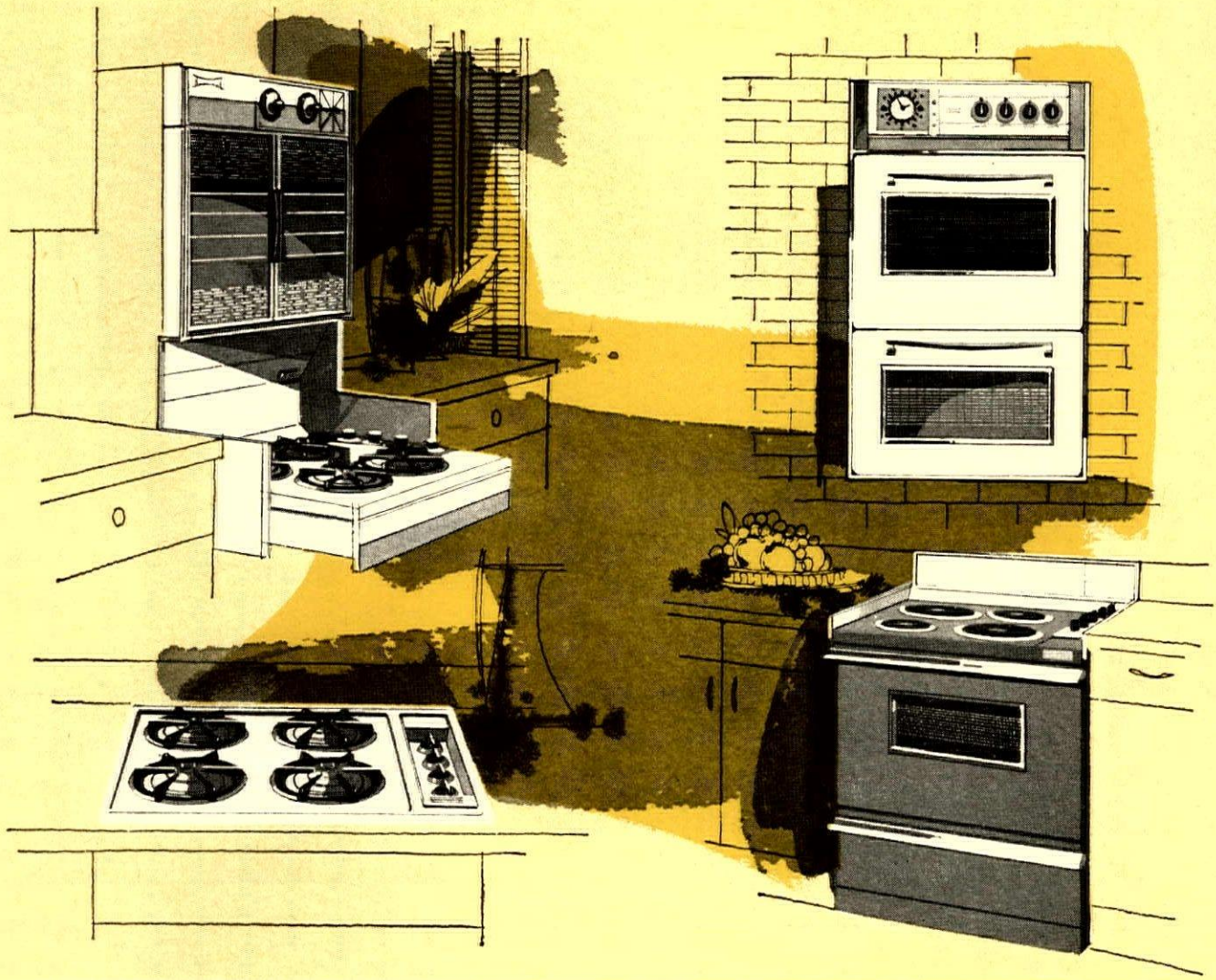


JUMBO WOODTEX 300

the "Crown Jewel of Roofing" . . . has been created by the expert hands of Certain-teed, the company which has pioneered practically every new breakthrough in the manufacture of asphalt roofing products. Examples: felt produced from fresh wood fibers, the Millerizing process of saturating felt with asphalt, automatic controls for uniform granule application, the Walton device for blending colors and abolishing pattern monotony. Now, Certain-teed presents the finest asphalt shingle available today . . . Jumbo Woodtex 300, with vivid new shadow line, distinct texture, and unique color styling. This heavy, rugged shingle carries the UL label and is backed by 25-year bond to give the ultimate in protection from wind, rain, sun and fire. Give your customers this superior product that will add to your reputation. Certain-teed Products Corporation, Ardmore/Pa.

PLANTS AND OFFICES
THROUGHOUT THE UNITED STATES

Only from Roper... a full line... gas or electric eye-level Charms, counter built-ins, and built-ins completely interchangeable



When you build for a Roper you can meet any customer preference...with no carpenter call-backs ever!

You'll never have to change a cabinet dimension when you plan for a Roper. Comparable models in gas or electric have exactly the same dimensions. And features can be varied in matching models without affecting

the size and shape of cabinet cutouts.

One more big advantage. No matter which fuel your customer prefers, there's no change in Roper quality. Gas or electric, it's *obviously* better.

Gas and Electric Ranges by Roper



ROPER



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PROBLEM

Provide quality air conditioning
for project homes and
garden apartments

SOLUTION . . . THE YORK that gives you application flexibility —

Here's a builders' package that makes it easy to install air conditioning in homes, apartments and small stores! It's the York Flex-O-Metic . . . the compact, versatile air conditioning system that assures low cost installation and customer satisfaction.

Application flexibility! The Flex-O-Metic system gives you a wide choice of location for cooling coil and furnace: in a closet, alcove, basement, utility room, attic or crawl space. Flex-O-Metic heat exhaust section is located outside the home,

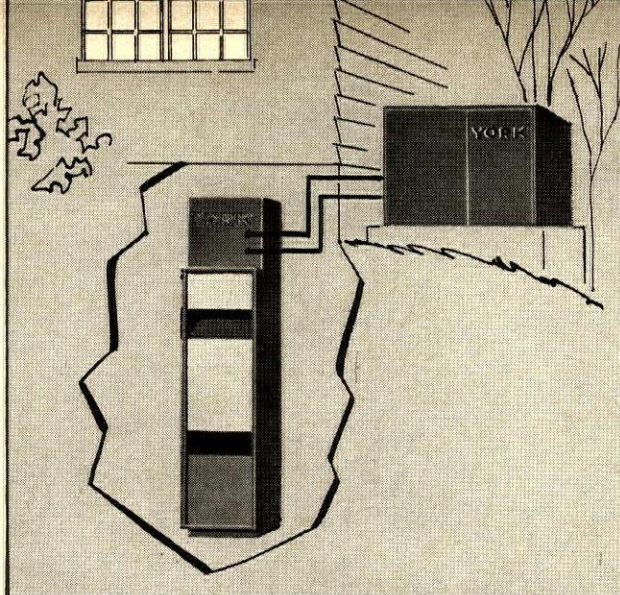
on a slab; or it may be installed on the roof where it is completely out of sight.

Teams with any furnace! The York Flex-O-Metic system may be installed with a matched Borg-Warner Furnace—or may be adapted to any warm air heating system, using the upflow type cooling coil. And, for 1963, there is a duct coil that lends itself to space-saving attic, alcove or crawl space installations.

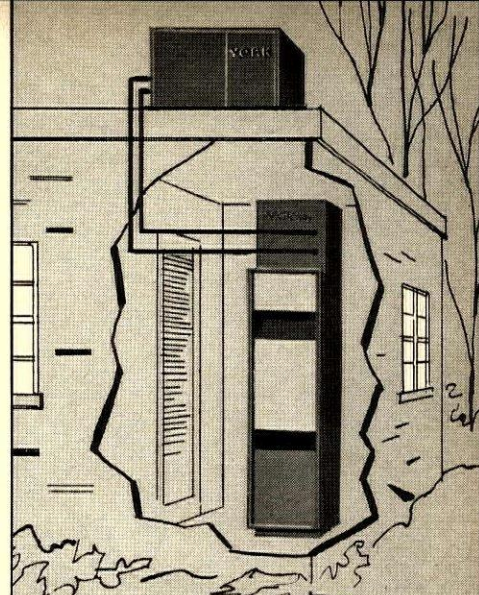
Easy, trouble-free installation! Flex-O-Metic systems feature famous York Quick-Connect Couplings; tub-

ing that connects heat exhaust section to cooling coil is pre-charged. Just a turn of the wrench makes the connection, with no field charging, no brazing, no field assembly of several parts.

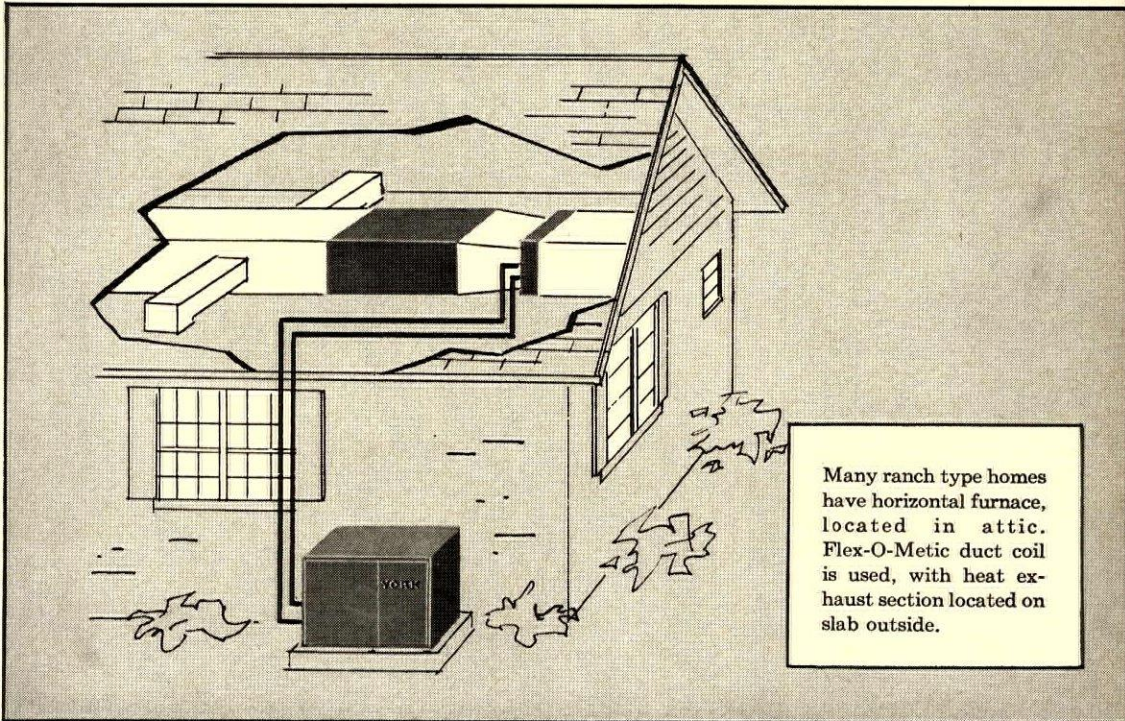
Quality cooling! The York Flex-O-Metic is an ideal system for builders who want to offer year-round comfort at competitive prices. The system is simple, flexible and compact; yet it offers true York quality. Available in two sizes—24,000 BTU/hr and 34,000 BTU/hr—the new Flex-O-Metic system meets the builder's need for a



With furnace installed in basement, upflow type coil is used. Flex-O-Metic heat exhaust section is located outside home, on a ground level concrete slab.



Rooftop location of heat exhaust section is widely used for garden type apartments. Furnace and coil are in closet or alcove.



Many ranch type homes have horizontal furnace, located in attic. Flex-O-Metic duct coil is used, with heat exhaust section located on slab outside.

FLEX-O-METIC Air Conditioning System

easy, low-cost installation!

versatile air conditioning system for homes, garden type apartments and small commercial buildings.

Want more facts? For complete information on the York Flex-O-Metic and other advanced residential air

conditioning systems for builders, see your nearby York Sales Office; or write directly to York Corporation, York, Pennsylvania. In Canada, call or write Shipley Company of Canada, Ltd., Rexdale Boulevard, Toronto, Canada.



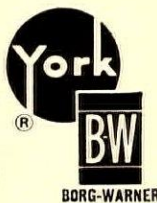
This symbol of the Air-Conditioning and Refrigeration Institute means that the equipment bearing it will render full performance under the ARI Standard.



Fully weatherproofed Flex-O-Metic heat exhaust section of zinc grip steel is finished with baked-on enamel for outdoor installation.

YORK CORPORATION
Subsidiary of Borg-Warner Corp.
YORK, PENNSYLVANIA

THE QUALITY NAME IN AIR CONDITIONING AND REFRIGERATION





Your home-buying and home-building prospects are learning about this window . . . and the advantages of welded insulating glass . . . through continuing advertising in the pages of LIFE, BETTER HOMES & GARDENS, AMERICAN HOME, HOUSE BEAUTIFUL, and HOUSE & GARDEN.

NEW! ANDERSEN NARROLINE WINDOWS

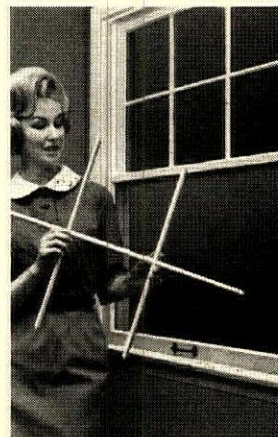
Give your customers these benefits of a "care-free" double-hung window... at no premium in price!

No more struggling with storm windows!

For the first time in a double-hung design, you can offer your customers the extra convenience of welded insulating glass. Eliminates the bother of storm windows forever. No washing, handling or storing. It's so weathertight, there's no compromise in fuel-saving economy. Yet the Andersen Narroline with insulating glass costs no more than an ordinary window with a combination storm window.

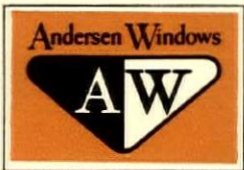
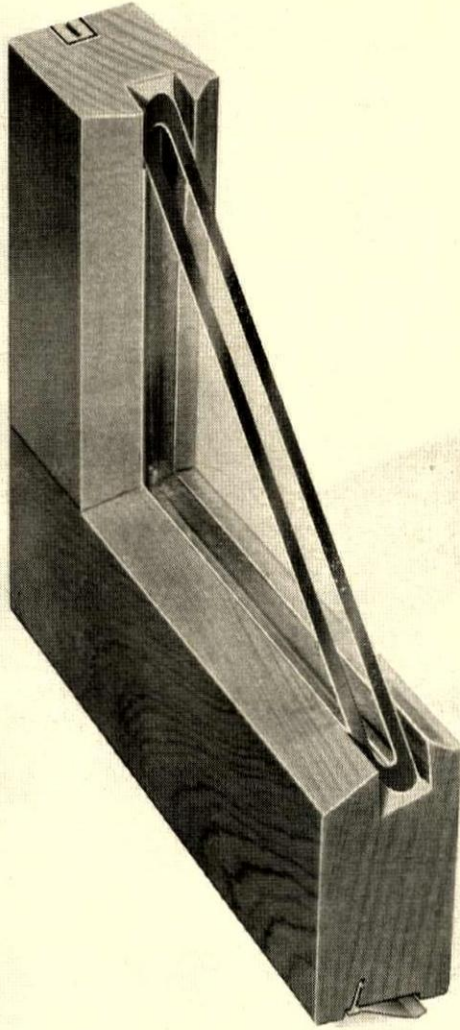
Removable grilles for easier cleaning!

Another exciting Andersen extra with built-in customer appeal. Custom-made snap-on grilles of Implex "pop out" for easy window cleaning. They simply "plug-in" to small grommets located in the sash. When installed without grilles, a touch of paint or stain covers any trace of the grommet. Grilles take paint readily (but never have to have it), won't warp, and can be wiped clean with a damp cloth. Available as a horizontal bar or in a variety of divided-light patterns.



FOR THE FIRST TIME . . .
 A DOUBLE-HUNG WINDOW SO WEATHERTIGHT
 THAT WELDED INSULATING GLASS IS PRACTICAL

(Andersen welded glass is Thermopane® or Twindow®)



THIS SIGN IN YOUR WINDOWS PUTS EXTRA SALES APPEAL IN YOUR HOMES

↑

AVAILABLE WITH WELDED INSULATING GLASS

Two fewer glass surfaces to clean!

Window washing heads the list as the household chore that housewives like least! With Andersen Narrolines and insulating glass in your homes, there aren't any storm windows to clean or handle . . . and you have a selling point that's bound to be a hit!

A size for every job—With the new Andersen Narroline, you can offer the design options of a custom-made unit! They come in 44 standard sizes . . . can be used as singles, multiples, or in combination with one of nine matched picture windows.

The new Andersen Narroline . . . today's greatest window value for you *and* your customers . . . offering smooth operation, weathertightness, and convenience never before found in a double-hung design.

See it today at your Andersen lumber or millwork dealer. Or send coupon for complete descriptive information.

YES! I WANT MORE INFORMATION ABOUT THE NEW NARROLINE.

Send size tables, details, and price information.

Name _____

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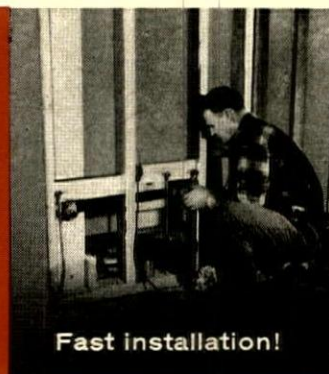
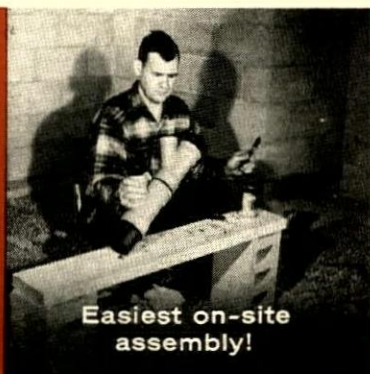
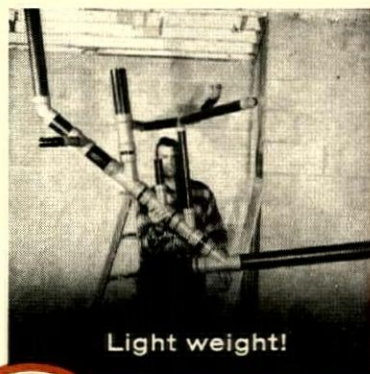
Andersen Windowalls

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HH-93

Now save up to \$100 per home with ABS pipe and fittings for DWV



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HEAVY DUTY ABS PIPE POLYMERS



Simply multiply \$100 by the number of homes you will build and see why it is so important for you to specify ABS pipe for DWV! Yet saving dollars, on materials and installation, is only one important advantage offered by ABS DWV.

Profit-wise builders should consider that skilled workmen can install ABS pipe and fittings made of CYCOLAC brand HEAVY DUTY POLYMERS faster than copper or cast iron. On-site assembly requires only an ordinary saw, a brush and a can

of solvent cement. One man easily lifts an entire basement assembly and attaches it in position. And heavy duty CYCOLAC ABS actually out-performs conventional materials in DWV systems. It's smooth and chemical resistant... won't corrode, resists build-up, and is unaffected by hot drainage water.

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Federal housing policies . . . Market research . . . Rx for more townhouses

The many-fingered federal puppeteer

H&H: Your two stories on our federal government's housing programs [June and July] are most interesting, educational, and frightening. When programs designed to help special interest groups fail, the people demand a different approach. This approach, fostered in hysteria, generally undoes what good has been done and brings complete government domination with its waste and confusion. Private enterprise has made the U.S. the No. 1 nation in the world. Why should we abandon it in housing?

HENRY A. BUBB, past president
U. S. Savings & Loan League

H&H: No one in the mortgage banking business can disagree with your thoughts. We strongly oppose the creation of a new cabinet post for housing, as was attempted by the Administration and defeated by Congress last year. FHA and its market-oriented activities should be divorced from HHFA and should be allowed to operate independently as a privately supported instrument with the primary purpose of developing a better home mortgage market. This would tend to reduce the cost of housing as it is affected by financing, and should let HHFA concentrate all its efforts on special programs and socialized housing, as it apparently desires to do.

CARTON S. STALLARD, past president
Mortgage Bankers Assn.

H&H: . . . I agree with almost every line you wrote. Not only that, but it has never been so well said. I only wish the solution could be stated as clearly as you put the problem. I am concerned that the housing industry has been hooked on the narcotic of financing gimmicks for so long it couldn't survive the shock of sudden withdrawal.

The builder hasn't profited from that rising cost curve you show. Average margins are much lower than in 1948, but as long as houses are bought on the basis of down payments and monthly payments instead of price, builders and buyers won't bring pressure for the basic reforms that are needed. One of the greatest needs is for sensible and uniform codes. There is so much code variation that true mass production is impossible.

I have been fascinated by the idea of a single land tax for years. It seems reasonable to believe that it would help keep land prices down. It certainly would minimize leap-frogging in land development. To the extent that a man would not be penalized by higher taxes on improvements, it would encourage higher standards in housing and maintenance, and could be one answer to the urban renewal problem.

IRVING ROSE, president
Advance Mortgage Corp., Detroit

H&H: I read "The many-fingered federal puppeteer" avidly when it came out. I'd been having trouble getting the many fingers distinguished. You did a grand job.

I agree with your general position. I would quibble over whether interest is not also a cost, and a very important one, but that is just a matter of choice of words. Certainly it has been easier to subsidize housing through

lowering this cost than attacking others, and the result is, as you say, to encourage inflation of other costs.

A minor point you bring out is quite important: Today's glut of mortgage money is a result of sticky federally manipulated interest rates. The glut is misleading. Actually this is a period of credit stringency, with interest rates at 30-year highs, and much real estate being liquidated to get cash. Money is abundant only at very high rates and in certain markets.

MASON GAFFNEY, chairman designate
Economics Dept., University of Wisconsin
Milwaukee



H&H: You did a real service in putting together in one place the story of how housing got that way, what the situation is now, what it portends for the future. I like the way you did it. The excessively easy terms authorized and encouraged by government agencies are the primary if not almost the sole cause of the present trend in the foreclosure rate. This in itself should be a warning signal for the future. But I fear that here again we learn that we do not learn from history.

OSCAR R. KREUTZ, past president
National League of Insured Savings Assns.

The new housing industry

H&H: Congratulations on the excellent series "The new housing industry." You have drawn on a wealth of background information, supplemented by investigation and analysis, and expressed pointed and thought-provoking observations. My thinking concurs with yours that there is a real cost problem in housing and credit has too often blocked its solution [The many-fingered federal puppeteer].

We should not overlook, however, that much progress has been and is being made, although there is still much more to be done. While the gains may seem scattered and small, they reflect intensive research and development, which we can document for our company. There is always the desire to achieve dramatic breakthroughs; indeed, this is a never ending goal. In practice, progress comes more through evolutionary changes which take cognizance of housing's complex political, social, and economic environment.

WALTER E. HOADLEY, vice president
Armstrong Cork Co., Lancaster, Pa.

Market research

H&H: Excellent article on research ["Market research: Housing's most neglected selling tool." H&H, July]. Thorough, to the point, and graphic. Some readers might misconstrue my position on the importance of marketing research—or market investigation as I like to call it. It's true that builders call me in

to put out a fire, which they think can be done with a magic bucket of marketing facts when the fire really needs revision in management practices or personnel. But these are the exceptions. Some of the most colossal pratt-falls in the business could have been avoided with a minimum of investigation—wrong styles, wrong prices, wrong type of housing, over-diversification, unreal forecasts.

Put me in the camp that exhorts builders to spend time and money to approach a risky business in a business-like manner. I've been preaching this for eight years—and I'm not discouraged. Progress in inches is better than none at all.

JAMES H. MILLS
Home Facts Research Inc., New Canaan, Conn.

H&H: I hope it will open some eyes. There is only one point that you omitted: market data being made available to builders by their local associations. As research consultant to the Houston Home Builders Assn. and the Houston Apartment Assn., I have tried to make my analysis and reports meaningful to the majority of members of each of these groups. But those who need my work most seem to use it least—small builders who cannot afford to lose a dime and larger builders who lose too many dimes and get in financial trouble. The younger, more progressive builders make very good use of the reports.

ELIZABETH GREGORY MORGAN
Morgan Research Associates, Houston

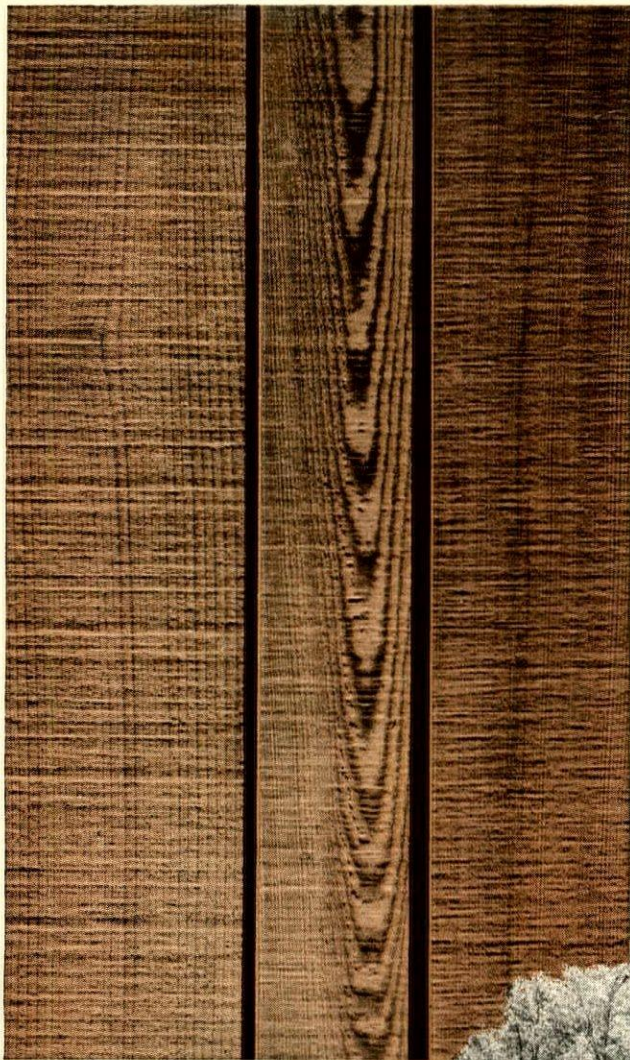
Patio townhouses

H&H: I hope the homebuilding industry can apply the patio house concept ["L-shaped patio townhouses: fresh answer to high land costs," H&H July] in this country as successfully as it is done abroad. Two things more are needed: 1) zone residential areas at a density between free-standing and garden-apartment housing and 2) standardize the core components of the big L-shape to allow a variety of interior living arrangements. The potential appeal of patio-house living in town may help bring us nearer to both.

WILLIAM K. WITTAUSCH, housing manager
Stanford Research Institute
South Pasadena, Calif.

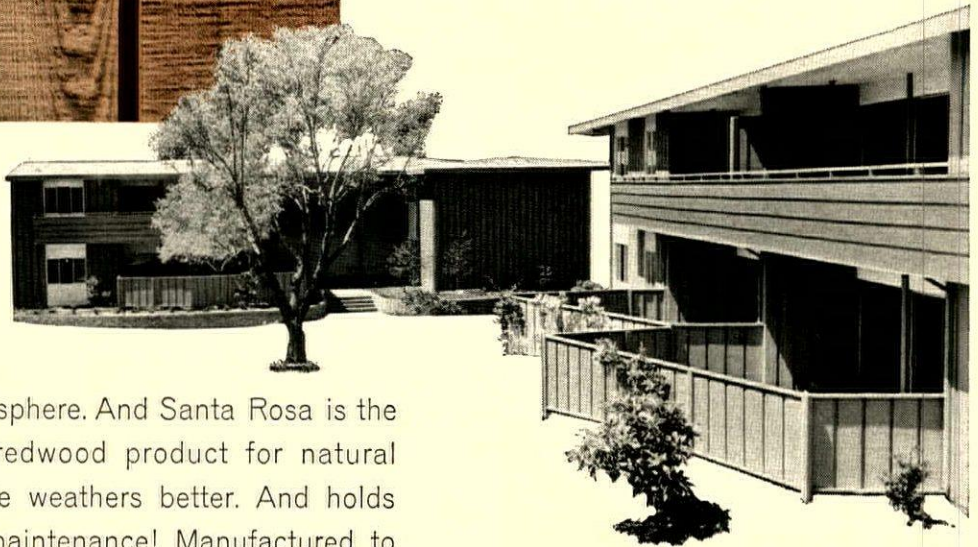
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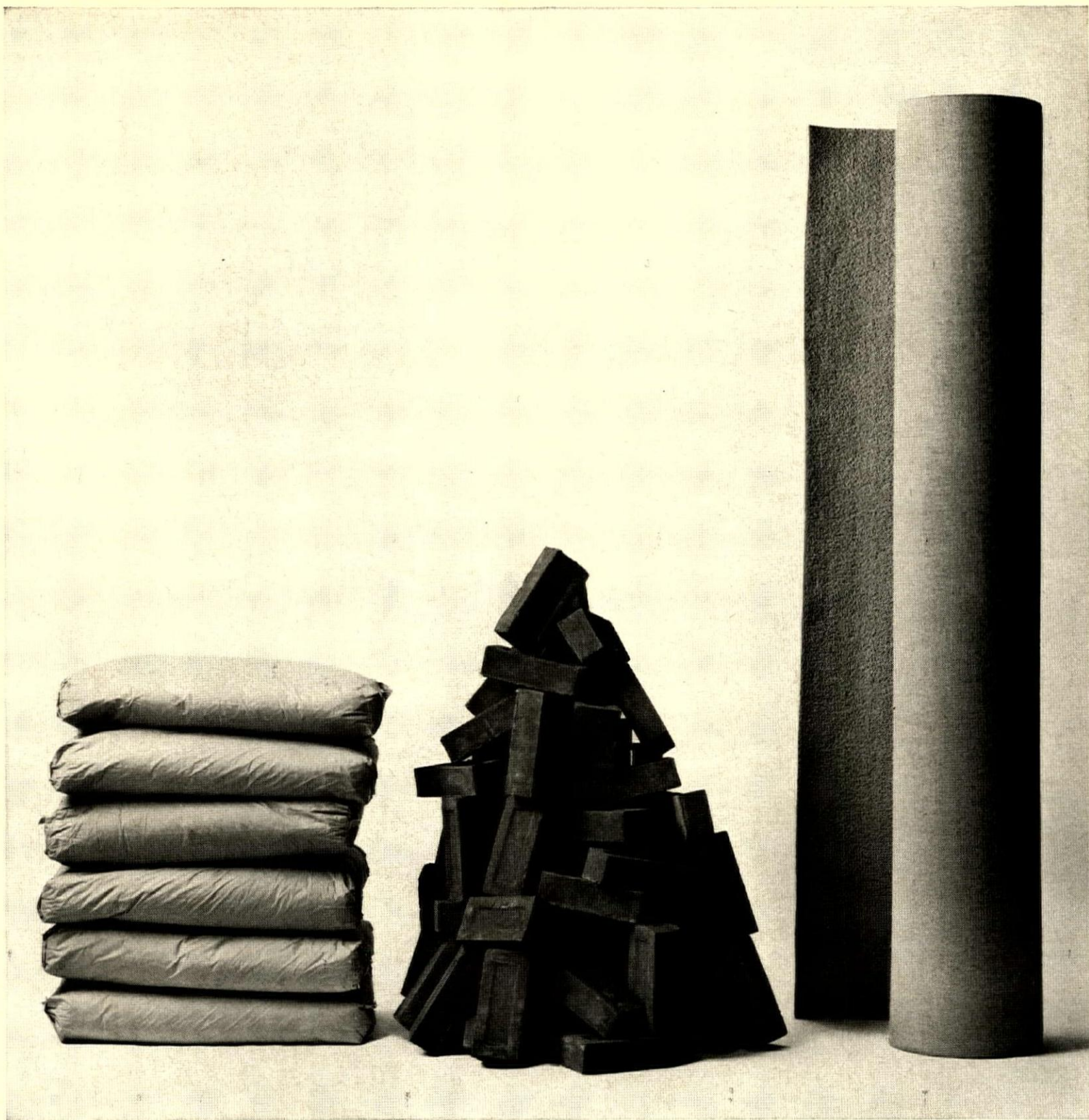


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Basic building materials for houses that sell!

The walls are up. The roof is on. The floors are down—but not *done* until they're carpeted.

That's the way most women feel about new houses. To them, carpeting gives every room a more finished, more luxurious look.

That's why you'll build houses that sell faster when you *finish* them—with carpeting of 100% Caprolan® nylon pile. Makes every room look more expensive. But it doesn't have to be more expensive.

Instead of investing in finished flooring, have your local carpet retailer install

carpeting of Caprolan nylon over plywood subflooring.

By working with a retailer, you can give your customers their choice from the widest possible selection of colors and patterns. (And you're not bothered with inventory, installation, or call-backs.)

By featuring Caprolan nylon carpets, you get all the extra sales-power Caprolan builds into famous-name carpeting. Beauty to match the homes you sell. Color that's deep-dyed to stay brilliant. Ruggedness to stand up to heavy traffic, year after year.

So to build homes that sell faster, include carpeting of Caprolan nylon in your basic building materials. And include it in the purchase price. It makes a package that no woman can resist!

American, Bemporad, Callaway, Lewis, Loomtex, Roman and Trend are just a few of the many fine mills making carpet of Caprolan nylon.

Fiber Marketing Dept., 261 Madison Ave., N. Y. 16, N. Y.



caprolan nylon

How did Perl-Mack sell 58 air-conditioned homes on a day like this?



"We did it because central air conditioning helps sell homes in any kind of weather," answers Sam Primack, Perl-Mack Homes, Inc. This successful Denver, Colorado, company had a snowstorm the day they unveiled 10 model homes in their "Northglenn" development — but they went right ahead with their opening anyway. A Sunday newspaper ad drew 8,000 people to the site, and 58 air-conditioned homes were sold on the spot. During the five-month period following the opening, over 600 net home sales were made.

Point is: You, too, can boost sales by including central air conditioning as a standard feature in your homes. Besides Perl-Mack Homes, many other builders have done just this through promotions such as the "Crowning Touch." For complete facts on central air conditioning, **send the coupon for our free booklet.** Address to: Du Pont, FREON® Products Division, N-2420, HH7, Wilmington 98, Delaware.



Better Things for Better Living
... through Chemistry

SEND FOR FREE BOOKLET

Du Pont Company
FREON Products Division, N-2420, HH9
Wilmington 98, Delaware
Please send booklet on central air conditioning.

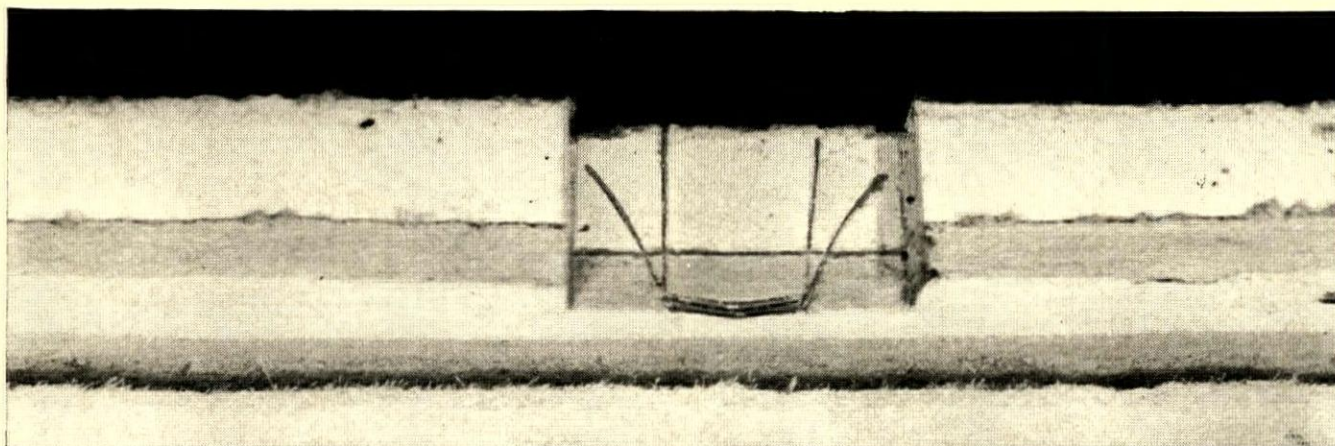
Name _____

Title _____

Company _____

Address _____

Du Pont makes FREON® refrigerants, not air-conditioning equipment.



In this cross sectional photo, edge of ceiling tile has been cut away to show how new BOSTITCH Gyplok Tacker places two staples through ceiling tile into gypsum lath or gypsum board. Second staple is driven over first—and flares out for extra holding power. Spring crown of first staple holds tacker in position for accurate driving of second staple.

**APPLY CEILING TILE
DIRECTLY TO
GYPSUM LATH
OR GYPSUM BOARD
WITH THE
NEW BOSTITCH
GYPLOK TACKER**

To make a big saving in both time and material costs.

Especially developed by BOSTITCH, this entirely new principle involves two staples—the first one is driven straight, then the second is driven over the first and flares out to furnish the required holding power. The spring-crown shape of the staple and the design of the driver make it easy to locate the second staple accurately.

This forward step in fastening ceiling tile to gypsum lath or gypsum board eliminates mastics, produces holding power well above acceptable minimums.

You get a really clean, owner-pleasing job that saves you time, money, and

manpower in installation. This is one more example of how BOSTITCH leads the way to help you get better profits through faster fastening methods.

For all the up-to-date facts, call your BOSTITCH representative. He has the latest list of ceiling tile manufacturers who have approved this new method for use on their products. Call him soon.

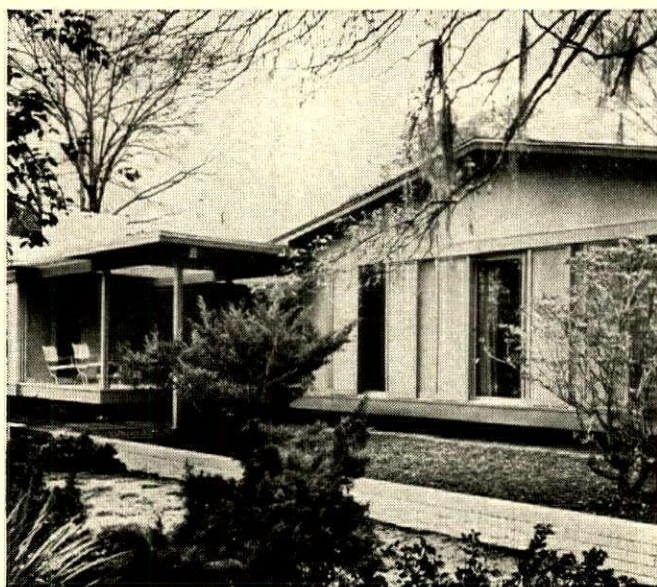
Fasten it better and faster with



529 Briggs Drive, East Greenwich, R. I.



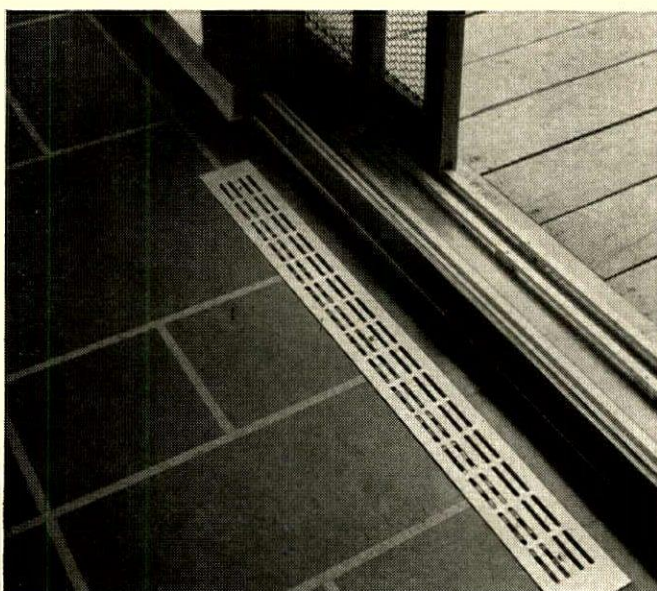
A NEW CONCEPT IN HOME DESIGN



Ladies Home Journal's Add-On House of 1963

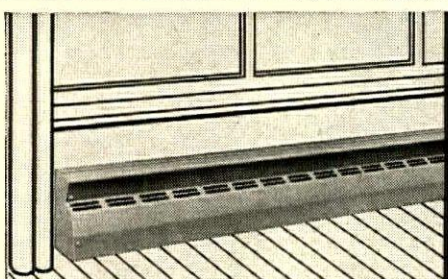
Ladies Home Journal's Home of the Year, designed by John Brenneman, AIA, Home Building Editor, now brings within reach of almost any couple a handsome home of long-lasting quality at a reasonable price. Called the "Add-On House," this home is built in stages as the family and its income grow. Yet at all times it's a complete living unit. Built by The Crawford Corp. in Baton Rouge, Louisiana, the house will be distributed by a nationwide group of homebuilders.

A NEW CONCEPT IN HOME COMFORT

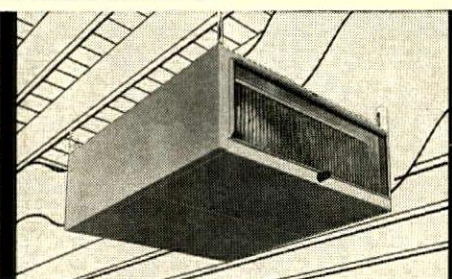


season :: aire electric comfort conditioning system

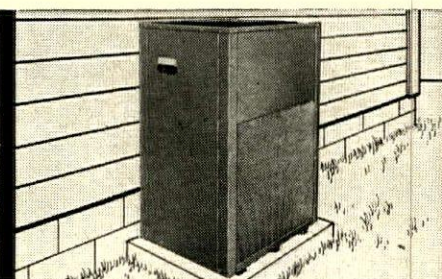
Season-Aire comfort conditioning was selected for the Journal's Add-On House for its new all-electric all-season approach to whole house climate control. Season-Aire heats and humidifies in winter; cools and dehumidifies in summer; provides clean, filtered mountain-fresh air everyday of the year. For full details—write for Season-Aire Bulletin R20101.



Smooth-Air Baseboards or Floor Drop-In Units distribute preconditioned air; integral electric heating elements provide room-by-room heat control.



Central-Air Unit mounts in basement or crawl space; supplies base heating and cooling load, electronic filtering, humidification and deodorizing.



Cool-Air Chiller installs outdoors; pumps refrigerated solution to cooling coil in Central-Air Unit; provides cooling and dehumidification.



chromalox *ELECTRIC* heating/cooling

Edwin L. Wiegand Company, 7770 THOMAS BOULEVARD, PITTSBURGH 8, PA.

WR-55B



This nine-room home is crowded with distinctive features, including a sunken living room highlighted with a fireplace that nearly covers one wall. Pre-wiring provided for Home Interphone service, which lets the owners talk room to room and answer the door by phone.

In Dayton, Ohio, this home sold for \$58,900

("...and features like concealed telephone wiring demonstrated its quality," says John E. Duckro)

"Before I built my first house eight years ago, I went to the telephone company to find out about the latest telephone conveniences," recalls Mr. Duckro, president of John E. Duckro, Inc. "I've been sold on concealed telephone wiring ever since.

"My buyers feel the same way.

There's no tearing up walls or harming the beauty of a room later on as telephone needs change. I have built-in telephone outlets placed in every room, including bathrooms, laundry rooms and the garage and patio.

"Concealed wiring should be installed as a matter of course by

any responsible builder. I wouldn't build a home without it."

* * *

Call your Bell Telephone Company Architects' and Builders' Service for help in telephone-planning your homes. Also, see Sweet's Light Construction File, 11c/Be. For commercial installations, Sweet's Architectural File, 33a/Be.



BELL TELEPHONE SYSTEM

Why is thinwall drainage tubing





... BECAUSE BIG BUILDINGS CAN'T RISK PLUMBING DRAINAGE FAILURE!

In commercial and community buildings, stores, hospitals, schools, offices and other high traffic buildings, you rarely find DWV copper tubing used for drainage piping. Most likely, it's cast iron soil pipe—chosen for demonstrated dependability. This is a most significant fact to home builders, architects, building materials specifiers, as well as home buyers.

There can be no thought of compromise with drainage piping dependability where the personal health of one person or thousands is involved.

Beginning with a comparison of wall thickness...the

known performance of cast iron soil pipe under exposure to acids and chemicals in ordinary sewage...and along with other advantages shown at right...DWV copper cannot begin to substitute for modern  cast iron soil pipe. These facts are worth remembering when you choose plumbing drainage piping for homes you build.

You can use  cast iron soil pipe to help sell your homes. Its very appearance suggests durability and quality, and freedom from costly maintenance. Our two new folders will give you all of the important selling facts. Get them today. Mail the coupon!

MEMBERS OF THE CAST IRON SOIL PIPE INSTITUTE



Alabama Pipe Company
The American Brass & Iron Foundry
American Foundry
Anniston Foundry Company
The Buckeye Steel Castings Company

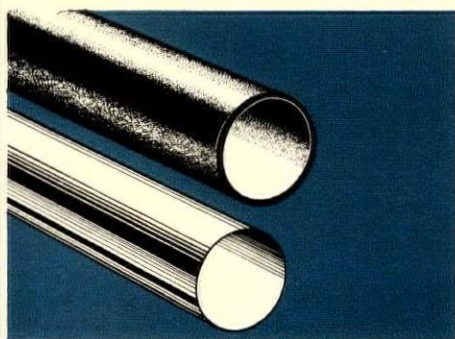
Buffalo Pipe & Foundry Corp.
Charlotte Pipe and Foundry Company
Glamorgan Pipe & Foundry Co.
Rich Manufacturing Company
Russell Pipe and Foundry Co., Inc.
Tyler Pipe and Foundry Company

United States Pipe and Foundry Company
Universal Cast Iron Manufacturing Company
Western Foundry Company
Williamstown Foundry Corporation

See...Feel...Hear the difference! Specify  — the way to buy modern...

CAST IRON SOIL PIPE

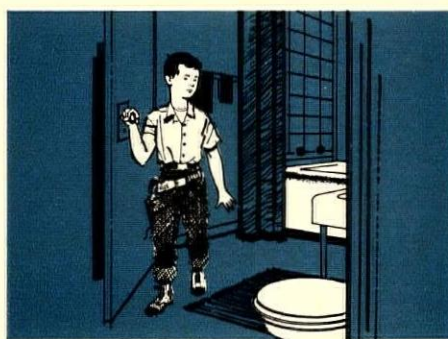
so rarely used "downtown"?



Cast iron soil pipe—a rugged nominal wall thickness about four times that of soft, thin-wall DWV copper tubing. *You can See... Feel...and Hear the Difference!*



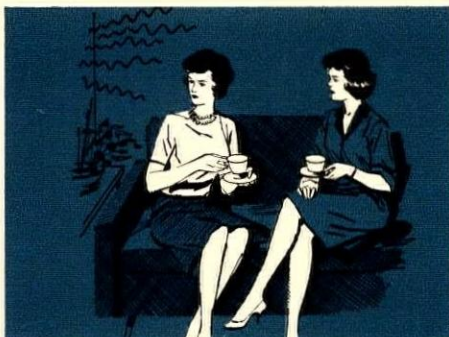
Cast iron soil pipe is nailproof! Accidental puncture of drain lines or stack can't happen with cast iron soil pipe. Plumber's "snake" does no damage from inside the pipe.



Cast iron soil pipe resists corrosive bathroom wastes that attack thinwall DWV copper drainage tubing—as demonstrated by actual experience. (Ask to see the evidence.)



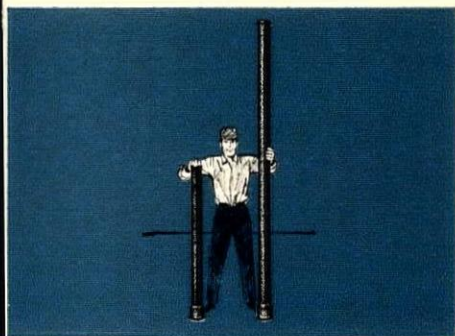
Cast iron soil pipe takes household chemicals in stride! Detergents and drain cleaners have little corrosive effect on cast iron soil pipe—even after many years of use.



No embarrassing bathroom noises! Thick-walled cast iron soil pipe muffles gurgling water sounds, quiets vibration noise—the sign of a quality plumbing installation. Thin-wall DWV copper tubing amplifies sounds.



Cast iron soil pipe gives long, long service. It is not unusual to find cast iron soil pipe installations which have served through three generations—about 100 years.



Modern 10-foot lengths of cast iron soil pipe save installation time and cost. Fewer joints are needed in any drainage system in the house and to the street sewer.



CI symbol of top quality. This insignia on cast iron soil pipe and fittings guarantees these products are American-made, and meet the rigid specifications adopted by the Cast Iron Soil Pipe Institute.



Cast iron soil pipe under the floor and to the street sewer gives maximum protection against infiltration, root penetration, crushing, pipe-joint failure. No substitute drainage piping can match it.

Two important folders for home builders! Facts in these folders give you strong selling features for homes equipped with **CI** cast iron soil pipe drainage systems.



Cast Iron Soil Pipe Institute, Dept. K.
205 W. Wacker Drive, Chicago 6, Ill.

Gentlemen: Please send the two helpful folders: "Cast Iron Soil Pipe or Thinwall Copper Tubing?"...and "Why the Sewer Line From Your House to Street Should be Cast Iron Soil Pipe."

Firm name _____

Your name, Title _____

Address _____

City _____ Zone _____ State _____



Marlite paneling is used throughout the new Akron Orthopedic Clinic designed by Wagner and Luxmore. The corridor features beige Plank; treatment rooms are paneled in various colors of Marlite Plank.

6337

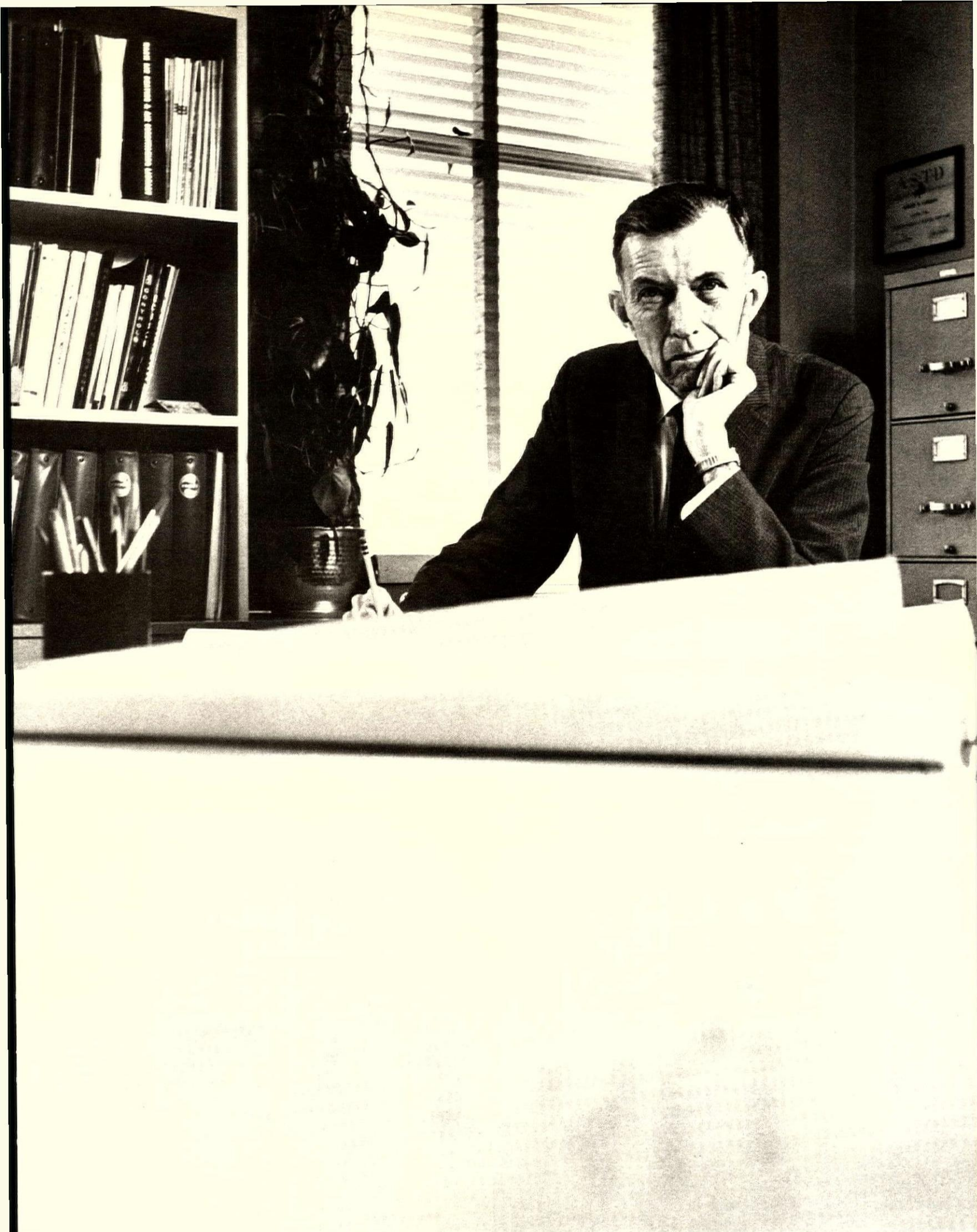
Specify Marlite for clean, modern interiors ...it's practically maintenance-free!

Any interior takes on a beautiful new look — and stays that way for years — when Marlite paneling is installed on the walls. That's because Marlite's soilproof baked finish resists heat, moisture, stains, dents. Marlite goes up fast, never needs painting or further protection . . . and most important, it wipes clean with a damp cloth . . . pushes maintenance costs to a new low! And

Marlite gives your clients a wide choice of distinctive colors, patterns and authentic Trendwood® reproductions for creating beautiful wash-and-wear interiors—anywhere. For complete information, see your building materials dealer, consult Sweet's Files, or write Marlite Division of Masonite Corporation, Dept. 922, Dover, Ohio.

Marlite® plastic-finished paneling
ANOTHER QUALITY PRODUCT OF MASONITE® RESEARCH

MARLITE BRANCH OFFICES AND WAREHOUSES: 204 Permalume Place N.W., Atlanta 18, Georgia • 18 Moulton Street, Cambridge 38, Mass. • 4545 James Place, Melrose Park, Illinois (Chicago) • 8908 Chancellor Row, Dallas 7, Texas • 1657 Powell Street, Emeryville, California (Oakland) • 3050 Leonis Blvd., Los Angeles 58, California • 39 Windsor Avenue, Mineola, L. I. (New York) • 2440 Sixth Avenue So., Seattle 4, Washington



**“Which heating system
can sell more homes for you?”**

NOFI's expert, Mike Reed, gives you the answer on the following page.



Mike Reed, NOFI's advisor to the building trade, takes a cold look at the selling advantages of different heating systems for new homes.

"The only reason you should plan on a particular type of heating in the homes you build is if—and it's a mighty important if—that system gives you more selling advantages than any other. Look at it, cold turkey, and there's only one conclusion. In most areas—the great majority of areas in the East and Midwest — Oil gives your houses more sales appeal.

"Granted, the installation cost for other fuels may be a bit lower. You may think only of that and be apt to say, 'That's for me.' But you want to sell more homes. So think of this: The public is generally not aware that an Oil heating instal-

lation has a higher cost (it's only a dollar a month on the average mortgage). But they do know Oil's reputation for safe, even, dependable heat—and that in many areas it has a lower operating cost. They'll buy quicker, pay more, if your house is heated by Oil.

"It's a strong inducement when you offer them this quality item. And, I repeat, the lower operating cost of Oil in many areas is a powerful additional selling weapon for you.

"Other advantages: With Oil, you control job progress. You don't have to depend on the extension of mains or laterals to get houses

ready for delivery as you do with other fuels. When you depend on a utility, weather and other hazards can intervene, causing delays, hiking costs. And, when houses are built during winter, they frequently must be kept heated. Here Oil can save you \$40 to \$50 per house over other fuel.

"I'm anxious to show you how you can profit with Oil heating systems. Let me hear from you. I'm always at your service."

Mike Reed
NATIONAL OIL FUEL INSTITUTE, INC.
60 East 42nd St., New York, N.Y.

**How much easier can you
sell a house that could look
new for 15, 20, or 25 years?**

**Investigate a new Du Pont
film finish called TEDLAR®
and find out.**



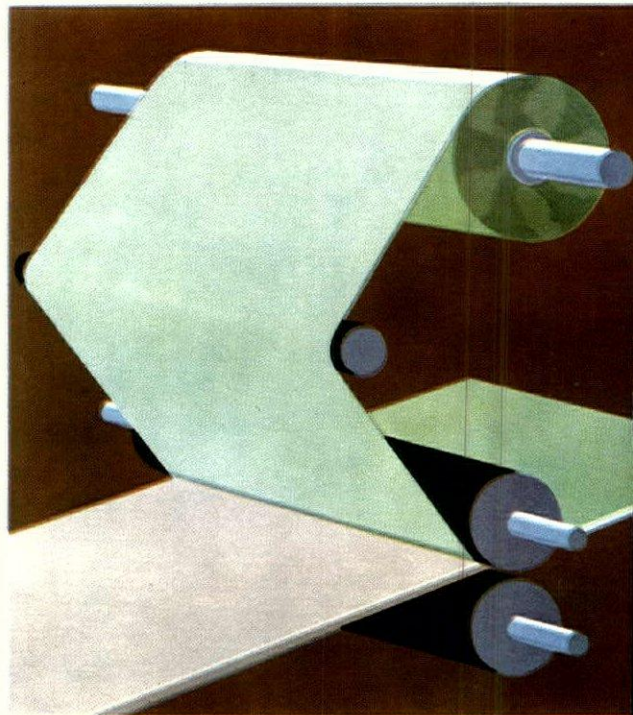
Location: Baton Rouge, La., Architect: John Brenneman, A.I.A., Home-Building Editor, LADIES' HOME JOURNAL. Builder: Crawford Corp., Baton Rouge, La. Building panels by United States Plywood Corp. are surfaced with TEDLAR.

THE LADIES' HOME JOURNAL uses TEDLAR* PVF film as the finish for building panels on its first unit house (above). Completely modern in design, construction and materials, this house is planned as a whole, but can be built in stages.

Building panels like these, surfaced with TEDLAR, have already been on test houses for five years. They still look like new. TEDLAR is extremely durable: the plywood panels on the Unit House could stay new-looking for 15, 20, perhaps even 25 years. So could the houses you're building now. Turn the page to find out more.

TEDLAR—a film, not a liquid

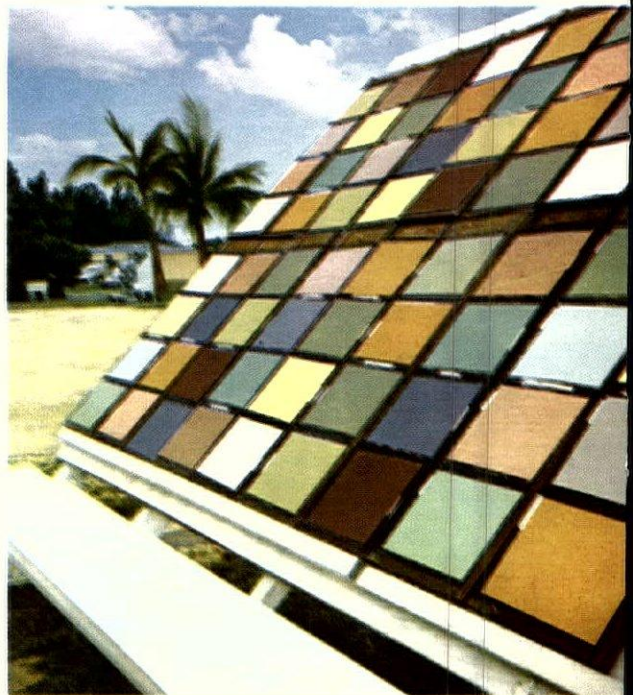
TEDLAR* is a film, not a liquid or a spray. Du Pont checks it for color, uniformity, thickness and quality, and sells it to building-product manufacturers who bond it—with special adhesives—to siding, roofing and other building products. This bond is so good that TEDLAR becomes a part of the material it protects.



TEDLAR is weather-proven

On racks like this in Florida, Arizona and New York, samples of TEDLAR bonded to metal and wood have been weathered for up to six years. They haven't noticeably faded or chalked.

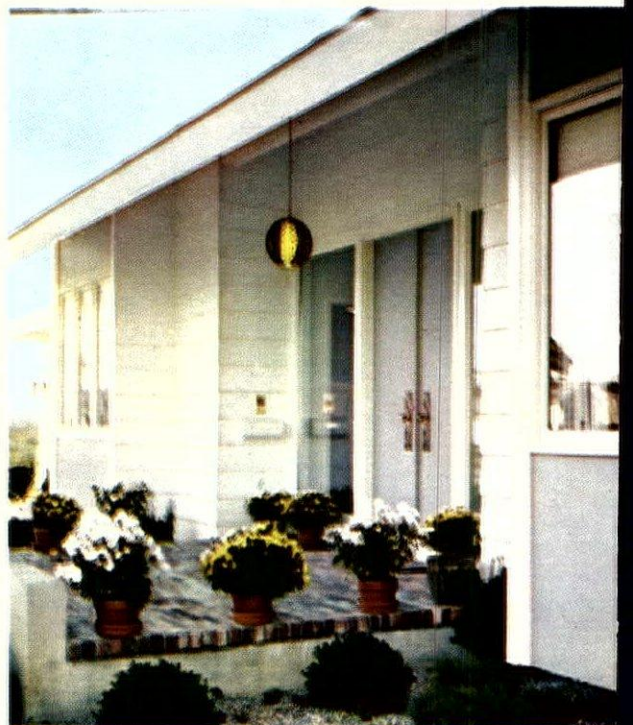
On test houses, products surfaced with TEDLAR have been up for five years. They've resisted chipping, crazing and blistering. Through rain, wind, cold, humidity, even sandstorms, TEDLAR looks new.



TEDLAR lasts

Chances are the lap siding with TEDLAR on this new house won't need refinishing for at least 15 years, maybe much longer. TEDLAR can offer this same long-term freedom from refinishing on your homes.

Today's buyers are deeply concerned about low maintenance and resale value. With TEDLAR you'll have a meaningful sales plus.



*Du Pont registered trademark for its PVF film.



TEDLAR resists on-site damage

Normal scuffing and marking have little effect on surfaces of TEDLAR. You save time, money and material, and have fewer call-backs to cut your profit.

Your buyer is happy with the looks of the finish on his house from the day he moves in...and, quite possibly, till the day he moves out.



TEDLAR cleans easily

Because it's tough and smooth, TEDLAR is hard to stain. On-the-job stains can be removed with anything that's appropriate—water, gasoline, kerosene, chemical cleaners. None of them will harm the finish.

This cleanability is a sales appeal, too! Even the kids' crayons come right off with a little soap and water.



TEDLAR helps you sell

Once they've decided they like your basic house, your prospects start looking for extras. With TEDLAR, you can offer a house that will look good longer, need less work and cost less to keep up than a house with conventional finish.

And many of the key features of TEDLAR can be demonstrated by your salesman right in the model home.



TEDLAR is available now

TEDLAR* comes in white and colors on plywood and aluminum lap siding, boards and batten strips, prefabricated built-up roofing, gutters, downspouts, doors, windows and reinforced plastics.

Take a look at the building benefits they offer you—and especially the selling benefits. For samples, a list of products and a more complete story, write the Du Pont Company, Film Department, Building Materials Sales Division, Box 63, Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

*Du Pont registered trademark for its PVF film.



Homeowners prefer floors that stay young

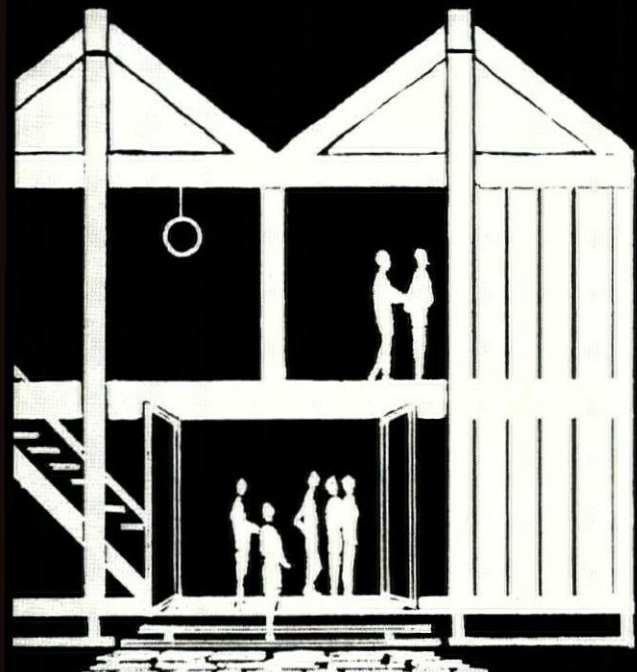
Floors of solid Oak just don't wear out. Unlike synthetic floorings and carpets, Oak is a lifetime floor with lifetime beauty. Most home buyers know this because they have lived on Oak Floors and already appreciate their fine quality. You don't have to sell prospects on the extra value of Oak Floors in your homes built for the market. You get immediate buyer acceptance instead of resistance often created by non-wood floors. Yet this plus value costs very little. Even over concrete slabs you can install lifetime N.O.F.M.A. Oak Floors economically, using an easy installation method recently developed. Write for data.

N·O·F·M·A

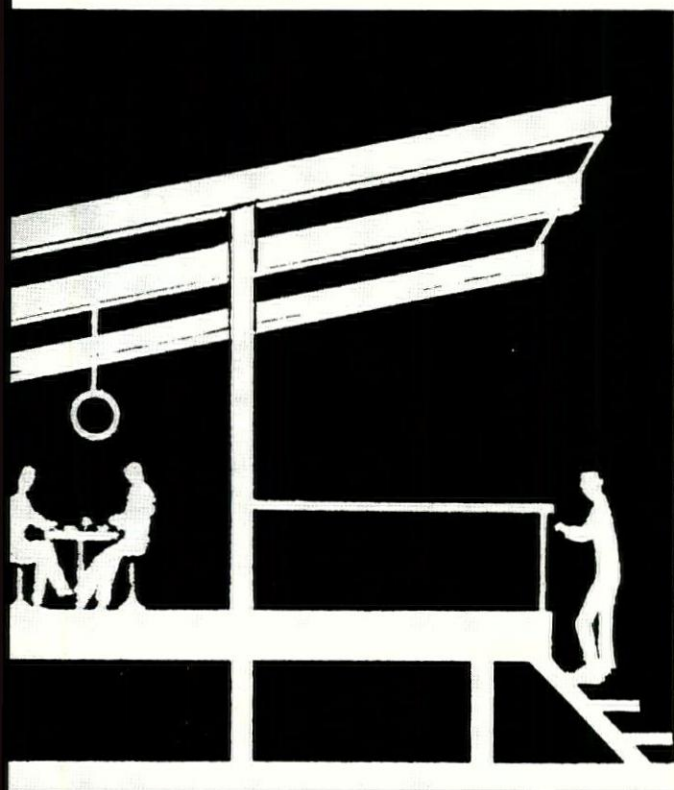


OAK FLOORS

Insist on N.O.F.M.A. Oak Floors . . . produced to rigid quality standards by over 80 members of the National Oak Flooring Manufacturers' Association, 814 Sterick Building, Memphis 3, Tennessee.



Especially wide entryway utilizes Noyolam Beams as headers and posts for maximum strength and dramatic architectural effect.

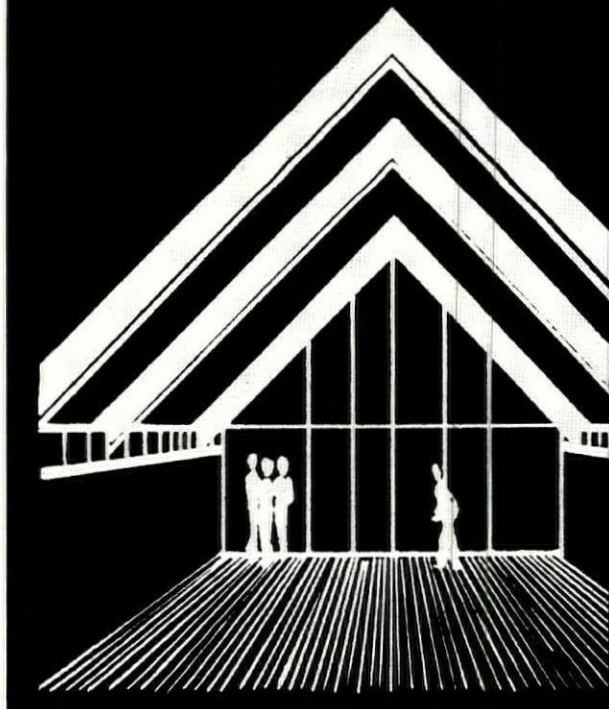
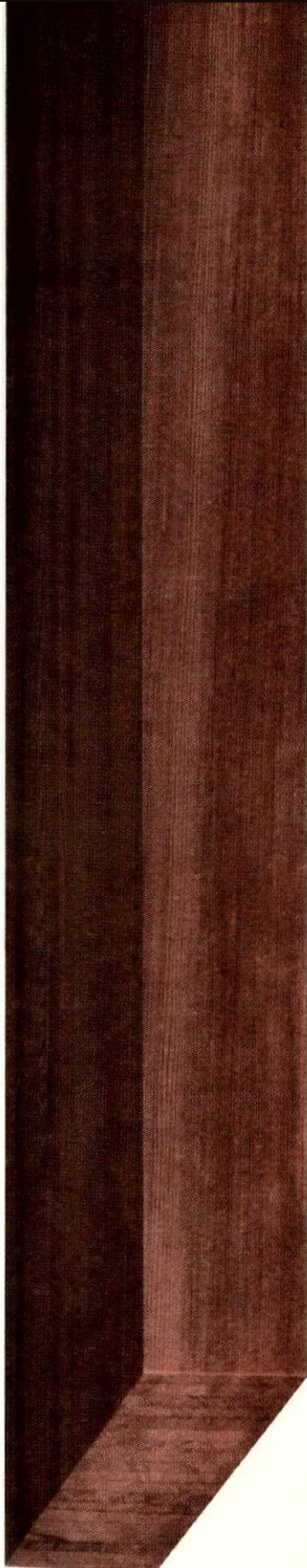


Noyolam Beams as exposed roof members provide an uninterrupted span from interior to exterior.

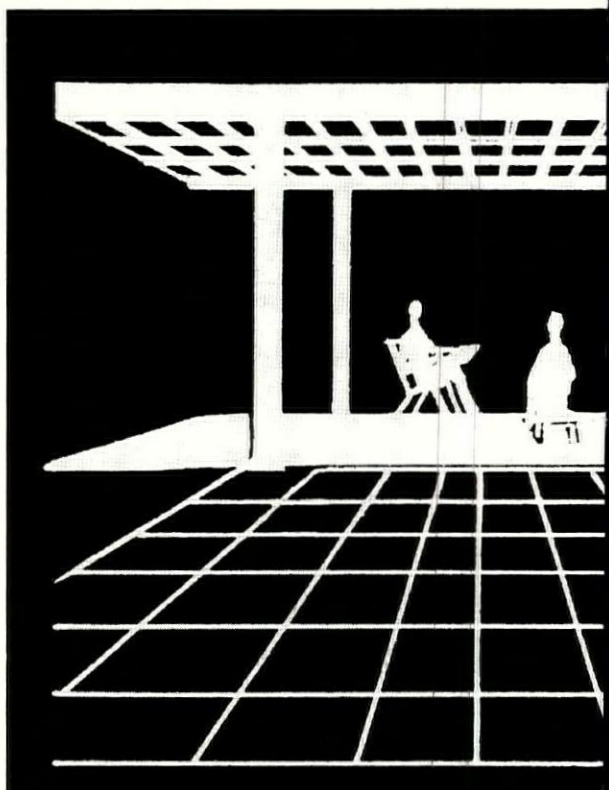
What's so special about Noyolam? Exterior to interior exposure of the same beam thanks to superior waterproof glue (meets Fed. Spec. MIL-A-39-A). One inch or more laminations for greater strength, greater interest.

CRA BUILDS DEMAND

To keep your customers and clients sold on Redwood, Union Lumber Co., as a pioneer member of the California Redwood Association, sponsors national advertising in leading consumer and business magazines.



Noyolams permit freedom of form in A-frame design plus the aesthetic and practical appeals of naturally durable redwood.



Specialty structures such as this poolside cabana are a natural for dimensionally stable, maintenance free Noyolam Beams.

INTRODUCING NOYOLAM REDWOOD BEAMS

FOR THE BEAUTY AND STRENGTH OF KILN DRIED REDWOOD IN SIZES NEVER BEFORE POSSIBLE

Available from 3 x 4 to 11 x 16, incorporating from 5 to 20 laminations. Lengths available from 8' to 40'. Plus . . . all the natural strength, warmth and durability of kiln dried Noyo Redwood.

UNION LUMBER COMPANY
Redwood Tree Farmers and Manufacturers



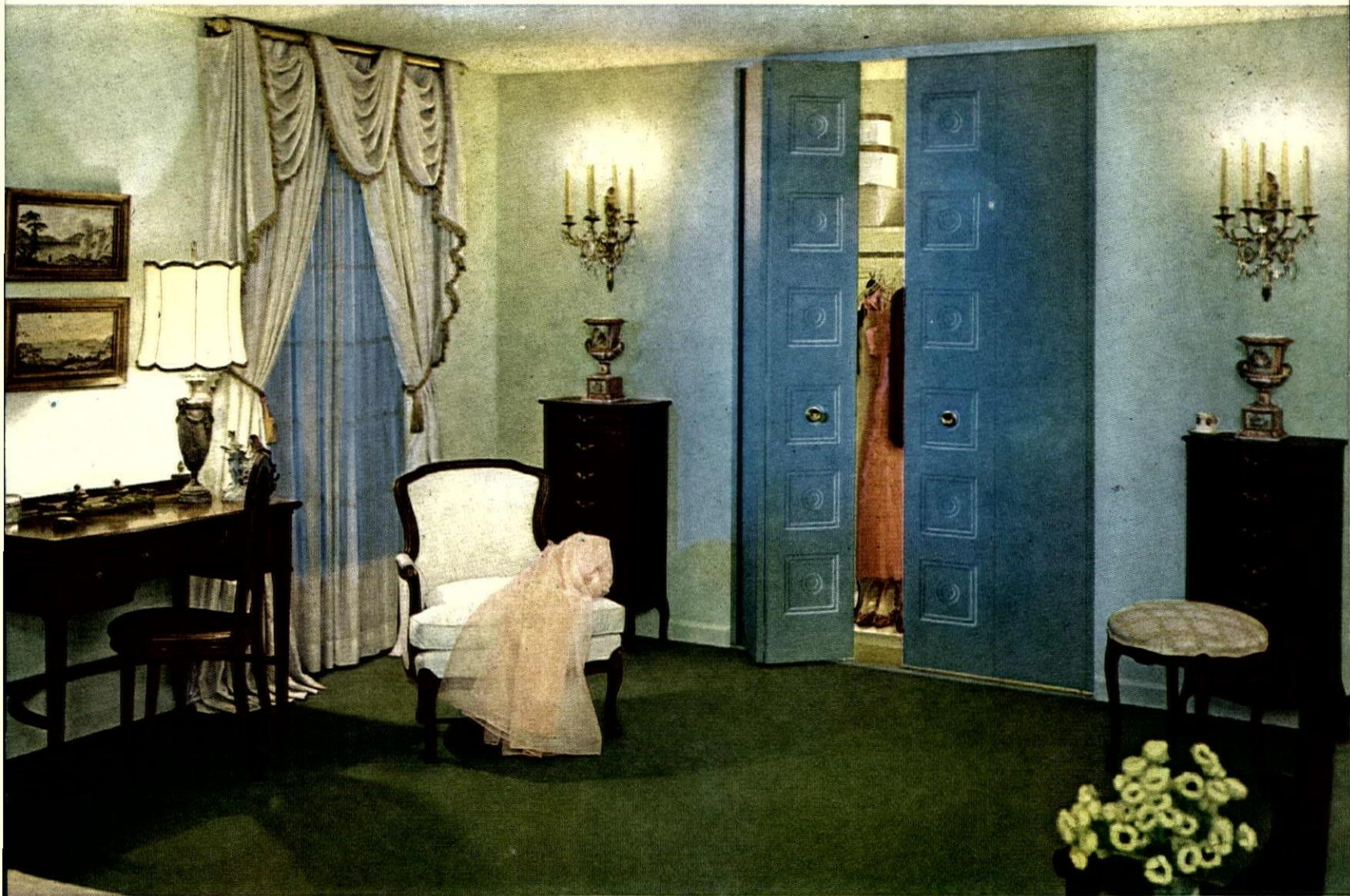
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Member: California Redwood Association

Give The Lady What She Wants!

SUITABLY SPACIOUS CLOSETS WITH SMARTLY STYLED DOORS



∞; NOW—DECORATOR DESIGNS AT FLUSH DOOR PRICES ∞

FLOAT-AWAY'S NEW GEORGETOWN CLOSET DESIGN

...turns lookers into buyers, yet costs no more than the basic flush panel door. *Also, at no extra cost—*

- 5 decorator colors when ordered in truckload quantities—Driftwood White in any quantity.
- 10% heavier than any other metal closet door—now increased to #23 gauge steel.
- No rust worries ever—zinc electroplated and bonderized steel.
- No door frames needed—all Float-Away Closet Systems are complete with trim.

Write for details:



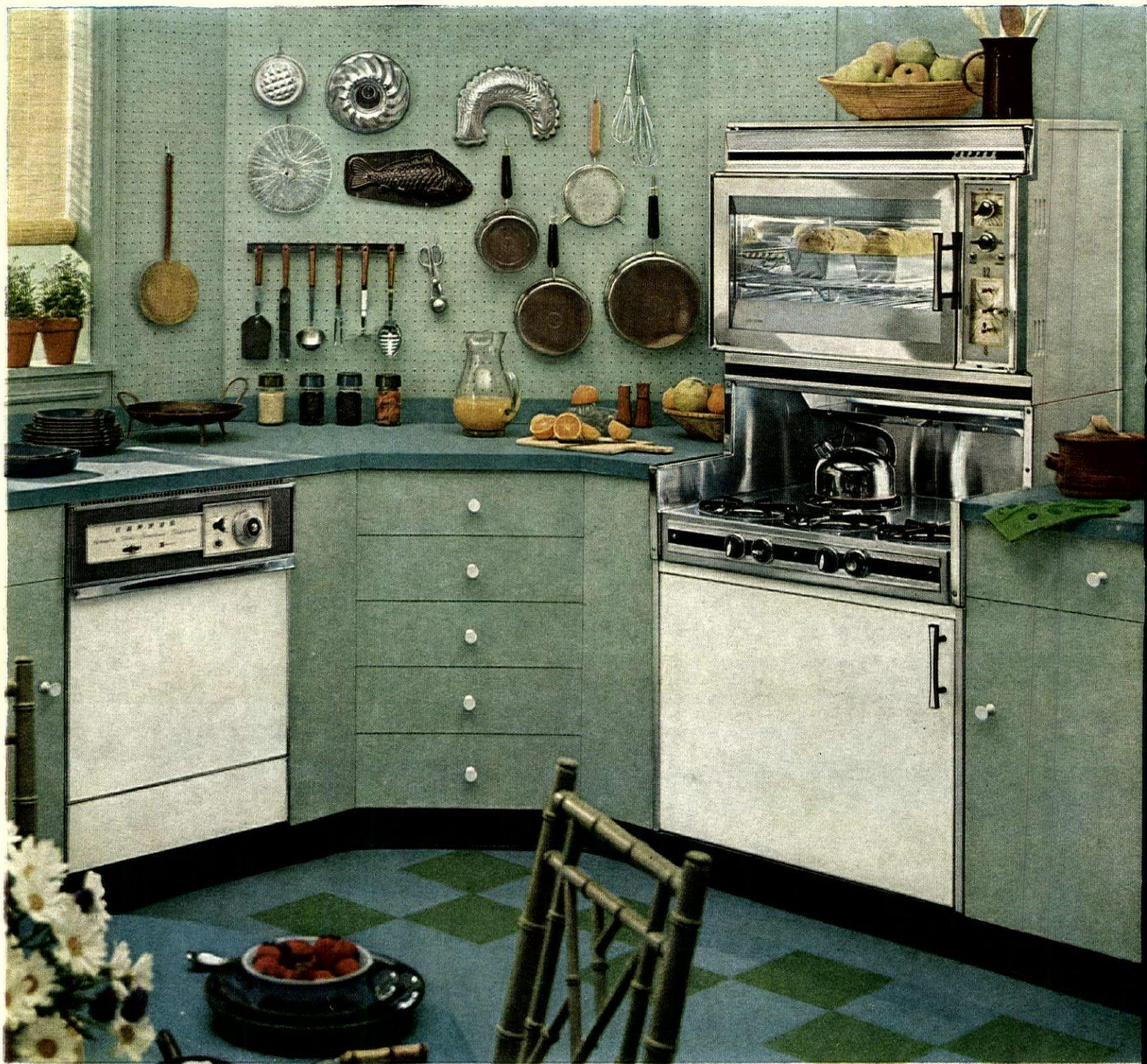
FLOAT-AWAY DOOR COMPANY

1173 ZONOLITE ROAD, N. E. / DEPT. H-963 / ATLANTA 6, GEORGIA

NO OTHER CLOSET DOOR EVEN OFFERS ALL THE FEATURES FLOAT-AWAY GUARANTEES

TAPPAN

The built-in look with slide-in installation convenience.



No matter how you install it . . . on the wall or on the roomy storage cabinet . . . this Tappan 'Fabulous 400' range will add elegance and woman appeal to your kitchens. Available in 30" width (ideal for compact kitchens) or double-oven 40" model . . . gas or electric. Get the story on Tappan's almost limitless selection of complete package kitchens: built-in, slide-in or free-standing ranges; dishwashers; refrigerators; disposers and range hoods. There's a package combination to match any building or remodeling budget. For full information write: Tappan Company, Dept. HH 9-3, Mansfield, Ohio.

An 86,000 sq. ft. discount store built by Robilt, homebuilders of Lakewood, N.J. Photo: H&H staff.



Homebuilders tap the light commercial market

More and more homebuilders, looking for profitable ways to expand their operations, are moving quietly but strongly into a field once considered the exclusive province of the general contractor. They are building—both for their own investment and as successful bidders on contract jobs—an increasing number of stores, shopping centers, motels, churches, clubs, and even schools. And they are finding this market so profitable that they plan to hit it even harder in the months ahead.

That is the import of a HOUSE & HOME survey (see next page) of nearly 600 homebuilders now doing commercial work. And it is borne out in conversations with builders—ranging from big-volume operators to small custom builders—across the country, who have found that skills sharpened in the tough competition of homebuilding can be used with equal success in commercial building. For details, turn the page.

Homebuilders see a market and profit potential that they can tap with their

Fittingly, it is a market that has been largely created by homebuilders themselves since World War II.

"As we developed areas in the suburbs, we brought in people to patronize stores and shopping centers," says Builder Charles Ervin, who has built 9,000 homes in and around Charlotte, N. C., in the past 12 years. Six years ago Ervin took a tentative step into the commercial market with a doctors' office and several other house-type commercial structures. This year he will build about \$5 million worth of stores, shopping centers, office buildings, and branch banks.

"At first our commercial building was entirely in and around our own subdivisions," says Ervin. "But once we got started, we found that we were getting our share of the whole Charlotte commercial market as well."

The price of land is just as vital to commercial building as it is to housing, and the homebuilder's control of land in and around his own subdivisions often gives him a big market advantage over the outside contractor. "Two years ago, we realized that the land left over from our housing projects had tremendous commercial possibilities," says President Robert Schmertz of Robilt Inc., a 750-house-a-year builder in Lakewood, N. J. "We started with swimming and country clubs. This year we'll build \$2 million or \$3 million worth of stores, light industrial buildings, and schools."

James Gillies and Frank Mittelbach, in their authoritative study of California building, *Management in the Light Construction Industry*, sum it up this way: "The increasing sophistication of management in the [homebuilding] industry has some important implications . . . There is increasing ability among firms to build all types of products in various markets."

Builders say that the tough competition of housing gives them a big edge in commercial work

"It's the really professional builders who are making a go of the commercial market," says President Sam Primack of Denver's 1,000-house-a-year Perl-Mack Construction Co. "To be competitive, we've had to know where every penny in our houses goes. By carrying the same tight budgeting, cost control, and scheduling into our commercial work, we're able to do a better job faster and for less money." For the smaller custom builder, the experience gained in building quality one-of-a-kind houses can be a big asset in bidding on smaller wood commercial structures. Architect Joseph Schiffer of Concord, Mass., who designed the church shown on page 97, awards three out of four such contracts to custom homebuilders. "They are more knowledgeable about wood frame construction than most general contractors," says Schiffer, "and they are more used to handling varied designs and detailing."

Profits from commercial work are at least as good as—and sometimes better than—homebuilding profits

That is the consensus among the builders HOUSE & HOME talked to. And most of these builders also agree that despite their seeming complexity, commercial jobs involve less staff work and fewer headaches (like dealing with dozens of buyers) than building houses. Another reason: Commercial units are larger than houses but often less complex to build. On the management level, it is often easier to build a 100,000-sq. ft. factory than a \$15,000 house, and of course there is a much bigger profit on the factory.

Most homebuilders who do commercial work build on contract (see survey box below), with a profit percentage in their bid. But many builders—particularly larger ones with bigger bank balances, and an eye on capital gains possibilities for long-range profit—erect commercial buildings for their own investment.

"We build, hold and lease almost all of our commercial buildings," says Charles Ervin. "Over a 20-year period we expect to net 10% to 12%, plus depreciation." And says Sam Primack: "Homebuilding produces immediate cash, but it has considerable built-in risk. By holding on to our commercial buildings we assure ourselves of profit over the long haul. The two together give us a well-balanced operation."

For the small builder, commercial work often offers a much better profit than building houses in competition with carpenter-builders, who don't know their costs and overhead and are content to work for wages. Donald Jasinski of Saginaw, Mich., a former 10 to 15 house-a-year custom builder, has switched entirely to commercial work for just this reason. "Now," says Jasinski, "we're making a fair profit, and our commercial business is almost doubling every year." Adds Builder A. Hays Town Jr., of Baton Rouge (who built the music store shown on page 99): "When you bid on commercial jobs, you bid against contractors who really know their costs and who want to make a fair profit. So the competition lets you make a decent profit yourself on the jobs you land."

Most light commercial work can be done with the same crews and the same equipment used to build houses

This, more than any other reason, is why so many successful homebuilders have found it possible—and relatively easy—to move into the light commercial field. It is also why most homebuilders handle commercial work as a division of their existing company rather than setting up a separate organization.

"We use the same laborers, carpenters, plasterers, masons, and concrete crews in our commercial work as in our homebuilding," says Charles Cheezem, who builds some 400 houses a year

House & Home surveyed 584 home-and-commercial builders, found they did almost

Q. What types of commercial buildings did you build?

	Number of builders	Structures completed in 1962	Estimated dollar value		Number of builders	Structures completed in 1962	Estimated dollar value
Individual stores	202	547	\$29,500,000	Hospitals	11	13	9,700,000
Shopping centers	81	125	63,500,000	Nursing homes	25	29	6,400,000
Small office buildings	185	248	18,300,000	Medical centers	15	18	1,500,000
Restaurants	52	71	5,200,000	Churches	71	104	9,100,000
Motels	29	37	20,200,000	Government buildings	19	27	2,900,000
Hotels	2	2	4,000,000	"Government contracts"	1	1	20,000,000
Banks	43	44	4,600,000	Other	43	81	19,300,000
Light industrial buildings	139	272	28,900,000	Remodeling	220	987	10,300,000
Recreational buildings	28	38	5,600,000	Additions	130	331	9,500,000
Service stations	42	89	3,000,000	Totals		3,166	\$299,400,000
Schools	63	102	27,900,000				

existing staffs and know-how

in St. Petersburg, Fla., and who will do \$2 million in commercial work this year.

Some builders use their home and commercial building crews interchangeably, while others have set up special crews and supervisors for commercial work.

Some areas of commercial work cannot be handled in homebuilding fashion. Large buildings may involve heavy steel work, big concrete pours, and specialties like bulletproof windows for banks. These are almost always subcontracted.

Union labor can complicate commercial work—especially in unorganized homebuilding areas. Setting steel, for example, is always a union job, and in some areas, all aspects of commercial work are union-controlled. Builder Robert Scarborough of Had-donfield, N. J., owner of the shopping center shown on *page 101*, has a non-union homebuilding operation, so he had to sub out the entire shopping center job to a unionized general contractor.

Finally, commercial building requires two men with experience often unavailable in homebuilding organizations: an experienced job superintendent and an estimator. The superintendent is the key man, and the estimator is almost as important. The reason: commercial buildings can't be priced by the square foot as houses often are. Says Ervin: "The superintendent can make you or break you. We took our super from the homebuilding operation, but he had a lot of past experience on commercial jobs. He also does our estimating."

Financing commercial buildings is a lot simpler—and usually cheaper—than financing houses

For the contract builder, financing is of course no problem: The financing is arranged by the client and the builder gets his money either in a prearranged series of payments (on smaller jobs) or in monthly payments (on larger jobs).

The builder who chooses to hold his stores or shopping centers as an investment will, if he is in sound financial condition, find his financing problems simple compared with those he encounters in housing. The lender (usually a commercial bank, as the survey below shows) is primarily interested in the soundness of the business that will be carried on in the building, whether by the builder-owner or by an outside client. If he is satisfied on this score, the rest is easy.

The typical mortgage on commercial buildings costs 5½% to 6% interest (with no discounts), runs from 15 to 20 years. As a rule of thumb, the builder can get a 75% loan on the appraised value on land and buildings. This can be a very favorable deal for the homebuilder who bought the land for his shopping center

before he built any houses. Almost always, the value of the land has risen so much that the lenders' appraisal lets him virtually mortgage out on the commercial building.

For a shopping center of any size, a commitment by a major chain store is a near must before the builder-owner can get financing. "It's difficult to get any financing at all without having a food or variety chain store signed up as a tenant," says Robert Scarborough, whose own center is keynoted by an A&P super-market. "But once you get the big store, you're in. Lenders are satisfied that the center will have stability."

In this day of plentiful mortgage money, a builder's house operations can make it easier for him to finance commercial work. Charles Cheezem, for example, gets his home mortgages through a saving & loan association "that is not overly anxious for commercial paper. But they go along with us because of our home business," says Cheezem. However, Cheezem does, unlike most builders in the field, pay 1½ to 2 points for his commercial loans, vs. 1 point for home loans.

Ervin Construction Co. has solved its financing problems by turning them over to a local Realtor. The Realtor brings in the prospective client, handles all leasing negotiations, and if the deal is made includes the financing as part of his package.

Most homebuilders who have dipped their toes in commercial work plan to wade in deeper in the future

As HOUSE & HOME's survey shows, 82% of the respondents plan to expand further into commercial work. Reasons: for many builders the growth potential in light commercial construction looks bigger than in housing.

Says Charles Ervin: "We've just about reached the limit of our share of the housing market in this area. But commercial building has lagged behind housing, and there's a big market just waiting there for us." Adds Robert Schmertz: "In our area, the commercial market is expanding much faster than the housing market." Says Charles Cheezem: "We started business as general contractors in 1951. In 1955 the housing market looked so good that we dropped all our commercial work and went into that. Now commercial building looks good again. We're going to stay in housing, but we think our biggest increase in business over the next few years will be in commercial work."

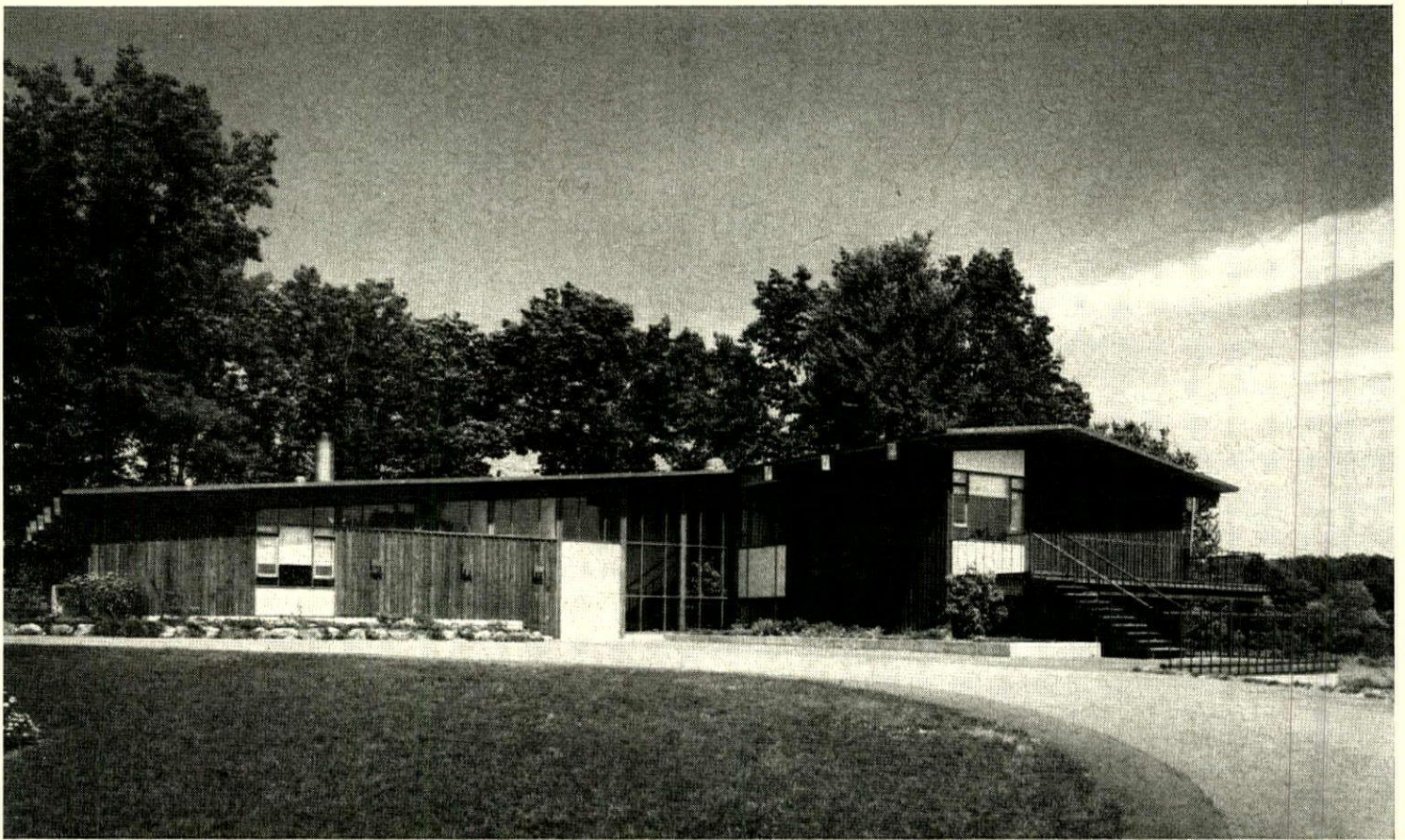
And authors Gillies and Mittelbach conclude: "It appears that in the 1960's continued growth and stability for individual firms will come primarily from diversification of construction."

On the following ten pages is a portfolio of light commercial buildings, built by homebuilders either on contract or for their own investment. Each building illustrates this basic principle: Despite its apparent complexity, light commercial work is mostly an extension of homebuilding and can be handled with the same crews, the same materials, and the same equipment.

\$300 million worth of commercial work in 1962. Here's what they built—and how

Q. Did you build on contract or for your own investment?		Number of builders		Percent	
Built on contract	362	71%	Savings & loan	211	38%
Built with plans to retain ownership	193	38%	Insurance company	111	20%
Built with plans to resell	26	5%	Mortgage banker	69	13%
Other	13	3%	Other	67	12%
Q. What professionals do you usually work with?		Number of builders		Percent	
Architect	448	85%	5 or more years	404	71%
Engineer	295	56%	3-4 years	70	12%
Realty firm	134	26%	1-2 years	76	13%
None	5	1%	Under 1 year	20	4%
Q. Where did you finance your commercial construction?		Number of builders		Percent	
Commercial bank	246	45%	Yes	443	82%
			No	100	18%

continued



LOW SILHOUETTE and natural wood siding help school blend into its wooded surroundings. Battens mask seams between adjacent sidewall panels.

Photos: Alessandro Macone Inc.

This school is essentially an oversized, prefabricated split-level

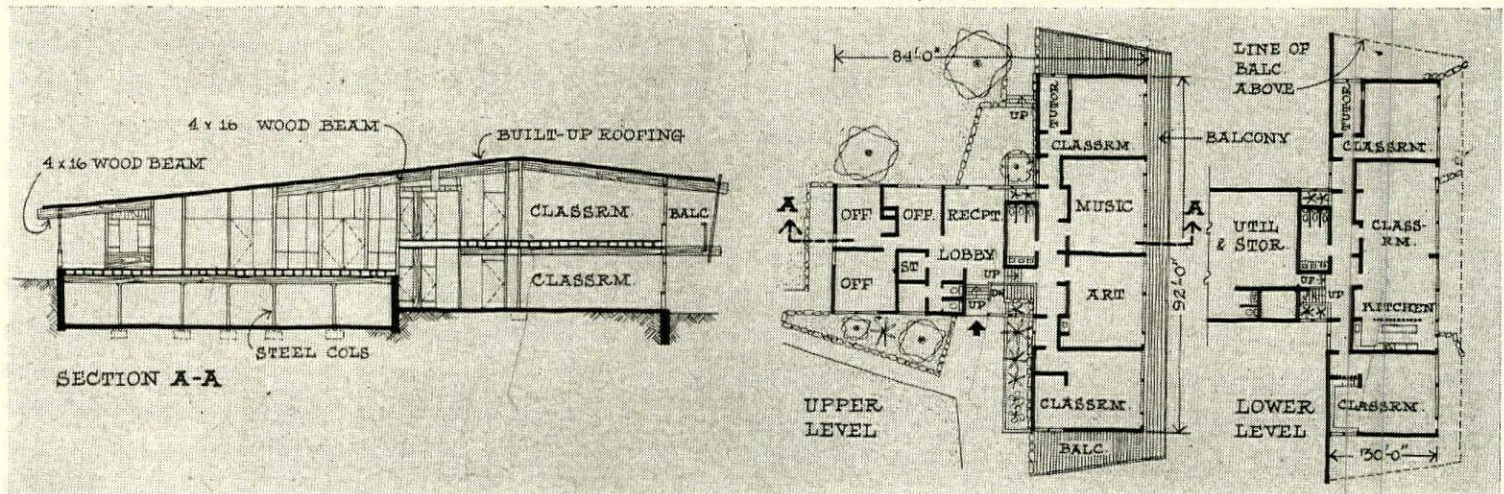
Architect Donald Gillespie used the split design to give the building a ground-hugging look and still provide well lighted classrooms on two levels. And the prefabricated wall panels, built in 6' and 8' modules, were a big reason why the builders, Zaffina & Luongo, were able to bid the 9,355 sq. ft. structure for \$98,000—or \$10.50 a square foot. Starting with the finished slab, the shell, including glazing, was finished in just two weeks. Both the architect and the builders estimate that with conventional construction, the job would have taken at least six weeks. Zaffina and Luongo were so impressed with the components—the first they had ever used—that they added a Techbuilt franchise to their regular custom-house operation.

The school is in Nashoba, Mass.



TYPICAL CLASSROOM has sand-finished plaster walls, cheaper here than drywall because it could be left unpainted. Flooring is asphalt tile.

T-SHAPED PLAN puts eight classrooms in two-story wing. Administrative offices are in one-story area, with utilities in basement below.





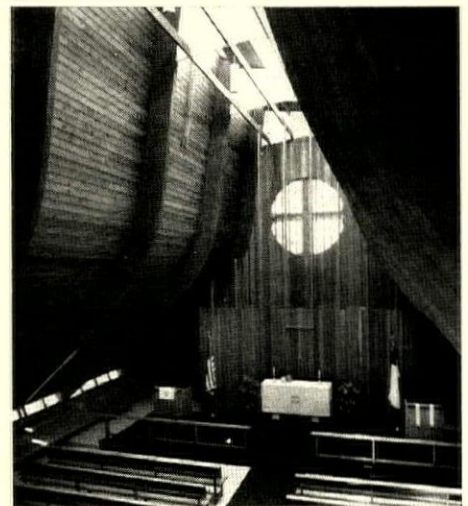
CURVED ARCHES give the church its basic form. They sit on concrete pillars, visible at right, and their ends project above the roof.

Photos: Alessandro Macone Inc.

... this church is essentially a plank-and-beam roof

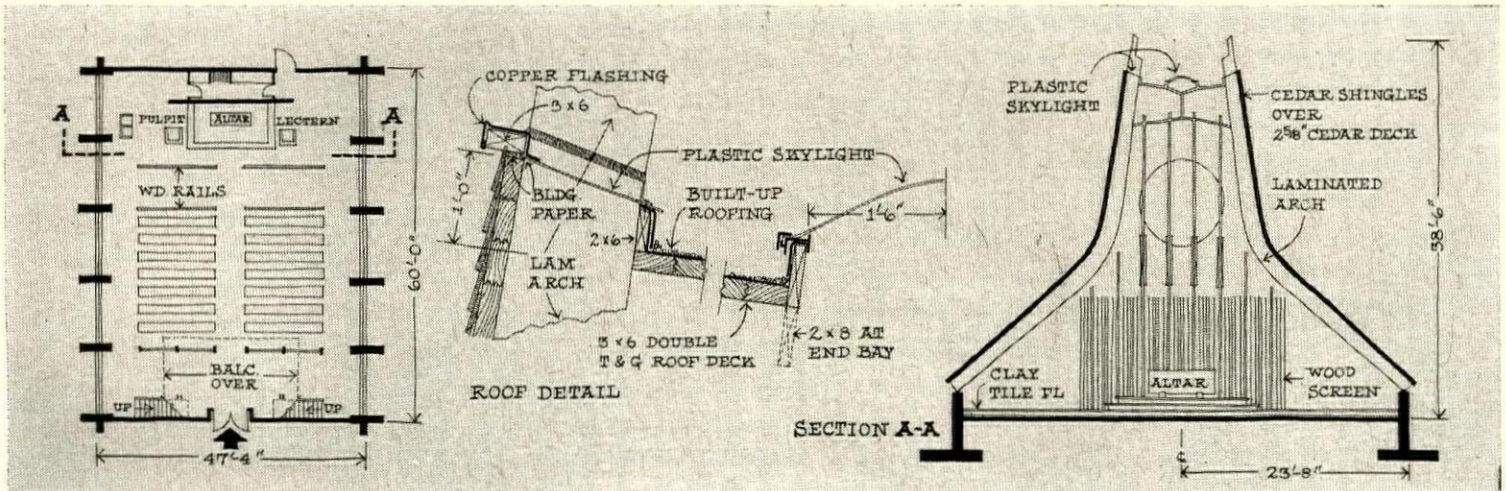
In design, this soaring structure in West Acton, Mass., is decidedly un-houselike. From a building point of view, the only basic difference between it and a plank-and-beam home are the 12 reverse-curve laminated arches, and their erection was the fastest part of the job. Honkala Construction Co. (a custom-house builder in Ashby, Mass.) needed only an hour and a half to set each pair of arches in place. The arches were permanently fastened on top, braced temporarily at the bottom, then set in place by a crane. Decking is 3x6 t&g cedar planks, covered with cedar shingles, and the end walls are conventionally framed.

The church cost \$60,000, including \$15,000 for the arches. Architect Joseph Schiffer of Concord, Mass. recently won a Boston Art Festival award for the design.



CHURCH INTERIOR is lit by strip windows at ground level, skylights between roof planes at top. Natural finishes are used throughout.

DRAWINGS show plan with positions of arch piers (left), details of top skylights (center), and section through the building (right).



continued



DESIGN of the "Home Beautiful Center" is deliberately house-like, and the finish is traditional board-and-batten with old brick.

Photos: Frank J. Miller

This store used only standard homebuilding techniques

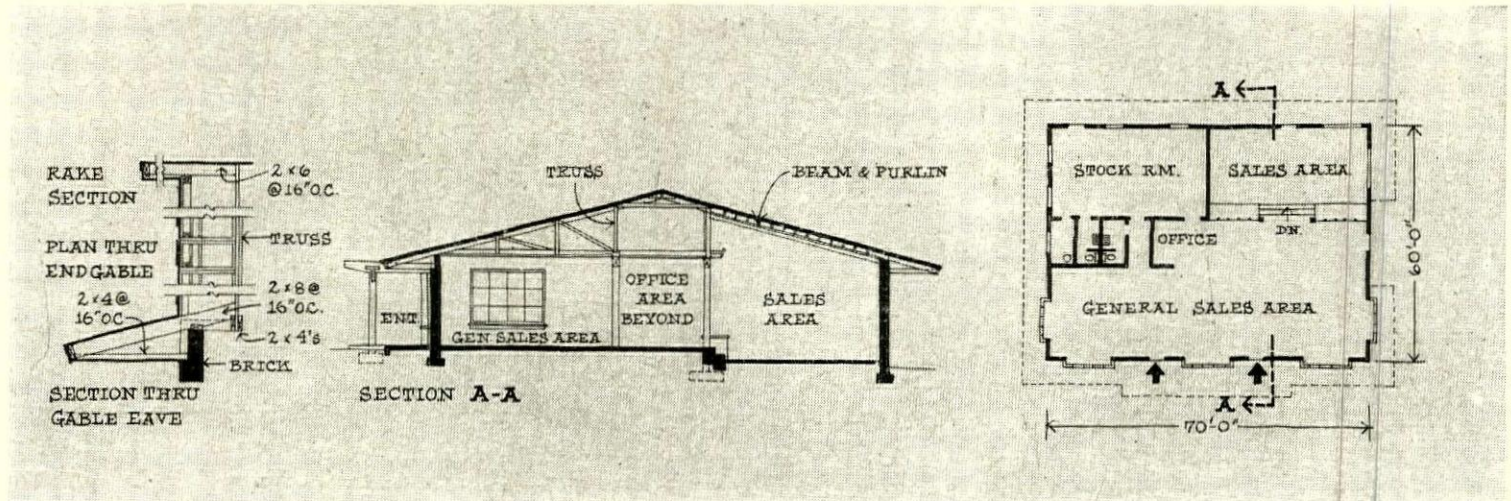
Builder-owner Charles Ervin of Charlotte, N. C. wanted a building that would be low in cost, and would fit with the design of his houses in the surrounding neighborhood. And his tenant, the Glidden Paint Co., wanted a "traditionally warm atmosphere."

To meet these requirements, Architect Ralph Mesrobian designed for Ervin what is essentially a big ranch. The walls are conventional; the roof, standard truss construction with two exceptions: 1) To handle the wide spans of the showrooms, Fink trusses were used instead of the W or king-post trusses common in houses. And 2) to create a sunken showroom with an open ceiling, trusses on one side of the building were stopped over a bearing wall and replaced with exposed beams (see section drawing below). Cost of the 4,200-sq. ft. building: \$40,000.



SUNKEN SALESROOM has exposed beam ceiling. Truss ends stop short at knee wall, left, are supported by posts and cross beam.

PLAN AND SECTION show similarity of store to conventional masonry-and-truss house. Detail, left, is of hip gable at ends of the building.





SPACIOUS FEELING of music store is augmented by glass end wall that rises to roof. Like bents inside, arches are laminated pine.

Photos: Frank Lotz Miller

... this store was an unusual, but simple, job

The owner, a piano sales company, needed a big open sales area that could accommodate grand pianos without feeling crowded or cramped. So Architect A. Hays Town of Baton Rouge designed a long brick-and-wood shell with an all-glass end wall. To avoid collar beams, Town used laminated pine bents in place of conventional roof framing. Otherwise, the construction is simpler than most houses. Brick is used for both the inner and outer finish of the side walls, and the 3x6 t&g roof deck is both structural and decorative.

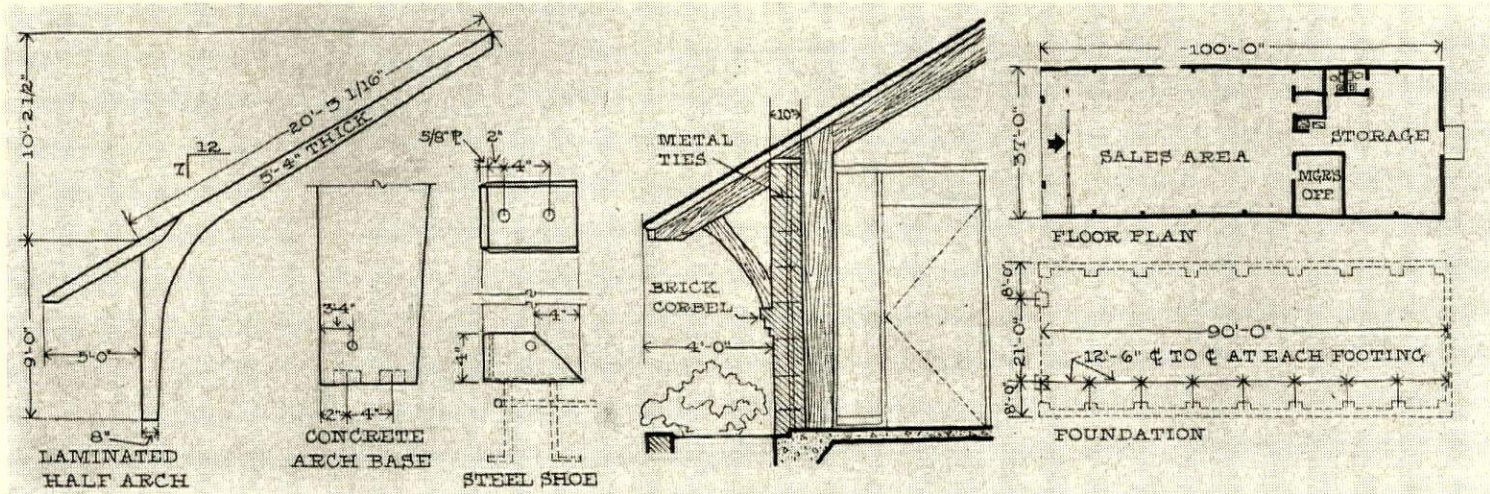
The design simplicity resulted in a low bid: \$35,000 for 3,700 sq. ft. of air-conditioned space. The builder: A. Hays Town Jr., small-volume custom homebuilder and the architect's son.

"You can bet we had to be low bidder," smiles Builder Town.

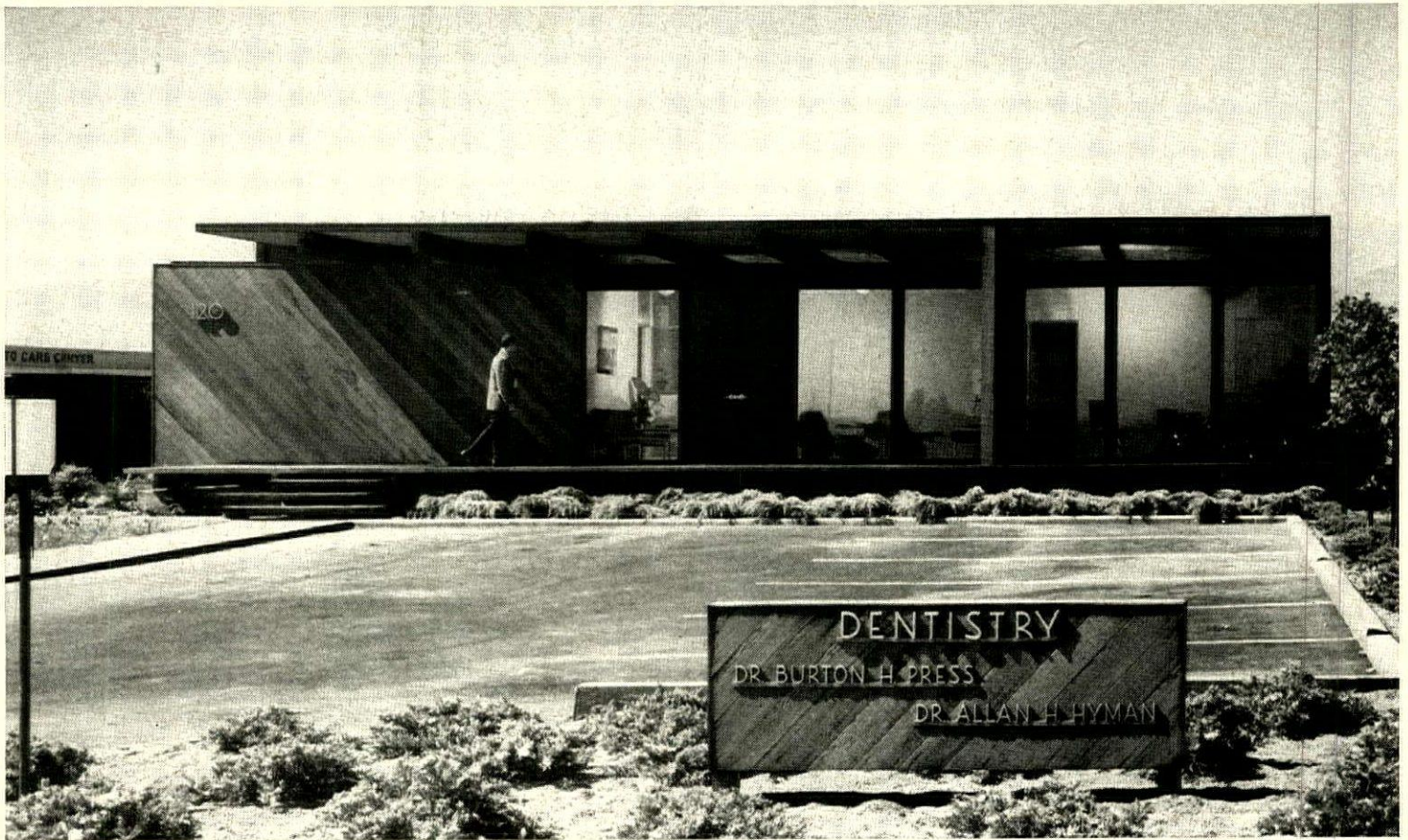


HEAVY PANELLED DOOR at front entrance provides a dramatic contrast with the surrounding all-glass wall.

DETAILS show how roof outriggers are joined to laminated bents, and how bents are braced at foot. Floor plan is open except for office and rest rooms.



continued



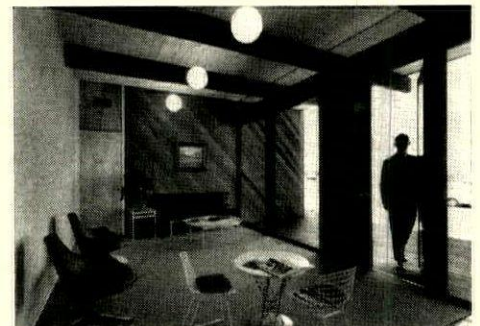
FRONT ELEVATION has glass walls and flat roof typical of California contemporary houses. Siding is silicone-treated, will weather naturally.

Photos: Karl H. Riek

This dentist's office fits a neighborhood of contemporary homes

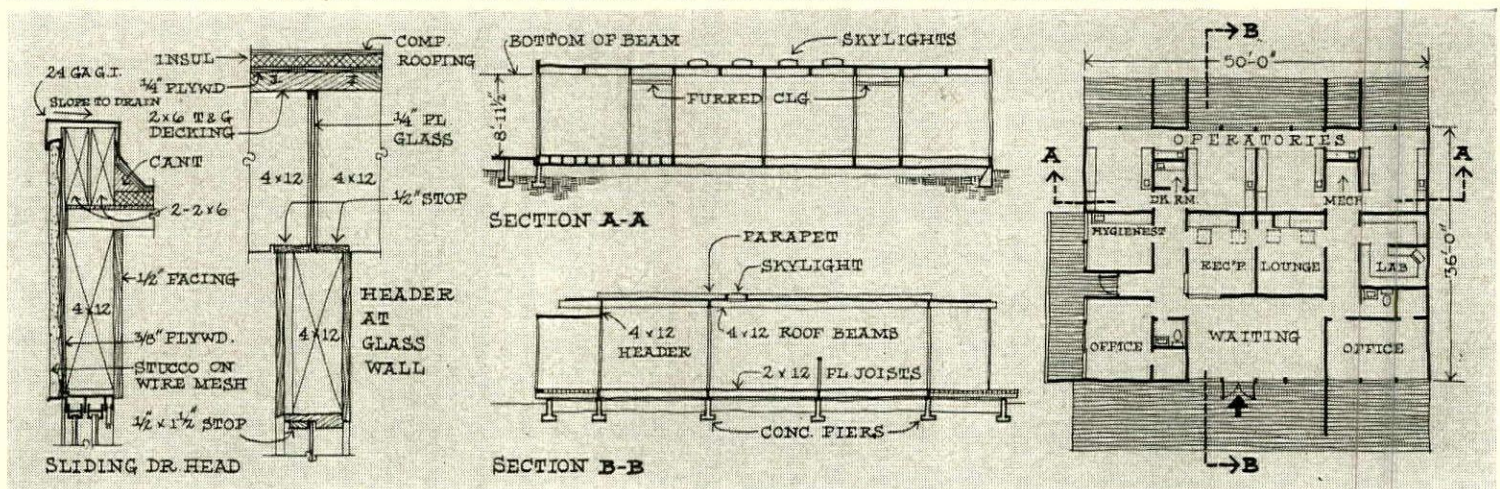
It is designed like a house and built like a house, so it is not surprising that all the bidders on the job—including the builder, L. C. Marshall of Antioch, Calif.—were custom homebuilders. Marshall's bid on the 1,800 sq. ft. building was \$44,000, including \$13,000 for special work like cabinets, extra lighting and plumbing, and air conditioning. The basic building cost was \$31,000 or \$17 a sq. ft.; about standard for custom houses of this type in the area.

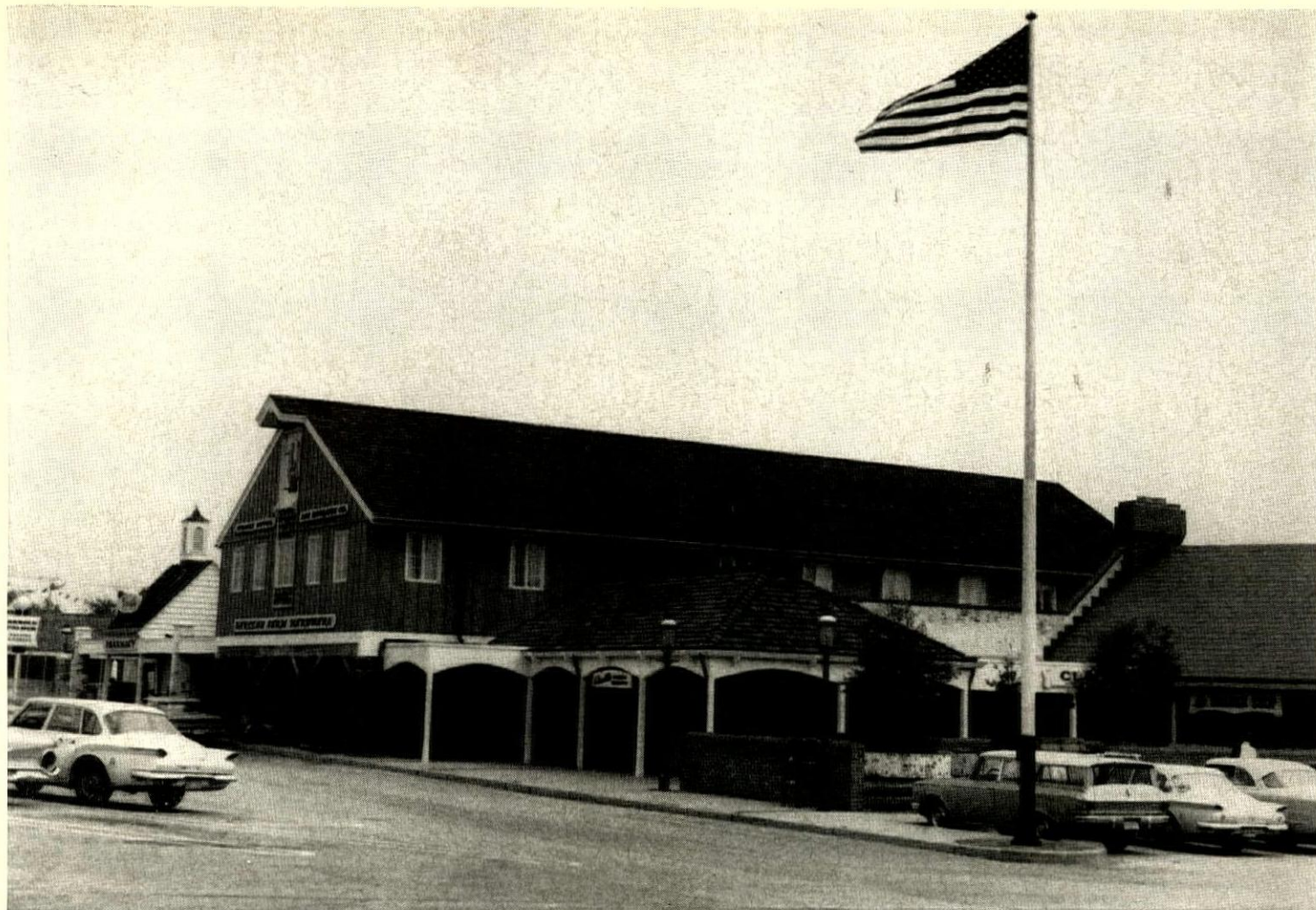
Construction is post-and-beam, with a roof decking of 2x6 t&g hemlock. (The hemlock cost \$600 less than pine, and although it has small knots, they were made inconspicuous by resawing.) The building is in Pittsburgh, Calif. Architect: Gerald G. Weisbach of San Francisco.



INTERIOR WALL FINISH—like exterior—is red-wood shiplap. Diagonal pattern adds interest, also braces against earthquake stresses.

DETAILS are standard for most post-and-beam house construction. Plan, right, shows office and working space for two dentists.





DOMINANT BUILDING in the complex is shaped and detailed like a colonial barn. Lower floor is a 3,500 sq. ft. hardware store, top floor has offices.

Photos: H&H staff

... this shopping center maintains the character of a colonial subdivision

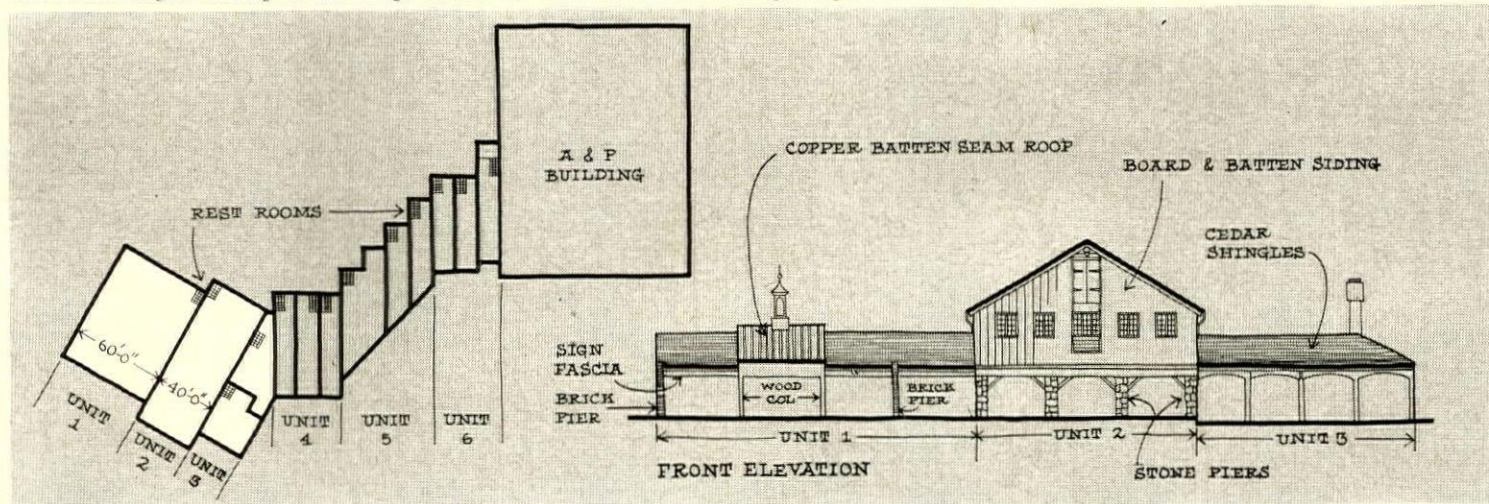
The owner, Builder Robert Scarborough of Haddonfield, N.J., has a strong vested interest in a colonial image. He has already built 1,100 traditional houses in surrounding Barclay Farms; he is selling 125 to 150 more each year; he has gone so far as to build an old fashioned covered bridge in the community. So he spent an extra \$1 a sq. ft.—about 10% of the total cost—to give this neighborhood shopping center authentic colonial details. "It probably won't add much to our income from the center," says Scarborough, "but it will maintain the character we've built up in Barclay Farms, so it should pay off in future home sales."

Cost of the buildings, including an A&P supermarket, was \$500,000; and parking lots, sidewalks, extra drains, etc., added another \$150,000. Architect: Herman A. Hassinger.

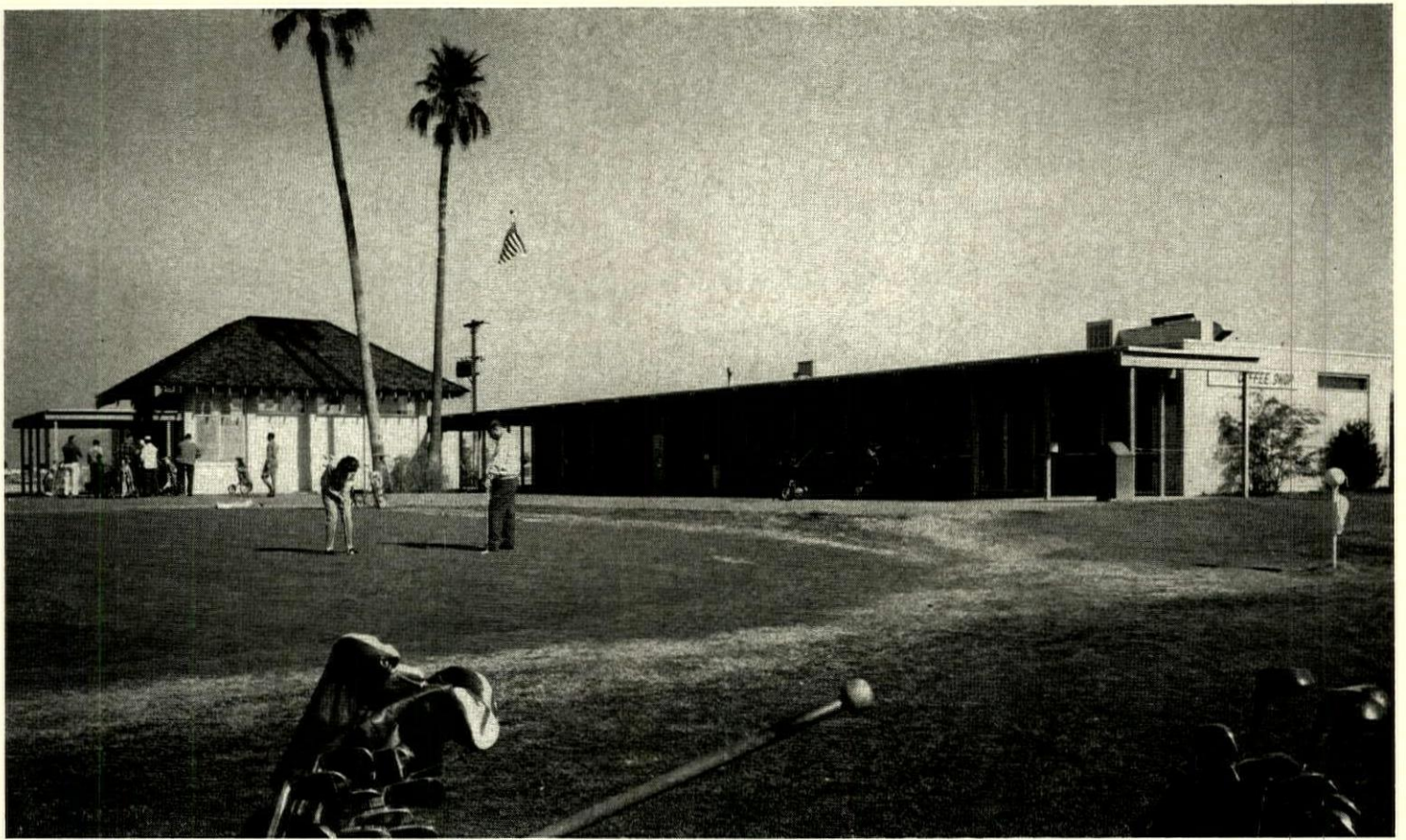


TRADITIONAL LOOK is carried out in the corner store by curved arches, heavy wood gutters, and old-fashioned gas street lamps.

SITE PLAN angles buildings to add design interest and minimize the mass of the parking lot. Elevation shows colonial detailing.



continued



GOLF COURSE SIDE of clubhouse has glass walls sheltered by a covered walk. Locker and dining rooms are at right, pro shop is under hip roof.

Markow

This golf club was built to keep sales moving in a giant subdivision

Builder John Long of Phoenix didn't make a cent on the clubhouse. He sold it, along with 140 acres of land that included an 18-hole golf course, to the city at cost (\$890,000). But he feels strongly that it has been a major item in maintaining a sales rate of 100 houses a month in his 13,000-house Maryvale development.

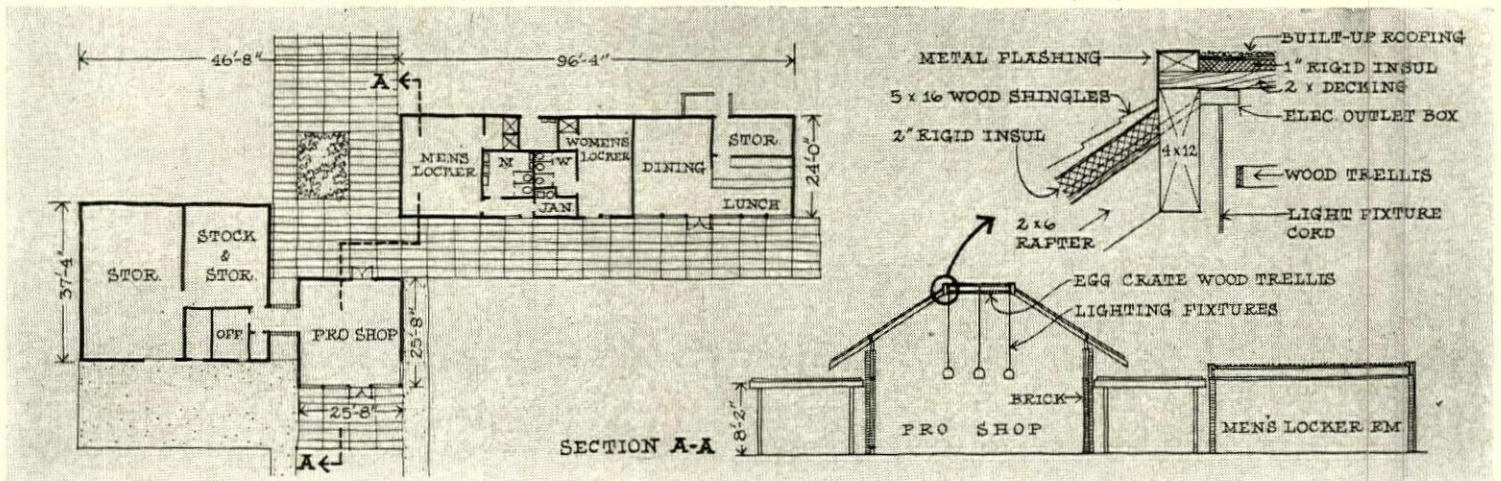
The clubhouse, which has about 4,000 sq. ft. of space, cost \$50,000. To keep the tab this low, Long used the same construction as in his early homes—single-thickness block walls painted inside and out. Design is by Victor Gruen Associates.

Because the city was short of funds when the club was started, Long sold it just the land (for \$400,000, the appraised value), then leased it back while he completed the course and buildings. Later he sold them to the city for an additional \$490,000.



STREET SIDE of club has almost solid block walls. Pro shop, focal point of design, is set back to create an entry court.

PLAN shows how buildings are separated by function, connected by covered walks. Section shows extreme simplicity of construction.





TYPICAL UNIT has eight rooms, is framed like a two-story house. Exterior finish is stained redwood, which needs no maintenance for years.

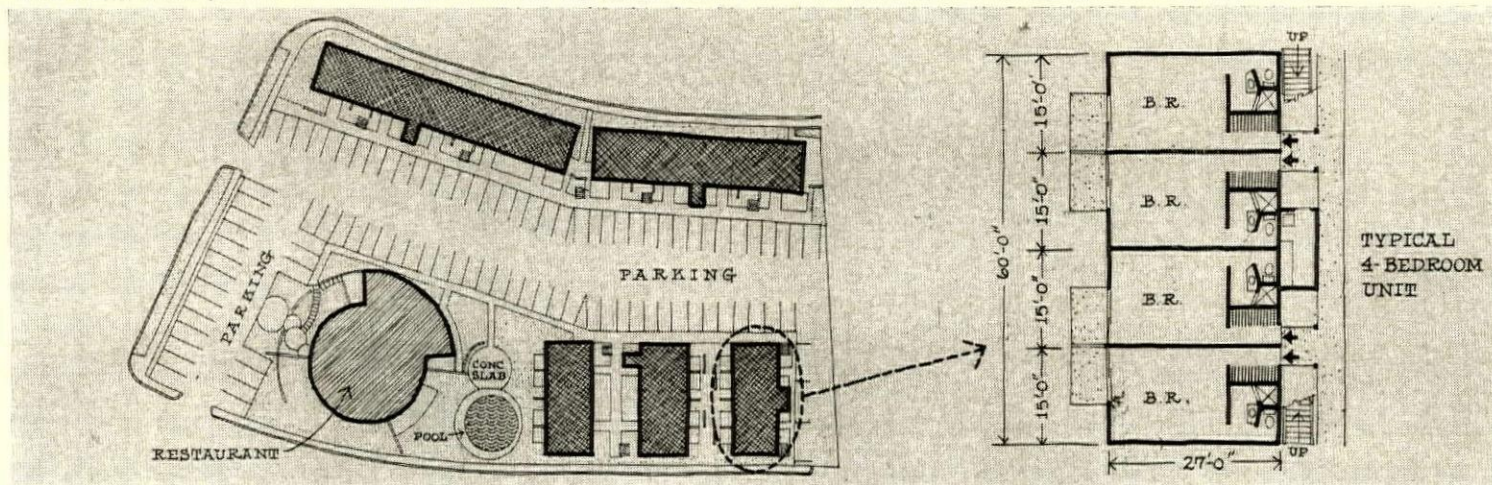
... this motel was built as a profitable investment

It is the second motel built, owned, and operated by Marlo Construction Co. of Fresno, Calif., and it is highly successful (average occupancy rate is 80%). The reason, says Martin Najarian, partner of Marlo Construction, is its design—and designed-in comfort. The rooms are big—15'x27'—and they are quiet. The architects, Robert Stevens Associates, turned the three units close to the road (see site plan below) at right angles to the road, presenting blank walls to traffic noise. They put a 1½" concrete floor over the 2" second-floor deck to minimize noise transmission between floors. And they specified a central boiler and chiller unit to eliminate room air-conditioner noise. Wood framing kept costs low: \$400,000 for the room units, \$40,000 for a 4,000 sq. ft. restaurant. The pool and landscaping cost \$20,000.



END WALL of unit is blank to block traffic noise. Canopy at right adds design interest, covers the walkway to the parking lot.

SITE PLAN shows position of the five room units and the circular restaurant. Floor plan, right, is the second floor of a typical unit.



continued



STRIKING DESIGN is achieved by alternating panels of brick with strips of glass. Steel columns support offset upper stories.

Even this three-story office building was built almost entirely

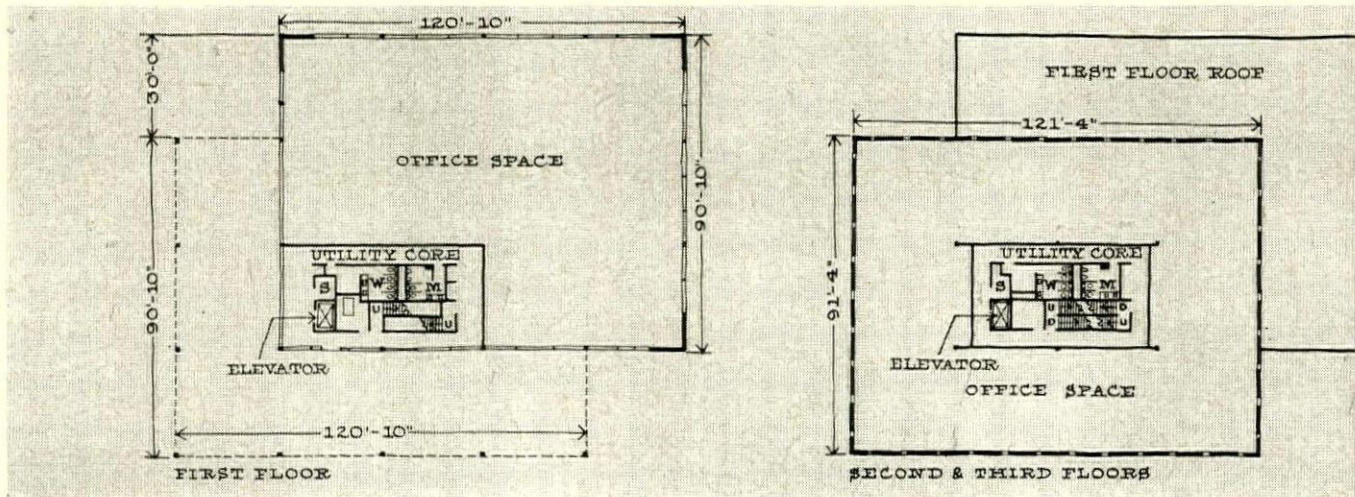
Perl-Mack Construction Co. of Denver used only three special subs for the job: a steel firm to erect wall frames and bar joists, an engineering firm to build caissons for the foundation piers, and an elevator firm for the oil-piston elevator (\$11,000 installed). But the same bricklayers, carpenters, masons and mechanical subs that build Perl-Mack's houses did the bulk of the work.

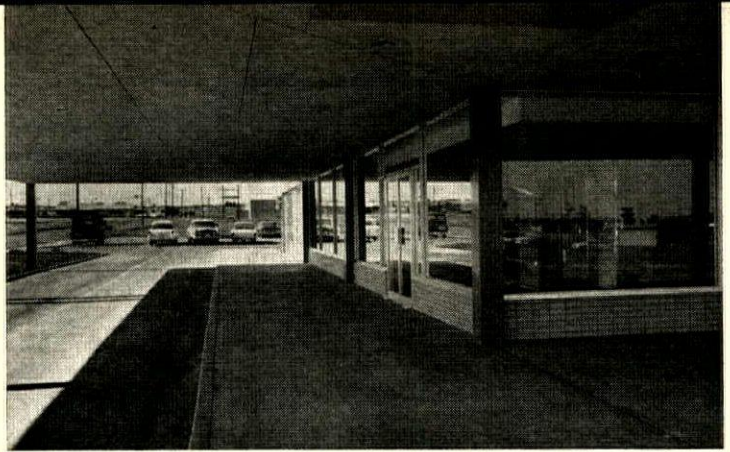
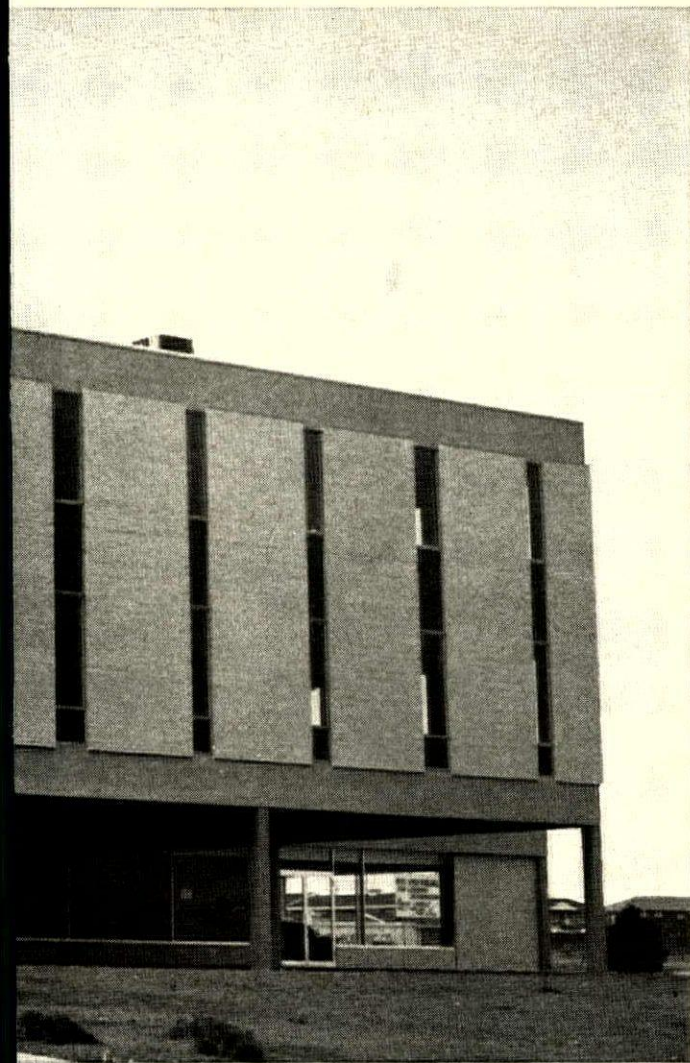
Key to the low cost of the building—\$330,000, or \$11 a square

foot—was simplicity. The 10" curtainwalls are cavity type—4" block inside and 4" brick outside, with 2" of vermiculite insulation between. Floors are steel decks with 4" concrete slabs. Partitions are simply stud walls. This simplicity also resulted in a fast job: the first tenant moved in only 4½ months after the steel crews began work.

A simple motorized construction lift proved a big cost cutter.

FLOOR PLANS show how upper floors are offset from first floor to create a promenade. Small service core minimizes unrentable space.





MAIN ENTRANCE to building is sheltered under the offset upper floors. First-floor shops will have all-glass walls on this promenade.



CONSTRUCTION PHOTO shows concrete floor, block walls, and bar joists that support a dropped ceiling and the steel deck for the floor above.



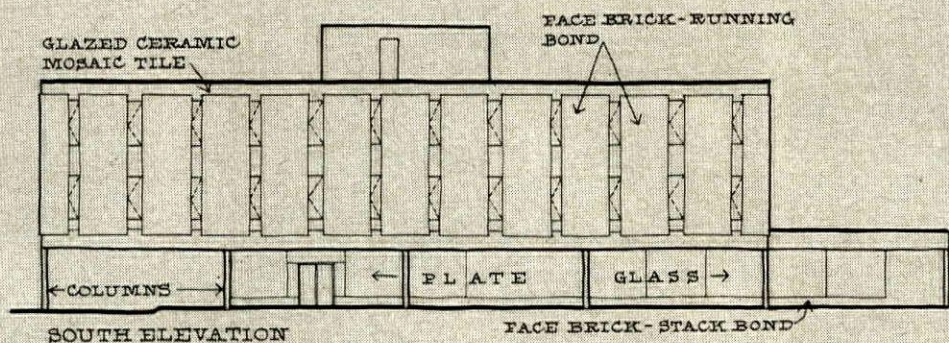
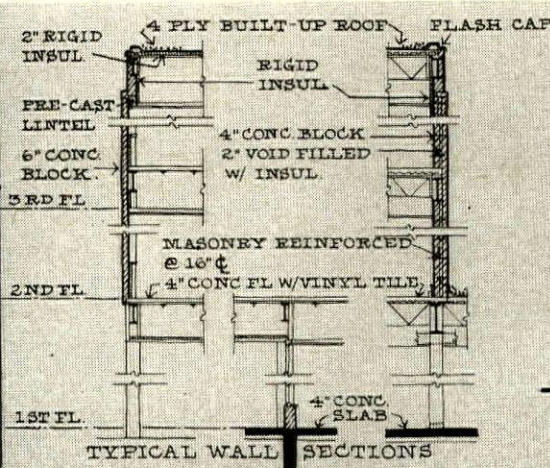
PARTITIONS are conventional wood framing. They were custom-installed to tenants' specifications after building was otherwise complete.

by homebuilding crews

Big enough to handle two loaded concrete buggies, it cost just \$4,000, required no operating engineer and paid for itself on this job alone.

For homebuilders reluctant to tackle multi-story buildings like this, Sam Primack has this reassuring answer: "It's not as hard as it looks. If you can do the second floor, you can do the 22nd floor." Architect: Warren A. Flickinger.

ELEVATION AND DETAILS show simplicity of steel framing and handling of windows and masonry walls.



1

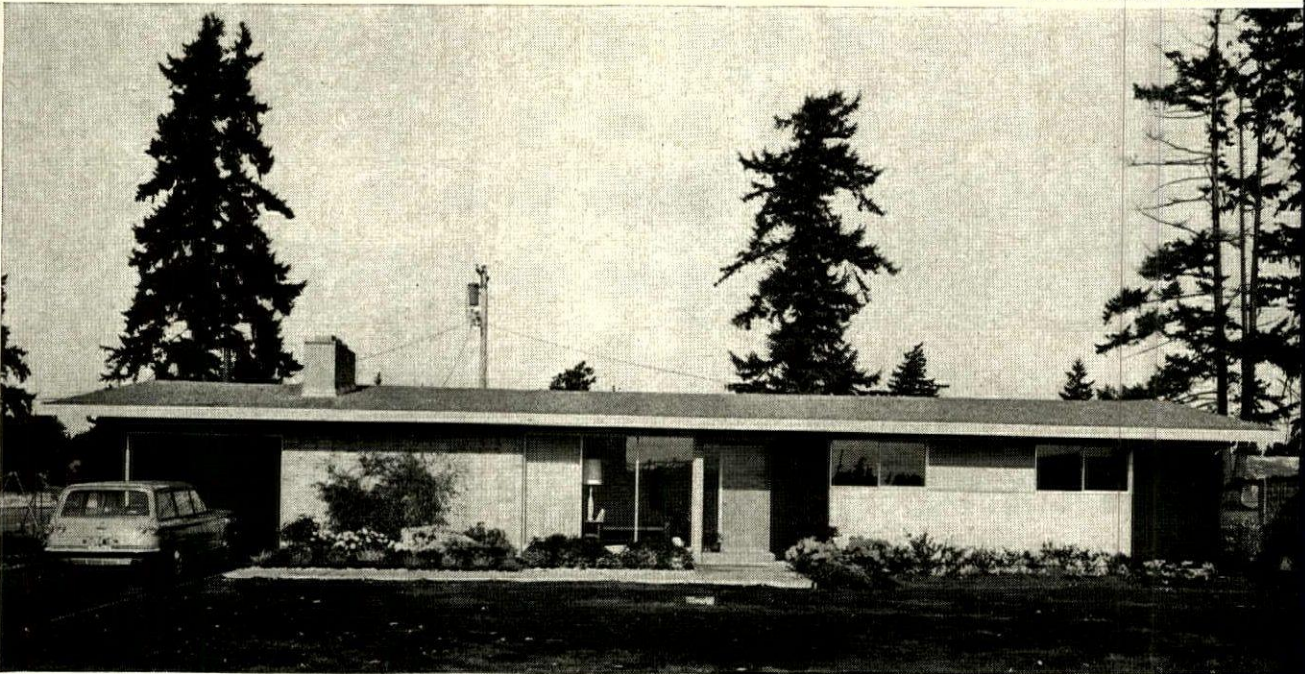
Builder Emil Hanslin
New Seabury, Mass.



Maris © Ezra Stoller Associates

2

Builder George Barclay
Tacoma, Wash.



Charles Pearson

3

Builder Melvin J. Berman
Bethesda, Md.



These built-for-sale houses are in three subdivisions that vary widely in location, size, and price range. But they have one thing in common—they show how and why it is profitable to use . . .

Top-level design as a sales tool

Each of the houses shown—and all the other models in the subdivisions—were designed by skillful architects. Each house was furnished by an interior designer, landscaped by professionals, and sited in a carefully planned community. And each is being sold successfully under a merchandising program that stresses — not prices and terms or gimmicks—but the immediate and lasting values of tasteful design.

- *Example 1 opposite is one of three new models for High Wood, the second village in Emil Hanslin's 11-village, 3,000-acre New Seabury development on Cape Cod (see also cover and pages 108-113). The close teamwork of top professionals is everywhere obvious at New Seabury, which is developing into one of the most handsome communities in the country. High Wood is a village designed for people who like (or like the idea of) riding, and Hanslin's restrained merchandising does just two things—it stresses the design teamwork that has gone into the project, and it carries out the horse-village theme. Items: A horse is kept in the paddock outside the sales office to emphasize the theme of the village and its many riding trails. The few (and quiet) signs in the model area are shaped like a gambrel-roofed barn. The models are not labeled with made-up names intended to confer prestige—but with the names of the architect and interior designer. In the barn display area, Hanslin stresses the recreational facilities of the community, and prominent is his growing collection of awards for good design. His main merchandising theme: "Good design gives you a better house for less money."*

Has this design-oriented approach paid off? In several ways. Banks and S&Ls are making 5¼% conventional loans for up to 80% of the sale price of the houses, though many are sold as second houses. Hanslin estimates the land was worth \$1.8 million when he began. He has so far invested another \$650,000 to develop 300 acres of it, which will sell for some \$2.6 million. He is able to command land prices (ranging from \$3,500 to \$15,000 a lot—or an average of \$7,350) that are roughly seven times what the developers of an earlier and undistinguished beach development got for adjacent and similar property. And in 14 months Hanslin has grossed \$2.1 million from sales of houses and lots—mostly in his first waterfront village (H&H, Apr. '62) because High Wood has just opened. Seventy-eight houses have been built—or are being designed for lot owners—at New Seabury so far.

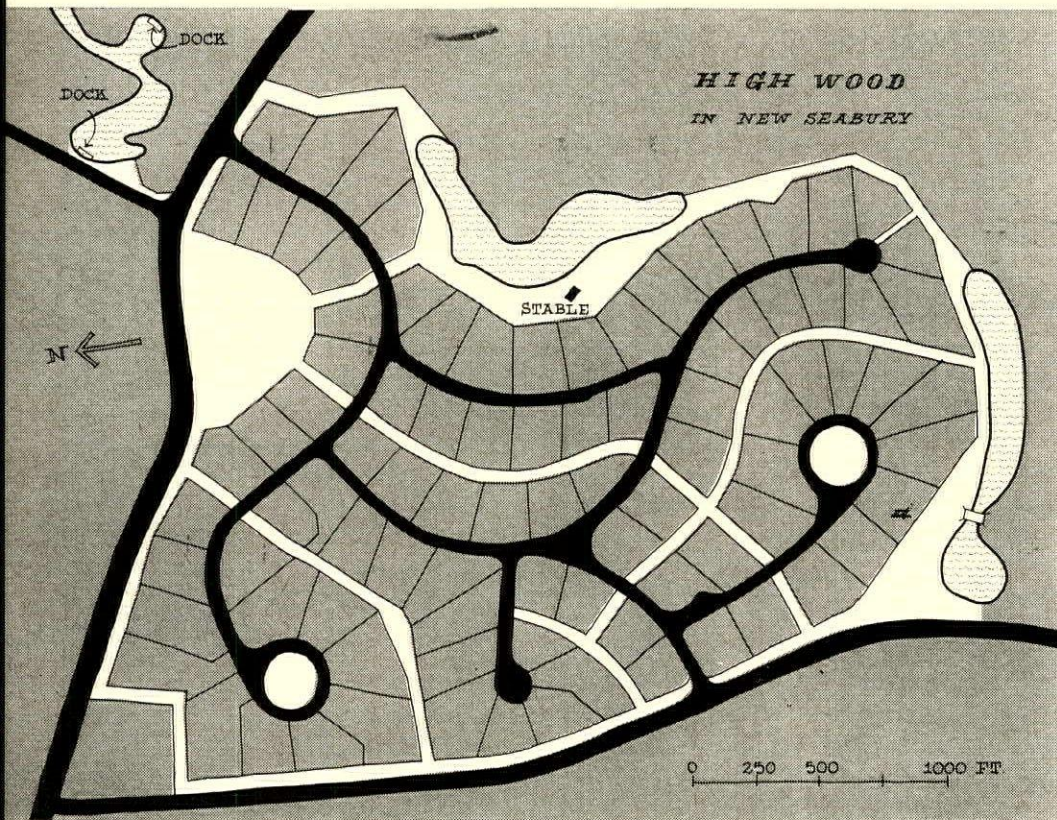
- *Example 2 opposite is one of several designs in the \$15,000 to \$23,000 range built by Tacoma's George Barclay, who also uses a team of professionals—architect, interior designer, marketing consultant, landscaper, and engineer—because, he says: "I simply can't afford not to." His sales result: about 85 houses a year. For details, see page 114.*

- *Example 3, shows the happy result of Builder Melvin Berman's attempt to create a small gem of a neighborhood, detailed on page 116, by working on almost a day-to-day basis with his architect and landscaper. His 20-house subdivision was a fast sellout—a good indication, like the examples above, that there is indeed a sizable and growing market that wants, and is willing to pay for, thoughtful design.*

continued

1

In New Seabury: a land plan for horsemen, varied design



91-LOT PLAN opens every house to a bridle path or riding fields (shown in white). Area is close to waterway leading to the ocean.

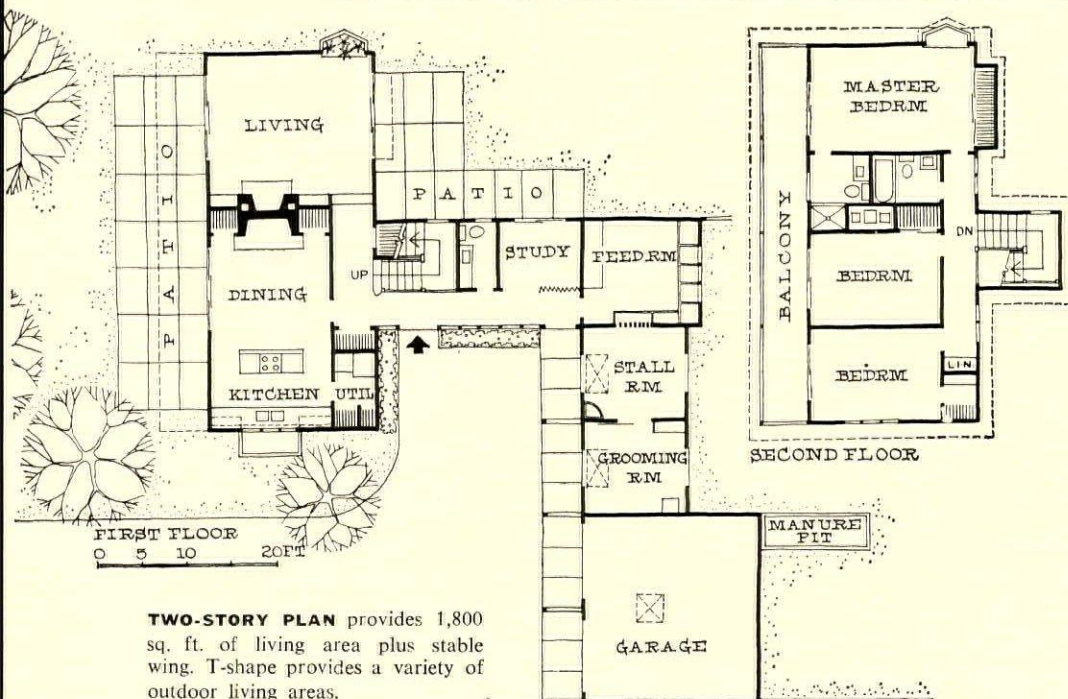
The planning concept—using bridle paths and riding fields as green belt between houses (see left)—is Developer Hanslin's. But before he laid out High Wood's 140 wooded acres, he called in four internationally known equestrians for advice.

Five and a half miles of bridle paths wind through the village. There are schooling rings and a community stable where owners may hire mounts or stable their own horses. The 91 homesites (ranging from 30,000 to 80,000 sq. ft. are set off by 42 acres, or 19,000 sq. ft. per lot, of community land.

Almost the only thing Hanslin was unable to do right at High Wood and elsewhere in New Seabury was the electric wiring, which is overhead. The local utility, Cape & Vineyard Electric Co., refused to sell Hanslin electricity if he buried the wiring—even though he offered to pay the extra cost and even to use all-electric heating systems. This woeful report does, however, suggest how far Hanslin has gone to make his new village attractive.

With the three models at High Wood, Hanslin has what he calls "a real spectrum of architectural approach"—varied houses for varied design tastes, as you'll see below and on the next five pages.

This is the top-priced model at High Wood—and the closest to conventional



TWO-STORY PLAN provides 1,800 sq. ft. of living area plus stable wing. T-shape provides a variety of outdoor living areas.

Designed by Architect Robert Woods Kennedy, it is the first of three High Wood models visitors see, and the horse-village theme is pointed up at once. Attached to the \$27,900 house (lot cost not included) is an optional \$9,200 barn wing with two stalls, feed room, hayloft, double garage—and a paddock.

The house itself is T-shaped, with staircase, half-bath, and small den in the base of the T opposite the front door. Opening off the entrance hall is a sophisticated living room—with broad fireplace, built-in bookshelves, and a modern, mitered-glass bay window. This room opens on a formal garden with reflecting pool. In contrast, the open kitchen and dining room are pure farmhouse, with hemlock flooring, 4x12 exposed fir beams, and oversize fireplace. Upstairs: two baths and three bedrooms opening to a long balcony (photos opposite). Decorator: Hans Kreiks Associates.



Photos: Lisanti

COMPACT HOUSE has natural finish that blends with site. The 40x5' balcony serves the bedrooms, is hung from roof trusses—a design idea that saves \$175 per house.



BOYS' BEDROOM, 14'x10', has room for two beds and is furnished to suggest sports and hobby interests. Sliding glass door opens to the balcony seen in the photo above.

continued



REAR VIEW shows twin gables of bedroom wing, left, and glass-walled living room, with sheltered garden terrace between. Living room opens to rear terrace through glass doors.

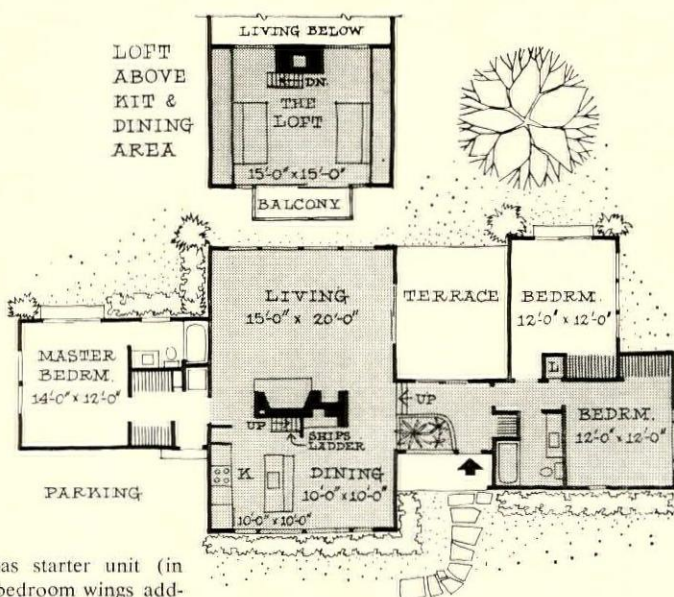


MEZZANINE LOFT, reached by ship's ladder (which takes only 3 sq. ft. of floor space) overlooks the living room. It is furnished as a party room, with built-in couches and stereo hi-fi components.



KITCHEN-DINING AREA has low ceiling under mezzanine party loft (photo right). Lighting is bulbs plugged into a surface raceway. Fireplace wall and living room are out of photo to left.

New Seabury's most popular model—a 'starter unit' with many expansion possibilities



FLOOR PLAN has starter unit (in gray) with two bedroom wings added. Living area of house as shown: 1,518 sq. ft. plus mezzanine loft. Price: \$24,400 plus lot.

As the plan shows, this house designed by Royal Barry Wills Associates can be built with one bedroom wing, with two, or with three—as the model house actually has been built. “And because everything is just one room deep,” Developer Hanslin points out, “any section of the house can be enlarged to suit a family’s needs, without changing the exterior design, without needing new sets of drawings.”

The \$24,400 house seems much bigger than its 1,518 sq. ft. One reason: its rambling (70' long) plan. Another: its high gables, 14½' and 18' above ground level, create spacious high-ceilinged rooms. And a third exciting reason is that a useful—and most unusual—mezzanine living space has been squeezed over the kitchen-dining area. Designer Emily Malino, AIA, has turned this 15' x 15' party loft into a big merchandising plus with her imaginative furnishings (see photo above).



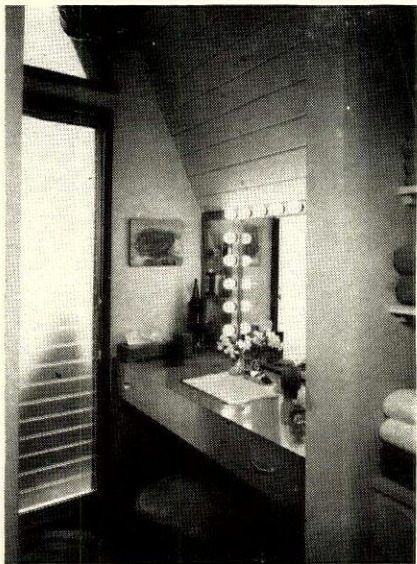
FRONT VIEW shows how architects used Cape Cod forms in a contemporary design, created a feeling of elegance with rustic materials (cedar shake roof; stained, rough-texture plywood siding).



INTERIORS are as colorful as the exterior is restrained. Above is a bedroom with bunk beds—one slides under the other to save floor space. At right is living room's massive red brick fireplace with stained trim and mantle.



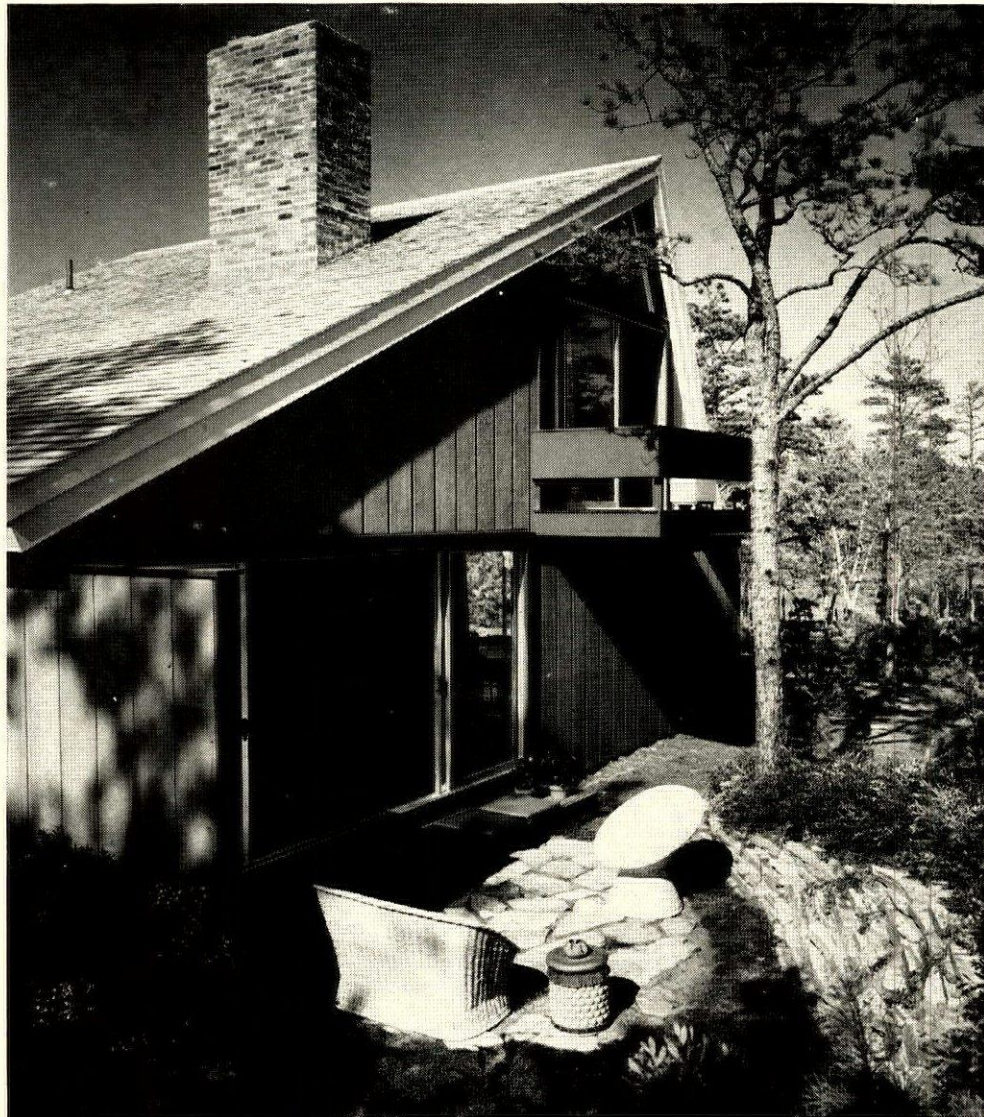
continued



DRESSING ROOM off master bedroom is tucked under the peak of the saltbox roof.



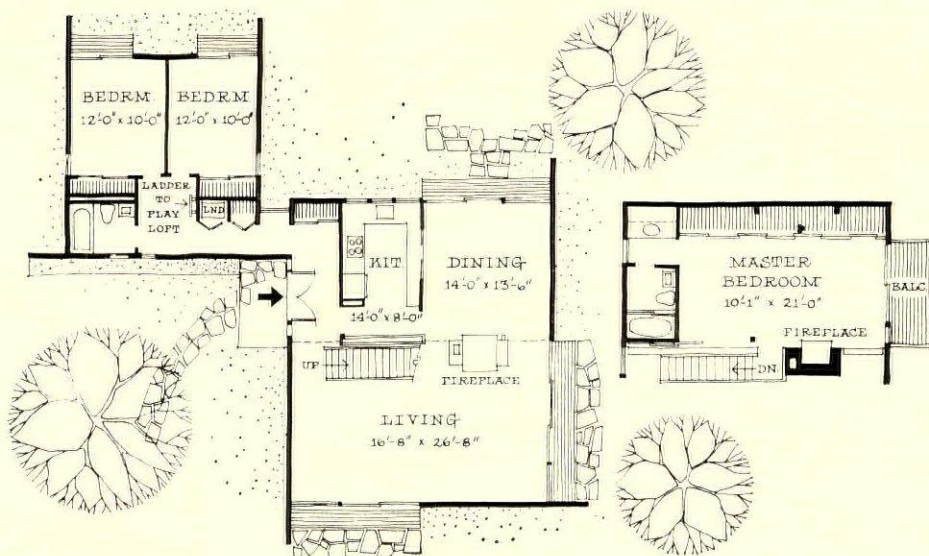
KITCHEN, finished all in white, contrasts sharply with the other, brilliantly colored rooms. Moreover, it is separated from the dining room, unlike other models.



SALTBOX SHAPE is dramatic outside and inside (see opposite). Sliding glass doors open the living room to a landscaped rear garden and the master bedroom to its balcony.

Photos: Lisanti

This New Seabury model gives the classic saltbox shape a contemporary flavor



1,750-SQ. FT. PLAN puts living area and master bedroom in one 27' square saltbox unit, children's rooms in a separate unit.

The result: a house with a variety of dramatic living areas for families of varying requirements. As the plan and cover picture show, this model (priced at \$25,400 plus lot) makes use of two saltbox sections—one larger than the other—to provide maximum privacy for a family with children. Architects Rudolph Bedar and Phineas Alpers have worked out many alternate combinations of these units.

This is the least conventional of High Woods models, and the excitement in its shape is pointed up in the model by the decoration and color-styling—done by the staff of *House & Garden*, which is publishing the house this month. Three colors dominate inside and out—a purplish plum (used outside on siding and trim, inside on all rafters), antique gold, and oyster white. And a dozen other colors are used in various rooms—for a striking example, see the living room opposite.

continued





COLORFUL EXTERIOR is achieved by simple combination of stacked brick and painted wood siding. House looks longer than its 63' because of the unbroken roof line and the horizontal panel of white below the bedroom windows.

Photos: Charles R. Pearson



INTERIOR COLORS are monochromatic throughout living areas, with beige dominant—as in the kitchen-family room area shown. Cabinets, divider wall, and tapered range hood are birch.

LANDSCAPING by Robert Chitcock, ASLA, includes wide flower borders and rectangles of different sizes of white aggregate in front, as shown, and—in the rear—a patio enclosed in narrow-strip fencing. Flowers and shrubs are scaled low to make the house seem larger.

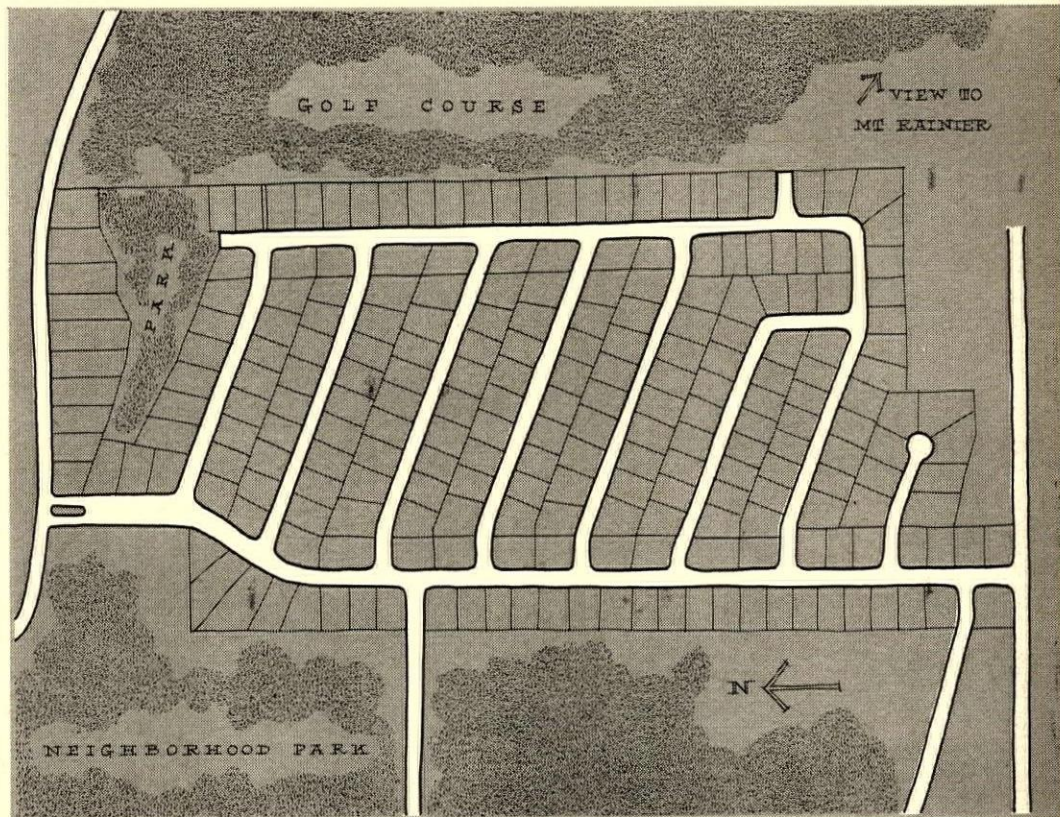


In Tacoma: top talent creates a fast-selling community

All of the houses in Builder George Barclay's 229-house Mayfair project (see land plan right) are the work of top professionals: Architect Robert B. Price, Landscape Architect Robert Chittock, Decorator Julie Sherman, Marketing Consultant Stanley Edge. And, Barclay says, even his workmen feel they are part of a team effort. He pays his staff experts "what they ask"—but says "they don't cost me a thing because they save me every cent of their fees. Professional help is the best bet for any builder like me who gets most of his sales from referrals."

This teamwork has paid off in sales volume of about \$1.5 million (80 houses) a year in homes priced from \$15,000 to \$22,500. About ten basic designs, all by Architect Price, are offered. Periodically, Barclay, Architect Price and Construction Superintendent Dean Biggs travel around the Northwest searching for new ideas in design, construction techniques, and product development.

Says Barclay: "I try hard to give a house individuality and still stay within the price market. I have to be competitive—but I feel I can't be unless I give the buyers the best design and best community in my area."



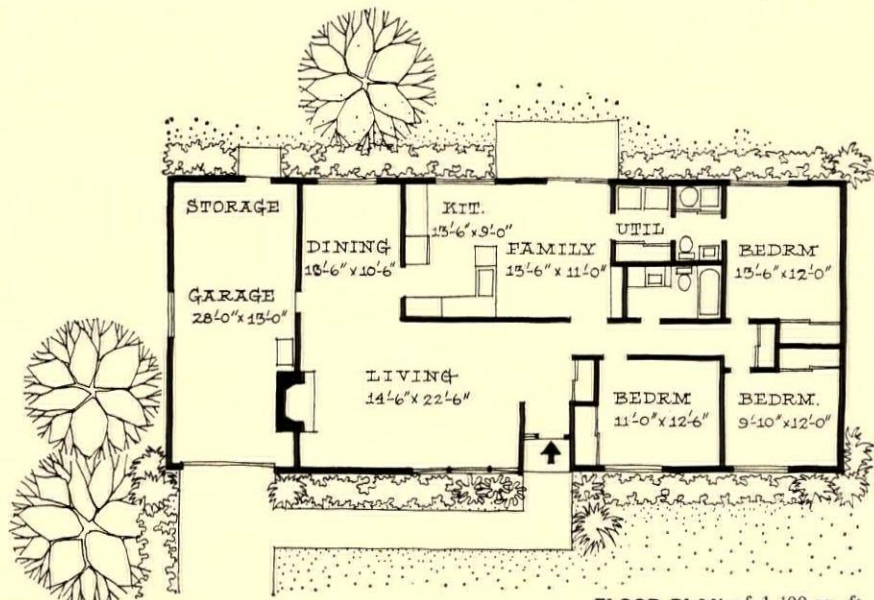
90-ACRE COMMUNITY has 229 sites, 174 built on so far. Many lots overlook parks or the golf course; others have a mountain view.

This clean-lined model was designed to the specifications of a consumer panel

At Consultant Edge's suggestion, Barclay sponsored a *Better Homes & Gardens* housing forum to find out what typical prospects in his area and price bracket wanted. Architect Price then incorporated these ideas in this design for a one-floor, three-bedroom, 1½-bath house.

Features preferred by the panelists and offered in the model include a sheltered entry, an entry foyer separated from the living room (here, by a brick divider), ample wall space for furniture placement in a traffic-free living room, a formal dining area, family room open to rear, U-shaped kitchen, sliding glass doors to a fenced patio, wide closets in all bedrooms, and bedrooms no smaller than 110 sq. ft.

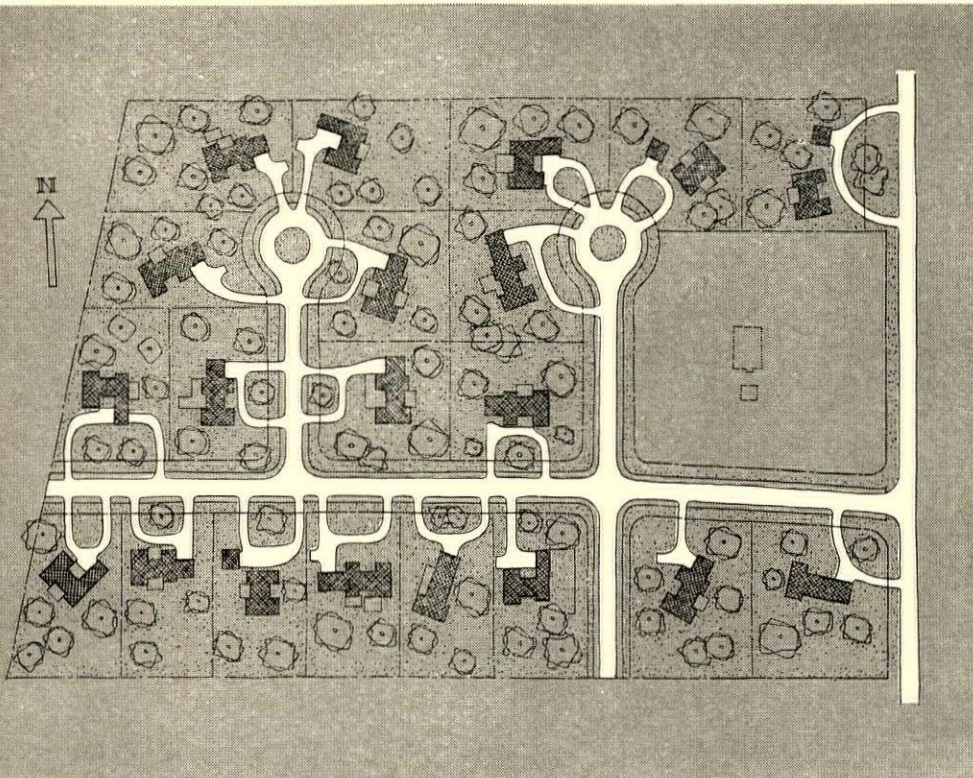
Other features in the \$18,000 house include a living-room fireplace with raised hearth, laundry room between the family room and the master-bedroom's half bath.



FLOOR PLAN of 1,400-sq. ft. house puts entry close to bedroom hall and both main living areas. Baths and utility room form plumbing core.

3

In Maryland: one design built and sited 20 ways



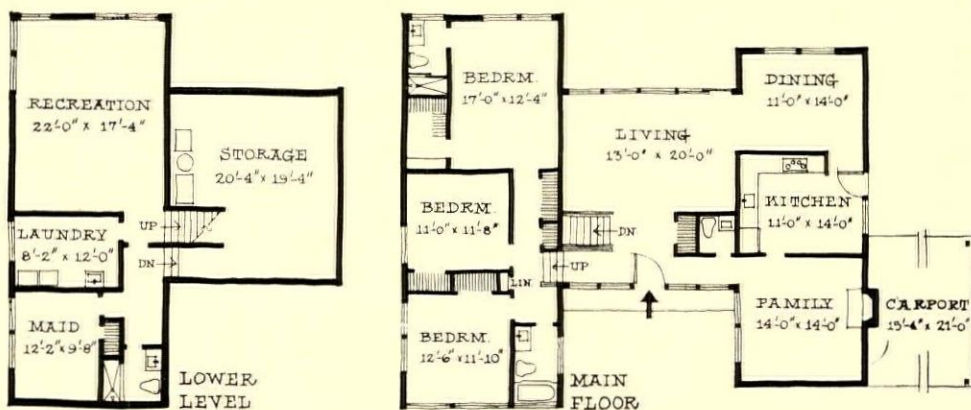
SITE PLANNING along side street and two culs-de-sac shows lengths to which builder went to separate houses, keep them from looking alike, and to save as many big and small trees as possible

All the houses in the varied and pleasant neighborhood shown here are the same basic house with the split-level floor plan shown below. The house was designed by Cohen, Haft & Associates for Builder Melvin Berman of Bethesda. He offered it at \$39,990 in his 20-house tract. Now Berman wishes he had four or five times as many lots, because the houses sold out fast when prospects saw what the neighborhood looked like.

Berman worked almost daily with Architect Jack Cohen and Landscape Architect Thurman Donovan to vary the houses' exterior treatment, vary the relationship of the design's two wings and site each house best for its lot and relationship to adjacent houses. (Also on Berman's team: Decorator Eugene Bewley, Realtor Carl Sturgis, and House & Gerstin for advertising and public relations).

Says Berman: "There is no doubt that a market exists for a good house made better by all the extra work involved in planning this kind of neighborhood. What I paid in fees was as negligible as the service I got was invaluable." The fees: \$300 per house for the design ("quite ample," says Architect Cohen) and about \$50 per house for landscaping advice.

The H-plan split-level house adapts easily to sites with almost any contour



SPLIT-LEVEL PLAN has 2,530 sq. ft. of living space, four bedrooms, and 3½ baths. Lower level was omitted in two houses. Carport location varies from house to house.

As Architect Cohen says: "A split-level like this is simply a two-story section joined to one-story. The two-story wing can be raised or lowered to adapt to any site requirements, without affecting the floor plan at all. Moreover, the length and width of the two wings can be changed to meet buyer needs and create design variety, and the carport can be moved around to change the house shape."

Inside circulation is well planned: The big entrance hall channels traffic to and from all three levels. There is no through traffic in the living room, and furniture can be grouped easily in all living areas. The plan at the left provides for indoor-outdoor living off the living room only, but some houses have a second patio off lower recreation room.

Better Homes & Gardens published the house in June as one of its "editors' choice" series.



STREETScape shows relatively level grade of tract. Little earth-moving was needed except to cut road somewhat deeper than desired for sewer line outfall. Best trees were saved in house siting.

Photos: J. Alexander Studio

CUL-DE-SAC HOUSES appear unlike because of varied orientations, varied carport locations, varied exterior materials, and varied heights of the two-story bedroom wings.

LANDSCAPING of each model included more than \$2,000 in paved patios, terracing (much of it dry stonework) and other extras. Trees as close as 1' to houses were saved.





The distribution dilemma

The tangled routes building products follow from producer to builder have long been a scapegoat. Much more serious are the problem of archaic pricing (which is being solved) and the problem of bad communication along the supply line (which is not).

Ever since homebuilding grew out of the handicraft stage into an industry where big-volume builders produce some 80% of housing, builders and manufacturers alike have been muttering about the channels of supply.

Builders have complained about the high prices they were asked to pay by local suppliers. Producers have complained about the high cost of distributing and selling building products. When Profs. Reavis Cox and Charles Goodman of the Wharton School of Finance set out four years ago on a \$75,000 study of distribution problems for the Producers' Council, one of the first things they discovered was: "If there is any one general complaint among producers, distributors, and users of building materials, it is dissatisfaction with the existing channels of distribution."

And no wonder. Then as now, the building-products distribution system looked on the surface as chaotic as the tangled concrete webs of a freeway interchange. For it is a system in which retailers compete with wholesalers, wholesalers compete with jobbers, and manufacturers sometimes compete with all the others. It is a system with prices as varied as in a Baghdad bazaar. And five years ago, one study found that typical building-materials producers had a 9% selling cost vs. an all-industry average of 4%.

Yet it is a system as competitive as any in U.S. industry. The output of building products stands at an all-time high. Prices have been squeezed down steadily, if slowly, for seven years.

The real dilemma has not been the layers of middlemen, but the archaic ways products were priced

It has taken a long time to get the pricing system that housing inherited from prewar days adjusted to today's realities of scale in homebuilding. Most particularly, postwar housing inherited a lot of dealers who thought that markups were a franchise to coast on, not something to be earned.

Before FHA made volume homebuilding possible and gave homebuilding direct access to bank credit, there were so few volume builders and so few builders who were not dependent on materials dealers for credit that there wasn't much need for a differential pricing system. So most builders paid maximum markups.

This kind of pricing structure forced *volume builders* to adopt a great variety of expedients to buy their products at prices consonant with their higher volume and lower service requirements. Some set up lumber-yard subsidiaries. Some dealt with wholesalers or jobbers. A few had enough leverage to make price arrangements direct with manufacturers.

In some product categories, adjusting the distribution system has been harder than in others. For instance, the retail furniture lobby has put so much pressure on FHA and Congress that FHA still penalizes builders who include carpeting in their houses. Plumbing prices have been sticky almost everywhere because

plumbers have been able to enforce a monopoly on plumbing supply distribution. (Volume builders have gone to elaborate measures to get around this problem: Ohio's Robert Schmitt got himself recognized as a plumber, New Jersey's Jacob Lefferts went into partnership with a plumber, and Florida's Mackle Bros. grubstaked a bankrupt plumber to do their plumbing work.) Under this kind of pressure from builders . . .

Distribution channels are now getting shorter for most products—so the price problem isn't what it was.

To shorten the chain of markups, appliance makers and basic aluminum producers now have wholly owned distribution outlets. Many distributors are combining wholesale and retail functions, or becoming highly specialized. And the biggest distribution bugaboo of all—direct selling—has pretty much been solved (see p. 120). With these changes, the price problem has faded.

Today's dilemma is not middlemen or archaic pricing, but (especially for producers) overcapacity

The industry's producers have expanded capacity so much in the last eight years that their distribution and marketing has been unable to keep pace. "What this industry needs most," says Chairman Melvin Baker of National Gypsum, "is volume, volume, volume." Lack of volume has propelled some major companies—including General Electric, U.S. Plywood, Alcoa, and Reynolds—into engaging directly in building to broaden their markets.

Indeed, the problem of overcapacity confronts much of U.S. industry. Says President Harrison F. Dunning of Scott Paper: "We apparently have more productivity and more capital invested in plants today than we are able to digest, simply because our marketing forces have failed to sell the output of our productive machine. In this economy we have been able to promote the quality, utility, and need for . . . items in our daily lives through the facilities of advertising. Such a volume can never be achieved by personal, individual, direct salesmanship alone, because that is a time-consuming process." He could well have been talking about building materials producers, for 19 of the major manufacturers invested \$2.1 billion in plant and equipment between 1956 and 1960—much more than doubling the \$1.3 billion in plant they had in 1955. Yet homebuilding, America's biggest industry, ranks 19th in advertising. And the U.S. is housed far worse than its rising incomes would allow.

Whatever is wrong with the distribution of building products today, the likeliest prescription seems to be better communications—feedback from builders to manufacturers and feedout from manufacturers to builders and the buying public.

For a detailed look at the industry's distribution dilemmas, and at progress towards ending them, see the next eight pages.

continued

Homebuilding inherited an archaic pricing and distribution system

Volume building, spawned by the Federal Housing Administration's firm forward commitment and nursed by the construction boom after World War II, helped to do to the building products distribution system what George Love of Consolidation Coal Co. did to rail rates on shipping coal. When Love discovered that it cost as much to ship a ton of coal as to mine it, he developed a system for shipping coal as slurry through pipe, and, at great cost, succeeded in cutting \$1 off every ton of coal shipped by rail. In similar fashion, many big-volume builders of the early fifties like William J. Levitt found the prices they were paying for building materials so ridiculous that they dug farther and farther back into their supply lines to buy cheaper. In 1946, when his huge production required more materials than most lumber yards were handling, Levitt set up North Shore Supply Co. to cut out the jobber and retailer mark-ups. Through the early fifties, scores of other big builders followed his lead.

The archaic pricing system builders were fighting was based on three erroneous assumptions: 1) most builders build so few houses a year that quantity discounts are unimportant; 2) most builders are so dependent on local dealers for land, financing, and materials that they are in no position to complain about mark-up; 3) homebuilding would remain largely a handicraft business.

Distributors were slow to grasp the impact of big builders on their operations

By 1949—the first postwar year when housing was able to achieve respectable volume, bigger builders grabbed a large share of the market—19% of professional builders of two or more houses of the year accounted for 79% of the new housing. This growth has continued. As noted in *An Analysis of Large-Scale Homebuilding* by John Herzog: "The big builder (who did 100 houses a year in at least one year of the 1950 decade) saw his slice of the market increase from 32% to 74%." The distribution system was slow to catch up with the big-builder market. Many materials dealers went blithely along believing either that their markups were a perquisite to which they were entitled, whether earned or not.

Many of the builders who went into direct buying and warehousing were unable to save as much as they had expected. But big-volume builders did achieve 1) lower prices on products, 2) a virtual revolution in materials distribution, and 3) a more efficient supply-support system that more effectively met the peculiar needs of assembly-line like production. Today, dealers have largely adapted to the changes in housing. Lumber dealers found, for example, that lumber accounted for only half of their total dollar volume. Says Thomas T. Sneddon, executive vice president of the National Lumber & Building Materials Dealers: "The 'all-things-to-all-men-to-all-types-of-markets dealer' was ill-equipped to do the job. So selective marketing was born. Today there are six basic types of building materials dealers [see photos at right] who specialize in services that can economically support them."

H. R. (Potts) Bergland of Denver Wood Products is one who successfully changed his operation to keep pace with the volume-building market. Says he: "60% of our annual volume (\$8 to \$10 million) is to builders of 20-or-more houses per year, only a very small percentage to small builders who do only a few houses a year. The small builder pays more for our material than the big fellow. We don't mind telling him why. We can't make money

shipping out small quantities of lumber to many small builders.

Today, there are probably more dealers getting into building than builders getting into materials dealing. It is the logical outgrowth of the profit-squeeze in distribution. One dealer who decided to join rather than fight builders is Henry J. Munnerlyn, Bennettsville, S.C., former president of the NLBMD. He builds about half the houses within a 15-mile radius of Bennettsville (about 50 houses a year) and does most of the remodeling, yet still runs his own modern retail outlet.

"There is still a lot of plain talk needed in the distribution end of the building industry." So says Clarence Thompson, former president of the Lumber Dealers Research Council, and a successful Midwestern dealer who serves both builders and homeowners. "There have been too many sacred cows in our industry. As dealers, we either earn our keep, or we don't. A lot of dealers lost sight of basic economics—for example, that they could not survive very long if they were dealing in fewer materials than their customers."

Pricing is still one of the stickiest subjects among manufacturers, distributors, and builders

Pricing varies according to whether a builder buys directly from a manufacturer, from a wholesale distributor, from a local dealer, or a distant broker.

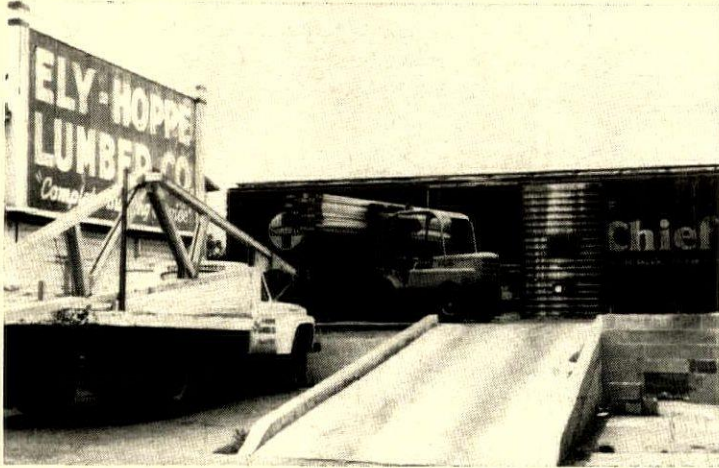
"You will find that most builders are as fed up as you manufacturers with having to buy your products in a regular Turkish bazaar in which there is no such thing as a price you can trust for anything," Vice President Perry Prentice of Time Inc told a Producers Council audience late last year. "Nine out of ten builders resent having to do business in a market where they can't trust any price quoted them, and they would be just as happy as you manufacturers would be if you could bring order into your pricing policies and practices."

Yet the supply end of the building business is convinced that all builders are born chiselers and that price is their only consideration. Ralph Johnson, director of research and technology for NAHB, demurs. Says he: "Builders are first of all businessmen. When manufacturers tell me that builders buy only on price, my answer is 'so do all purchasing agents.' The Time and Methods Analysis Program (TAMAP) showed that purchasing time is well-spent, for over 60% of the direct labor and materials cost in a house is in the materials. I don't know of any industry where suppliers are so fond of castigating their customers."

One of the pricing barriers that builders have the most trouble vaulting is on plumbing fixtures. Many plumbing companies keep two price lists, one showing retail prices, another showing markups for wholesalers, for plumbing supply houses, and for plumbers. Some builders are able to get plumbing fixtures at close to wholesale prices by buying out or buying into a plumbing business or by working closely with plumbing wholesalers. It is doubtful that plumbing fixtures can be bought for less than the wholesale price. Even Levitt admits "the plumbing manufacturers seem to have made out a good case with the Justice Department that their business depends on doing a lot of low markup business with wholesalers." But a smart purchasing agent with the right price sheet in his hands can figure out how much a plumber is paying and dicker about contract prices.

One result of pricing chaos is that many builders are still deeply involved in distribution (to see how and why, turn the page).

... but the rise of specialized dealers has done much to solve the problem



DEALER-BUILDER tries to sell not only materials but also the labor to put them together, often does remodeling. Ely-Hoppe Lumber Co., North Platte, Neb. does this and also builds and sells components like trusses, contracts building and remodeling jobs as complete packages, and is engaged in land development work.



CONSTRUCTION SUPPLY DEALER keeps a big inventory of heavy and bulky materials like lumber, hardboard, gypsum, windows, plywood, sells at wholesale prices to big-volume builders and contractors. Denver Wood Products Co. wholesales in two product lines, prefabs components, and precuts lumber (mostly for builders of over 20 houses a year).



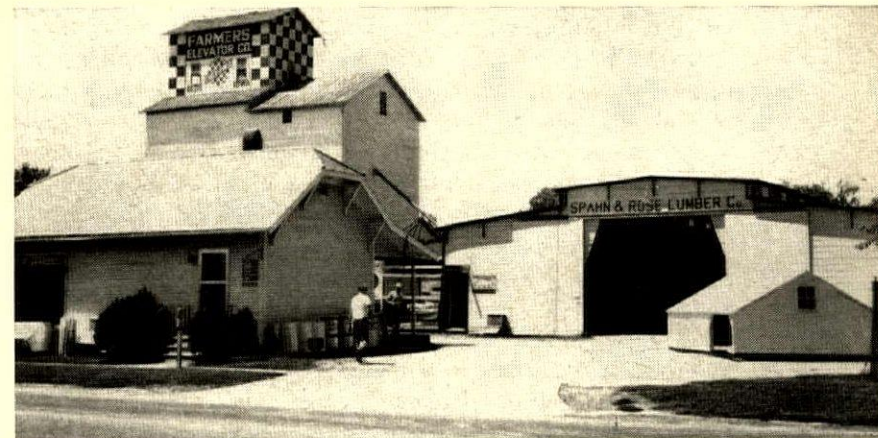
FULL SERVICE DEALER carries a complete line of building products including appliances and kitchen cabinets and serves the widest range of customers. Merner Lumber Co., Palo Alto, Calif. sells builders, homeowners, commercial, and industrial customers. Many such dealers sell both on credit and cash-and-carry, develop land, do cost estimating.



SUPERMARKET DEALER retails both to the public and to the trade, usually from a highly trafficked location, often sells lumber and plywood priced by the piece. W. H. Sawyer Lumber Co., Worcester, Mass., handles garden supplies and appliances as well as building materials, encourages self-service but offers delivery to all customers.



CASH AND CARRY DEALER carries a wide inventory and relies on rapid turnover and self service from a highway location. Lumbermen's Mercantile, with yards in three western states, carries "everything but wet cement," sells mostly to small builders and consumers. Discounters like this company have shown the biggest growth in the last ten years.



FARM OR RURAL DEALER mixes farm supplies and building materials. Spahn & Rose, Dubuque, Ia. (which has 33 yards in communities with as few as 189 people) handles lumber, ready-mix concrete and has a grain elevator (left). Most sales are to farmers at the consumer level. S&R also prefabs cottages and farm buildings (right).

continued

Now that producers have overcapacity, and distributors have reorganized .

"Competition is a brutal social control. If a new distribution system is needed, somebody'll put it into effect." So said Professor Reavis Cox, then president of the American Marketing Assn., in a talk to the Producers Council four years ago.

This is precisely what happened to building products in the second half of the 50s. Two events occurred.

Starting in 1956, building product manufacturers, overanticipating the promised housing boom of the Golden Sixties, went on the biggest expansion jag in their history. Between 1956 and 1960, the top 19 producers added \$2.1 billion in productive capacity to the \$1.3 billion they had owned in 1955—winding up with capacity enough to build 2 million houses per year. This tremendous surge in capacity largely explains why 1962, with a housing volume of 1,483,300 non-farm housing starts, was a buyers' market in materials while 1956, when housing output reached only 1,118,100 non-farm units, was a sellers' market. And it explains why in the last seven years materials prices dropped steadily.

About the same time, as Professor John Herzog has noted, "the early 1950 trends toward bypassing local suppliers in favor of direct purchases from manufacturers fell into disuse. More and more firms let the building materials dealers maintain inventories and drop items at construction sites." Builders had been learning that they could not perform distribution functions as economically as materials distributors, some of whom were merging both wholesale and retail functions and many of whom were beginning to perform additional services to meet the changing needs of a more highly industrialized housing technology. Despite widely held opinion to the contrary, many builders were willing to pay reasonable margins for materials and services. Most builders did not object to middlemen because they were middlemen, but they did object to paying dealer margins based on tradition.

Today, many big builders have given up their central purchasing and cutting yards and are turning to construction supply specialists like Denver Wood Products, O'Neill Lumber Co. of California, and cash and carry discounters like Lowe's Companies, which operates a chain of materials yards in five Southern states. Builders came to recognize the need for and cost of distributive functions amidst the celebrated (and continuing) managerial revolution that has seen builders become as knowledgeable about business management as they were about construction methods. Most sizeable builders today have learned how to use their limited capital better. They have learned the importance of indirect costs, the difficulties of supervision. Says Jerry Snyder, big California builder (1,007 sales closed last year): I could build more economically if I performed more building and distribution functions myself, but I'd lose control and would sell fewer houses. You can't do everything. We're more interested in selling a volume of houses than in saving every last dime."

But builders who gave up distribution functions have not swarmed back to distribution specialists only to pay traditional retail prices. Instead, they have worked out prices for materials from local suppliers commensurate with volume and services actually rendered. Big Builder George Emery of Topeka, for example, negotiates prices on furnaces and hot water heaters directly with the manufacturers but bases the prices he will pay on the uncrating and positioning of these products (by a distributor) in the basements of his houses.

The decision whether to buy direct or not to "is largely a matter of arithmetic," says Bill Levitt. "The basic yardstick for

pricing materials is the carload lot. That's the way manufacturers sell. G.E. doesn't sell two refrigerators to a dealer; it sells a carload of appliances to someone who can store them and ship them out in smaller quantities. Unless a jobber-wholesaler does these things for a builder, it is sheer blackmail for him to get paid simply because he exists. And it is blackmail if material is shipped directly to a builder and he is billed through a wholesaler. We are in the wholesale business through a subsidiary, Builders Supply Corp. . . . We don't believe we're any more or less efficient than most wholesalers, but we can produce houses cheaper because we have learned to integrate wholesaling efficiently into our building operation. We have learned, for example, what materials we should send through the yard and what materials to send directly to a job. I'd quit the wholesale business if I found someone who would do it cheaper for me."

Manufacturers, pressed to boost volume in search of profits, are more and more willing to sell direct

They want a bigger share of the market so they can pay for the cost of their expanded facilities. "Aggressive young sales managers are so anxious to sell the output of their huge productive machinery," grumbles one supplier of big builders, "that they'll make almost any kind of direct deal to push the product out."

Manufacturers, by law, must deal with each class of customer on the same basis. Traditionally, building product makers have recognized industrial accounts as entitled to buy directly. Builders take on this coloration when they set up a central yard or prefab plant. Observes Levitt: "The cutting and storage yard is strictly symbolic to a great many manufacturers: if you have one, they begin to recognize you as a wholesaler."

"The central yard helped perpetuate the myth of a new kind of industrial account," agrees Leonard Haeger, former NAHB research chief and one-time technical director for Levitt. "Nowadays many industrial account sales forces compete directly with builder-contract sales forces of the same producers."

The builder-contract sales teams were created largely to help big producers (particularly appliance makers) to get more builder business. Some appliance makers arrange what amounts to better prices for a distributor if he, rather than their direct sales force, gets the builder business. Reasons: 1) producers believe that big builders will assure greater volume, 2) producers like the added promotional value of getting appliances into the builders' model houses, and 3) producers want to stimulate their distributors to do a better sales job.

"Everyone tries to maintain business ethics with their distributors," says one ex-marketing director of an appliance maker, "but in effect they will sell direct. The breakpoint of direct sales to builders (in major appliances) usually comes at an annual production rate of 50 houses."

Arguments for and against direct buying will probably persist as long as homebuilders believe they can estimate manufacturing costs and the costs of getting products to them. Two successful builders who take opposing stands on the question are Ohio's Donald L. Huber, chairman of NAHB's marketing committee, and Kavanagh-Smith, publicly held company in North Carolina. What makes their divergent views more intriguing is the fact that the two companies are approximately the same size and have similar multi-city building operations (see right).

does direct buying and central warehousing pay off for builders?



DONALD L. HUBER builds in Dayton, Indianapolis and Lima, Ohio, sells 550 to 650 houses a year in the \$16,000 to \$21,000 price class in eight subdivisions. His Universal Manufacturing Co. buys most materials for houses in Huber's operations and manufactures trusses and wall panels for him and other builders (about 55% of its business).

Says Builder Huber: direct buying is cheaper

“Materials is an entirely different business than building, and it takes a different type of individual, facility, finance, and management. Unless a builder is big enough to support a large volume, he would make a serious error in establishing such a company.” But there are three advantages for a central purchasing-warehousing yard (particularly if it is tied to a manufacturing facility):

“**1. Purchasing power**—this is the primary reason but the most deceptive advantage. The difference between local retail prices and manufacturers' prices looks huge at first glance (about a 25% mark up), but to be successful direct buying has to be as efficient. You can buy materials at savings well in excess of \$500 per \$17,000 house, but the efficiencies—in purchasing, warehousing, handling, and financial—will determine how much of this can be translated into dollar savings on construction.

“**2. Waste** is a big item in housing, but our saving through wasting very little is probably our No. 1 cost-cutter. The TAMAP study shows huge savings can be made if material is properly processed. Our central location, pre-cutting and pre-assembly operation cut waste, theft, and spoilage significantly. We spend \$5,000 on every new house design to engineer it for maximum use of material.

“**3. Capital leverage** is the most significant advantage of central purchasing and warehousing. It takes a lot of money to start a centralized material facility, but now that we have some of our capital invested in this, we can borrow money cheaper than if we just built homes—at 6% true annual interest, vs. the 10% (6% interest plus 1% construction loan fee) most builders pay to finance construction.”



J. Harold Smith

ROGER KAVANAGH is president of Kavanagh-Smith and subsidiaries, Greensboro, N.C. publicly-owned company building from 600 to 700 houses a year in nine North Carolina towns in 18 different subdivisions. K-S buys much of its material through Lowe's Companies Inc., a cash and carry discount distributor with outlets in five states.

Says Builder Kavanagh: local buying is cheaper

“High-volume merchandisers who provide products at a low distribution cost have a place in the retail distribution of building materials. We buy some materials direct—like lumber, flooring, brick, ready-mixed concrete, windows, doors, sand and stone products because they are manufactured locally and we can get job-site delivery. But we buy from distributors items like roofing, insulation board, plywood, gypsum, composition siding, millwork (other than windows and doors), appliances, hardware, medicine cabinets, and range hoods. We calculate that losses from pilferage, damage, and the cost of warehousing and maintaining materials would eat up potential savings that could be made buying direct. There are specific advantages in buying through a distributor:

“**1. Low markup.** We have a good knowledge of manufacturer's prices, and can calculate how much money we are paying a distributor for his services. His markup is so low that our company cannot afford the warehouses, trucks, and personnel to do what he does ourselves.

“**2. Buying power.** Our distributor has outlets and serves customers in five states. We're pretty big, but we are only working in one state. So our purchases are small compared to his total purchases. So he can buy at better prices than we. And he is big enough to hire buying specialists to follow the market in commodities. We couldn't afford to.

“**3. Employment of capital.** The distributor uses his capital to provide us with services we need. If we were to capitalize an operation in competition with his, we could not employ capital as effectively, because we don't have his volume. On the other hand, we can use capital to make money doing what we know best: building.”

continued

Why builders make the decisions they do, now that they have an option

Today there is hardly a big-volume builder (over 50 houses a year) who does not buy some products directly from manufacturers. Some buying is truly direct—from manufacturer's plant to builder's warehouse or site, but very often *direct* buying is really negotiating prices with a producer's representative and getting delivery through the producer's own warehouse or an independent warehouse that is in on the deal. Of course, the bigger the builder, the greater is the tendency for producers to sell direct. But there is no consistency in manufacturers' direct sales policies. Some kitchen equipment manufacturers will sell appliances, cabinets, and countertops direct; others will sell only the cabinets and the tops, still others the appliances and the cabinets. One big roofing, siding, and flooring manufacturer will sell acoustical tile but not its flooring direct. Makers of accessories often sell both directly to large volume builders and through distributors.

"A real distribution dilemma comes about when a producer introduces a new product," says Leonard Haeger. "But most manufacturers won't let the complexity of the distribution system stand in the way of getting a product to market. They'll sell it any way they can."

"Gypsum wallboard," says T. C. (Chuck) Rowe, West Coast chain discount dealer, "was one of the first *new* products to break down the step by step distribution pattern." To win acceptance over wet plaster, gypsum producers often dealt direct from factory to builder. More recently, built-in ovens have become almost standard in California houses, thanks to similar marketing. Producers' own sales forces took over the job when distributors failed to sell them into the new-house market. Today about 65% of all appliances are sold through factory-owned branches or to big retail chains. Many local dealers no longer resent this because it is volume business they couldn't get anyway.

Big aluminum producers chose to short-cut traditional channels because aluminum—a fairly new building product—was not being pushed by traditional distributors. Reynolds Metals Co., for example, set up a building products company, RABCO, early in 1962 as a jobbing-wholesaling division of the parent company, stating—in an effort not to antagonize some distributors who were selling its products: "[They] could not be expected to invest heavily in stock, expend the effort on developing new uses, and promote the sale to the extent necessary for marked progress." The Weather-Tite/Aristocrat division of Pacific Coast Co., a manufacturer of extruded aluminum, which also set up its own branch warehouse distribution system, put it more baldly: "Ours is a captive operation. Branches perform the services of a distributor, which they are, but eliminate the burden of additional profit margins that an independent distributor incurs." Factory-owned warehouses today, it should be noted, are notably low- or no-profit operations.

"I can't blame the producers for selling direct," says one big cash-and-carry dealer. "A lot of dealers didn't want to pioneer on new products, so the producers had to move them themselves."

Builders buy direct when it saves money— but not every product fits this formula

Not every builder buys the same products direct or for the same reasons. The products that builders tend to buy direct are usually: appliances (because they can get them through factory branches), light items (like aluminum louvers), compact items

(like anchor bolts), easily stored items (like closet rods), items packaged against damage (like vent hoods), and low bulk items used in volume (like staples and nails). But they will often buy kitchen cabinets direct (because many of them are now made in small local plants). Some will buy heavier materials like windows, sheathing, gypsum board, or roofing (but usually only when the builder has a component or lumber company subsidiary). A check among a dozen big builders, whose annual output ranges from 50 to 800 units, exhibited all these trends. When asked why they preferred not to buy more products direct, half of the builders pointed out that storage, delivery, capital requirements, or added overhead costs made more direct buying a money-losing proposition.

Two new trends may increase volume and variety of products sold direct:

1. More and more major suppliers, notably the kitchen equipment manufacturers, are making package sales of color-coordinated appliances, vent hoods, sinks, cabinets and countertops. General Electric, Westinghouse and Emerson Electric, among others, have set up special divisions that cut across product lines and offer builders what amounts to supermarket buying instead of shopping in several stores for closely related products. Borg-Warner offers a one-stop service through its contract sales division. Here builders can get from a single source appliances, air conditioning, insulation, plumbing fixtures—even financing through an acceptance corporation. This type of packaged selling promises to increase the amount of *one-stop* (through a wholesaler) buying, and perhaps direct factory sales.

2. More and more builders are subcontracting more of the operations in building (e.g.: carpentry labor, roofing, basements, slabs, grading). Plumbing, heating, and electrical work have traditionally been subbed, and still are as a rule. Merchant builders who work very closely with their subs and often buy the materials subs install, say they are tending to listen more to subcontractors' recommendations on products today, since they believe the subs can often cut their costs. The possibility is strong that many subcontractors, who like big builders have grown more management conscious are growing to sufficient size to do more of their own product buying—and doing it directly with manufacturers.

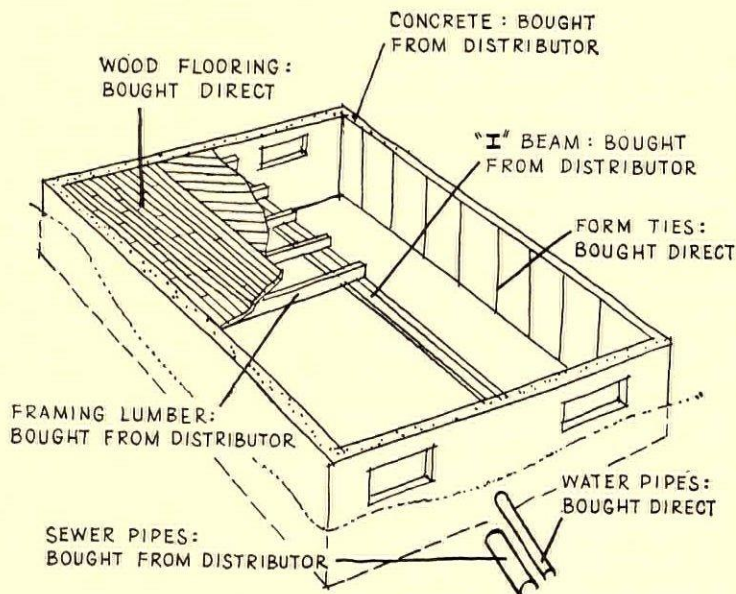
One big Southern California roofing subcontractor gets so much of the business because, says one builder, his prices are "rock bottom," "and he determines the brand we use because he can buy better than we can."

How one big builder explains his decisions about what he buys direct and what from distribution channels

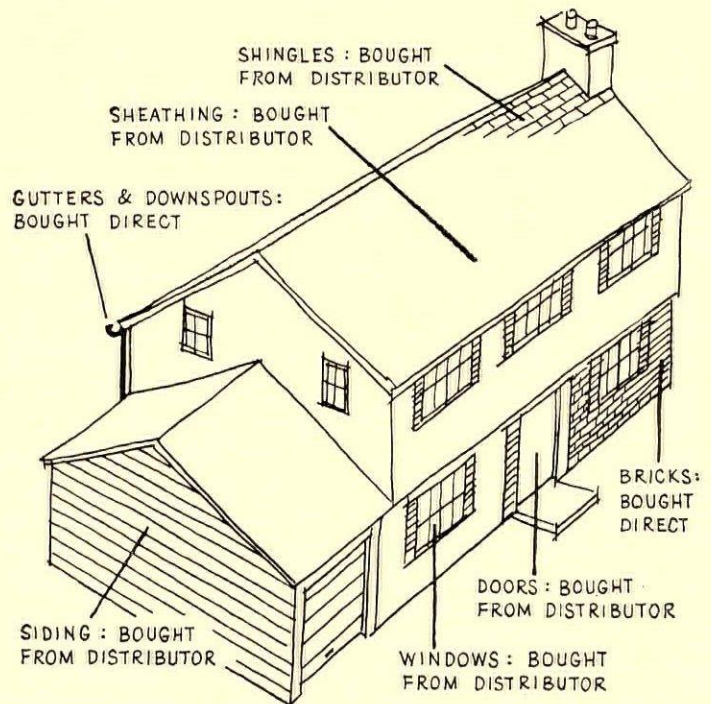
Perl-Mack Construction Co., Denver, which has built about 1,000 houses a year for the last three years, buys many of its products direct from manufacturers, but a still greater number from efficient distributors even though the builder owns his own central warehouse and yard. Perl-Mack's buying decisions are not typical of *all* big builders but they are typical of the thinking process of builders in buying.

The pictogram on the facing page shows how Perl Mack buys many of its materials, and explains why.

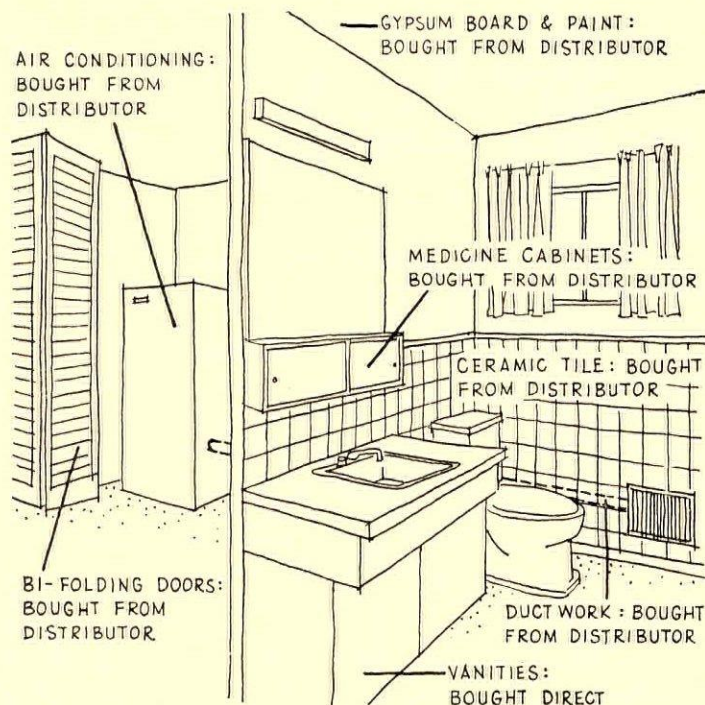
of buying some products direct and some through distributors



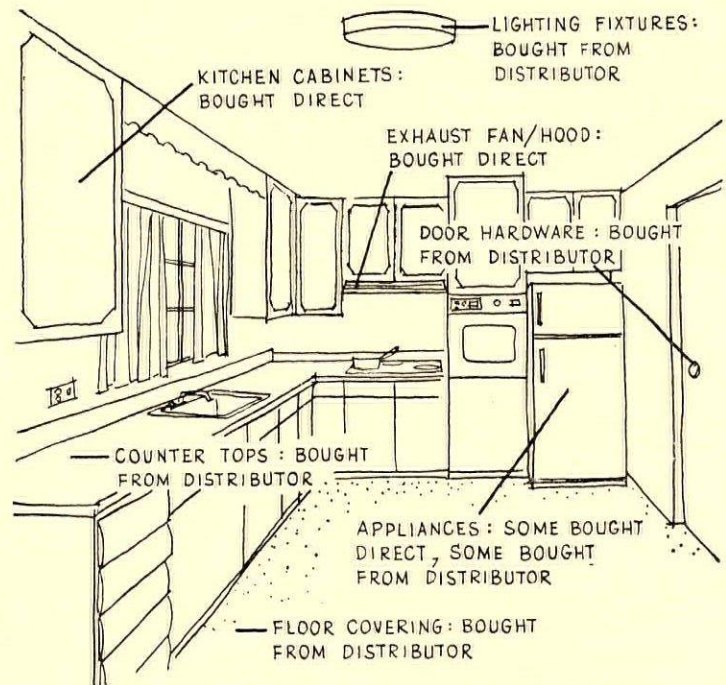
FOUNDATION PRODUCTS bought direct from manufacturers include: 1) form ties because they are used by the thousands and are stored easily at 4½¢ apiece saving; 2) transite water pipe because it can be bought from the manufacturer; and 3) oak flooring because it is delivered to job sites in trailers which are left until emptied. All other items are bought through distributors and delivered to the job because the cost of rehandling bulky items through a central yard would eliminate savings from direct buying.



EXTERIOR MATERIALS bought through distributors include: 1) aluminum windows because a distributor will repair job-broken glass at set prices; 2) shingles—laid down by a subcontractor who copes with the problem of customers demanding a wide range of colors; 3) sheathing, siding, and doors because they are delivered in the kind and quantity needed. Products bought direct: 1) brick because builders use thousands on every house; 2) gutters and downspouts because the builder owns a sheet metal shop.



BATHROOM PRODUCTS bought through distributors include: 1) gypsum board because it is hung, taped, and painted by one subcontractor at a price the builder can't beat; 2) plumbing and air conditioners because they are delivered to the job at builder-negotiated prices; 3) medicine cabinets, bi-fold doors, and sheet metal for ductwork because they cannot be bought cheaper from a manufacturer than through a distributor. The only item bought direct is vanities.



KITCHEN EQUIPMENT bought direct from manufacturers includes: 1) exhaust fans and hoods because they are all one color and can be stored compactly; 2) kitchen cabinets because they are built to builder specifications and can be stored for use when needed; and 3) appliances—some of which are bought through manufacturers' own distributors at builder-negotiated prices. Products bought through distributors include: light fixtures, floor coverings and countertops.

continued

Today's big need: better communication between producers and users

The failure of manufacturers, distributors and dealers to understand fast enough the import of housing's industrialization (pin-point delivery, tight work scheduling to assure faster construction, factory-finishing of surfaces, use of bigger components) accounts for many of the snarls that existed—and still exist in spots—between builders and their suppliers and distributors. Manufacturers seldom find out enough details about how their products are used, how they could better fit their customers' needs. Example: the appliance maker who admitted his dishwasher is designed so that its connections are easily accessible only when the washer is turned on its side—which may be fine in the factory but doubles the cost of installation in a house.

Distributors and manufacturers alike too seldom get their shoes muddy learning what goes on where building products are put into form for their final sale: to homebuyers. And dealers seldom are able to hire enough competent salesmen. Manufacturers' sales agents have tried—in some product lines—to take on the role vacated by distributors' or dealers' salesmen. And, according to many builders, even they have failed.

From builders, the complaint heard most often is that communications with them are wretched. They are unhappy about the amount, kind, and quality of information they get from their supply lines. Indeed, even though builders have a reputation of being more price conscious than other businessmen (they aren't), they gripe more about lack of product intelligence than about prices.

Specifically, builders are dissatisfied with cost and pricing information. They are unhappy about data on specifications and performance ("It would be nice if a salesman knew the out-to-out measurements of a new appliance that he's trying to sell into your kitchens," says one builder). They are angry because they get too little data on availability and delivery, even such basic information as whether or not a product has FHA approval.

Ideally, builders would like to get data sheets that would outline costs, performance, specifications, availability, delivery time, how a material can be used, how much it can save, what its installation time is, and who gives the warranty and on what.

Yet little trade advertising, the logical source for such information, includes such data. The Time and Methods Analysis Program (TAMAP) sponsored by NAHB, The Stanley Works, and Builder Robert F. Schmitt indicated how much manufacturers and their advertising agencies could learn through greater familiarity with the homebuilding process that would help them do everything from re-design products to write sharper advertising copy (H&H, April).

The failure of many manufacturers to sell more of their product through their own or their distributors' efforts has often forced them to *buy* their markets rather than *sell* their products. Today some major producers are even financing elevators, air conditioning, kitchen and laundry appliances in rental apartments to assure themselves of big-volume business.

Does ineffective advertising underlie producers' troubles selling *all* they can make?

In their effort to sell the product of their giant productive machine, materials manufacturers have tried all manner of marketing techniques—save the most obvious one: better communication through more and more responsive advertising.

While the 19 major producers of buildings products were (as

noted earlier) more than doubling plant capacities from 1956 to 1960 (at a cost of some \$2.1 billion), their advertising outlay rose only slightly—from \$12.7 million in 1955 to \$16 million last year. Nine of the biggest companies actually spent less last year than they did in 1955, and almost the entire total increase was due to Armstrong Cork, which almost doubled its advertising outlays from \$3.1 million to just over \$6 million. Its \$6 million advertising expenditure in 1962 was more than double that of the next biggest advertiser, Pittsburgh Plate Glass, with \$2.5 million.

Evidence that advertising mass-produced goods—be they flooring or acoustical tile, toothpaste or headache remedies, autos or cereals—pays rather than costs shows up in the case of Armstrong. Last year, the company showed the healthiest earnings record among the 19 producers, and over the years it has had one of the most consistent profit scores. Part of Armstrong's enviable record is attributable to new product development, but much of the credit can go to its vivid advertising (mostly to consumers but also to building professionals) and its sales philosophy that it pays to advertise.

Housing professionals *do* read advertising, even badly written advertising. Listen to Builder Joseph L. Eichler on the subject: "I read the advertisements as well as the editorial matter in magazines. We're always looking for something new—how to light a bathroom even better, what new kinds of cabinets are on the market, what new kinds of hardware are being made. Unless we read the ads, where would we find the kinds of things we're looking for? Like all builders, we see many new products in advertising and at trade conventions, but I never cease to be amazed how little manufacturers follow through on inquiries we make."

Does lack of consumer education underlie producers' troubles selling the *best* they can make?

Yes, says one major lumber manufacturer: "The failure of product manufacturers to understand the builders' problems and the failure of many retail dealers to educate the builders and the public about quality are some of the chief reasons why so many low quality items are sold."

Builder after builder has complained that there is no use putting better products in his house because the manufacturers haven't taught consumers to know the difference. Most of the home-buying public can't distinguish between a washdown toilet and a reverse trap toilet*, can't assess the value of a burglar-proof front-door lock, doesn't appreciate the difference between cheap windows and well-made windows.

The problem of quality goods has now come before Congress. This month, the distribution subcommittee of the House small business committee will scrutinize the industry, as the committee resumes a series of hearings on what it calls "dual distribution." The subcommittee wants to examine the effect of builders' direct buying on normal distribution channels, and it wants to run down charges that, in some cases, appliance producers are making available to builders what are known as builders' models, inferior to manufacturers' standard products. Considering the forum, neither producers nor builders should expect much sympathy at the hearings. But the fact that they are being held at all underscores the communications gap (see also NEWS, p. 13).

*Washdown toilets, dating from 1889, are noisier, less sanitary than all other models on the market. Reverse trap toilets (1910) are quieter, more sanitary, cost about \$3 more.

On the horizon: shorter supply lines and computer-controlled inventories

In today's competitive race to get products to market—in volume—at the lowest possible cost, manufacturers will take almost any route if an established distribution pattern fails. So change has been rapid and apparently will continue so. "One way more economies may be introduced into distribution," predicts the chief sales executive of a major lumber producer, "is by mergers of big materials producers with efficient wholesale distributing companies. And there would probably be more mergers except for the government attitude towards them." Two other trends may affect the supply-distribution pattern:

1. Manufacturers are building more plants and warehouses to eliminate some distribution costs. The fact that more manufacturers are setting up wholly owned warehousing subsidiaries is evidence that some independent distributors and dealers are still not efficient. But one major manufacturer raises the question of whether or not manufacturers themselves have deployed their productive facilities to cut out huge distribution wastes. Says Milton J. Stevens, chairman and chief executive officer of Republic-Transcon Industries (which makes water heaters, garbage disposers, air conditioners, and clothes driers): "Too many manufacturers have built up their selling prices as umbrellas to cover such outrageous items as bonus cruises, high distribution costs, high warehousing costs, and high markups. Why don't they build a plant near you?" He practices what he preaches: his company has eliminated jobbers, sells direct from eight factories. "We decentralized our plants so we'd be reasonably close to every market. We went a step farther and bought our own trucks and trailers to cut down freight costs within a zone. It now costs us only 25¢ to ship a water heater from California to Arizona. This [distribution] is the one of the few places you can cut costs. You can't get a better price on steel; you can't get labor to work for less money. The only thing you can eliminate is unnecessary costs."

2. Important changes in the distribution system may be effected by computers. The use of data processing equipment—which has revolutionized so much of decision-making and problem-solving in many other industries—may soon revolutionize distribution within the housing industry.

The fast communication and precise inventory control possible with computers may cause more and more building products to be inventoried farther and farther back the distribution chain towards the manufacturer. (This is a trend in industry as a whole and one theory holds that the 1958 recession and production slowdown was caused by inventory adjustments made because computers showed businessmen how to cut down inventory without losing sales.)

Most homebuilders are well aware that stocking materials on their site is expensive in terms of tied-up capital; many do so to assure that they have what they need when they need it.

But if computers make it possible for manufacturers to guarantee reliable delivery with a much smaller inventory at the plant and all along the distribution chain, everyone—manufacturers, wholesalers, subcontractors, dealers, and builders—is bound to be affected.

Some—most probably the middlemen—may get hurt; but the net effect should be lower costs to the builder, and thus stable house prices to the consumer. And this is the most important thing.

—EDWARD BIRKNER



Six of 1963's best-designed custom houses

These Merit Award and Honorable Mention houses, together with the four Honor Award winners shown in the July issue, make up the ten houses premiated by the custom jury in 1963's Homes for Better Living program sponsored by the American Institute of Architects, *HOUSE & HOME*, and *LIFE*.

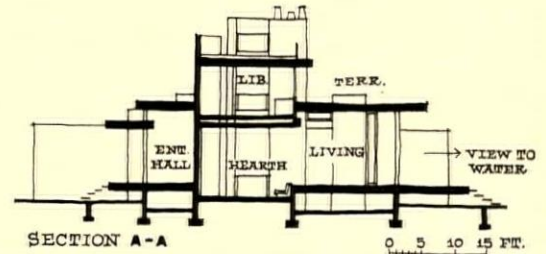
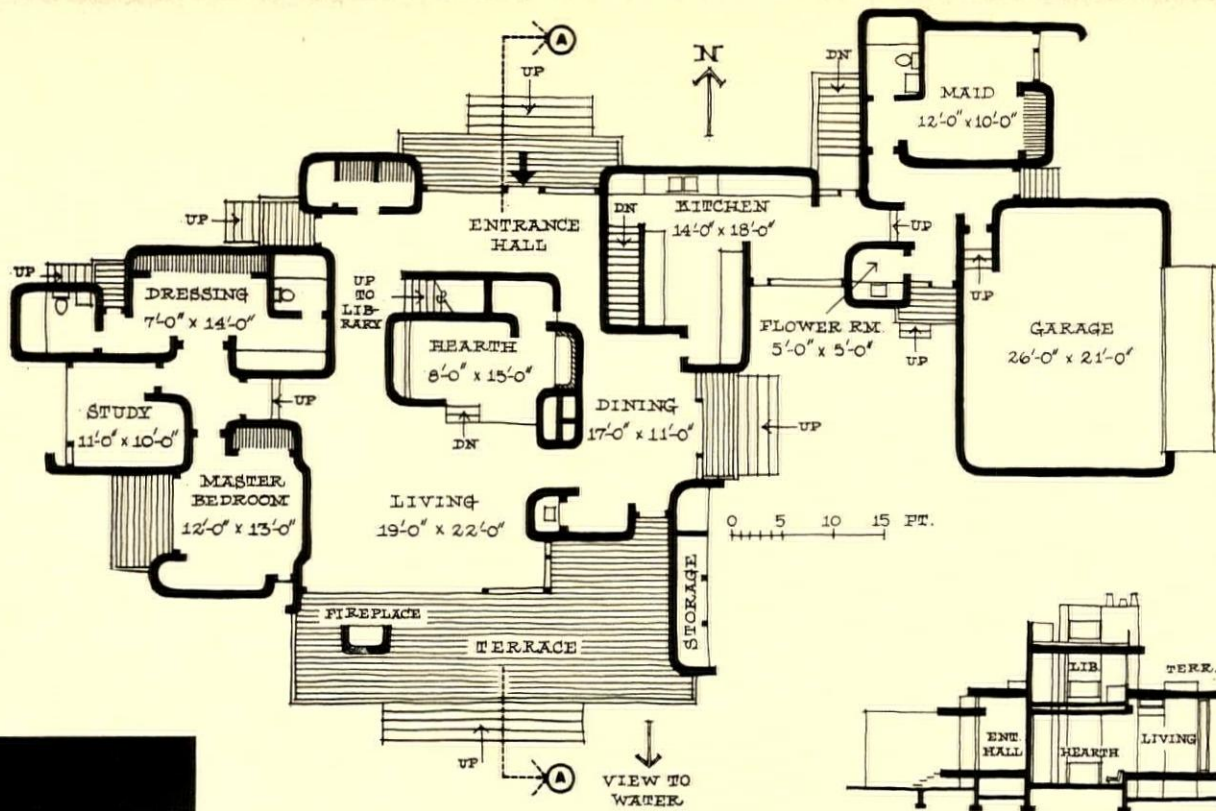
They couldn't be more varied: John Johansen's almost-brutal masses of concrete in Connecticut (below) are more than just

a continent apart from Joseph Esherick's romantic courtyard house near San Francisco (*p. 130*). Because they are so varied—indeed, in different worlds of the imagination—each has a very different lesson that can be applied to other houses in other places: lessons in exploring new forms and new uses of materials, in designing for a climate or a particular view, and in fitting a house to a problem site.



The towers and walls resemble castle battlements, an illusion heightened by the rough, striated masonry masses and the parapet-like rooftop ter-

aces. Floors are suspended above grade between the walls as protection against flooding during exceptionally high tides.



Cellular structure of the plan, interrelated yet zoned, appears in the curved concrete walls. Section shows the various levels.

1. Concrete walls and towers, original in concept and form

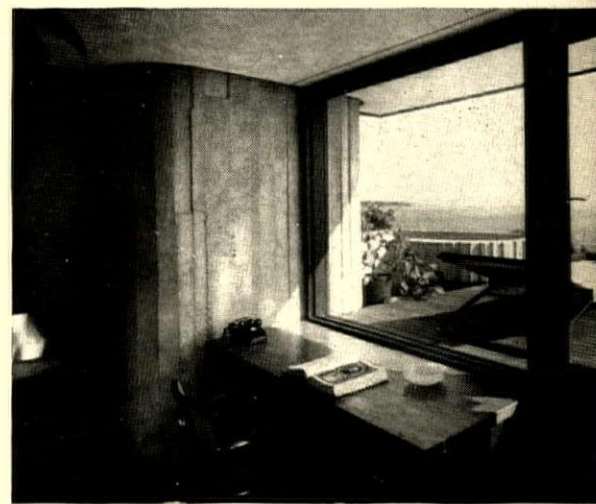
Architect John Johansen's house for a weatherswept Long Island Sound property challenges the viewer to finish this sentence: "It reminds me a little of . . ." Cited by the judges for "originality in basic conceptions, with magnificently composed skylines and rooflines," the house is a series of interlocking curved concrete walls enclosing the various rooms and levels of the plan.

Protection from the elements—from high tides, occasional hurricanes that sweep up the East Coast, and from the hot summer sun that bakes the exposed site—was the primary requirement of the owners. The three-level core of the house consists of a sunken hearth room, a tower library above it, and a roof terrace atop that (see section drawing). Other groupings are a master bedroom suite and the service and servants' quarters, on opposite sides of the general living, dining, and entry areas.

Not shown is a separate group of walls forming a three-bedroom guest house, complete with kitchenette and dining area.

MERIT AWARD

CLASS: over 2,800 sq. ft.
 ARCHITECT: John M. Johansen
 BUILDER: T. deF. Hobbs Inc.
 LANDSCAPE ARCHITECT: James Fanning
 LOCATION: Westport, Conn.



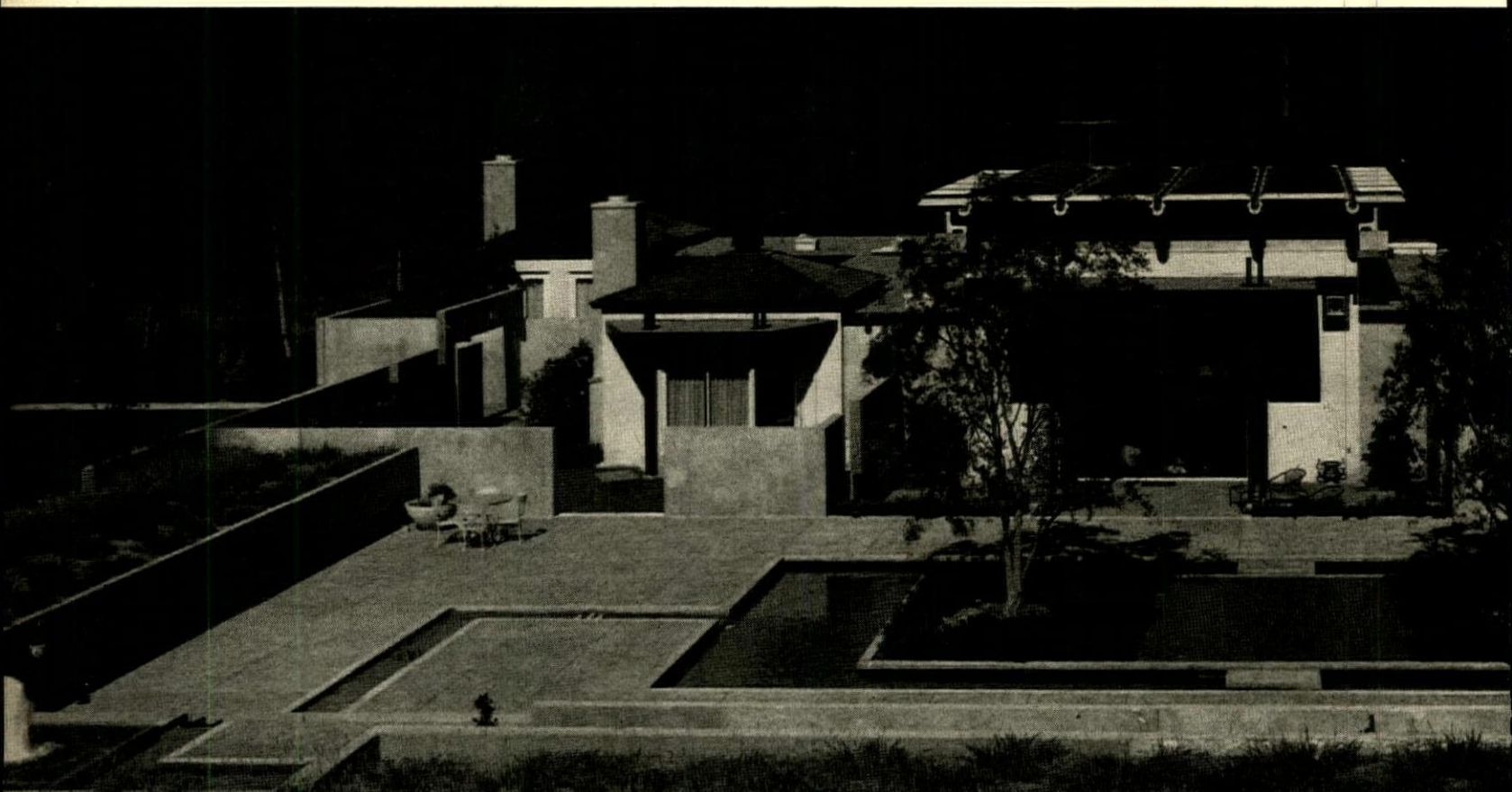
Library looks across a second-level wood deck to Long Island Sound. Roof top terrace above is reached by an exterior staircase.



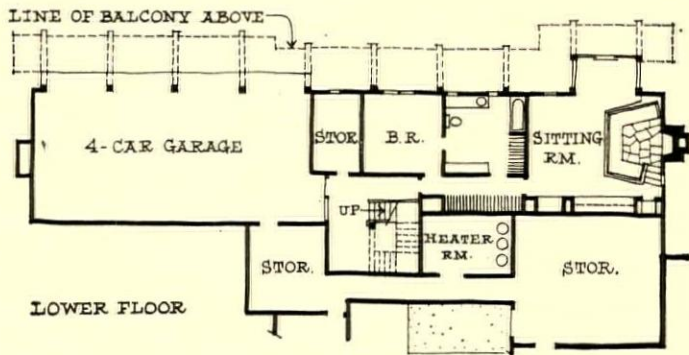
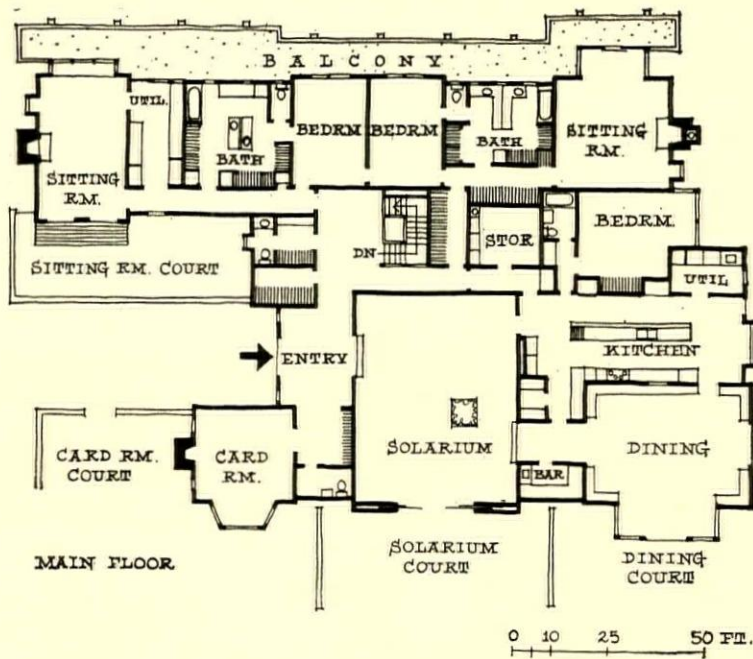
Hearth room is just visible to left of living room on a lower level. Some interior walls are smooth plaster furred out from the concrete.

continued

Photos: Robert Damora



In rear of the house, card room, left, solarium, and dining room open to this formal garden. Roof outline shows the U-shaped gutters between the rows of plastic skylights over the solarium.



Two-level plan puts parents' bedroom-sitting room suite on lower floor below the two groups of children's rooms. Balcony across the entire 101' width of house is accessible through sliding glass door from sitting rooms.

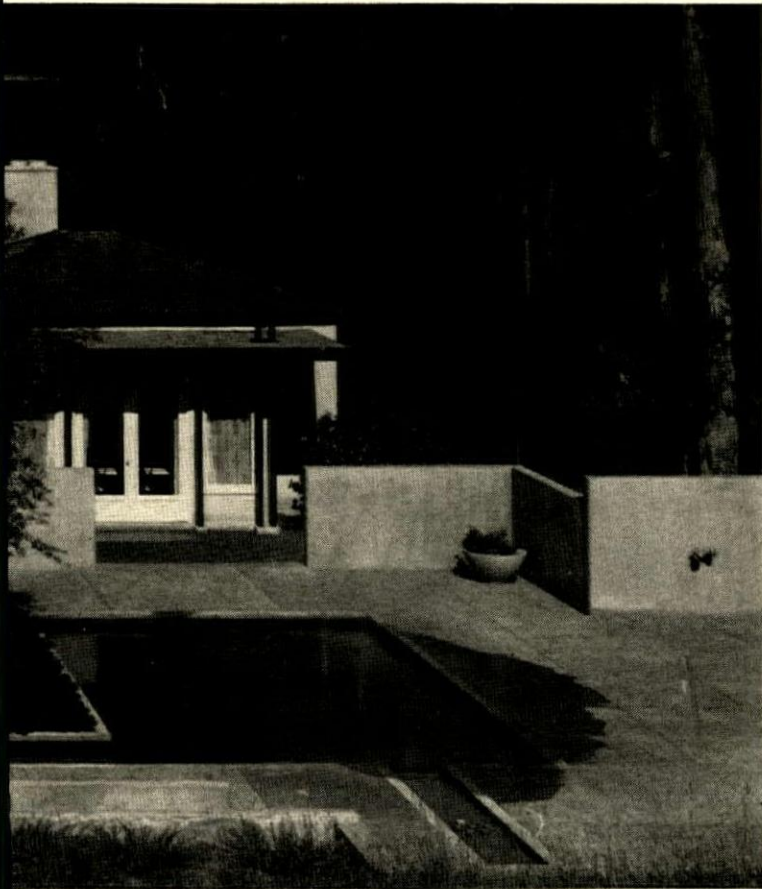
2. A plastic-roofed patio is the heart of this big house

One of the owner's requirements for this design was a central patio like those in Latin American houses. The photo at top right shows Architect Esherick's adaptation for a U.S. climate, a roofed patio which the jury called "entirely fresh and of contemporary materials . . . most successful." Around this central room (which serves as a family gathering place) are a series of self-contained living areas: separate bedroom-bath-sitting room suites for teenaged boys, girls, and—on the lower floor—the parents; the kitchen-dining area, and a card room for entertaining small groups.

Each living area opens to a separate outdoor living area—balconies, terraces, or a series of walled courts (see below).

Walled courts were conceived as a series of rooms without roofs to give form and outline to the relatively dull upward sloping site.





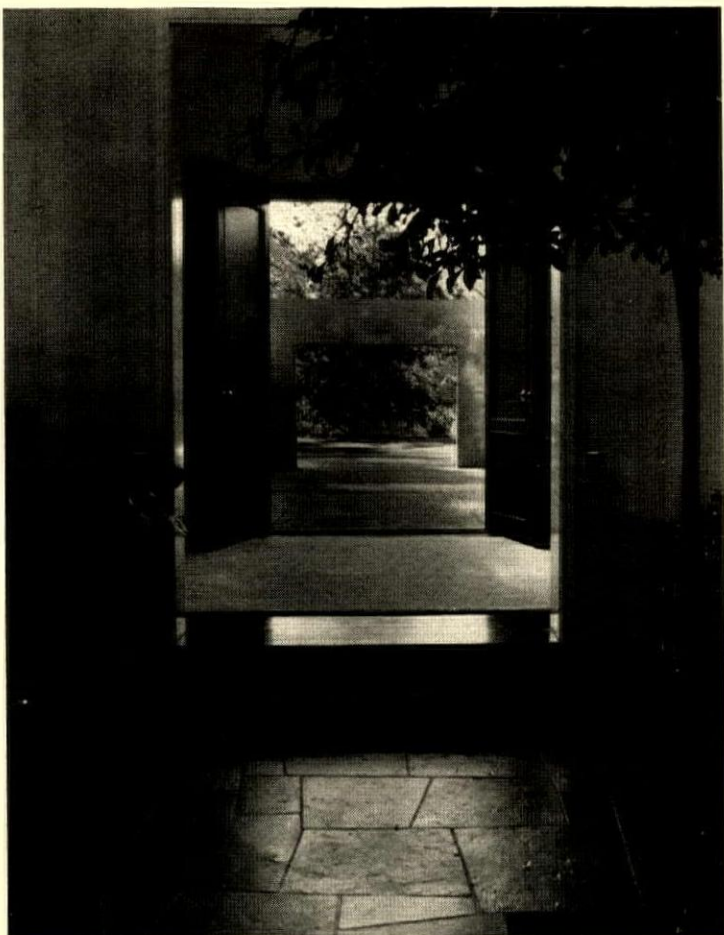
Photos: Roy Flamm



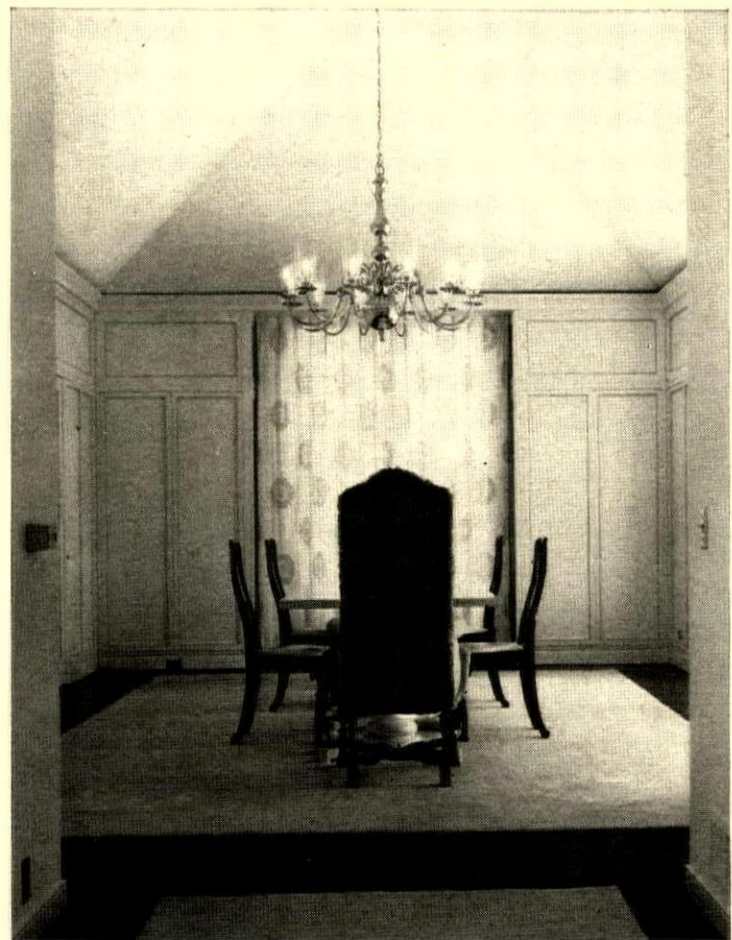
In patio-solarium, double dome skylights are supported on precast concrete units that act as supports, skylight curbs, and roof gutters. Clear plastic hopper windows just below the ceiling help ventilate the court.

MERIT AWARD

CLASS: over 2,800 sq. ft.
 ARCHITECT: Joseph Esherick
 BUILDER: Oscar L. Cavanaugh & Son
 LANDSCAPE ARCHITECT: Lawrence Halprin
 LOCATION: Hillsborough, Calif.



Impressive entry leads through concrete arch into forecourt, then through a foyer into the solarium. Slate floor needs little maintenance, and is a satisfactory dance floor when the room is used for entertaining.



Dining room is severely formal and traditional, in contrast to the informality of the court. The high ceiling follows the lines of the peaked roof to give a feeling of expansiveness to the paneled room.

continued



Photos: Julius Shulman

Close-to-the-water siting keeps the all-glass front concealed from the houses on either side. The grilled projections contain balconies and doors that open for ventilation. Siding is t&g cedar left to weather a natural grey

MERIT AWARD

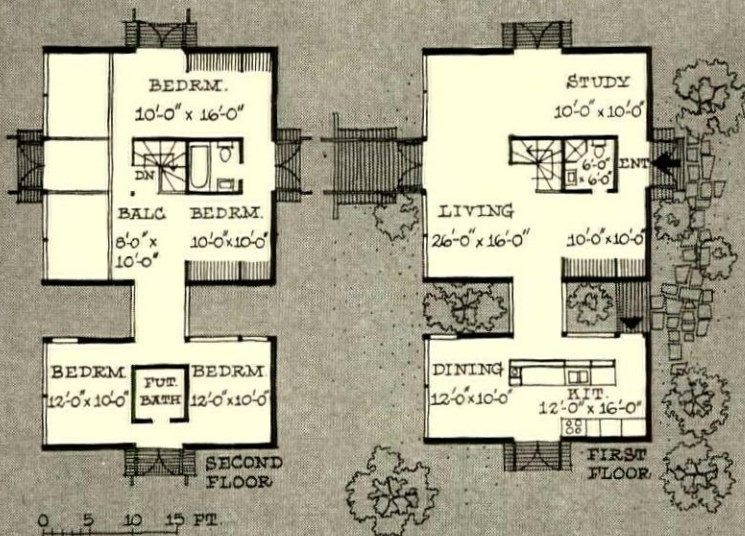
CLASS: 1,600 sq. ft. to 2,800 sq. ft.
 ARCHITECTS: Crites & McConnell
 BUILDER: Pat Hall
 LOCATION: Solon, Iowa

3. A box-framed house for less than \$10 per sq. ft.

This house started out as a vacation-house for a young family of four, but they were so happy with what the architects created that they switched, in mid-plan, and made it their year-round residence.

Architects Ray Crites and Richard McConnell are no strangers to the winners' circle (three awards last year, including an Honor), and are equally at home with tight budgets (this house has 2,053 sq. ft. and cost only \$19,200, plus land and fees). They poised the house on concrete piers well off the ground and close to the lakeshore to gain a commanding view as well as privacy from nearby houses. They got minimum foundation costs and an airy, floating appearance as extra dividends.

Essentially, the house is two simple boxes joined at both levels by a glass-walled passageway—a plan that impressed the jury. Also mentioned favorably: the separate kitchen entrance. Said one juror: "Houses with all their circulation through the front door must be for families who have no children running in and out."



Floor plan reveals the division of dining and kitchen space from the living area which the judges especially liked. Framing is on 6' and 10' bays, in a combination of post-and-beam and conventional construction.

Bedroom balcony overlooks the two-story living room. The doors at rear open onto a small balcony with no access (the catwalk leading to the balcony door was never floored because extra cross ventilation has not been needed).

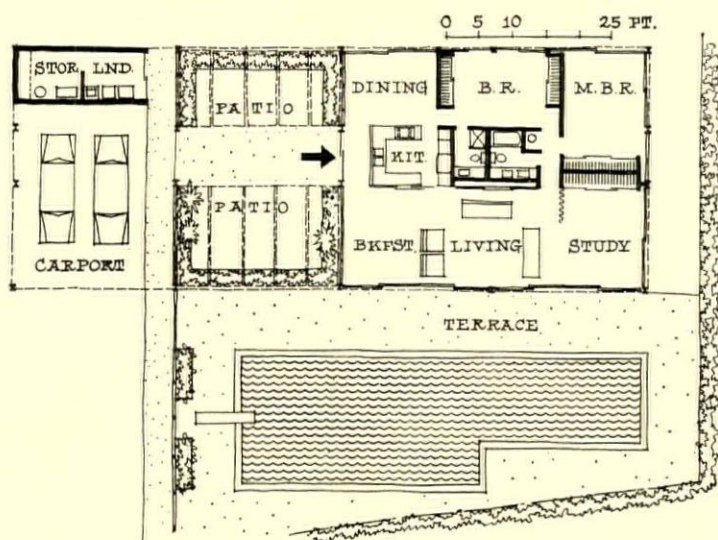
Living area has an almost unobstructed view, and its own deck cantilevered out from the front of the house. Natural-wood treatment of the exterior—including diagonal end-wall siding—is carried out inside.





Simple framing shows clearly in the view from the street, with I-beams running the 92' length of the house. Storage, heating, and laundry facilities are housed in the steel-walled structure at the rear of the carport.

Photos: Leland Y. Lee



Main living area is oriented to overlook the swimming pool, while the bedrooms face the hillside bank to the rear. The U-shaped kitchen is centrally located near two inside eating areas and two patios.

4. A glass pavilion framed in the tight discipline of steel

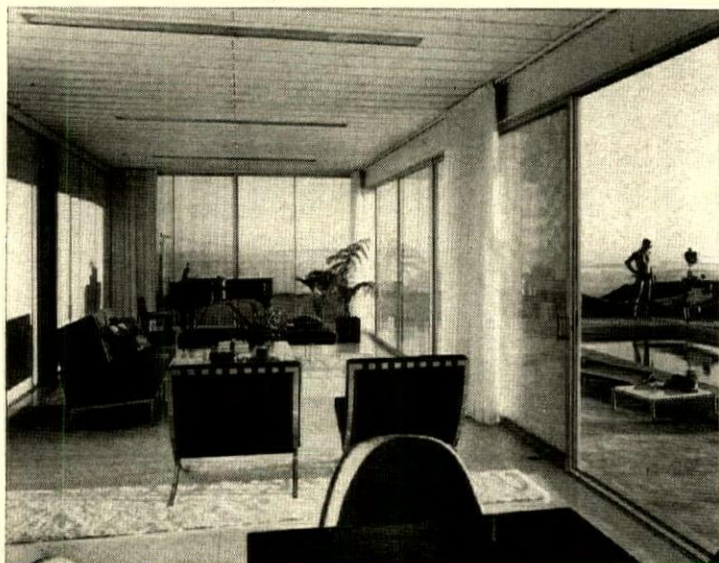
"Without doubt, the best steel house we have seen this year," said the jury.

Architect Pierre Koenig, one of the U.S.'s leading exponents of all-steel construction, glass-boxed his framing to satisfy the clients' wishes for an unlimited view from the hillside site and for close integration of the swimming pool into daily living.

The framing is simplicity itself. Four rows of columns, at 23' intervals, support 12" I-beams spanned by 18 ga. galvanized steel decking. Interior ceilings are acoustic board hung between the ribs of the decking, and obscure glass is used as a facing for ceiling lighting troughs.

HONORABLE MENTION

CLASS: 1,600 sq. ft. to 2,800 sq. ft.
 ARCHITECT: Pierre Koenig, AIA
 ENGINEER: William Porush
 LOCATION: Palos Verdes, Calif.
 BUILDER: Owner



Living area, facing south and west, is protected from the sun's glare by sliding light-blue louvered screens across the glass. Decor is essentially white, with blue kitchen cabinets and walnut paneling for contrasts.



Photos: Douglas M. Simonds

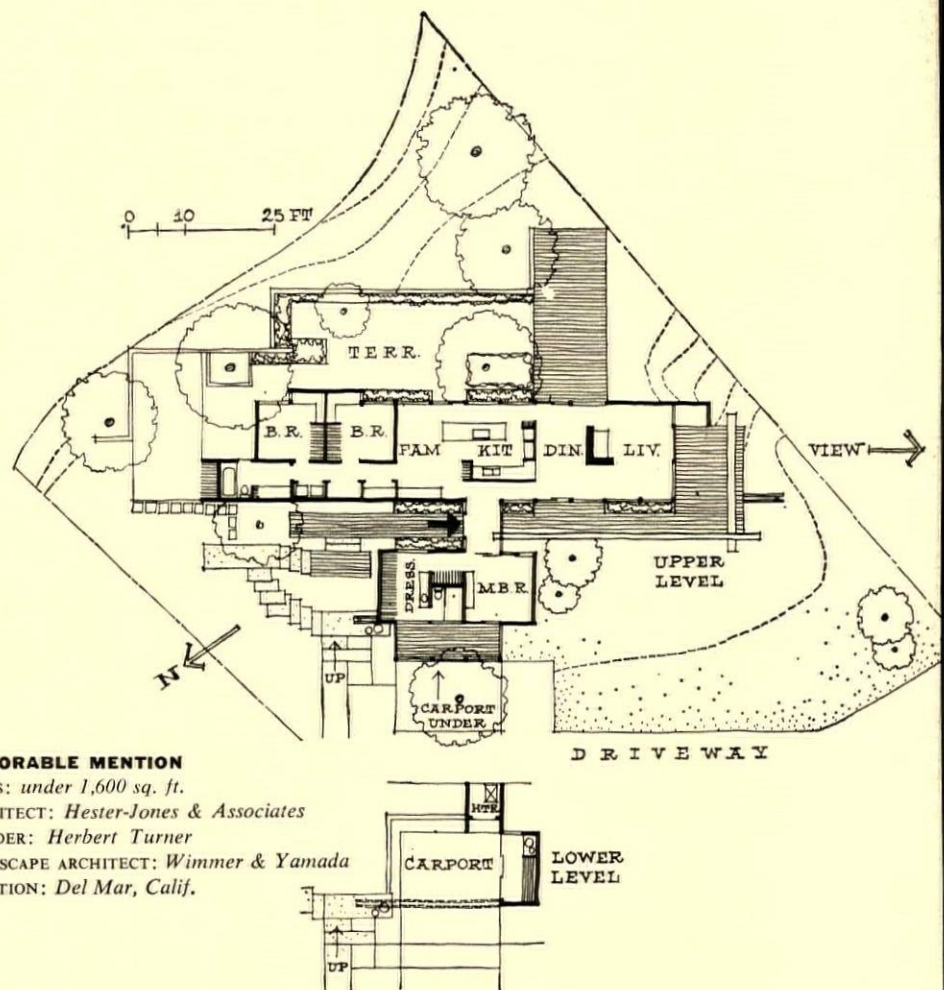
Two-story look results from projection of master bedroom suite (above carport) and living room wing (right) over the downhill slope. A future studio, with a private entrance, is planned for the space beneath the living area.

5. An all-wood hilltop house that nestles into its site

This house, set at the top of a steep site (it rises 30' in 100') looks at first like a multi-level. Actually, all of its living area is on a single floor, with only a carport and utility room beneath.

The jury was especially impressed by "the excellent handling of the wood decks, and the successful integration of existing trees and foliage with the entrance [photo below]." Architect Robert Jones used redwood siding and creosote-stained posts, beams, and trim to blend the house into the crown of the hill. Privacy for the master bedroom suite is gained by separating it from the rest of the house.

Broad entry is protected by 8' roof overhang, and existing trees were carefully preserved.



HONORABLE MENTION

CLASS: under 1,600 sq. ft.
 ARCHITECT: *Hester-Jones & Associates*
 BUILDER: *Herbert Turner*
 LANDSCAPE ARCHITECT: *Wimmer & Yamada*
 LOCATION: *Del Mar, Calif.*

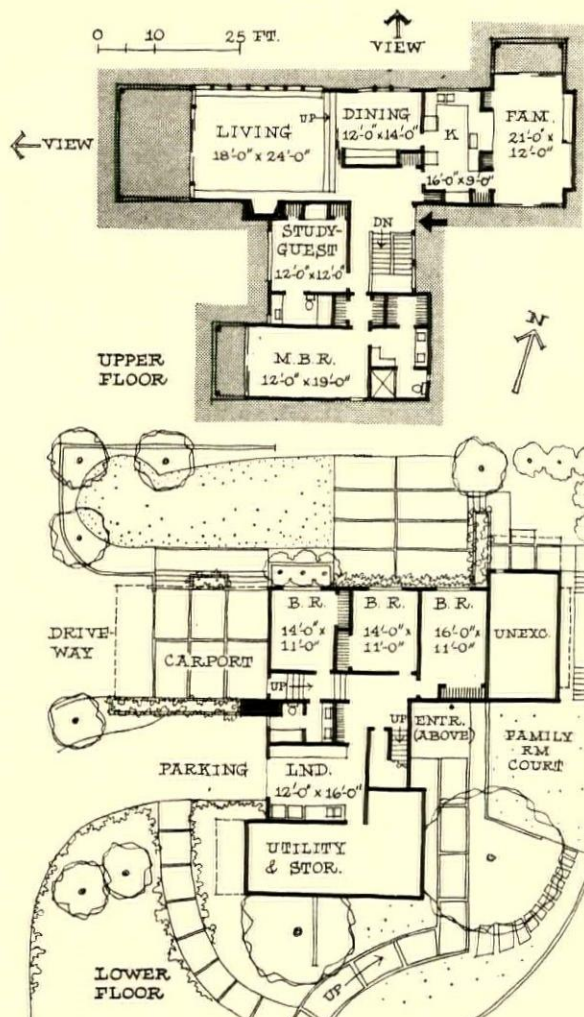
Ample decks and terraces extend the relatively small floor area (1,600 sq. ft.), and provide space for a future expansion of the family room and dining area. Redwood and pebbled concrete entry steps follow the curve of the hill.

continued



Generous open porches face the view, are accessible through sliding glass doors. Wide soffits, with tension cables at each end of the rooms, contain the thrust of the pitched roof, which has no collar beams.

Photos: T. F. Walters



HONORABLE MENTION

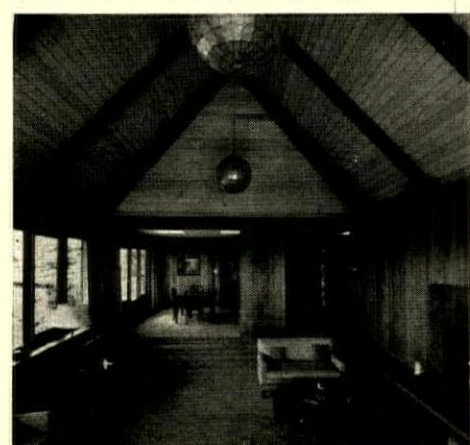
CLASS: over 2,800 sq. ft.
 ARCHITECT: Ian Mackinlay, AIA
 BUILDER: William Etchegoin
 LANDSCAPE ARCHITECT:
 C. Mason Whitney, ASLA
 LOCATION: Berkeley, Calif.

6. Great roofs shelter a house oriented to the west

This design solves a common problem: orientation to the afternoon sun. Sited on a small city lot in an older neighborhood, the house has a magnificent view—like all Berkeley views, due west. To retain the view, yet control the heat and glare, Architect Mackinlay extended his roof structure over and beyond porches extending from the upper level living room and master bedroom (see photo above).

A central entry hall gives excellent circulation to all the activity rooms on the upper level, completely separate from the children's bedrooms below. Surfaces are natural wood throughout.

Soaring triangles of the open ceilings and changing floor levels lend excitement to the interior space. This is the living-dining wing.



Major rooms for living and entertaining are on the upper floor, while children's bedrooms and utility areas are set into the hillside. The family room has both a view balcony to the north and a sun terrace to the south.

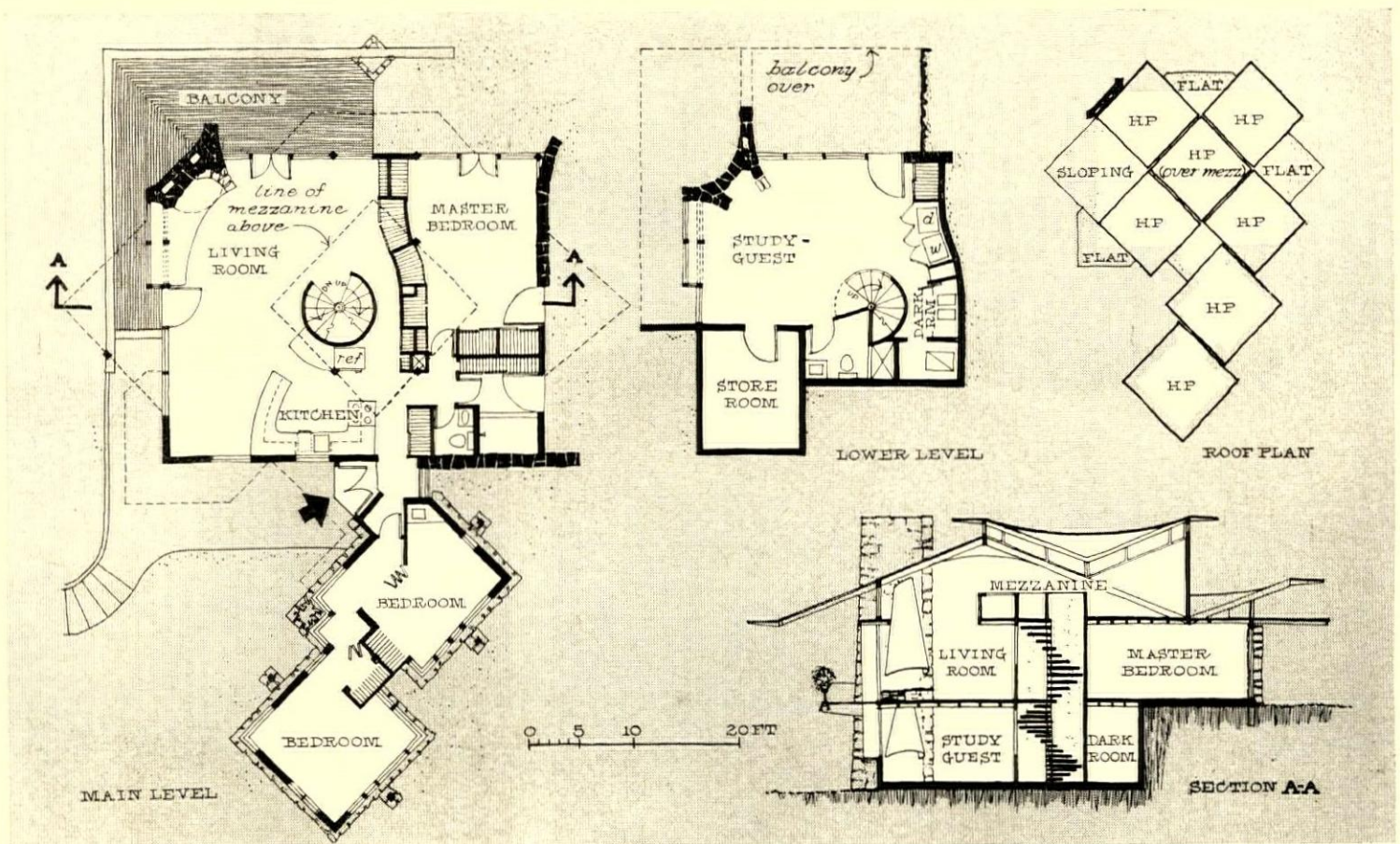
This unique house explores many new ideas in structure, materials use, and finishes

For example: The series of hyperbolic roofs over the flowing floor plan below are sprayed concrete. The design uses built-up wood girders to support a sundeck cantilevered 13' over the hillside. The stairwell is a circular silo of sprayed concrete with precast steps. It has insulated stone walls, radiant heat in the frame walls. These and other ideas—all adaptable to many other designs—are detailed on the next three pages.

The big and rambling house—nearing completion in Croton, N.Y.—was designed by its owner, Engineer Alfred Bush. Back in the 1930s, Bush, a construction-systems consultant, studied under Frank Lloyd Wright at Taliesin West for four years, and was profoundly influenced by Wright's constant search for new expressions and new potentials in materials and structural systems. Bush built this house to express and test his own ideas about the way materials can be (but rarely are) used in homebuilding. For example, says Bush: "In the house, I used concrete for what it is—our only permanent, plastic building material. With it, you can build any form or shape—and it is one of our cheapest materials."



CONSTRUCTION PHOTO shows roof sections being built up with sprayed concrete before frame walls are finished.



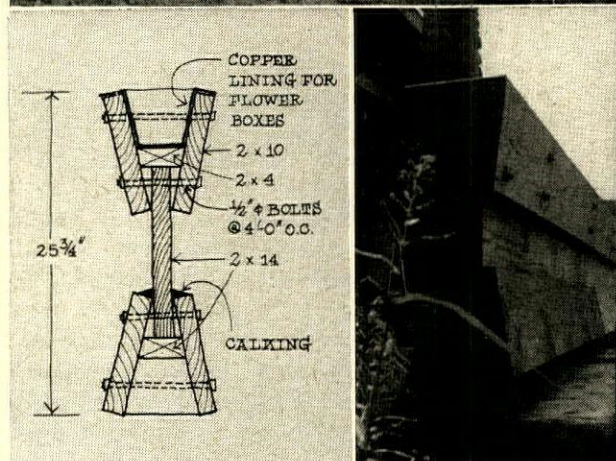
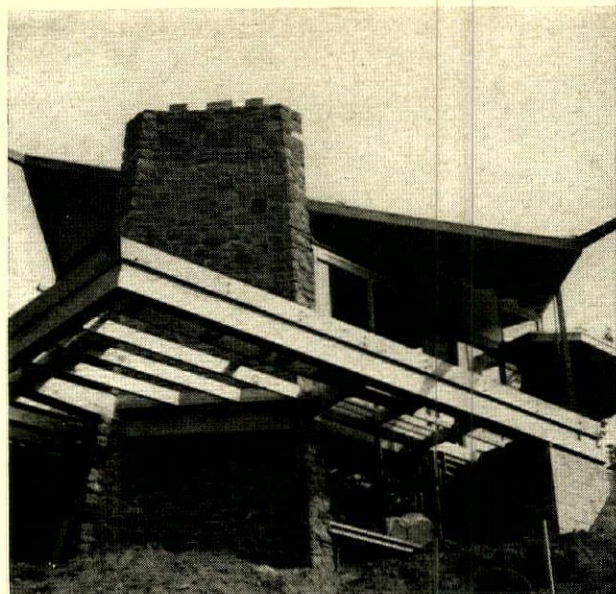
PLAN reflects the square modules of the complex roof system. Section shows three-level scheme.

continued

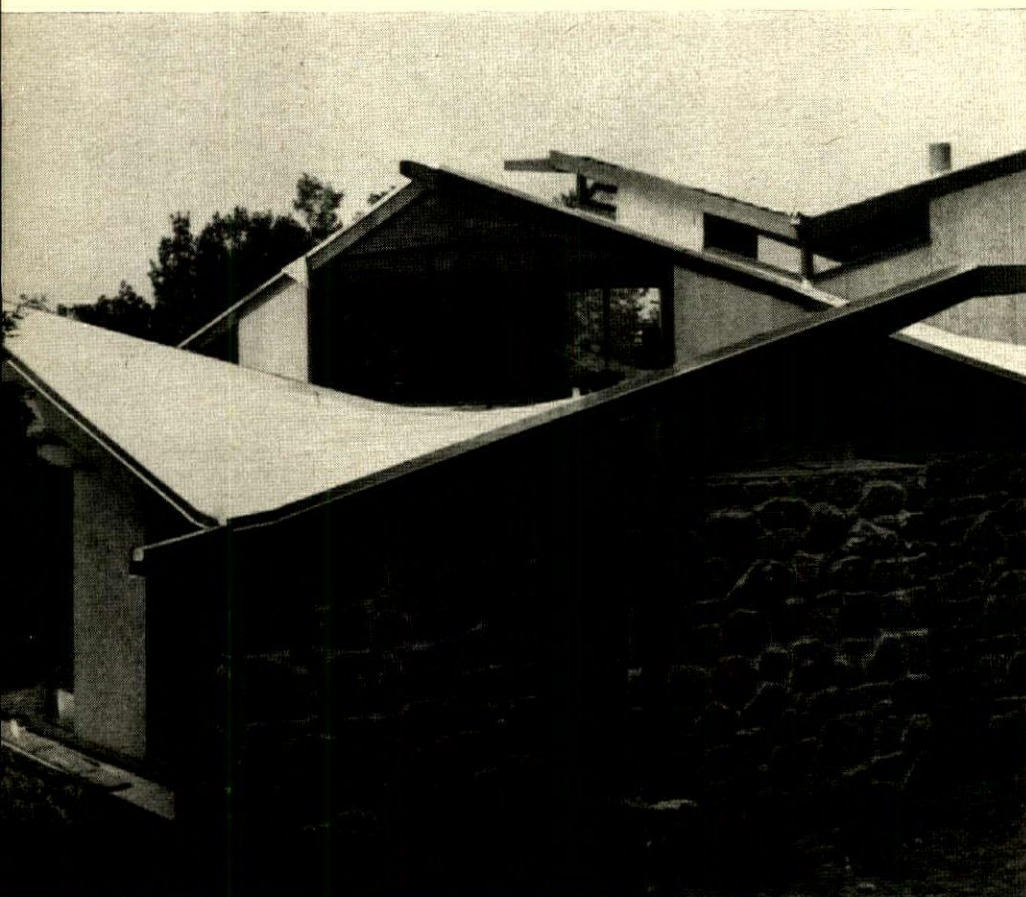
A wooden girder cantilevers 13' to support a sundeck, and a roof of seven concrete hyperbolic paraboloids was made without any formwork

The house juts out over a steep hill, and to carry the big sundeck Bush designed the wood girders detailed at the right. The girders are tied into the foundation at their uphill ends, get extra support from wooden tie beams let into the corners of the chimney. The beams cantilever out and join at the peak of the overhanging sundeck (see top photo, right). The top of the girder carries a copper planter.

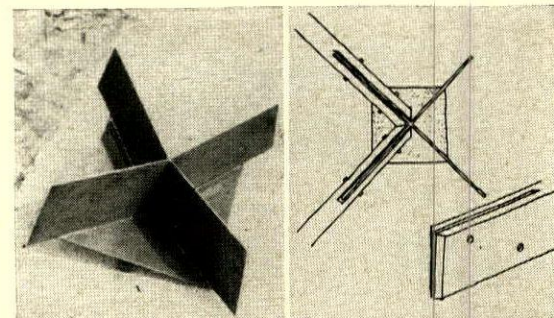
The h-p roofs were made in four steps: 1) 4x8 edge beams were positioned and joined at corners by the steel connector shown below right. A saw kerf in the ends of beams fits over the 1/8" steel plate and the joint is glued and bolted. 2) Steel-wire mesh with a paper backing (bottom picture at right), was stretched between edge beams and held by lag hooks screwed into the beams. 3) Concrete was sprayed both over and under the steel mesh with a gun that mixes cement, sand and water right at the nozzle. 4) When the concrete had set, foamed urethane planks, scored so they would follow the curves of the roof, were laid down on top for insulation. A surface of polyvinyl fluoride on roofing felt was then applied with a mastic, and joints sealed with a pressure sensitive tape.



SUNDECK under construction, top, shows how the deck joists tie into lower flange of girder. Girder (see section) is made of dimension lumber bolted together. Angled flange helps support deck joists, repeats use of angles used everywhere in the design. Copper flower boxes are in short lengths to let bolts through from flange.



FINISHED H-PS were surfaced with plastic film over foam insulation. Long spouts shoot rain away from house.



CONNECTOR PLATE for h-p edge beams is welded, 1/8" steel. Beams are kerfed; glued, and bolted to plate.

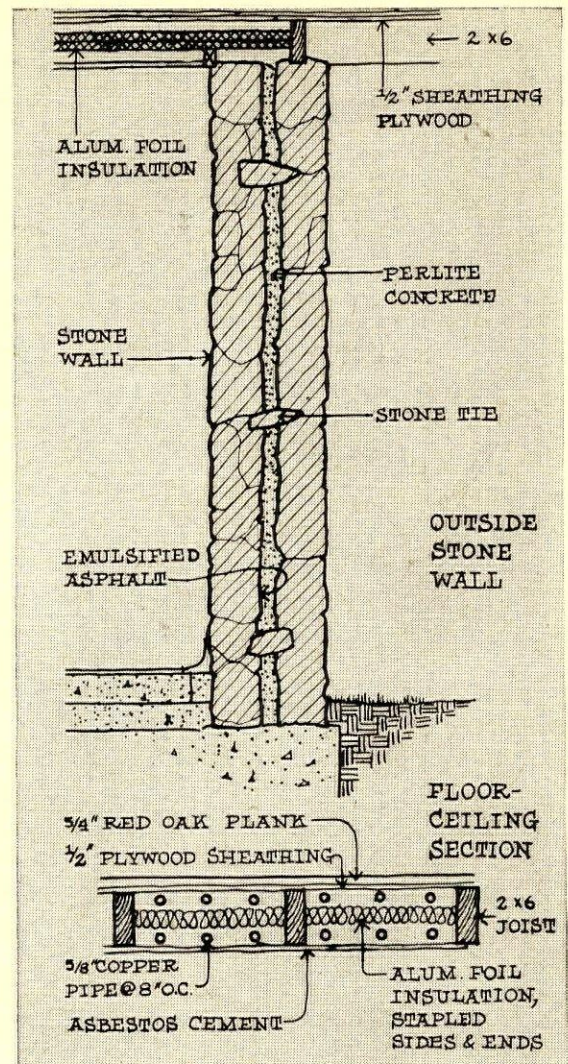


CONCRETING was done by one man. Gun has controls at nozzle, so mix could be altered as roof was built up.

Stone walls are insulated; radiant heat is used in walls, floor and ceiling; and the stairwell is concrete with precast steps

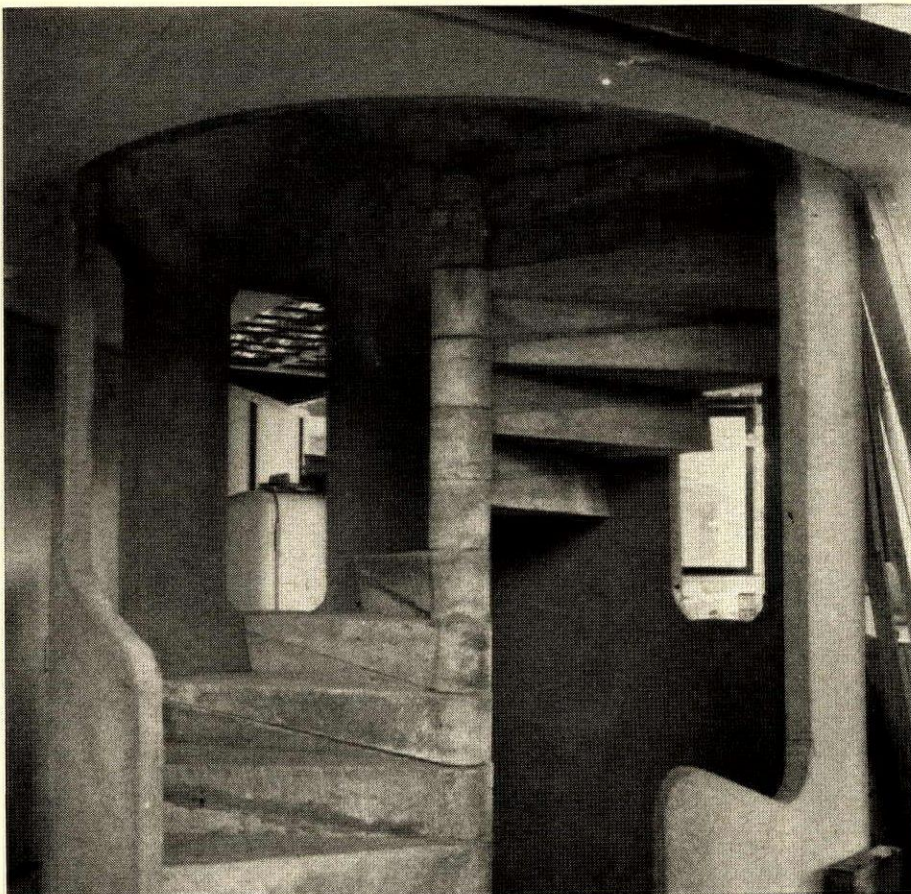
About a third of the outside wall in Bush's house is built of field stone insulated with lightweight perlite concrete as shown at right. Even with the insulated stone and wood walls, there was so much glass area that Bush's floor heating coils could not provide enough BTUH. So he put radiant coils in various sections of ceiling and walls to increase the total radiation. Wall and ceiling surfaces over these hot-water coils are asbestos-cement board. To reduce operating costs, Bush used a three-zone heating system; and to reduce first cost, he specified one circulating pump with solenoid valves to control each zone (usually there is a pump per zone).

Bush's silo-like stairwell, below, runs up through the house from basement to mezzanine library. The steps were cast in a wood form that custom Builder Andrew Zuccaro of Westchester made on the site. They are assembled on a slim steel column that fits the hole at the inner end of each step. The circular stairwell was made by spraying just over 1" of concrete on both sides of steel mesh placed around the steps. The openings in the stairwell let in light and air and serve as a design element. All interior concrete surfaces have the rough, as-sprayed texture.

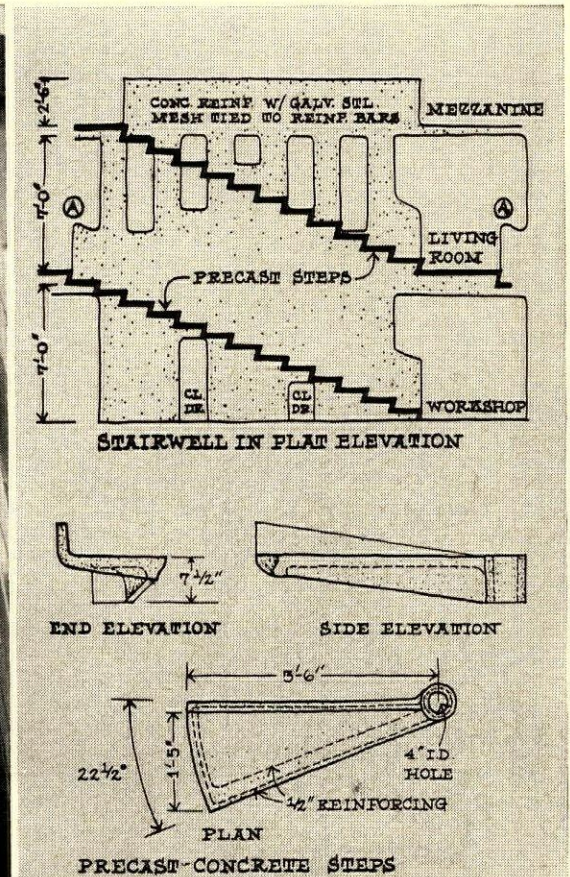


DETAILS show (top) how the stone walls are insulated. Inner half was built first, and asphalt applied as a vapor barrier. After the outer half was built, perlite was poured in the cavity. Ceiling-floor radiant heating (bottom) places coils on either side of aluminum foil insulation to make zoning more effective.

Photos: H&H staff

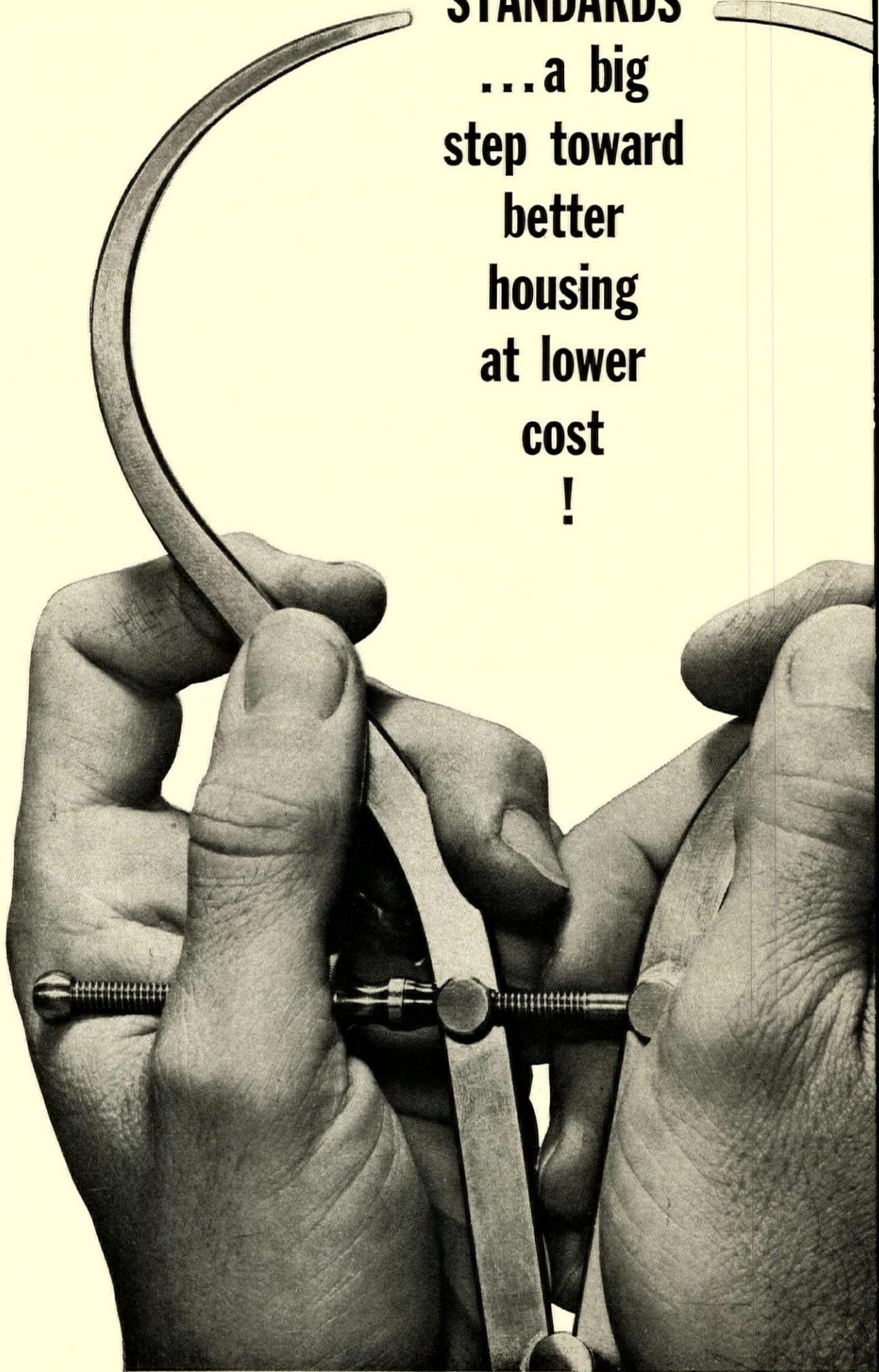


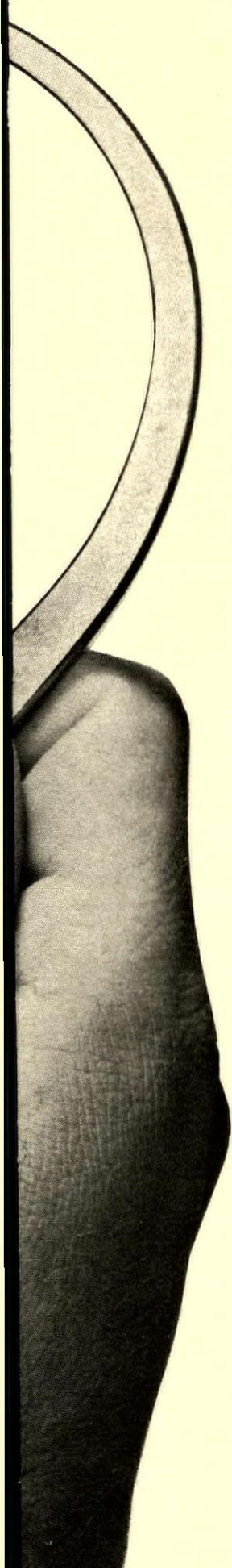
STAIRWELL has big opening on living room level, smaller doors at mezzanine and basement. Walls are 2 1/2" thick.



DETAILS show how the stairwell would look uncurled from circular form; and how precast steps are reinforced.

**NEW
LUMBER
STANDARDS**
... a big
step toward
better
housing
at lower
cost
!





Proposed new ALS standards will cut costs, eliminate waste and simplify builder specifications.

Under the present system, builders have been forced to subsidize the cost of unnecessary weight, unnecessary wood and unnecessary strength in dry lumber framing. Reform is overdue. The proposed new standard will cut the cost of efficient construction with dry lumber, reduce overbuilding and simplify the work of specification and buying.

The new ALS standard will:

- Establish for the first time definitive lumber sizes based on moisture content.
- Establish a realistic 1½" thickness for dry framing.
- Require 15% average moisture content with 19% maximum for dry lumber.
- Provide clear identification of dry lumber.
- Require green lumber sizes to allow for shrinkage to the equivalent size and strength of dry.

The great weakness of the present system is the requirement that dry lumber be manufactured oversize to satisfy span tables based on the lesser strength of green lumber. The new standards will eliminate this wasteful practice and permit better construction at lower cost.

Your support is needed

The new standards are being circulated now as revised Simplified Practices Recommendation 16-53. Although Weyerhaeuser is one of the largest producers of green lumber, we support the revised SPR 16-53 in the best interests of home builders. We strongly urge that you write today to the Department of Commerce, Washington 25, D. C., expressing your support. Every letter counts.



Weyerhaeuser Company
Wood Products Division
Tacoma 1, Washington

RESIDENTIAL AIR CONDITIONING WORKSHEET

I - SHADED GLASS AREA USE SHADE LINE GRAPH:

GLASS FACING	FEET OF ROOF OVERHANG	"D" FROM SHADE GRAPH	VERTICAL LENGTH OF WALL IN SHADE	DISTANCE FROM TOP OF GLASS TO BOTTOM OF EAVE	HEIGHT OF GLASS IN SHADE	LENGTH OF GLASS	AREA OF GLASS IN SHADE
ALL GLASS FACING NORTH IS CONSIDERED IN SHADE							
NORTH OR NORTHEAST	X				X		35.0
EAST OR SOUTHEAST	2'	0.8	1.6'	1'	0.6	16	9.6
SOUTH OR SOUTHWEST	2'	4.2	8.4	1'	7.4	X	63.0 (ALL IN SHADE)
WEST OR NORTHWEST	2'	0.8	1.6	1'	0.6	10	6.0
TOTAL AREA IN SHADE [ENTER IN II]							113.6 SF

FROM SHADE MAP

II - HEAT GAIN THRU GLASS:

GLASS FACING	TOTAL AREA OF GLASS	GLASS IN SHADE (SEE I)	GLASS NOT IN SHADE	HEAT GAIN FROM TABLE A
EAST OR SOUTHEAST	50.5	9.6	40.9	2300
SOUTH OR SOUTHWEST	63.0	63.0	0	0
WEST	31.5	6.0	25.5	1480
SHADED	ENTER TOTAL FROM I		113.6	2780
TOTAL HEAT GAIN THROUGH GLASS =				6560

FROM TABLE A

III - SUBTOTAL OF SENSIBLE HEAT GAIN:

HEAT GAIN FROM:	AREA	HEAT GAIN FROM GRAPH
DOORS	40	560
APPLIANCES		1,200
OCCUPANTS (NO. X300 EACH)	4	1200
GLASS (ENTER TOTAL FROM II)		6560
SENSIBLE SUBTOTAL		9520

FROM GRAPH 2

III-A - FHA MAXIMUM ALLOWABLE HEAT GAIN FROM GRAPH 4

FHA MAXIMUM ALLOWABLE HEAT GAIN FROM GRAPH 4	23100 BTUH
MINUS SENSIBLE HT. GAIN SUB TOTAL FROM III	9520
MAXIMUM ALLOWABLE SENSIBLE GAIN THRU CLGS, WALLS & FLOORS	13580

FROM GRAPH 4

IV - SENSIBLE HEAT GAIN THRU CEILINGS, WALLS & FLOORS:

BUILDING SECTION	AREA	HEAT GAIN FROM GRAPHS 2 & 3
CEILINGS R-13	1500 SF	3600
WALLS R-10	1060 SF	8200
FLOORS OVER OPEN AREAS R-10	1500 SF	none
GAIN THRU BUILDING SECTIONS		11800 BTUH

FROM GRAPH 3

JOB NAME _____
ADDRESS _____
DATE _____

TOTAL FROM SECTION IV	11800
SENSIBLE HEAT GAIN	21320
MULTIPLIED BY FACTOR FROM TABLE C OR D	1.47
CALCULATED EQUIPMENT SIZE	31340 BTUH

FROM GRAPH 2

III-A - FHA MAXIMUM ALLOWABLE HEAT GAIN FROM GRAPH 4

FHA MAXIMUM ALLOWABLE HEAT GAIN FROM GRAPH 4	23100 BTUH
MINUS SENSIBLE HT. GAIN SUB TOTAL FROM III	9520
MAXIMUM ALLOWABLE SENSIBLE GAIN THRU CLGS, WALLS & FLOORS	13580

IV - SENSIBLE HEAT GAIN THRU CEILINGS, WALLS & FLOORS:

BUILDING SECTION	AREA	HEAT GAIN FROM GRAPHS 2 & 3
CEILINGS R-19	1500 SF	2420
WALLS R-11	1060 SF	3460
FLOORS OVER OPEN AREAS R-10	1500 SF	none
GAIN THRU BUILDING SECTIONS		5880 BTUH

FROM TABLE C

JOB NAME _____
ADDRESS _____
DATE _____

GLASS (ENTER TOTAL FROM II)	9520
SENSIBLE SUBTOTAL	9520
TOTAL FROM SECTION IV	5880
SENSIBLE HEAT GAIN	15400
MULTIPLIED BY FACTOR FROM TABLE C OR D	1.47
CALCULATED EQUIPMENT SIZE	22600 BTUH

© NATIONAL MINERAL WOOL INSULATION ASSOCIATION, NEW YORK, N.Y.

It looks more complex than an income tax form, but this new system is

The simplest way yet to figure cooling loads

Up to now, figuring out what it takes to air condition a house or apartment has been such a complex job it is small wonder so many are under or over cooled. The National Mineral Wool Insulation Assn. has just devised a simplified system which promises to help builders do a much more accurate job—thus not only complying with FHA's Minimum Property Standards but also reducing their total building costs by using the optimum combination of insulation and cooling capacity. The new system is explained in detail in the association's new *Residential Air Conditioning Calculator*, from which the worksheet shown above is taken.

Here's how the system works, beginning with section I (above):

I. Shaded glass area is figured from working drawings and D factors (circled), taken from shade map opposite, top left.

II. Heat gain through glass is figured by subtracting the shaded glass area (from I above) from total glass area in the house and multiplying by factors from table A, opposite. This example is for single glass.

III. Subtotal of sensible heat gain is figured by adding heating gain through glass (from II), from appliances (a fixed 1,200 BTUH), from people (300 BTUH per occupant) and through doors (from graph 2).

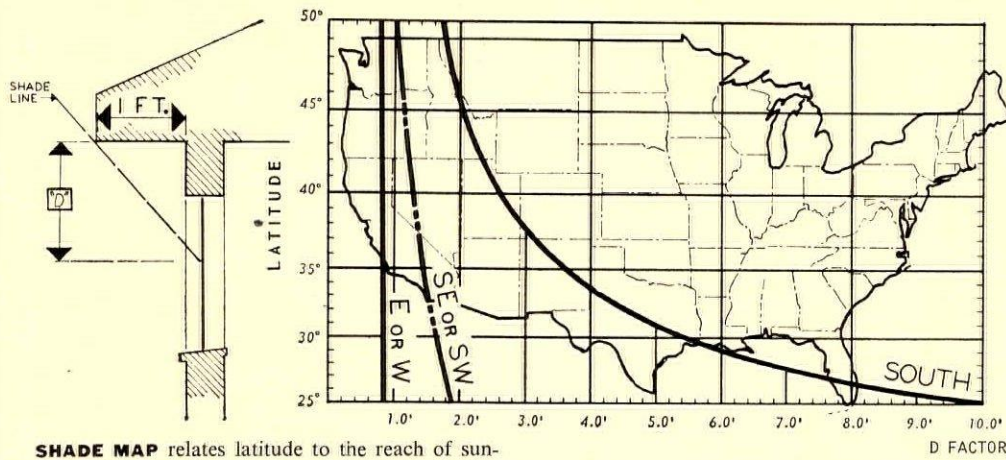
III-A. Maximum allowable heat gains through walls, floor, and ceiling are determined by subtracting subtotal III from maximum allowable heat gain from graph 4, opposite—which charts FHA's maximum allowable heat gain for various size houses.

IV. Sensible heat gain through non-glass areas, which depends on the R factor of the insulation, is taken from graphs 2 and 3.

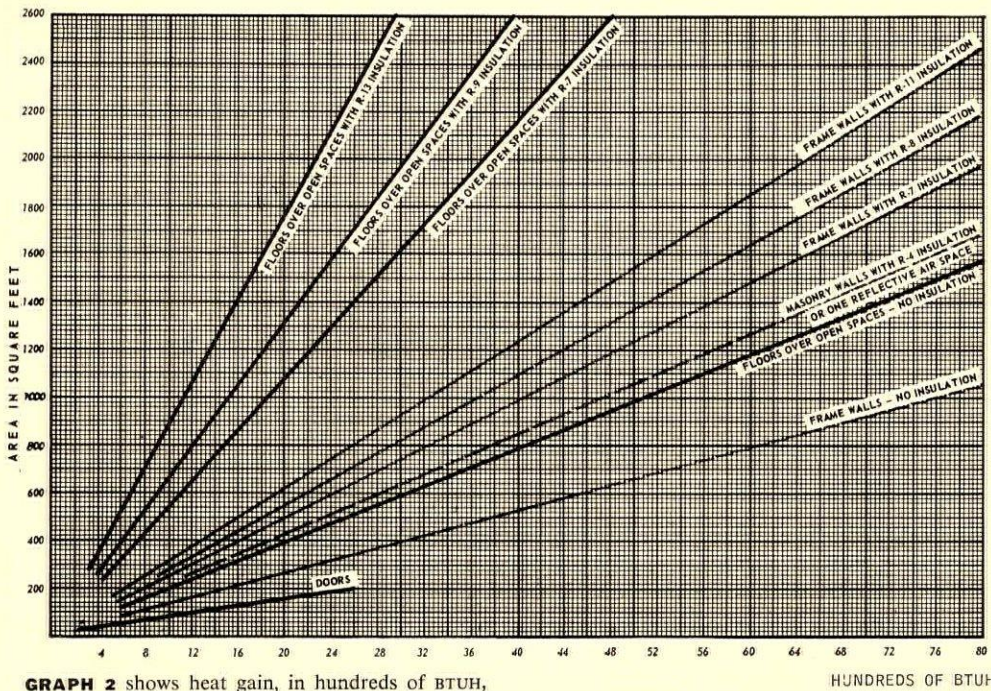
Finally, total sensible heat gain (at the right of IV on the worksheet) is multiplied by a factor taken from table C—air-cooled units—opposite, which takes into account the type of cooling to be used and the design temperature of the area. (Table D, not shown, gives factors to be used for evaporative cooling units.) The result is "calculated equipment size"—the size air conditioner needed.

Part of a worksheet (shown at the bottom of illustration above) shows how equipment size can be reduced by increasing insulation.

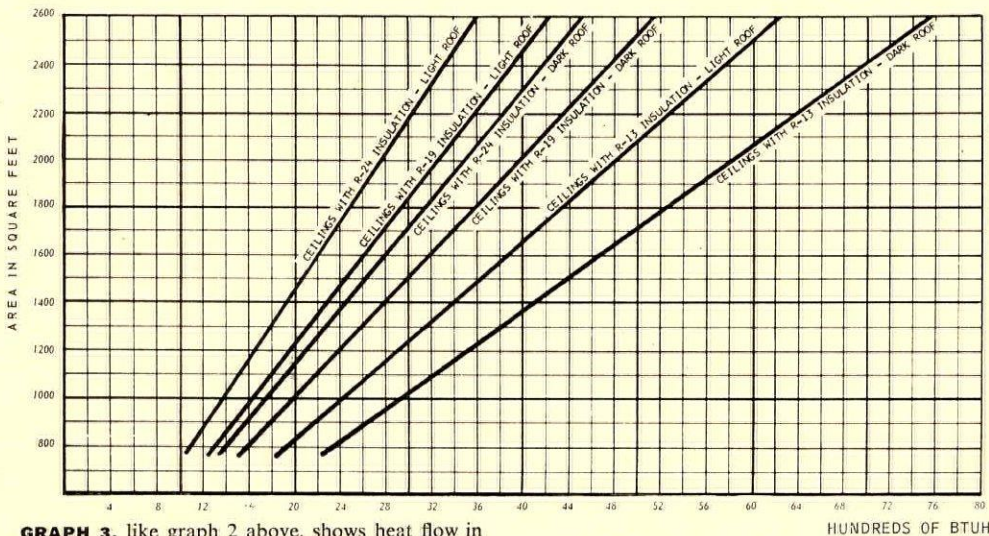
Eight versions of the calculator are being produced for various areas of the country. The graphs shown at right are calibrated for a design temperature of 95F. FHA and NAHB have endorsed the system, and instructions and worksheets are available for \$2.50 from the National Mineral Wool Insulation Assn., 1270 Sixth Ave., New York City 20.



SHADE MAP relates latitude to the reach of sunlight down a wall under an overhang. In Dallas, for example, the sun at noon strikes 4.2' down a south wall with a 1' overhang. These D factors are used in section I of the worksheet opposite.



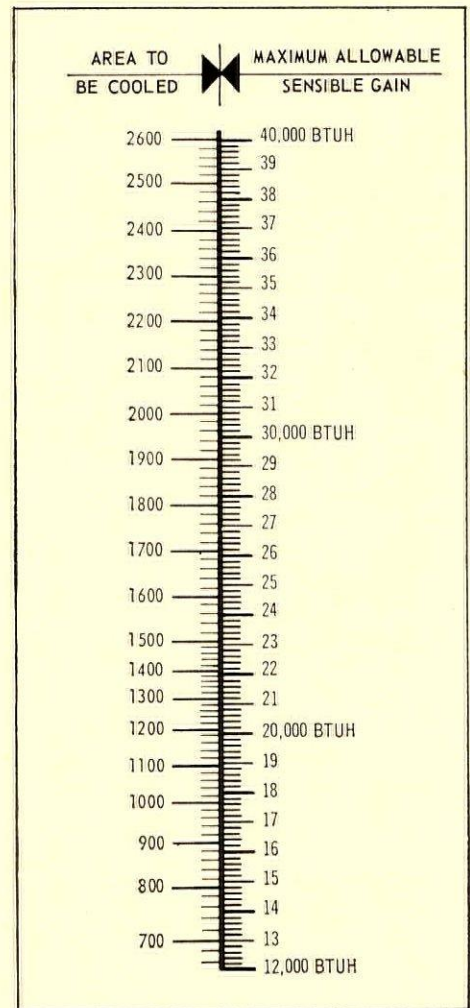
GRAPH 2 shows heat gain, in hundreds of BTUH, for areas of floors, walls, and doors. R factors—printed on all batts—are a measure of insulation thickness and effectiveness (the higher the R factor, the more effective the insulation).



GRAPH 3, like graph 2 above, shows heat flow in hundreds of BTUH through various types of ceiling and roof construction. Ceiling heat gain is critical, so insulation here is typically heavier (and has a higher R-factor) than in walls.

HEAT GAIN - [SINGLE GLASS]											
GLASS AREA (sq. ft.)	WITH VENETIAN BLINDS OR DRAPERIES					NO SHADING AT ALL					
	N. or SHADED	NE or NW	E or W	SE or SW	SOUTH	AWNINGS (ANY DIRN.)	N. or SHADED	NE or NW	E or W	SE or SW	SOUTH
2	50	80	110	100	70	60	60	130	180	160	100
4	100	170	230	200	130	120	130	280	380	320	200
6	150	250	340	300	200	180	200	390	540	460	300
8	200	330	450	400	270	240	260	520	720	640	400
10	240	420	560	500	340	300	320	640	900	800	500
12	290	500	680	600	400	370	390	770	1090	950	590
14	340	580	790	690	470	430	460	900	1270	1110	690
16	390	660	900	790	540	490	520	1030	1450	1270	790
18	440	750	1020	890	600	550	580	1160	1630	1430	890
20	490	830	1130	990	670	610	650	1290	1810	1590	990
22	540	910	1240	1090	740	670	720	1420	1990	1750	1090
24	590	1000	1360	1190	800	730	780	1550	2170	1910	1190
26	640	1080	1470	1290	870	790	840	1680	2350	2070	1290
28	690	1160	1580	1390	940	850	910	1810	2530	2230	1390
30	740	1240	1700	1490	1000	920	980	1940	2720	2390	1490
32	780	1320	1810	1590	1070	980	1040	2070	2900	2540	1590
34	830	1410	1920	1690	1140	1040	1100	2190	3080	2700	1690
36	880	1490	2030	1790	1210	1100	1170	2320	3260	2860	1790
38	930	1580	2150	1890	1270	1160	1240	2450	3440	3020	1890
40	980	1660	2260	1990	1340	1220	1300	2580	3620	3180	1990
42	1030	1750	2370	2090	1410	1280	1360	2710	3800	3340	2090
44	1080	1830	2490	2190	1480	1340	1430	2840	3980	3500	2190
46	1130	1910	2600	2290	1540	1400	1500	2970	4160	3660	2290
48	1180	1990	2710	2390	1610	1460	1560	3100	4340	3820	2390
50	1220	2080	2820	2490	1680	1520	1620	3220	4520	3980	2490

TABLE A shows the heat gain in BTUH for areas of single glass. In the example on the facing page (section II) all the windows are assumed to have drapes or venetian blinds. A similar table covers heat gain through double glass.



GRAPH 4 simply charts FHA's maximum allowable heat gain for any size house (i.e., area to be cooled) as spelled out in its Interim Revision No. 14 to the MPS for Insulation, dated Dec. 11, 1962.

TABLE C AIR COOLED UNITS		PRINCIPAL LOCATION OF DISTRIBUTION SYSTEM			
DESIGN INDOOR TEMP. SWING (F)	DESIRED INDOOR TEMP.	DUCTS IN ATTIC SPACES WITH 1" INSULATION	DUCTS IN ATTIC SPACES WITH 2" INSULATION	FLOOR SLABS, INSULATED DUCTS IN ENCL. CRAWL SPACES, UNCOND. DITIONED BASEMENTS or PURRED-IN SPACES	DUCTS IN CONDITIONED SPACES (No gain in the duct system included)
		90 F.	3°	1.46	1.39
	4½°	1.25	1.19	1.14	1.09
	6°	1.05	1.00	0.96	0.91
95 F.	3°	1.34	1.47	1.41	1.34
	4½°	1.33	1.27	1.21	1.16
	6°	1.13	1.08	1.03	0.98
100 F.	3°	1.62	1.55	1.48	1.41
	4½°	1.41	1.37	1.30	1.24
	6°	1.22	1.17	1.11	1.06
105 F.	3°	1.74	1.67	1.59	1.51
	4½°	1.52	1.45	1.39	1.32
	6°	1.29	1.24	1.18	1.12

TABLE C provides factors that the total heat-gain calculation is multiplied by to determine equipment size. These factors reflect the calculated design temperature and the type of construction in the house.

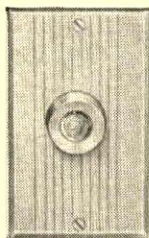


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— designed just for your decor

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now — choose your
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Now, chandelier living—plus the dramatic decorator effects of modern dimming—are yours in Moe Light's special Fall offer. For a limited time, choose your chandelier from among seven attractive stylings and receive a \$9.95 value dimmer free. A quality electronic control, the dimmer subtly matches lighting to your every living mood—from candlelight dining to a party's brightness—and it fits any standard single switchbox, too.

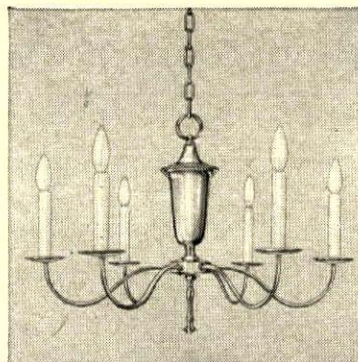
You'll love the drama, the graciousness a chandelier and dimmer give your dining room, foyer or bedroom. Visit your Moe Light Showroom soon for full details on this special offer.

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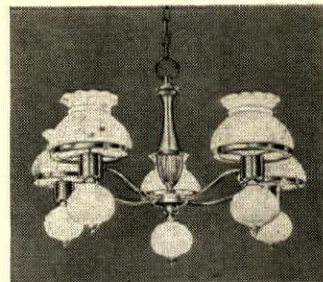
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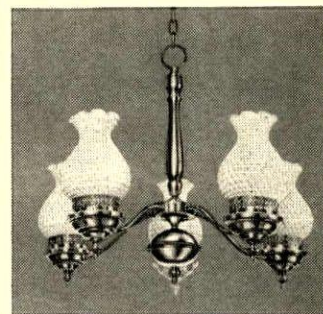
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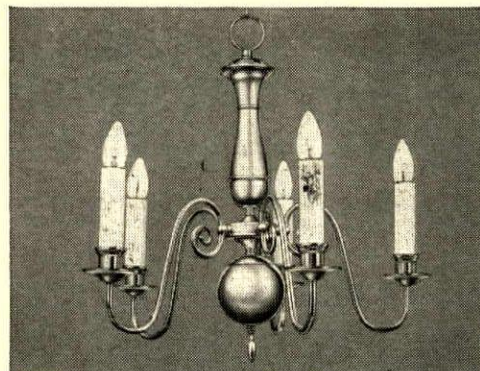
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Middletown: Middletown Elec. Sup. Co.
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Stamford: Elm Elec. Sup. Co.
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McDonald Elec. Supply
Ft. Myers: Brockman Elec. Supply
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Major Elec. Supply
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Jax Elec. Supply Co.
Key West: Consolidated Southern Supply
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Miami: Graybar Elec. Co. Inc.
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Orlando: Hughes Supply Co.
Graybar Elec. Co. Inc.
Panama City: Seaco Elec. Supplies, Inc.
Pensacola: Alston Elec. Supply
St. Petersburg: Graybar Elec. Co. Inc.
Hughes Supply Co.
Seminole Elec. Supply Co.
Sarasota: Brockman Elec. Supply
Hughes Supply Co.

Tallahassee: Union Supply Co.
Tampa: Atlas Lighting Inc.
Electric Supply Co. Inc.
Graybar Elec. Co. Inc.
Seminole Elec. Supply Co.
Venice: Hughes Supply Co.
West Palm Beach: Consolidated Southern Sys.
Graybar Elec. Co. Inc.

GEORGIA

Atlanta: Noland Co. Inc.
Graybar Elec. Co. Inc.
Electrical Wholesalers
Albany: Albany Elec. Supply
Augusta: Georgia Elec. Supply
Brunswick: Glynn Electric Supply
Columbus: P & W Elec. Supply
Macon: Noland Co. Inc.
Lowe Elec. Co.
Marietta: Noland Co. Inc.
Rome: Wholesale Elec. Supply
Valdosta: Union Supply Co.

HAWAII

Honolulu: Honolulu Elec. Products Co.

IDAHO

Boise: Graybar Elec. Co. Inc.
Idaho Falls: Electrical Wholesale

ILLINOIS

Aurora: Electric Supply Corp.
Bloomington: Springfield Elec.
Chicago: Active Elec. Supply
Bonny Elec.
Eteenge Elec. Sup. Co.
Illuminating Elec.
Majestic Elec. Sup. Co.
Revere Elec. Sup.
Wholesale Elec. Sup.
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Crystal Lake: Northern Illinois Elec. Sup.
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De Kalb: Crescent Elec.
Forest Park: Bonny Elec. Supply Co.
Freeport: Koyon Elec.
Joliet: Joliet Elec. Sup. Co.
Kankakee: Lang Elec. Sup. Co.
La Salle: La Salle Elec. Supply
Mattoon: Mattoon Elec.
Melrose Park: Graybar Elec. Co. Inc.
Mount Prospect: Northwest Elec. Sup.
Peoria: Crescent Elec.
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Kiefer Elec.
Quincy: Heintz Elec.
Rockford: Forest City Elec.
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Springfield: Springfield Elec. Co.
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Davenport: Crescent Elec. Sup. Co.
Des Moines: Graybar Elec. Co. Inc.
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Dubuque: Crescent Elec.
Fort Dodge: Lighting Fixture Showroom
Marshalltown: Marshall Electric
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Ottumwa: Crescent Elec.
Sioux City: Warren Electric
Waterloo: Kies Elec.

KANSAS

Great Bend: Wedell, Inc.
Hutchinson: Sunflower Elec.
Liberal: Sunflower Elec.

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Lexington: Graybar Elec. Co. Inc.
Louisville: Graybar Elec. Co. Inc.
Hoffman Lighting
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Lafayette: Interstate Elec. Co.
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Plaquemine: Reulet Elec. Supply Co.
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Forestville: Burgess Elec. Supply Co.
Hagerstown: Noland Co. Inc.
Rockville: Columbia Lighting Fixture Co.
Salisbury: Central Elec. Sup. Co. Inc.

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Boston: Gem Elec. Supply Co.
Brookton: Columbia Elec. Sup. Co.
Lowell: Middlesex Supply Co.
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Quincy: Granite City Elec.
Springfield: Eastern Elec. Sup.
Worcester: Keystone Elec. Co. Inc.

MICHIGAN

Ann Arbor: Madison Elec. Co.
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Grand Rapids: Ackerman Elec.
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Holland: Holland Elec.
Kalamazoo: L. R. Klose Elec. Co.
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Muskegon: Bell Elec.
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MINNESOTA

Mankato: S. M. Supply
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Meridian: Southern Elec. Supply Co.

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Cape Girardeau: Cape Elec. Supply Inc.
St. Louis: Western Extralite Inc.

MONTANA

Great Falls: Falls Supply

NEBRASKA

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Las Vegas: Ingram Hardware Sup. Co.
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Hackensack: Capital Lighting
North Woodland: Vallesse Elec.
Phillipsburg: Lady Elec. Co.
Trenton: Griffith Elec. Sup. Co.
Woodbridge: A-B-D-Elec. Supply Co.

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Buffalo: Davis Elec. Supply
Wehle Elec. Co.
Shanon Elec.
East Patchogue: Brown Lighting Fixture
Elmira: Wehle Elec. Co.
Glens Falls: Glens Falls Elec.
Gloversville: Montana Elec. Sup.
Liberty: Liberty Elec. Supply
Middletown: Great Elec. Sales
Rochester: Rowe Elec. Sup. Co.
Wehle Elec. Co.
New Rochelle: Max Goldman, Inc.
Poughkeepsie: Electra Sup. Co. Inc.
Syosset, L. I.: Lighting Studios, Inc.
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NORTH CAROLINA

Asheville: Graybar Elec. Co. Inc.
Charlotte: Union Supply & Elec. Co.
Durham: Electric Supply Co.
Noland Co. Inc.
Gastonia: Bryant Supply Co.
Hickory: Bryant Supply of Hickory
High Point: Electric Supply Co.
Rocky Mount: Eastern Elec. Supply
Salisbury: Electric Wholesale Co.
Sanford: Longley-McKensie
Statesville: Electric Wholesalers
Wilson: Electric Supply Co.
Winston-Salem: Graybar Elec. Co. Inc.
Noland Co. Inc.

NORTH DAKOTA

Minot: John Iverson Co.

OHIO

Akron: The Hardware & Supply Co.
Canton: Sommer Elec. Co.
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Graybar Elec. Co. Inc.
Cincinnati: B and B Elec. Co.
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Graybar Elec. Co. Inc.
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Dayton: Stanley Elec. Supply Co.
Lima: State Elec. Supply Corp.
Massillon: The Hardware & Supply Co.
Springfield: W-W Elec. Co.
Toledo: Loeffler Elec. Co.
Warren: Sommer Elec. Co.

OKLAHOMA

Oklahoma City: Hunzicker Bros.

OREGON

Portland: Stubbs Elec.

PENNSYLVANIA

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Erie: Carpenter Elec. Supply
Jeannette: Jeannette Elec. Supply
Harrisburg: Schaedler Bros.
Hazleton: Power Elec. Supply
Lancaster: A. A. Elec. Sup. Co.
Lansdale: Moats & Taylor
New Castle: Bruce Elec. Supply
Philadelphia: Rose Elec. Sup. Co.
Scranton: Lewis & Reif Inc.
State College: Whitehill Elec. Supply
Washington: Ward Elec. Supply Co.

RHODE ISLAND

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Anderson: Sullivan Hardware
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Greenville: Sullivan Hardware
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SOUTH DAKOTA

Aberdeen: McLaughlin Elec.

TENNESSEE

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Mills & Lupton
Clarksville: Clarksville Elec. & Plumb. Co.
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Jackson: Townsend Hardware Co.
Johnson City: Noland Co. Inc.
Kingsport: Wholesale Elec.
Knoxville: Graybar Elec. Co. Inc.
Roden Elec. Supply
Memphis: W. B. Davis Elec. Sup. Co.
Graybar Elec. Co. Inc.
Nashville: Hermitage Elec. Sup. Co.
Oak Ridge: Roden Elec. Supply

TEXAS

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Austin: Graybar Elec. Co. Inc.
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Bellaire: M & M Lighting Inc.
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Dallas: Rogers Electrical Supply Co.
Graybar Elec. Co. Inc.
El Paso: E & M Supply
Ft. Worth: Cummins Lighting Center
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VIRGINIA

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WASHINGTON

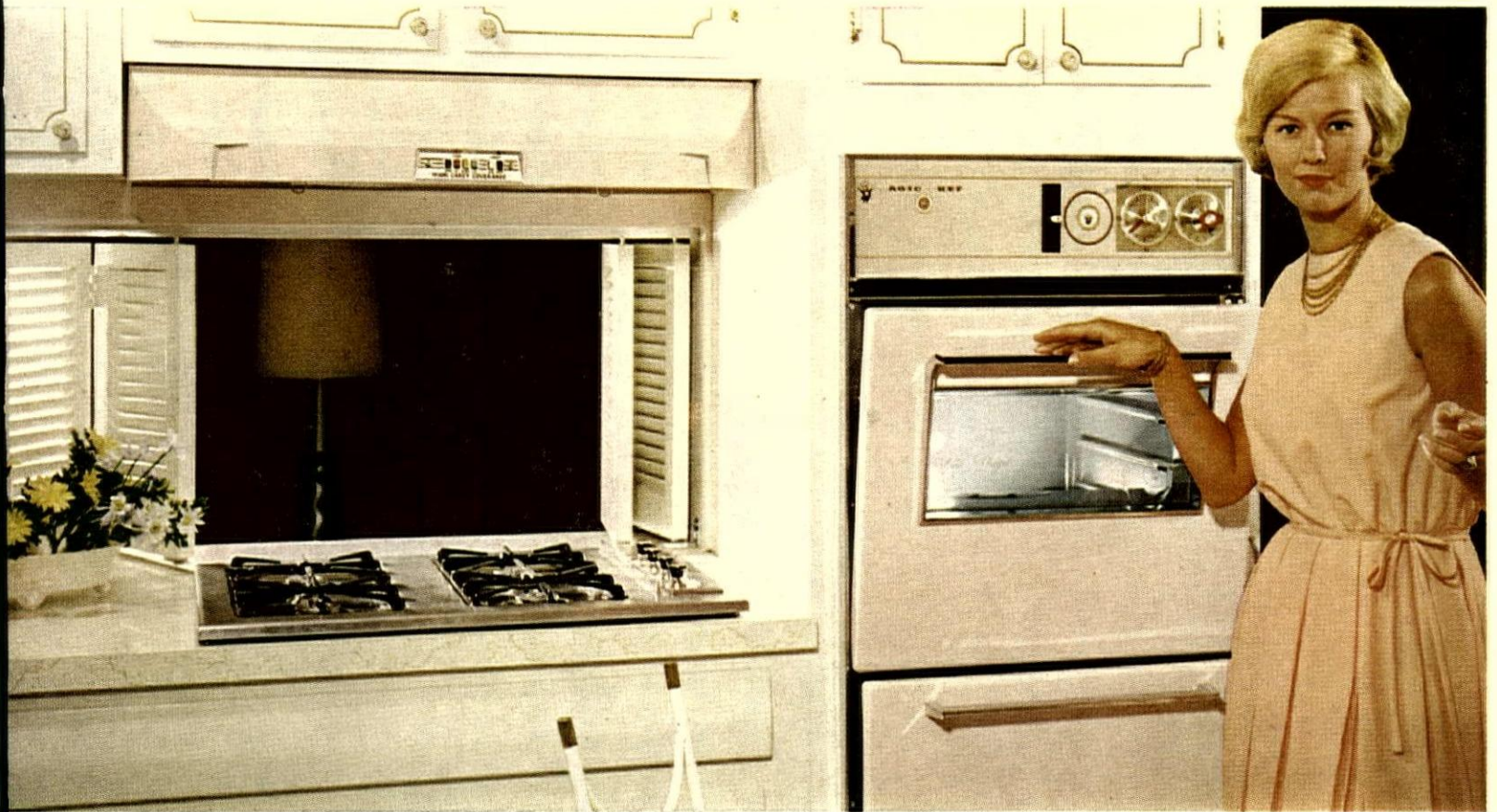
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Spokane: Graybar Elec. Co. Inc.

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Huntington: State Elec. Supply Co.
Parkersburg: United Elec. Sup. Inc.

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17 qualities that make rental projects livable

INTENSITY OF DEVELOPMENT AND LIVABILITY OF MULTI-FAMILY HOUSING PROJECTS. By Robert D. Katz. Federal Housing Administration, Washington. 116 pp. \$2.

Author Katz, after a first-hand study of 80 projects in 14 U.S. and European cities, argues that livability in multi-family housing projects depends on five aspects of intensity and 12 aspects of quality. The intensity items: density (best definition is dwelling units per net acre), coverage (percent of land occupied by structures), floor area per acre, building type and size, and spacing between buildings. The quality aspects: privacy, usable open space, individuality, diversity, location, proximity to community facilities, safety and health, circulation, auto storage, blending with surrounding neighborhood, site details, and views to and from the project.

FHA underwrote part of Katz' research expenses and has pub-

lished his findings as FHA Technical Study TS 7.14. The book devotes a page to each of the 80 multi-family projects studied, showing site plans and giving pertinent data.

The author, who is an assistant professor in the department of city planning and landscape architecture, University of Illinois, discusses relationships of various intensity and quality aspects, and reaches three main conclusions:

1. Rigid interpretation of intensity controls has worked against good livability in many multi-family projects. These standards should be periodically reviewed and should be followed with more flexibility.
2. All 12 aspects of quality "are fundamental to the success of any housing project."
3. Most successful designs are in small to medium-sized projects. Large sites should be split into sub-sections.

What it takes to plan housing for the elderly

BUILDINGS FOR THE ELDERLY. By Noverre Musson, AIA and Helen Heusinkveld. Reinhold Publishing Corp., New York City. 216 pp. \$15.

"One thing the elderly do not want is peace and quiet as represented by the rural setting considered desirable for them in years past."

This is the conviction of Authors Musson (of Tibbals-Crumley - Musson, Columbus, Ohio) and Heusinkveld (of the National Council on Aging) in their fact-filled book on designing housing for the elderly. Sites for such housing, they point out, should provide for some or all of: "A busy life around, a view of traffic and people, protection but not isolation from the alarms of the street, [attractive] views, separation from playground if one exists, some level ground, walks or terraces, sun and breeze—but shelter from them also."

The authors also suggest this checklist for on-site development of either single-family or project housing for older people:

- Small lots to limit upkeep.
- Simple landscaping.
- Level walks and drives.
- Safe, easy driveway access.
- Short walks and driveways.
- Good night-lighting.
- Patios with privacy.
- Preservation of trees.
- Easy access to central facilities, by internal paths.
- Good views to the outside and within the development.

- Entrances, front porches, and sitting areas that promote sociability.

Since the site is so important, Architect Musson rightly suggests that "it is urgent that the architect be brought into the site selection as early as possible. The land chosen . . . has more effect on the physical characteristics of the finished building than any other single factor outside of the mind of the architect."

The book also contains a step-by-step guide showing how to organize to sponsor a retirement project, how to select an architect, complete construction, and operate a retirement community.

The architect's role in this process is compared to that of "author and director of the show, whereas the owner is its angel and producer. Their relationship is an intimate, mutually responsible one, but the roles are not interchangeable."

ARCHITECTURAL DESIGNS: HOMES FOR THE AGED, EUROPEAN APPROACH. By Robert B. Rutherford, M.D. and Arthur J. Holst. Howard Co., Peoria, Ill. 101 pp. \$12.50.

Thirty-four retirement projects in 12 European countries are shown in this volume by Messrs. Rutherford and Holst of the Forest Park Foundation in Peoria. The volume also includes a detailed discussion by Swedish Architect Ake E. Lindquist on various Swedish approaches to the housing problems of the aged.

New products start on p. 151

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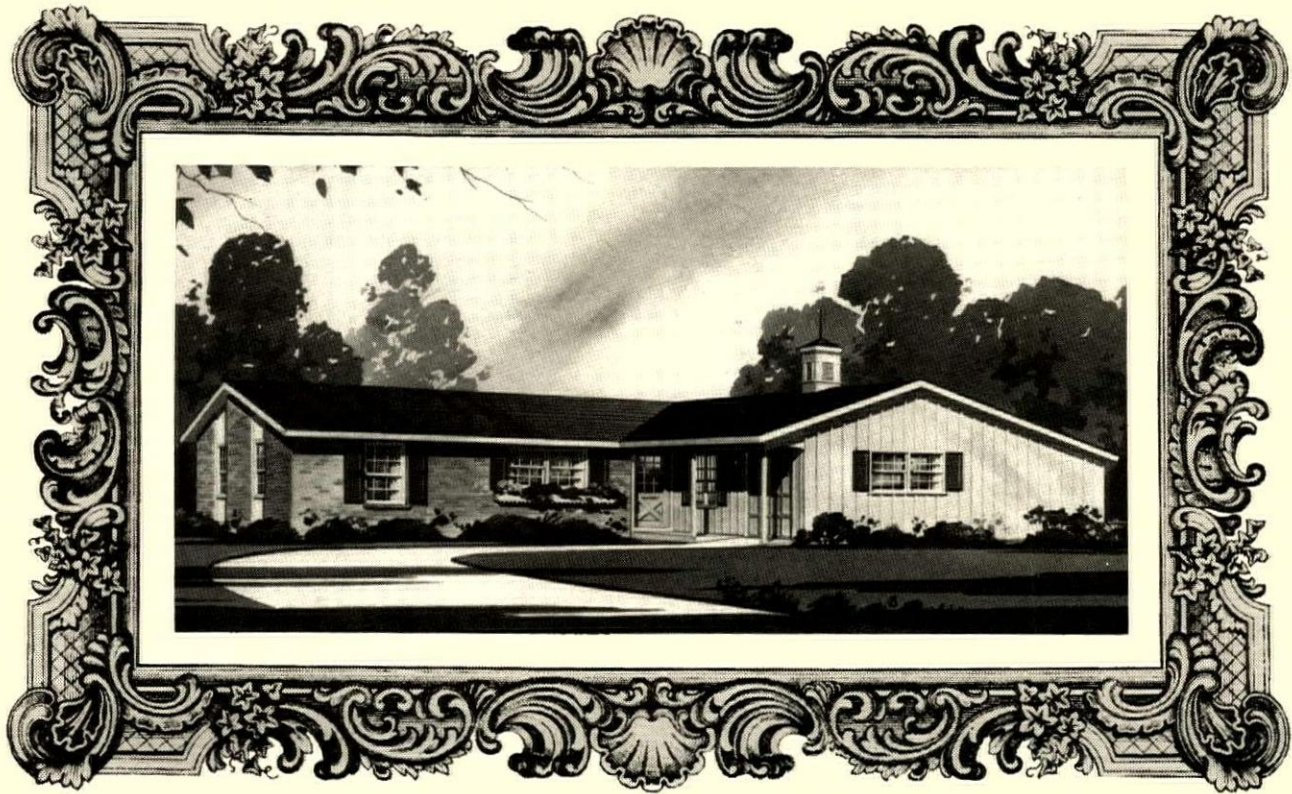
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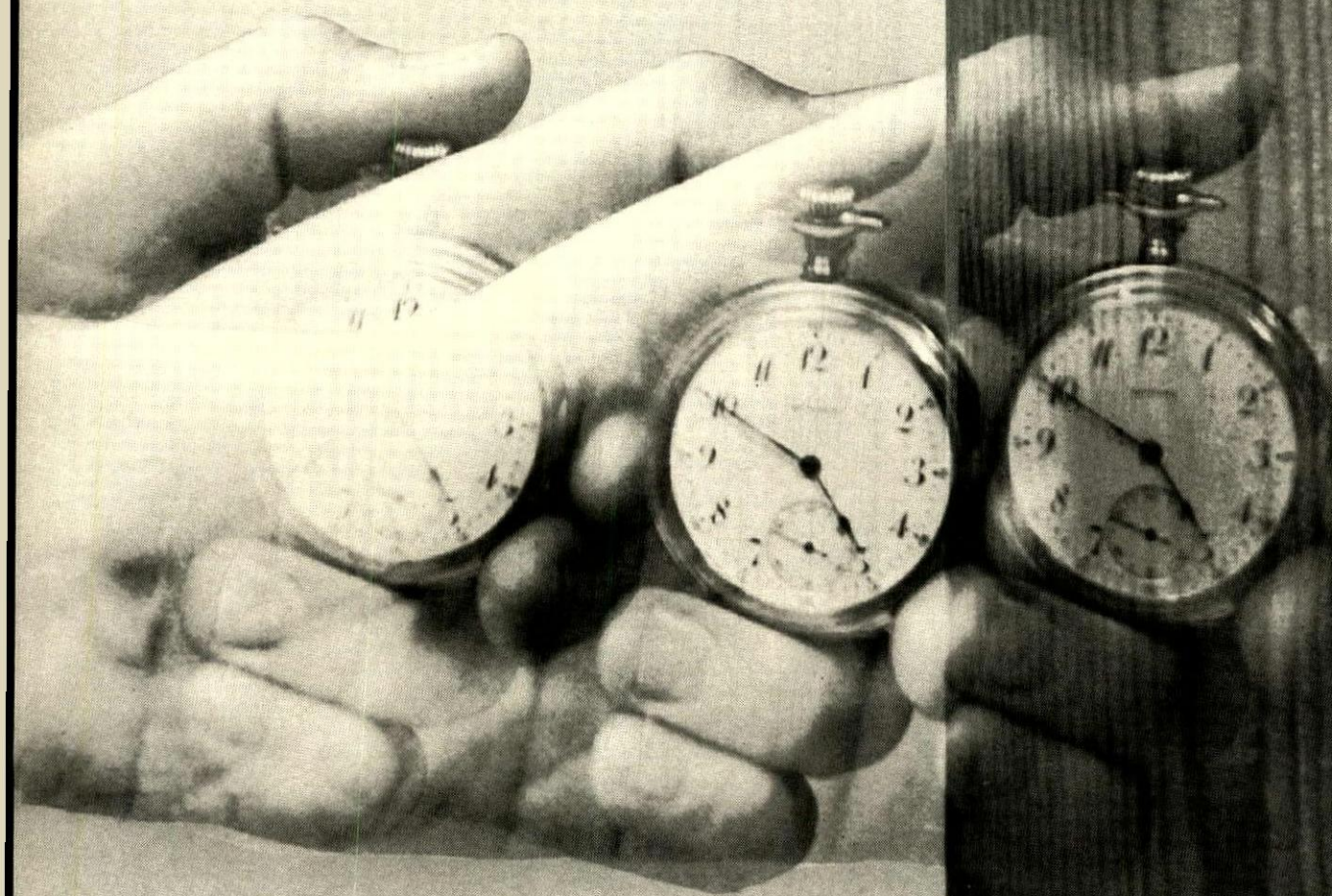
CITY _____ ZONE _____ STATE _____



Go together... time and Wolmanized pressure-treated lumber. Actually, two distinct *time benefits* are achieved that speed construction, give homes greater marketability. Wolmanized lumber permits *fast* erection. It works like untreated wood. Paints or sealers are applied easily. Wolmanized lumber lasts *long*. Preservative-impregnation creates a low-cost, lifetime defense against termites and wood rot. Good sales point for you. Excellent performance is assured by Koppers research and quality control resources . . . invincible standards that make Koppers the continuing leader in the science of wood preservation. Increase your sales advantage. Have Wolmanized lumber on your next jobsite.

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Kitchens



Top-line refrigerator (right) is loaded with new ideas: 1) It is finished on all four sides so it can be used as a room divider; 2) the 13-cu. ft. refrigerator section has triple-pane thermal-glass doors which are normally translucent but, at the flick of a light switch, allow inspection of contents; 3) refrigerator doors slide, saving swinging space. The bottom section of the unit is a two-drawer, 10-cu. ft. freezer. This 48" x 72" x 26" unit, available in January, will retail for \$795. Smaller models will be introduced in February and March. Franklin Div., Studebaker Corp., South Bend, Ind.

For details, check No. 1 on p. 183

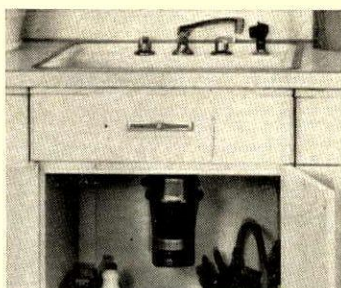
30" range (left) has a large chrome-lined oven mounted over the cooktop at convenient reach-in height with oven controls at the side. The four-burner range top has automatic controls. Cabinets can be built in under the range. Tappan, Mansfield, Ohio.

For details, check No. 2 on p. 183



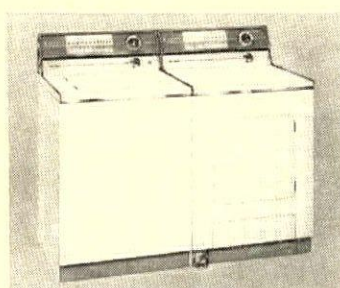
Two-door refrigerator for undercounter installation is only 34 7/8" high with 11 sq. ft. of shelf space and a top freezer. It has frost free operation, a rack for a dozen eggs, three ice-cube trays, and a five-year warranty. Norcold, Gardena, Calif.

For details, check No. 3 on p. 183



Low-price disposer is a continuous-feed model with a stainless-steel hopper to resist corrosion and a snap-on mounting for easy installation. One quart unit leaves plenty of undersink storage space. Retail price: less than \$40. General Electric, Louisville.

For details, check No. 4 on p. 183



No-vent dryer, right, is connected to companion washer so water is siphoned from dryer during next washer operation. Extra plumbing and outside vent are not needed. A sprinkle setting will dampen clothes for ironing. Frigidaire, Dayton, Ohio.

For details, check No. 5 on p. 183



Rollout dishwasher completes the ss&E line of kitchen appliances. The Suburban 21 has two wash cycles and three rinse cycles. It holds 13 place settings or up to 36 glasses in one load. Samuel Stamping & Enameling Co., Chattanooga.

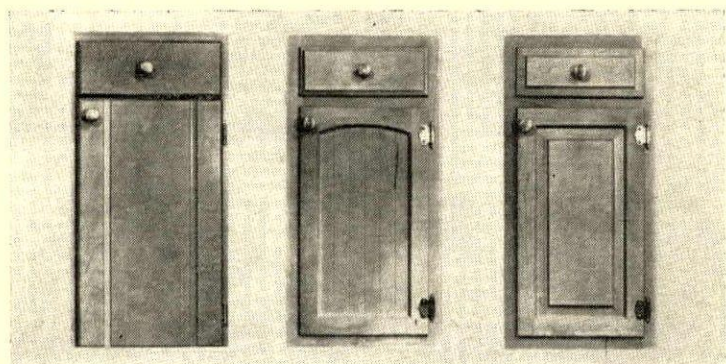
For details, check No. 6 on p. 183



Stainless steel double sink is made so fittings can be arranged as the customer chooses, to right or left of a single-lever faucet. Ala Carte choices include remote-control drain or disposer

control for each bowl, dispensers for detergent and hand lotion, and a spray attachment. Single-bowl models are also available. Elkay, Broadview, Ill.

For details, check No. 7 on p. 183



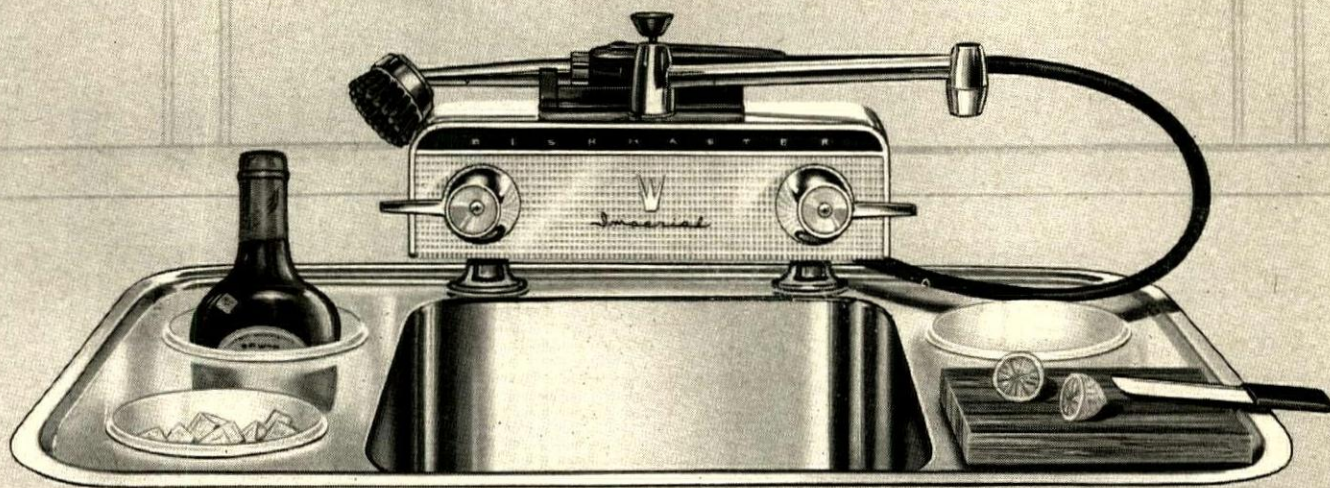
Colonial-style cabinets in three new designs are available in any of five natural stain finishes, five color stains, or four enamels. Americana (left), Dutch Colonial (center), and Old New

England (right) all have weathered-finish hardware. Cabinets have aluminum drawers and adjustable shelves. Kitchen Maid Corp., Andrews, Ind.

For details, check No. 8 on p. 183

New products continued on p. 156

New Dishmaster Bar-Boy Sink



Costs little more than a sink and an ordinary faucet!

Dishmaster—famous the nation over for quality—now presents a complete bar-sink in combination with the Dishmaster dishwasher. Dishmaster is already America's best-liked dishwasher.

The Dishmaster Bar-Boy features four storage wells for ice, bottles or foods. The wells are made of polyethylene to prevent dripping and to retain cold. A chopping block (included with every sink) can be placed on top of one of the wells for salad or other food preparation.

This versatile unit is large enough to be practical, yet compact enough to allow its use in patios or boats, as well as kitchens and family rooms. The Dishmaster "Imperial" is an integral part of the unit, and installation is quick and easy.

The Dishmaster Bar-Boy Sink combination (Model DS-400) makes an invaluable selling feature for new homes and apartment units.

Your inquiry will receive prompt attention from either of the addresses below.

Here's the special sink for those limited areas—on the patio, in the family room, or in the galley. It's a convenient, practical sink, and the incomparable dishwasher—the Dishmaster "Imperial" is attached.

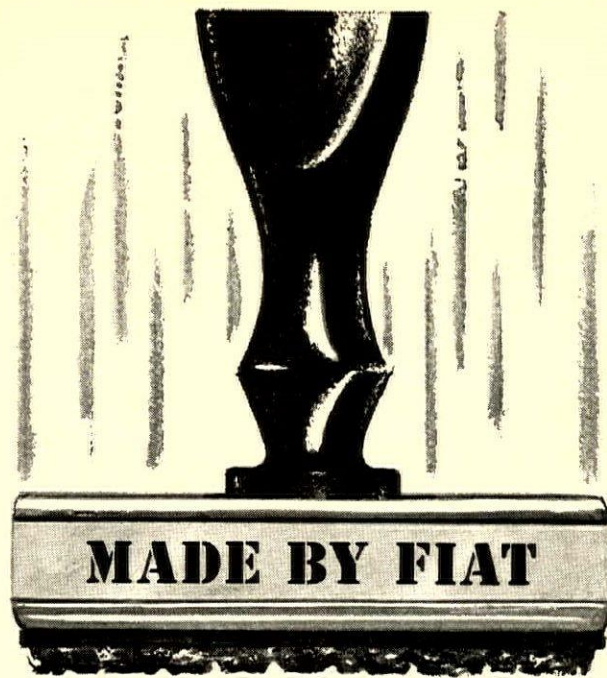


- 18-8 Self Rimming Stainless Steel Sink with a coated bottom and sides to deaden noise and prevent condensation.
- Standard 3½" drain hole.
- Laminated maple cutting block, specially treated, lifts out for easy access to wells, remains handy for cutting.
- Standard fittings provide for easy installation of sink.

- Four polyethylene wells hold ice, bottles, ice cream scoops, fruit, etc. Flush mount for a level, leak-proof surface . . . lift out for easy cleaning or cold storage.
- Shipping Weight . . . 20 lbs.
- Dimensions:
O.D. . . . 18¾" x 25¼" x 6"
Sump. . . 11" x 14" x 6"
Wells . . 4" Diameter x 5¼" Depth (1 quart cap.)

DISHMASTER CORP.

2605 WOODWARD AVE.
BLOOMFIELD HILLS, MICHIGAN
2208 S. GRAND, LOS ANGELES, CALIFORNIA



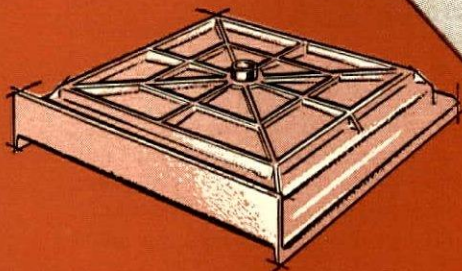
SAVES HOME BUILDERS ON SHOWER CONSTRUCTION COST



*SAVE 80% WEIGHT
 of masonry floors*

*DRAIN PERMANENTLY
 ATTACHED AT FACTORY
 saves time and labor in field
 —insures leak-proof
 connection*

*SIZED TO FIT:
 Square 32" x 32"
 Square 36" x 36"
 Rectangular 48" x 32"*



*INSTALLS RIGHT ON SUB-FLOOR—NO SUB-PAN
 OR BACKING-UP REQUIRED. VIEW SHOWS
 ADEQUATE SELF-REINFORCING CONSTRUCTION.*

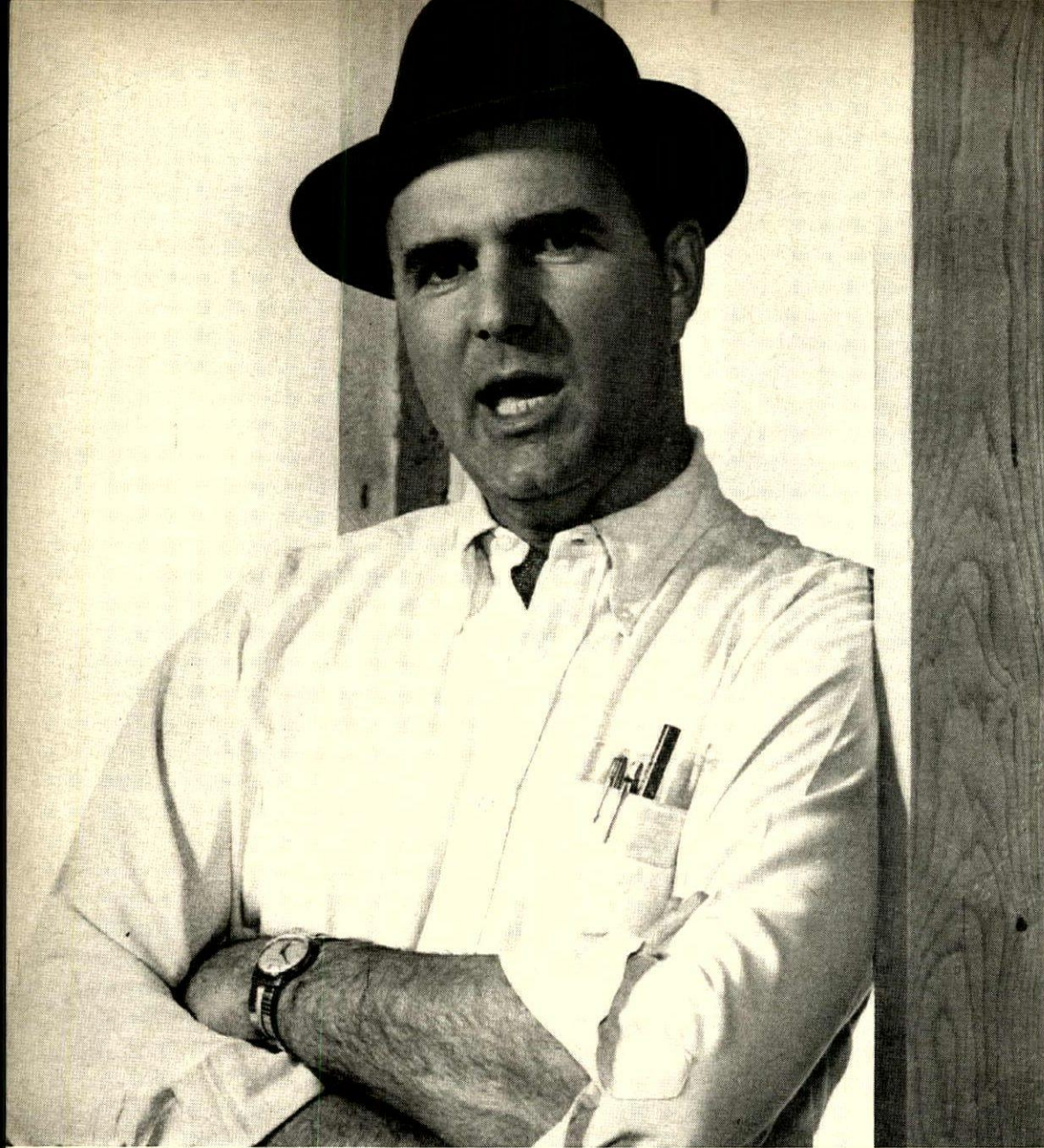


cascade
 MOLDED STONE FLOOR

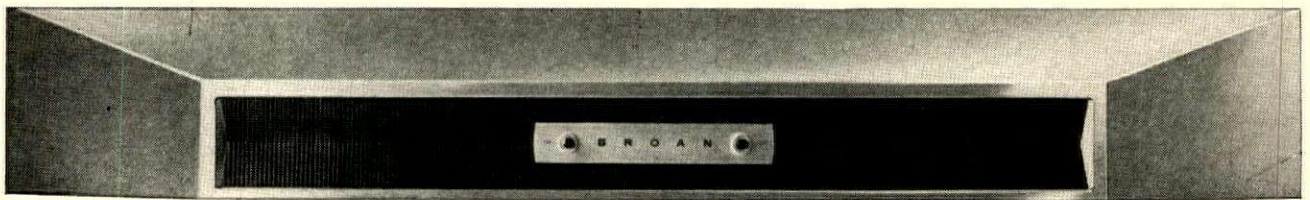
**...WRITE NEAREST FIAT FACTORY
 TODAY FOR LITERATURE, PRICES
 AND DELIVERY INFORMATION!**



FIAT METAL MANUFACTURING COMPANY, INC.



That's right, Lady... I always install Broan



I don't take any chances. As a builder, I'm the guy who gets the complaints when things in a new house go wrong. If the roof leaks, the floor squeaks, the door creaks—I get the call. So I play it safe. When the plans call for a kitchen range hood, I always install a Broan.

Come on. I'll give you a peek at the Broan range hood we're installing in your kitchen. "Mixed-Flo II" range hood, they call it . . .

There she is! Still in packing cases — just been delivered. Quite a beauty, isn't she? Look at those nice clean lines and that rigid construction. Operates at two speeds. Comes in colored enamel finish, too. And see? — it's got twin lights up front to brighten your cooking area.

Believe me, Lady, the Mixed-Flo II range hood really does a job. Picks up all the cooking odors in your kitchen and whisks them

out of your house before you know they're there. Lady you could serve a meal of smoked fish, sauerkraut and garlic bread, with corned beef and cabbage for dessert. Your *family* might complain, but not the Mixed-Flo II. This little hood'll gladly gobble up any cooking odors you give it.

That's the way with all Broan products. Willing workers. Real "lookers", too. And from *my* point of view — well . . .

They arrive on time, fully assembled and pre-wired for easy installation. Special orders get fast attention — and get here in a hurry. Fewer costly service calls. Fewer customer complaints. Broan sure makes *my* life a lot more pleasant, too. It'll make yours more pleasant, too.



Broan Mfg. Co., Inc., Hartford, Wis.
 Manufactured in Canada by Superior Electrics Ltd.





Architects:
George Fred Keck—William Keck,
Chicago, Illinois
Mechanical Contractors:
Kelleher Engineering Company,
Chicago, Illinois

B & G *Hydro-Flo*® EQUIPPED...

AWARD WINNING HOME DEPENDS ON ZONED HOT WATER HEAT FOR COMFORT



B&G BOOSTER

The sales record of B&G Boosters is ample evidence that their quality and performance have never been equalled. Over 4,000,000 are in operation today.

OTHER B&G EQUIPMENT IN THE "RECORD HOUSE" INCLUDES:

Two Motorized Valves • One No. 12 Pressure Reducing Valve • One Airtrol Boiler Fitting • One Compression Tank

Among the "Record Houses of 1962" is this residence in Highland Park, Illinois. The selection of a B&G Booster pump, motorized valves and auxiliary forced hot water equipment for this distinctive home is a tribute to their reputation for quality and performance.

B&G Boosters, for example, have for years given proof of complete dependability. Among many exclusive features of design *perhaps the most important is the fact that the Booster is oil lubricated!*

This means that the Booster is immune to trouble under all water conditions within the system, because:

1. Foreign material in the heating system water cannot affect the bearings.
2. Design temperatures over 200° are not injurious to the pump. B&G Boosters operate satisfactorily at today's higher design temperatures, which frequently reach 240°.
3. Entrained air and gases released from the system water do not create bearing lubrication problems.

B&G Boosters are approved by Underwriters' Laboratories—meet all building code requirements. Nationwide availability of repair parts and expert motor repair stations assure prompt service, even in remotest locations.



BELL & GOSSETT
C O M P A N Y

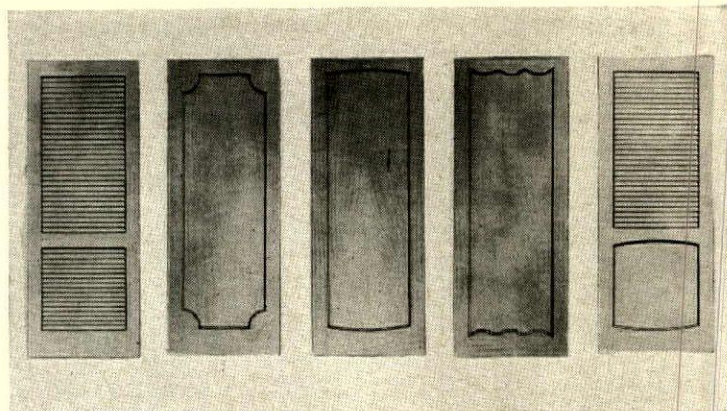
Hydro-Flo® DIVISION, Dept. HS-10, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto 16, Ontario

NEW PRODUCTS

start on p. 151

Doors



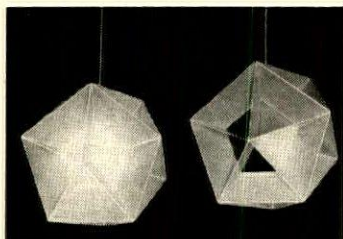
Mirrored closet doors (left) are made with 3/16" crystal or 1/4" plate mirror and an extruded-aluminum sliding-door frame. Lift-out doors are suspended from above on nylon ball-bearing rollers. Stanley Building Specialties, Miami.

For details, check No. 9 on p. 183

Interior doors (above) are now made in nutmeg, a South American wood which takes all popular finishes—walnut, mahogany, ash, oak, and fruitwood. Nutmeg's natural finish is a pinkish brown. The doors come in five panel, louver, and louver-panel styles. Caradco Inc., Dubuque, Iowa.

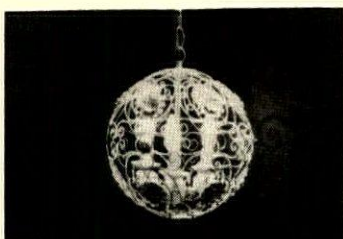
For details, check No. 10 on p. 183

Lighting



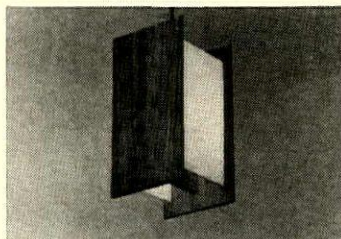
Multi-faceted pendant is made of translucent styrene, is available either in solid white or white with random facets of red, yellow, blue, green or smoke. Called the Polyhedron, it is 18" in diameter and glare-free. Lightolier, Jersey City, N.J.

For details, check No. 11 on p. 183



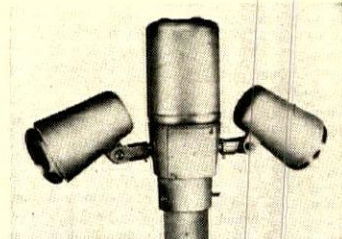
Filigree globe is Florentine-styled wrought iron with a white-on-gold finish. The pendant is 12" in diameter and has a 25" adjustable chain. Candelabra base has three lamps, each takes up to 40 watts. Moe Lighting Div., Thomas Industries, Louisville.

For details, check No. 12 on p. 183



Rectangular pendant has a walnut frame with translucent plastic panels on two sides. The combination of wood and translucent surfaces provides semi-directional lighting. Rosewood, teak, and ash fixtures are available. Habitat, New York City.

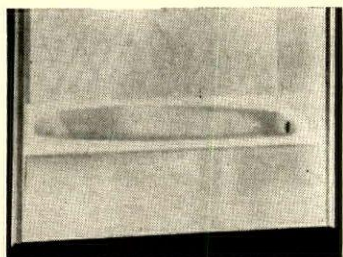
For details, check No. 13 on p. 183



Mercury-vapor lights now come wired to a slip-fit junction box. To install, unit is slipped on pole, screws are tightened, and the line connected. 1200 Series comes in single-, double-, and four-light units. Natale Machine & Tool Co., Carlstadt, N.J.

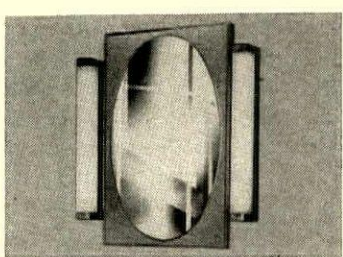
For details, check No. 14 on p. 183

Baths



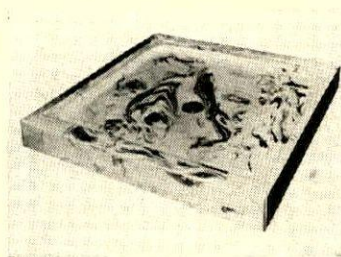
One-piece bath bay, made of glass fiber, can be nailed right to the studs. Base is self supporting. Tub is 60" x 34" x 16"; wainscot comes 60" or 12" high; in five colors. Meets requirements of the Uniform Plumbing Code. Superior Laminates, Los Angeles.

For details, check No. 15 on p. 183



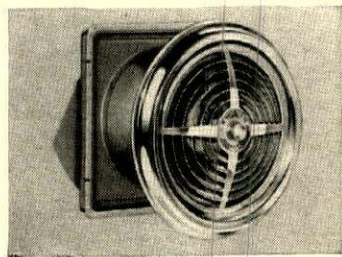
Oval mirror cabinet is now available with side lights in gold and stainless-steel finishes. Lawson also offers medicine cabinets with double and triple doors, sliding doors, louver doors, and with swing-wing mirrors. F. H. Lawson Co., Cincinnati.

For details, check No. 16 on p. 183



Shower stall base of synthetic marble comes in eight color combinations to match Marbelon vanity tops. The smoothly-curved shower bases are available in three sizes: 32" x 32", 32" x 36", and 32" x 48". Standard Steel Cabinet Co., Chicago.

For details, check No. 17 on p. 183

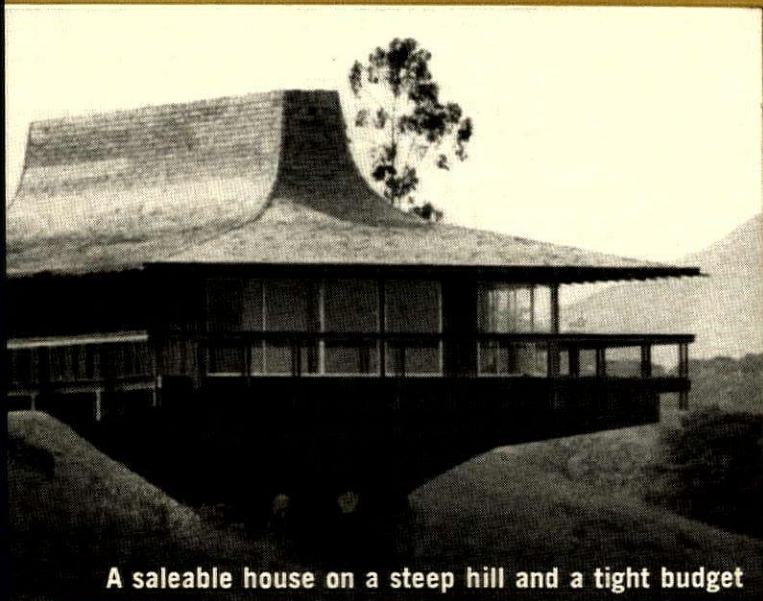


Bathroom ventilating fan for new construction or remodeling installs quickly on a sidewall mounting bracket. Venaire 3808 has aluminum housing and grille which are guaranteed rustproof inside and out. List price: \$16.95. Ventrola Mfg., Owosso, Mich.

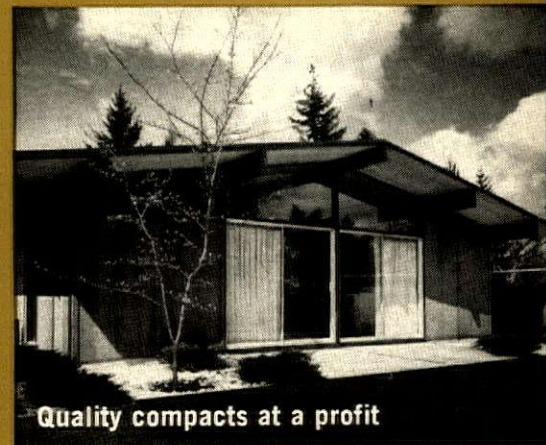
For details, check No. 18 on p. 183

New products continued on p. 166

FOUR MORE BUILDING PROBLEMS SOLVED WITH PLYWOOD



A saleable house on a steep hill and a tight budget



Quality compacts at a profit



Keeping big operations on schedule



A house to build in bad weather

☑ ANOTHER BUILDING PROBLEM SOLVED WITH DFPA PLYWOOD

A house designed for midwinter construction



NAHB 1963 EXPERIMENTAL HOUSE

BUILDER:	W. Evans Buchanan
DESIGNED BY:	NAHB Research Institute
LOCATION:	Rockville, Maryland
SPONSOR:	National Association of Home Builders

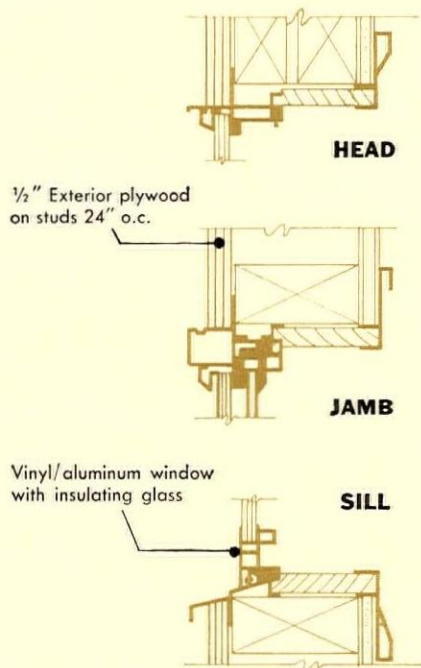
NAHB's 5th research house was deliberately planned for wintertime construction. It demonstrates new materials and methods that let you keep building right through the worst weather, and keep your labor costs to the bare minimum. Sidewalls and roof are Exterior plywood, presurfaced with tough plastic film. (Du Pont's Tedlar on walls, Hypalon on roof.) The plywood came through rain, snow and rough treatment during construction without a mark — and needed absolutely no painting or finishing at the site.

The use of plywood in this house is important to builders for a number of other reasons. You build with big compo-

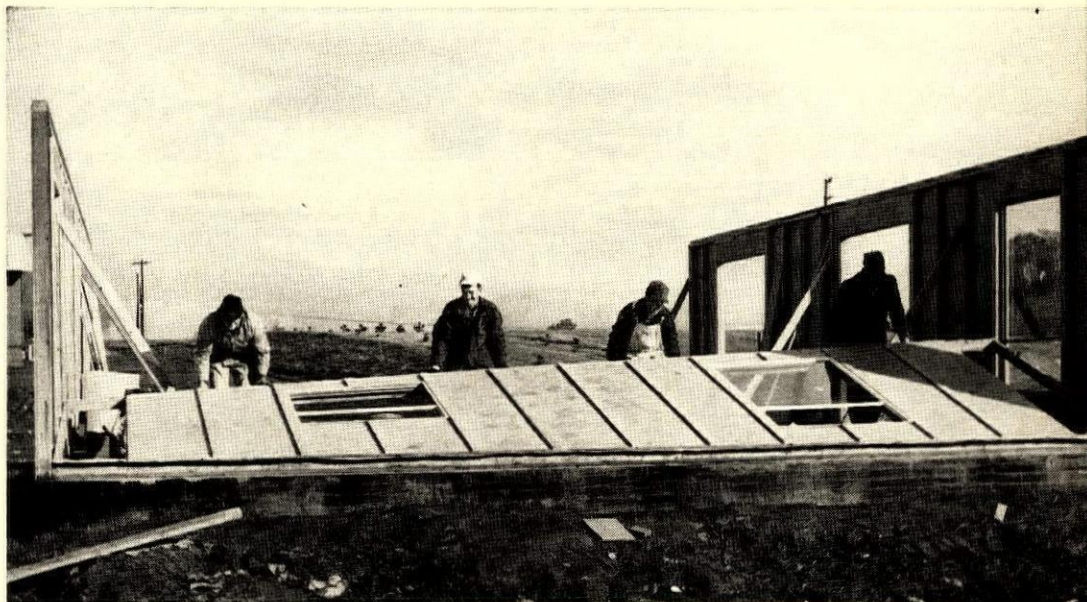
nents — so you close the house in quickly. You use materials that combine plywood's traditional strength with the durable protection of factory-applied plastic surfaces — so they do two jobs at once. One thickness of Tedlar/plywood serves as siding as well as sheathing; Hypalon/plywood provides roof sheathing and finish roofing, all in one step. Finally, you can offer home buyers a better break on maintenance. Du Pont predicts that Tedlar-coated plywood won't need painting for 15 years — maybe 25. For information on these and other new presurfaced plywood products, write Douglas Fir Plywood Association, Tacoma 2, Wash.



SECTION (exterior wall)



High-speed roof system uses 2 x 10-ft. Bermuda shingles made of Hypalon-surfaced plywood. It took four men six hours to install, starting at eaves with concealed nailing and folding up successive courses of the shingles. Hypalon film acts as a continuous hinge at interlocking horizontal joints.



To make the 28-ft. tilt-up wall sections, 1/2" Exterior plywood, presurfaced with Tedlar, was fastened to studs on 24" centers, then battens were blind-nailed to cover stud nails. Battens, window casings, trim and plywood soffits are also Tedlar-surfaced.

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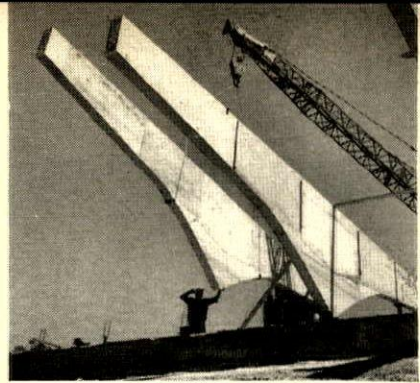
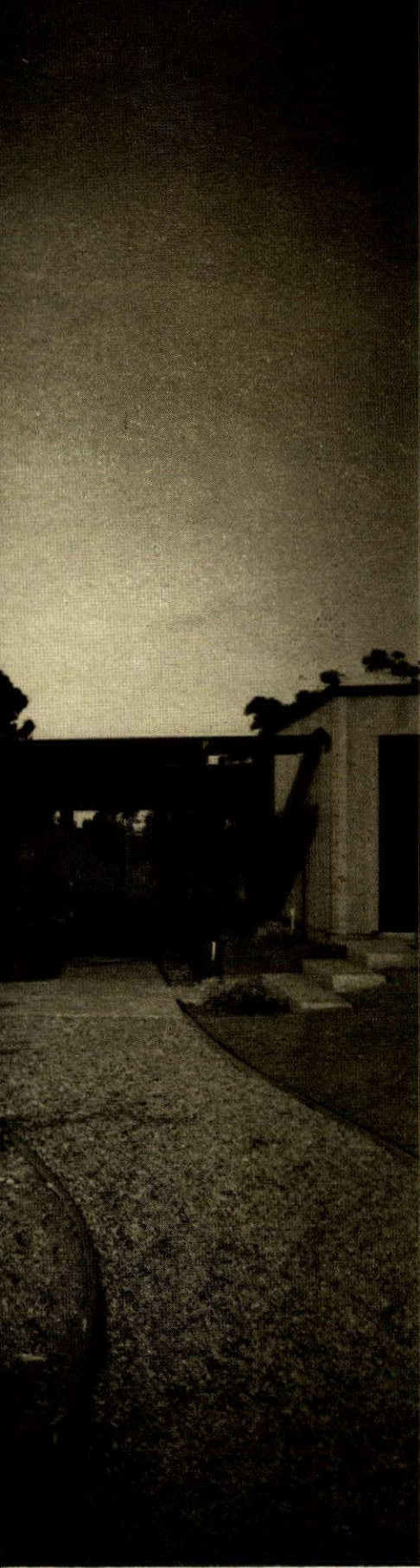
✓ ANOTHER BUILDING PROBLEM SOLVED WITH DFPA PLYWOOD



"HANGING GARDENS" HOUSE

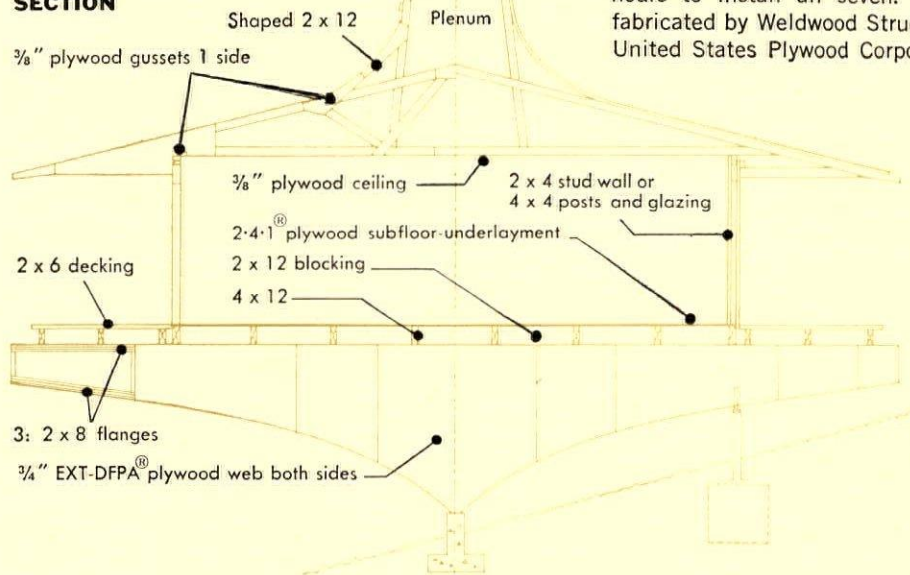
BUILDER: Twentieth Century Homes
ARCHITECT: R. R. Zahm, A.I.A.
LOCATION: Marin County, California
SPONSORS: Douglas Fir Plywood Association
West Coast Lumbermen's Association

This house had to be built with plywood



The 44-ft.-long plywood box beams, in spite of their strength, are relatively light, 930 lbs. each. It took only two hours to install all seven. They were fabricated by Weldwood Structures Div., United States Plywood Corporation.

SECTION



Key to the low cost is the single footing wall and the seven plywood box beams, which bear the entire vertical load. Beams are bolted to the foundation wall through steel bearing plates and stabilized by pipe columns connected to concrete pads near the uphill end. The house itself is simply a plywood-and-glass box built on a platform. The superstructure is held rigidly together by the diaphragm strength of plywood shear walls, floor and ceiling.



Curved plywood soffits conceal pipes, wiring and insulation under the floor. Pre-painted panels of 1/4" EXT-DFPA plywood were sprung between 4x12 framing. This is an easy way to conceal the clutter under a hillside house. The heating and cooling system are also out of sight, in the attic plenum.

A steep site and a tight budget: this combination creates some of the toughest problems a builder can face. Here's a house in Marin County, California that solves them all with one simple structural concept.

Seven plywood box beams, resting on a single reinforced concrete foundation wall, support a platform on which the house is built just as though it were on a level lot. Site preparation, usually extremely expensive in hillside construction, was less than \$100. The whole substructure came to only \$2.33 per sq. ft. This took care of everything up to and including the floor platform: foundations, box beams,

purlins, plumbing, wiring, insulation, soffits, the 28x72-ft. plywood floor and the 7-ft.-wide perimeter redwood deck.

Twentieth Century Homes of San Rafael built the house on speculation and sold it for \$65,000. It was designed to demonstrate a practical solution to hillside construction problems, and was so successful that the architect, R. R. Zahm, is planning 17 medium-priced homes with the same support system. It could be adapted to build on almost any grade at costs comparable to those for level lots. For more information on plywood box beams and components, write Douglas Fir Plywood Association, Tacoma 2, Wash.

(continued)

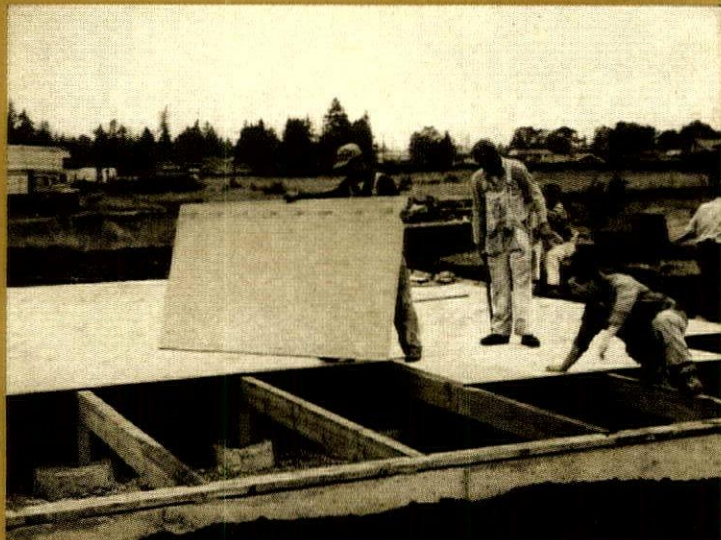
Big builders use plywood to keep on schedule

Mayer/Peterson makes money by building good houses fast. They can go from foundation to closed-in house in less than a day because they build with big plywood parts.

"We just don't have time for archaic methods—putting thousands of small pieces together at the site," says Curt Peterson. So they use plywood and components, keep on-site labor to a minimum and stick to their schedules. "We can build so quickly that the buyer moves in before we get the bill from the supplier," says partner Kurt Mayer. "Very little of our capital is tied up, and overhead is cut to the bone." They buy the whole house as a package, so

ordering, delivery and accounting are greatly simplified.

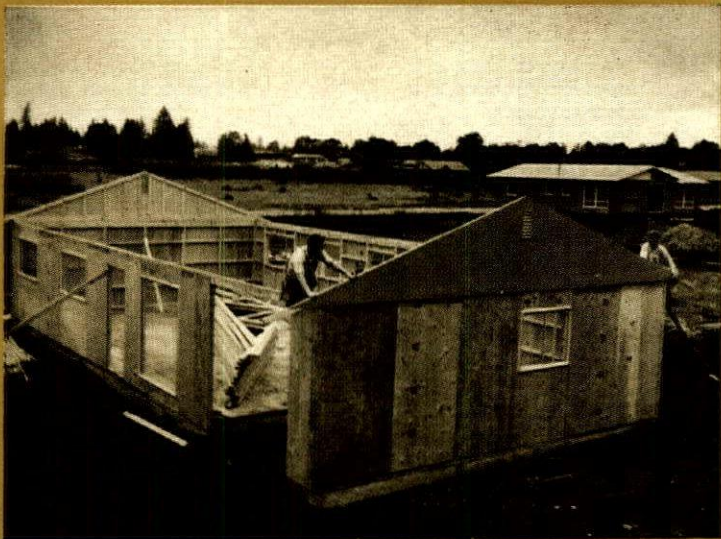
Mayer/Peterson built ten homes in Parkland, Washington in 1959. They'll build about 200 this year. In general they still use the system they started with. For example, wall components are of two standard types: four-ft. pre-framed sections with plywood sheathing on studs, to which siding is applied at the site; or entire wall sections with sheathing and siding. A typical time-saver, worth about two man-hours per house: they apply PlyScord® sheathing without precutting to fit at roof edges, then cut at eave-line. The pictures below show how they build a house in a day.



1. Foundation was poured the day before. Plywood floor on this model is 2'4" x 1', the 1½-in.-thick combination subfloor-underlayment, with supports on 4-ft. centers.



2. The rest of the parts come just as the floor is completed. Buying is simplified because plywood sheathing, wall panels, flooring, trusses and even interior partitions all come from the same supplier.



4. By 10:30 (2½ hours after the start of work) the crew is ready to lift prefabbed gable ends into position. Almost at the same time, they begin installing trusses which are waiting inside on the floor.



5. PlyScord roof sheathing is stacked alongside the house so the crew can reach it easily. Mayer/Peterson have never used anything but plywood for roof decking on their houses.



Most Mayer/Peterson houses are between \$10,000 and \$17,000 and are in medium-sized developments like this, a group of 17 near Lakewood, Washington. Most of these were sold before completion. All houses use plywood component systems, but vary widely in siding and architectural styles ranging from ranch to colonial (below).



3. Wall components for this M/P model have plywood sheathing on studs; siding will be applied later. Components are stacked on the floor platform near where they'll be used.



6. As soon as roof sheathing is on, the house is enclosed and doors can be hung. Interior work—which uses as many prefinished parts and materials as possible—can start any time. It's 1:30.



FOREST HEIGHTS AND MONT VISTA

BUILDER: Mayer/Peterson
ARCHITECT: L. S. Higgins, A.I.A. & Associates
LOCATION: Pierce County, Washington

(continued)

✓ ANOTHER BUILDING PROBLEM SOLVED WITH DFPA PLYWOOD



"FANTASTIC" HOMES

BUILDER: Ron Mitchell Corp.
ARCHITECT: Mary Lund Davis, A.I.A.
LOCATION: Tacoma, Washington

Plywood is your key to profits in compacts

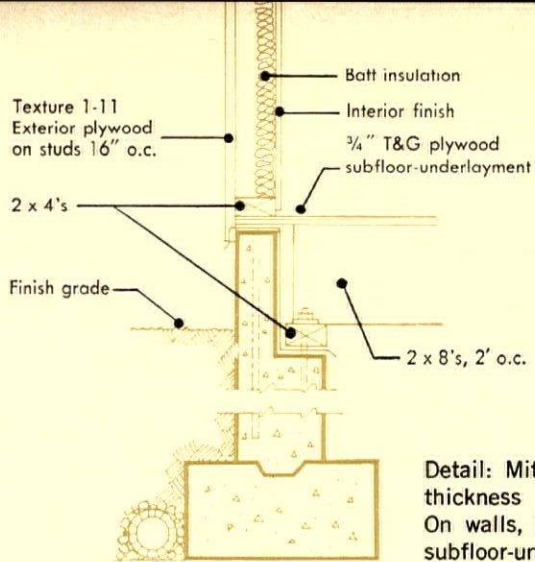
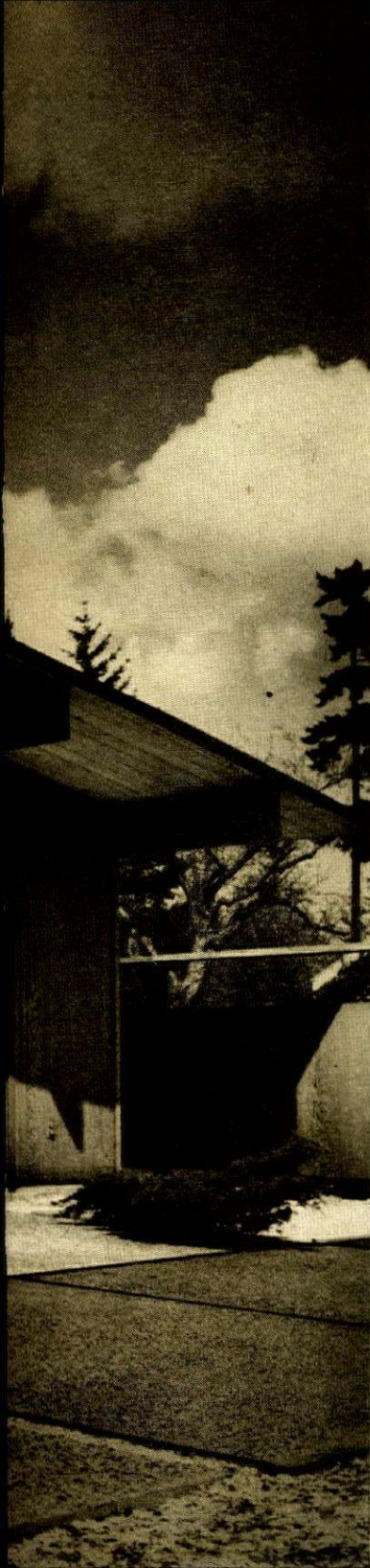
Ron Mitchell of Tacoma, Washington builds compacts at a profit by keeping costs down and quality up—with plywood construction. He has no trouble selling them because he gives the buyer what he wants.

"Low-cost housing does not have to look cheap or small," says Mitchell. All his homes are architect-designed, and have clean, simple lines and attractive siding treatments. He uses a variety of plywood sidings, including the new rough-sawn plywood seen on the contemporary house above, a national award-winner for design. Mitchell's construction methods are geared to use of components which

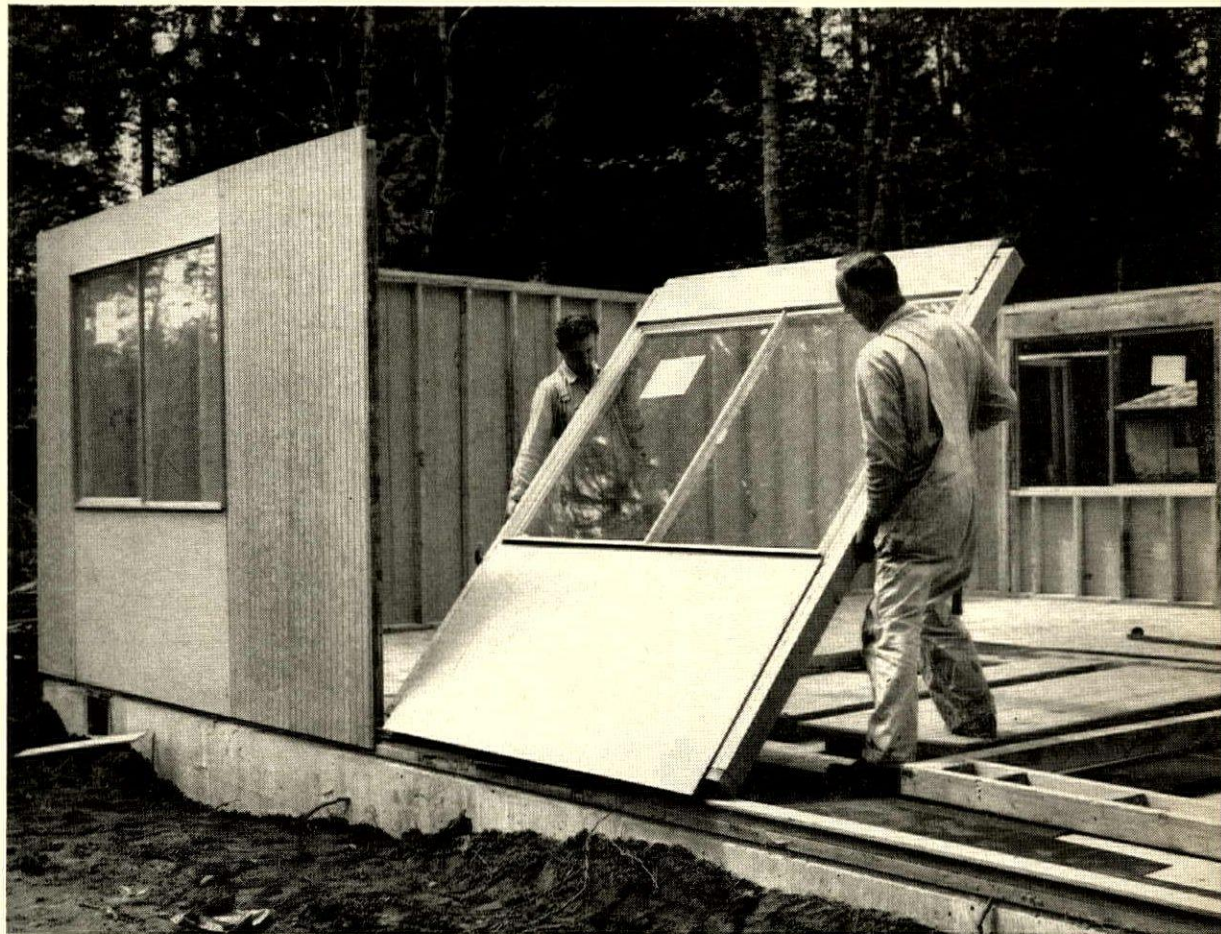
he fabricates in his own plant. He uses as many other time-saving plywood techniques as he can (see details at right).

Currently, he sells about a home a day. Sizes of compacts range from 800 to 1,100 sq. ft., prices from \$6,250 to \$9,450 on buyer's lot. Mitchell also builds larger homes from 2,500 sq. ft. on up, at prices from \$10,000-\$20,000.

Along with a half-dozen other builders throughout the country, Mitchell is participating in a pilot program sponsored by the Douglas Fir Plywood Association to make compacts easier to build and sell. For more information, write Douglas Fir Plywood Association, Tacoma 2, Wash.



Detail: Mitchell cuts costs by using one thickness of plywood for two purposes. On walls, it's siding-sheathing; on floors, subfloor-underlayment.



Wall sections are prebuilt in Mitchell's own plant, to save on-site labor. He uses timesaving equipment such as power nailers to fasten plywood to studs. Walls of this house are Texture 1-11® plywood,

except for panels over and under windows. These are smooth plastic-overlaid plywood for contrast. Floors in most houses are T&G plywood, either 3/4" or 1 1/8" (2-4-1)®, combining subfloor-underlayment.

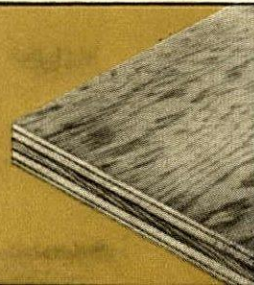


It takes about four man-hours to apply plywood roof sheathing to one of Mitchell's compacts. House on this page has 1,008 sq. ft. and sells for about \$70 a month on buyer's lot. Mitchell offers dozens of variations in size, style, features. This model, the "Holly," designed by Robert Bruce Waring, is one of 12 plans available to builders under DFPA's Compact Homes program.

The DFPA trademark is your assurance of quality plywood

DFPA helps solve your building problems. It also protects your profits because they depend on your reputation for quality construction—and DFPA trademarked plywood always means quality. It's the only plywood backed by an industry-wide quality-control program, and a quarter-century of experience in plywood testing and inspection. Look for the letters "DFPA" on all the plywood you buy.

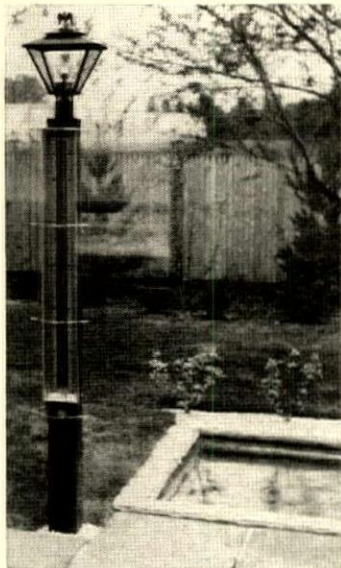
DOUGLAS FIR PLYWOOD ASSOCIATION
Tacoma 2, Washington



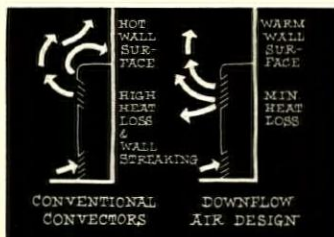
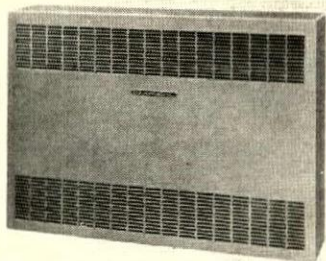
NEW PRODUCTS

start on p. 151

Heating and cooling



Heater lamp-post for patios, porches, and swimming pools makes outdoor living more pleasant when there is a chill in the air. The new gas-fired infrared heater has a 30,000 BTUH rating. Takes standard gas light. Perfection Div., Hupp, Cleveland.
For details, check No. 19 on p. 183

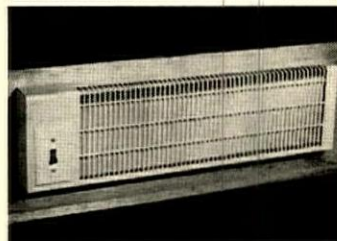


Cabinet convector for semi-recessed or surface mounting has louvers that direct the air down for, maker claims, more efficient air flow to the room and less wall streaking (see drawing). Convector uses no fan. Edwin L. Wiegand Co., Pittsburgh.
For details, check No. 20 on p. 183

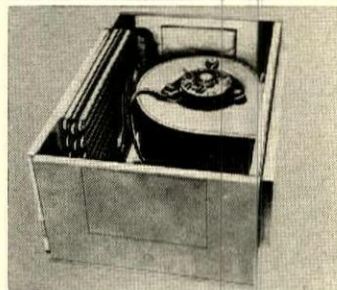
Forced-air furnace (right) for outdoor installation needs only gas, electricity, and duct connections. Line includes 80,000 and 100,000 BTUH models for heat alone and three larger models with add-on cooling. Day & Night Mfg., La Puente, Calif.
For details, check No. 21 on p. 183



Radiant electric heater (right) uses a special circuit on a thin steel panel. Radiant panels are 1'x1' for room heaters or in large units rated at up to 2,000 watts for complete heating systems. Radiant Systems, Farmingdale, N. Y.
For details, check No. 22 on p. 183



Compact cooling unit is only 30"x26½"x12½" in 1½- and 2-ton models. Shallow depth lets unit be mounted in closets or crawl space or behind false ceilings. Units can take auxiliary electric heaters or wet-heat coils. Peerless, Indianapolis.
For details, check No. 23 on p. 183



New products continued on p. 169

BEAT SURFACE CRACKS - TROWEL WITH THOMPSON'S

Every time you pour concrete, here's a smart "finishing touch" that makes for satisfied customers . . . eliminates costly patching and repair call-backs. Simply trowel-in Thompson's Water Seal on your final troweling. Results: a crack-free, spall-free surface that's waterproof and dustproof; much greater strength and wear resistance. (Non-treated concrete measured 260% more abrasion loss than concrete treated with Thompson's in certified laboratory tests.)

Thompson's Water Seal . . . seals, waterproofs, cures. Saves you time and labor. Does not contain silicones. Write for brochure and certified test data.



THOMPSON'S WATER SEAL
E. A. Thompson Co., Inc.
Merchandise Mart, San Francisco

see our catalog in Sweet's



8490

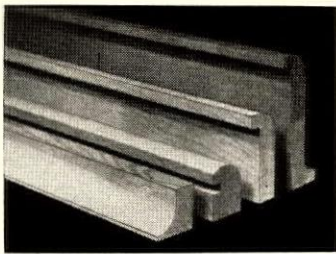
NEW PRODUCTS

start on p. 151



Window well cover keeps out rain, dirt, and children, is made of 3/16"-thick Plexiglas, clear or translucent. It fits over the well with aluminum clips that let the unit be raised for ventilation. Greenlawn Div., Gates Rubber Co., Denver, Colo.

For details, check No. 24 on p. 183



Moldings are designed for post-formed cabinet and vanity tops. They are precision milled so they can be used with post-formed laminating machinery. Competitively priced with standard moldings. Precision Mouldings Inc., Atlanta.

For details, check No. 25 on p. 183



Safety hat of thermoplastic resin is not affected by most acids and will not crack or chip. Two-piece polyethylene suspension is secured to the shell at eight points for optimum impact distribution. Apex Safety Products, Cleveland.

For details, check No. 26 on p. 183



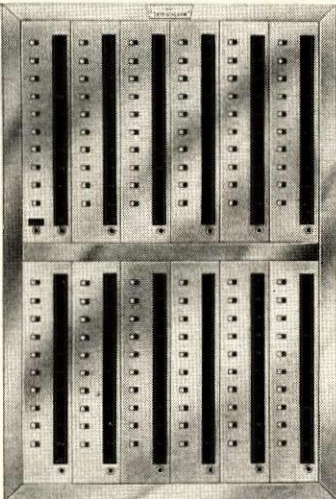
Radio transmitter speeds job-site communication between builder, architect, and construction crews. Voice Mate is 6"x3"x1", weighs only 12 oz. including two 8-volt batteries and a collapsible antenna. General Electric, Lynchburg, Va.

For details, check No. 27 on p. 183



King-size cupola provides a large decorative ventilation area. Mount Vernon model (above) comes 40" square, 64" high or 48" square, 77" high. Roof is heavy copper or aluminum. Louvers have screen backing. Manor House, Warsaw, Ind.

For details, check No. 28 on p. 183



Alarm system for apartments—which is turned on at tenant's request—signals the doorman if anyone enters. A switch by the apartment number on the central control panel (above) activates that apartment. Auth Electric Co., Long Island City, N.Y.

For details, check No. 29 on p. 183

Publications start on p. 177

the Brown touch adds so much prestige



THE LUXURY TOUCH SHE'LL BUY AT FIRST SIGHT

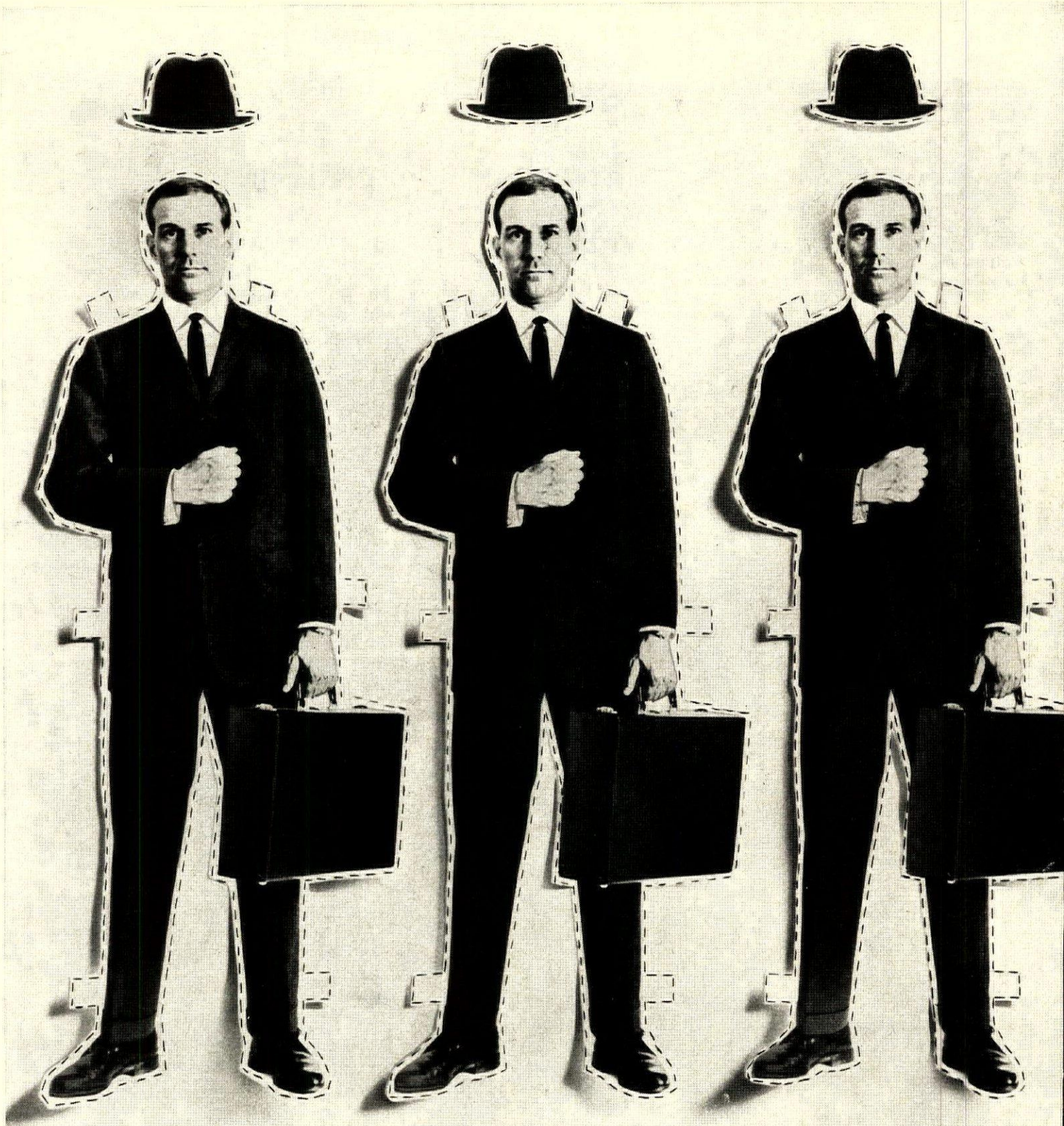
When a lady buys, she buys beauty. That's Brown—the luxury range available in six decorator finishes. When a lady buys, she wants convenience. That's Brown automagic gas and electric cooking. And she wants to know the name. That's Brown—guaranteed by Good Housekeeping—the range with over a quarter-century reputation of manufacturing know-how and reliability. When a builder buys—he wants economy. That's Brown. So put Brown into your kitchens. For prestige, for performance, for price—Brown slip-ins and built-ins will close more sales for you.

BROWN
Over a quarter century proved performance

Write today for information and specifications!

BROWN STOVE WORKS, INC. • CLEVELAND, TENNESSEE





TIRED OF PAPER PEOPLE? . . . for real

Tired of paper work? Tired of writing letters to multiple suppliers, just to get two or three bits of information you need to run your business?

You've been dealing with *paper people!*

Because we know your problems, we merged four Republic divisions, and made each one of our salesmen responsible for *all* the products of our former Berger, Container, Culvert, and Truscon plants.

So that you can call on *one* salesman who can

answer all your questions about all the products made by the Berger, Container, Culvert, and Truscon facilities—only now we call ourselves the **MANUFACTURING DIVISION.**

Naturally, you don't know what all the products are. That's why we've listed them here.

To find out more about any one of the products listed, all you have to do is ask for a call by your local Republic Man.

Doesn't that make a lot of sense?

Strong
Modern
Dependable



service, call your REPUBLIC MAN!

CALL THE REPUBLIC MAN FOR THESE PRODUCTS: VISION-VENT® and GRID-VUE Window Walls . . . Residential and Commercial Steel Doors and Frames . . . Steel, Stainless Steel, and Aluminum Windows . . . Steel Cabinets for Kitchens . . . Roof Drainage Products . . . Steel Storm Sash and Window Screen Frames . . . Metal Lath and Lintels . . . Partition Studs . . . Steel Lockers and Shop Equipment . . . Bookshelves, Wardrobes, and Special Cabinets . . . Steel Pipe and Corrugated Steel Drainage Pipe . . . Concrete Reinforcing Bars . . . TRUSSPAN Steel Buildings . . . Channels, Curb Bars . . . Steel Joists and Roofdeck . . . Welded Wire Fabric . . . Tie and Hanger Wire. *You can get literature by asking your Republic Man. Again, no paper work.*

REPUBLIC STEEL
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MANUFACTURING DIVISION
DEPT. HO-5694, YOUNGSTOWN 5, OHIO
BERGER • CONTAINER • CULVERT • TRUSCON



**Nothing sells a home
like the kitchen**

**Nothing sells the kitchen
like Nickel Stainless Steel**



1. Nickel stainless steel sink. List of manufacturers upon request.

These seven products made with nickel stainless steel represent a kitchenful of sales appeal. They have the quality features that discriminating buyers look for.

Beauty • Stainless steel's soft gleam, clean and modern, lasts a lifetime and harmonizes with any color.

Durability • Stainless steel resists denting and scratching—won't chip, crack or peel.

Easy maintenance • Stainless steel wipes clean with a damp cloth. Its smooth, non-porous surface won't harbor dirt or bacteria.

Corrosion resistance • Stainless steel is

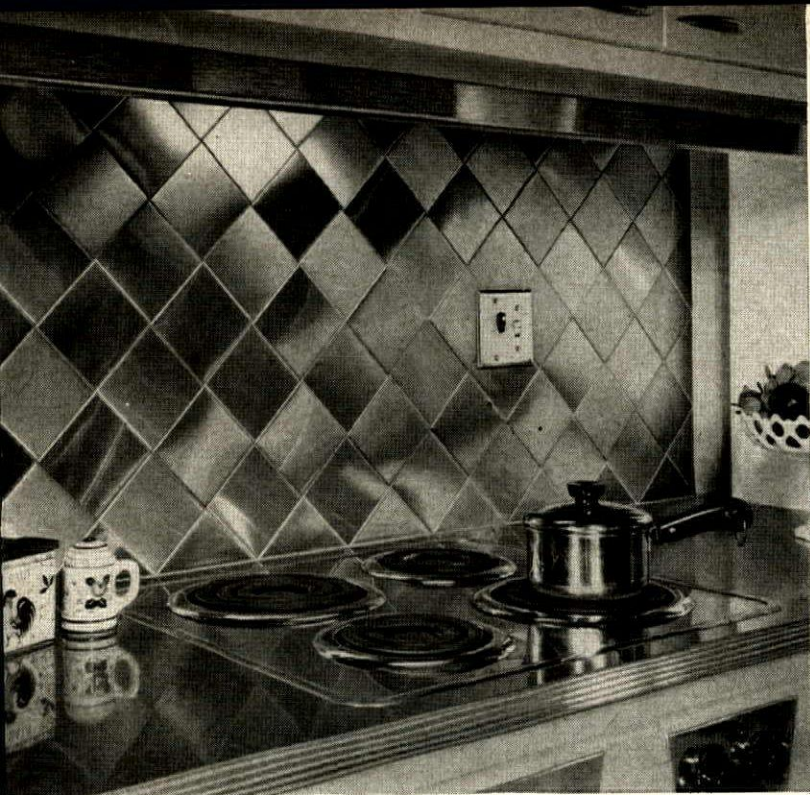
unaffected by heat, cold, moisture, food acids or detergents.

Because of its many advantages, builders and architects are using versatile stainless steel in a wide range of applications with built-in value—both interior and exterior. If you have a question on how and where nickel stainless steel can put more sales appeal in your homes or apartments, write:

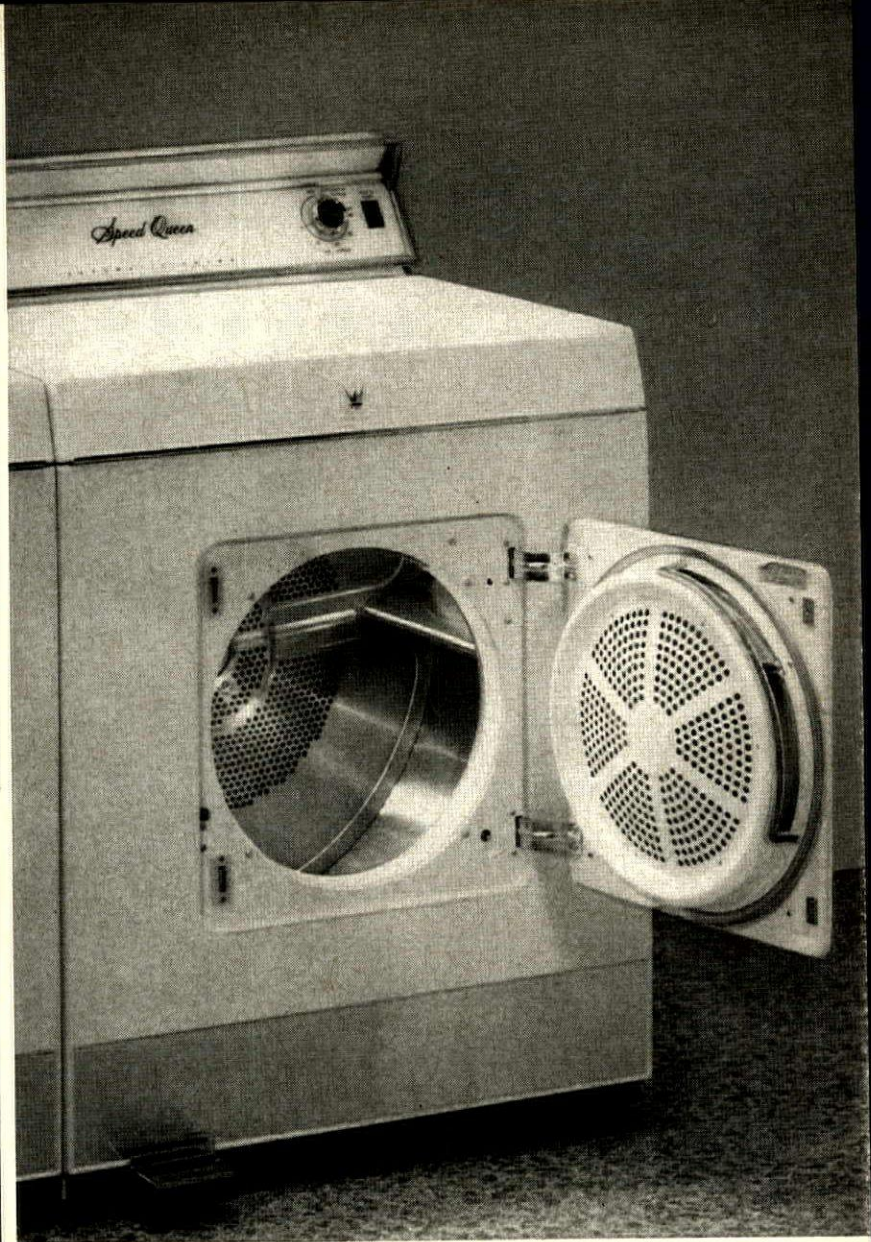
THE INTERNATIONAL NICKEL COMPANY, INC.

67 Wall Street  New York 5, N.Y.

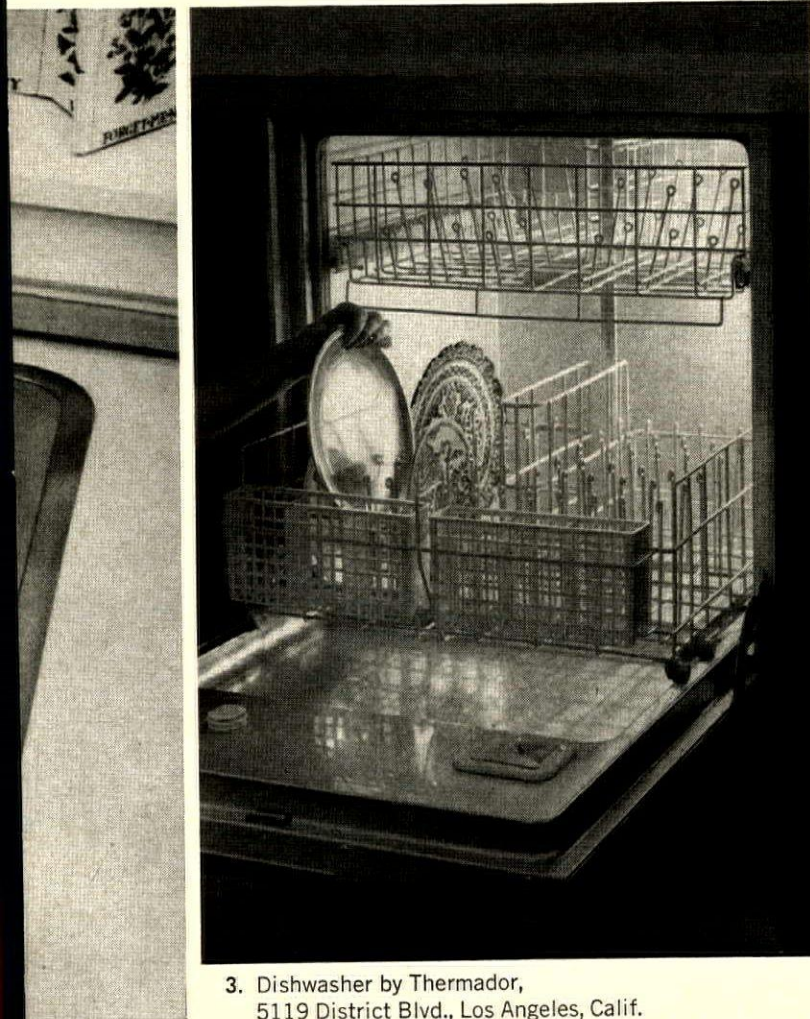
NICKEL...its contribution is QUALITY



2. Wall tile by Vikon Tile Corp., Washington, N. J.



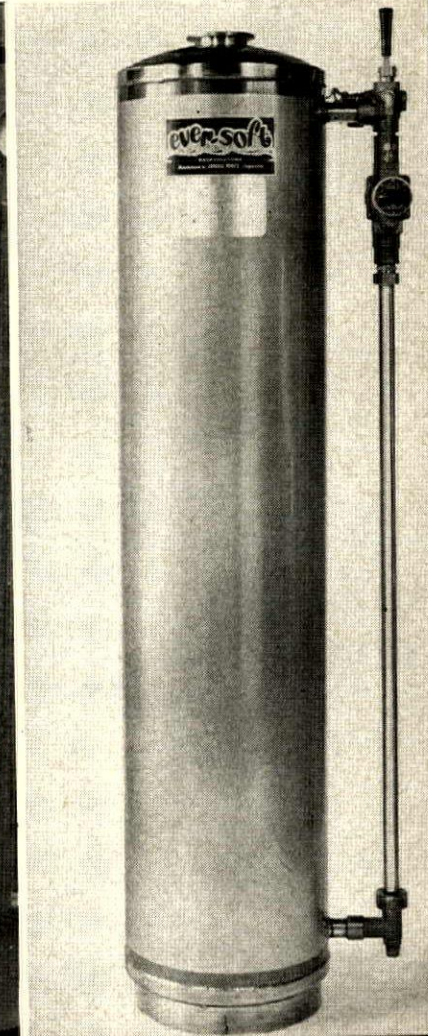
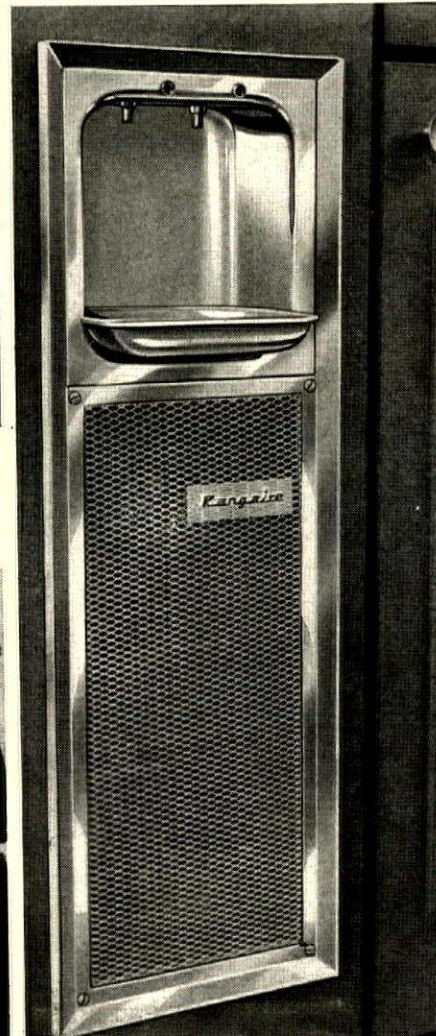
5. Washer and dryer by Speed Queen, Ripon, Wis.



3. Dishwasher by Thermador,
5119 District Blvd., Los Angeles, Calif.

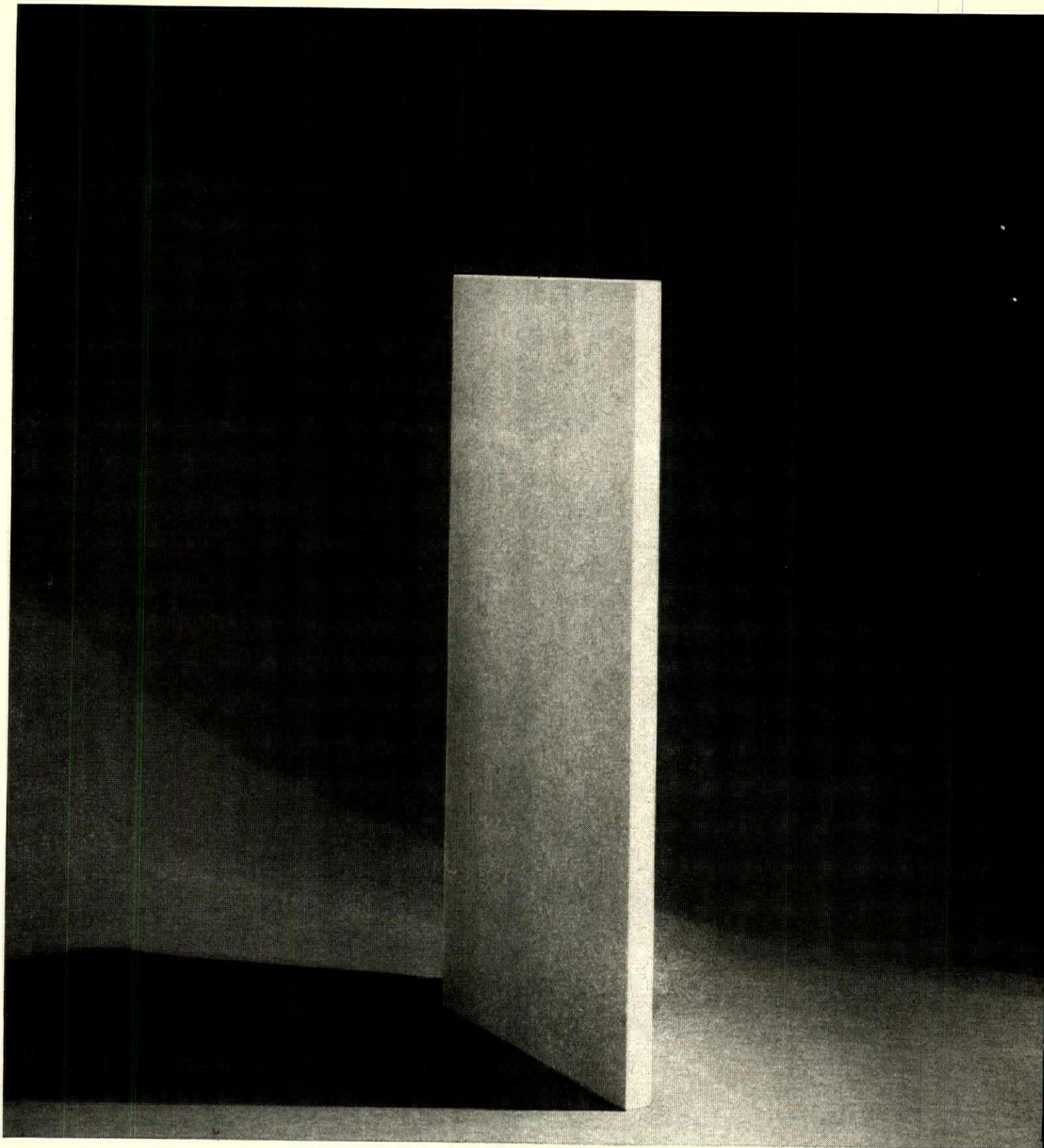
6. Hot and cold water dispenser by
Rangaire, Cleburne, Texas

7. Water softener by General Ionics,
101 Terence Drive, Pittsburgh, Pa.

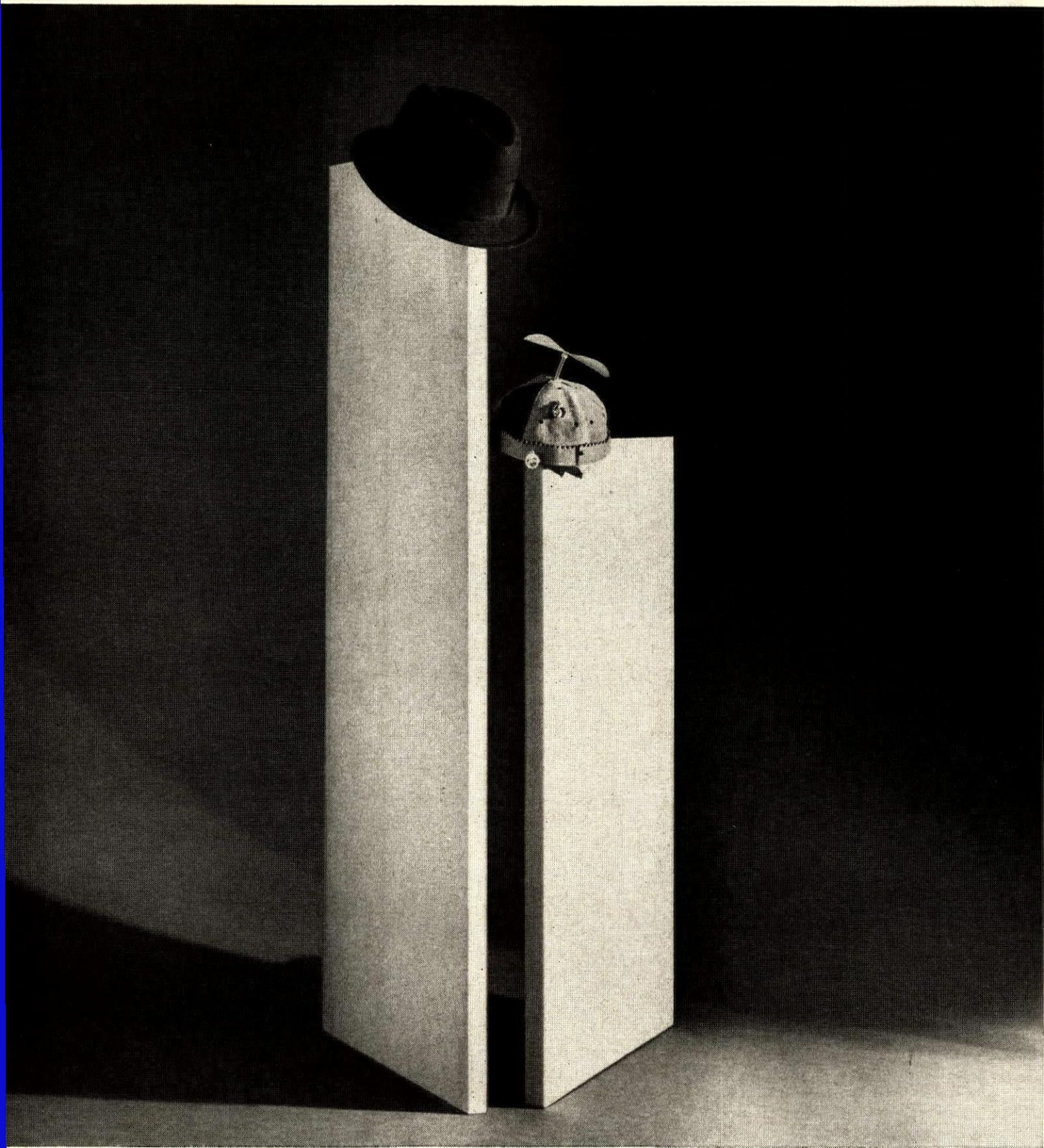


4. Range and wall oven by Jenn-Air, 1102 Stadium Drive, Indianapolis, Ind.





Roofmate FR is the most dependable insulation since Styrofoam®.



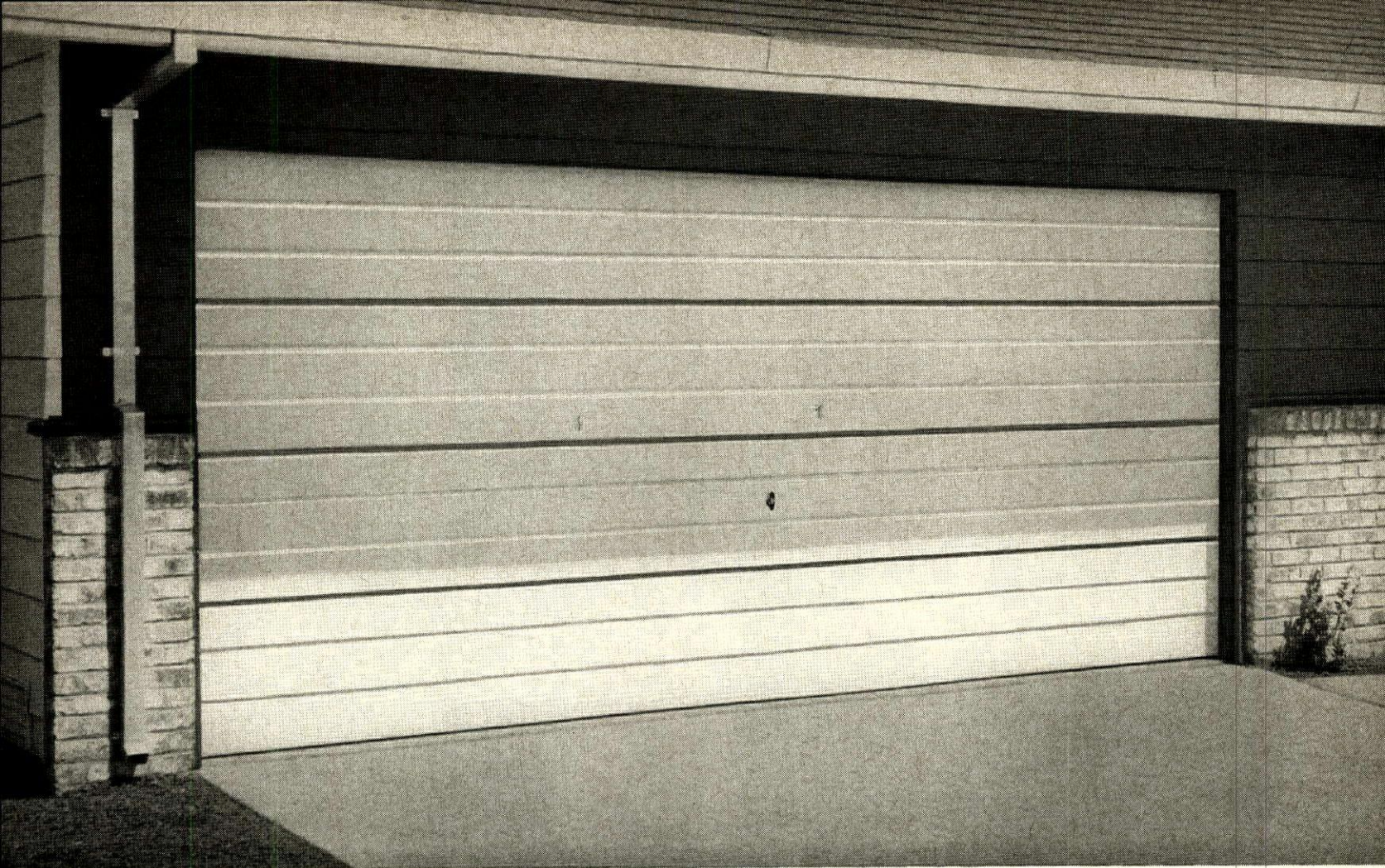
Like father, like son.

We extrude both from the same polystyrene, by the same exclusive process. Just as Styrofoam wall insulation does, Roofmate® FR roof insulation keeps heating and cooling costs constant, building owners happy. It also ends your worries about roof blistering and cracking caused by waterlogged insulation. Like Styrofoam, Roofmate FR

can't absorb moisture. It stays dry. Competitive in price as a material, Roofmate FR saves on installation too: as much as one dollar a square! It's lightweight (less than 25 lbs. to the bundle) but tough. We give it a high-density skin top and bottom to take the beating a roof insulation gets.

Your roofing contractor uses standard methods with Roofmate FR. It comes in thicknesses to meet usual "C" factor requirements. Want more data and specifications? Just see our insert in Sweet's Light Construction File, or write us: The Dow Chemical Company, Plastics Sales Dept. 1011BP9, Midland, Michigan.





**"THE HOUSE YOU DON'T HAVE TO PAINT"
SAVES YOU MONEY... SELLS BEST!**

ITEM:

**ALL NEW! REYNOLDS
RIB-DOR™**

**ALL-ALUMINUM
GARAGE DOOR**

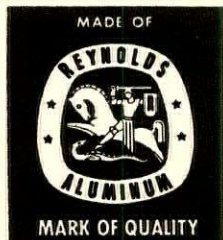
Of rigid aircraft-type construction, RIB-DOR is handsome and efficient. Each section is a full-width aluminum panel, lock-rolled into rugged extruded aluminum frames, riveted on four sides and also riveted to muntin stiffeners.

RIB-DOR is pre-finished both sides in Reynolds famous Colorweld® baked enamels—white inside, choice of white, beige, green outside. On the aluminum base, which cannot rust, rot, warp or swell, these colors will last years longer than ordinary painting. Aluminum's light weight is also important, for easy installation and finger-tip operation. Available in one-car and two-car sizes, with optional low headroom kits, packaged *complete* in one carton.

Reynolds new RIB-DOR is the kind of low-upkeep, "Easy Living" feature that people want. Add it to your plans for "the house you don't have to paint"—along with the other products listed below. They will all save you money and help you sell!

REYNOLDS ALUMINUM BUILDING PRODUCTS • Check this List for Information

TEAR OFF AND MAIL TO REYNOLDS METALS COMPANY, RICHMOND 18, VIRGINIA



- GARAGE DOORS
- SLIDING GLASS DOORS
- GUTTERS
- SIDING
- WINDOWS
- SHINGLES
- SOFFIT
- FLASHING

Your Name _____

Company Name _____

Address _____

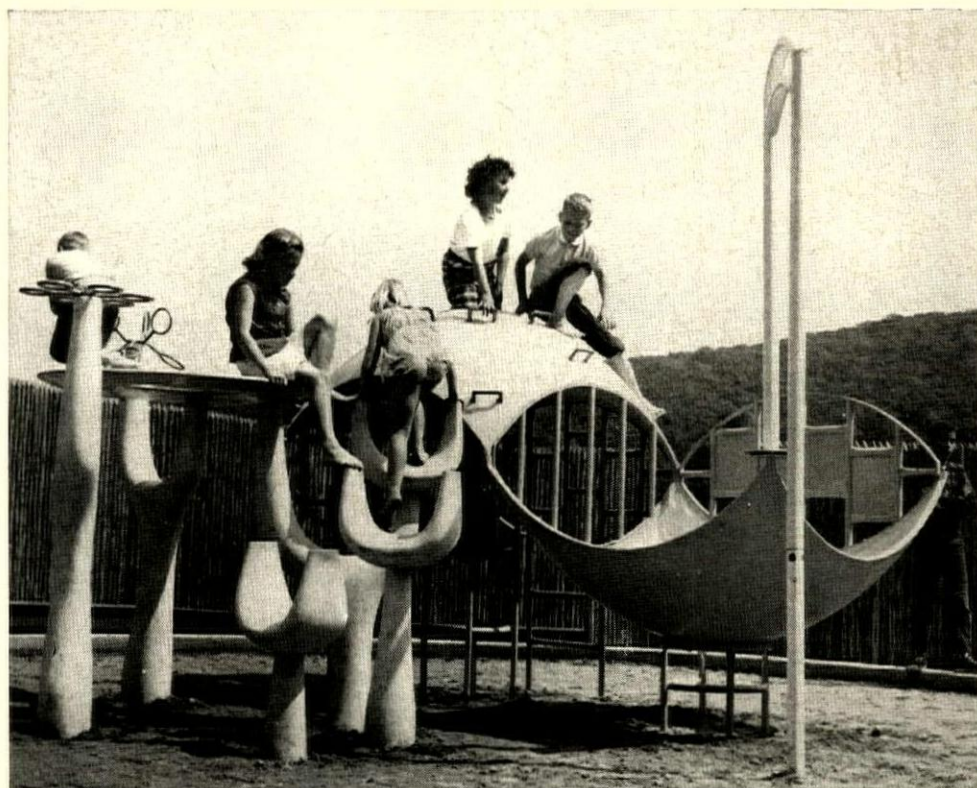
City _____ Zone _____ State _____

Watch Reynolds TV program on NBC: "The Dick Powell Reynolds Aluminum Theatre" Tuesday nights.

New forms for the playground are shown in 48-page catalog

Included are five different kinds of climbing and jumping equipment: 1) tree, stump, and saddle shapes of reinforced concrete, left in photo; 2) dome-shaped aluminum shells with climbing grilles and sliding poles, right in photo; 3) pressed-steel blocks with colored aluminum tread plates assembled to form bridges and mountains; 4) giant-size aluminum alphabet letters; and 5) webs of swinging aluminum bars that form climbing tunnels, walls, and cradles. The designs in each group are graded for various age levels. The forms come individually and in playscape packages.

Playground Corp. offers a consulting service to designers or builders of schools, motels, shopping centers, and public parks; and will help plan model-house play areas. Playground Corporation of America, New York City. For copy, check No. P1 on the coupon, p. 183



Noise control: 100 pages of technical data and products

This new design manual covers the complete range of sound conditioning systems including the effects of lighting fixtures and air diffusers. The introductory section is a comprehensive review of technical data on sound insulation and noise control. For example, pages 10 and 12 (shown at right) show sound-transmission loss for various types of floors and partitions.

Sections on UL fire-rated assemblies, acoustical tile, and acoustical lay-in panels, show patterns, finishes, sizes and sound-absorption coefficients for each product.

The final section is an acoustical specifications guide. It is amply illustrated with installation drawings and construction cutaways. The manual is available free to architects on their letterhead. Celotex Corp., acoustical dept., 120 South LaSalle St., Chicago 3.

Part No.	Description	Weight, Lbs. per Sq. Ft.	Transmission Loss, Db.	Rating
HOLLOW FRAME PARTITIONS				
1	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	5.9	35	FAIR
1a	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	7.2	37	GOOD
2	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	8.2	38	GOOD
2a	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	12.9	40	GOOD
3	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	15.2	41	VERY GOOD
4	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	6.2	42	VERY GOOD
4a	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	7.7	43	VERY GOOD
4b	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	13.4	45	EXCELLENT
4c	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	15.6	46	EXCELLENT
5	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	14.3	52	EXCELLENT
6	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	8.3	40	VERY GOOD
6a	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	4.7	32	FAIR
SOLID PARTITIONS				
7	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	16.8	37	GOOD
8	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	16.4	38	GOOD
MASONRY PARTITIONS				
9	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	21.8	39	GOOD
10	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	28.0	41	VERY GOOD

Part No.	Description	Weight, Lbs. per Sq. Ft.	Transmission Loss, Db.
1	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	15.8	42
2	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	19.0	45
3	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	16.2	50
4	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	16.7	54
5	1/2" CELLULOSE FIBER BOARD 1/2" Gypsum Board 1/2" Gypsum Board 1/2" Gypsum Board	20.3	56

Four new lighting brochures show a wide range of fixtures

Intermatic. Two 4-page bulletins outline various uses for timed switches and photo-electric lighting controls. They explain how the automatic controls operate and describe their convenience and economies. Photos, sizes, and electrical specs are given for each item. International Register Co., Chicago. For copy, check No. P2 on the coupon, p. 183

Moe. This 90-page catalog describes Moe's complete line of residential fixtures. Four groups of matched fixture styles are shown,

and all fixtures are grouped by type (e.g., pull-downs, chandeliers, dimmers, luminous ceilings, recessed fixtures) and each is illustrated with sizes listed. An area-lighting guide shows 32 lighting areas in a house and suggests the proper fixture for each. Moe Light, Louisville. For copy, check No. P3 on the coupon, p. 183

Lightolier. This 12-page booklet covers the maker's line of wall fixtures—units for lighting desks and other work spaces, and units that provide both direct and upward indirect lighting. All are in simple contemporary styles and are designed for easy installation.

Fixtures are shown in photos and installation drawings with mechanical and electrical specs. Lightolier, Jersey City, N. J.

For copy, check No. P4 on the coupon, p. 183

Benjamin. This 40-page brochure covers a complete line of fixtures for commercial and institutional buildings—both fluorescent and incandescent. Most, including three just-announced additions to the line, are high-styled units with anodized aluminum and walnut trim. Each unit is shown in four-color photos with installation details. Benjamin Div., Thomas Industries, Louisville. For copy, check No. P5 on the coupon, p. 183

Publications continued on p. 182

PAY OFF IN HOME OWNER SATISFACTION NEW PPG GATEWAY® II SLIDING DOORS

GATEWAY II is the type of sliding door your prospects want!

No other sliding glass door offers the quality, the excellence of design, that you get in the GATEWAY II—at such a moderate price.

- Two panel unit—right or left hand panel can be sliding—your option at time of installation.
- Three panel unit—center panel or either end panel may slide—whichever you choose.
- Frame is reversible when assembled—makes possible inside slider-outside screen or outside slider-inside screen.

GATEWAY II is easy to install. Standard 6'8" height, in 4 widths to fit nominal 6', 8', 9', and 12' openings, available for single and TWINDOW® Insulating Glass. Frame attaches to head and jambs with wood screws. Just tie down the fixed panel, slip sliding panel into place, make a small screwdriver adjustment and the job is done.

Local PPG branches have GATEWAY II Sliding Glass Doors available and ready for delivery to your job.

GATEWAY II offers these luxury features:

- Smart, modern styling, with stiles wide enough to be strong, yet narrow enough to be graceful.

- Exclusive safety-threshold—low profile, no fins to catch heels on. No water can be trapped behind fixed panel, nor run out on floor.
- Quiet, smooth action . . . door glides on nylon-covered rollers with lubricated ball bearings.
- Vinyl weather seals and silicone-treated wool weather-stripping keep out drafts, moisture, dust and insects. Door can be adjusted easily for height without losing weather seal.
- Finest lock in industry . . . can be ordered master keyed, keyed alike or keyed to rest of house.
- Top-rolling fiber glass screen—won't jam or rack.
- Anodized aluminum construction tells a buyer that this GATEWAY II Sliding Glass Door will stay beautiful for years.

And remember, the PPG label is one more indication to a buyer that you've chosen quality construction materials. Many of your prospects will have seen the GATEWAY II Sliding Glass Door on network television, and in *Better Homes & Gardens*, *House Beautiful*, and *House and Garden*.



PITTSBURGH PLATE GLASS COMPANY
PAINTS • GLASS • CHEMICALS • FIBER GLASS

Available glazed with new HERCULITE® K Tempered Safety Sheet Glass—to meet latest FHA MPS!

The new FHA MPS for glass, revision 109 and many local safety standards, now require safety glass or the installation of muntins or safety bars on all patio doors. GATEWAY II, glazed with strong and safe Tempered HERCULITE K, meets these requirements.

1. Simple adjustment.
2. Flat safety threshold.
3. Tremendous impact strength.
4. Finest lock in industry.
5. Tightly weather-sealed.
6. Trouble-free, top-rolling screen.



6

5

4

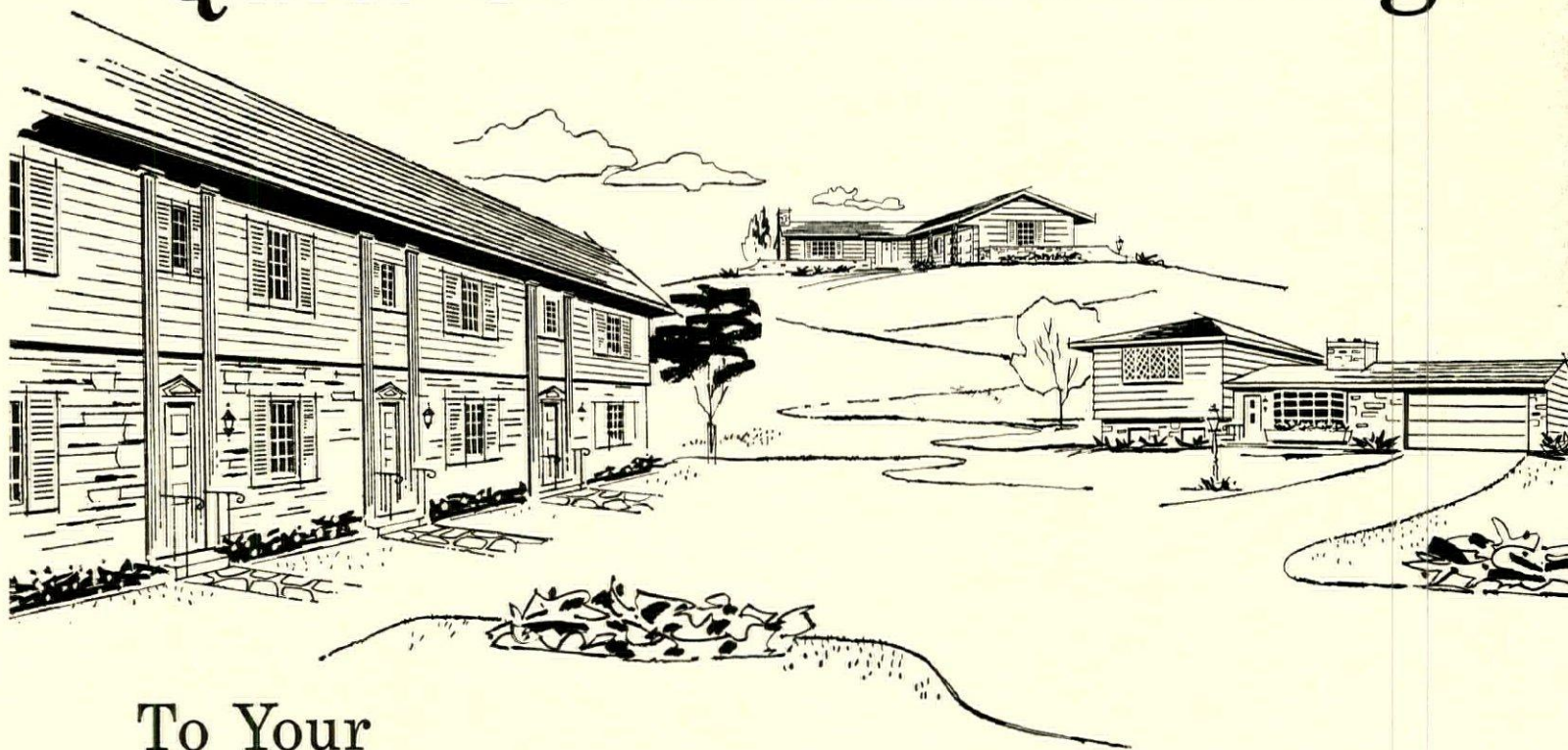
3

1

2

sales-clinching NEWS FROM CELOTEX

3 WAYS you can add the proved sales advantages of *Quiet Conditioned Living*



To Your Town Houses and Single Family Homes

BUYER PREFERENCE — Yes, buyer demand for the modern comfort of Quiet Conditioned Living is increasing daily! Alert builders are turning this demand into sales advantages for their town houses, apartments, single family homes.

Through widespread publicity, as well as personal experiences, prospective buyers and renters have learned that noise *can* be reduced. In some cases, tenants have left apartments because of irritating noise that could have been eliminated by sound quieting construction.

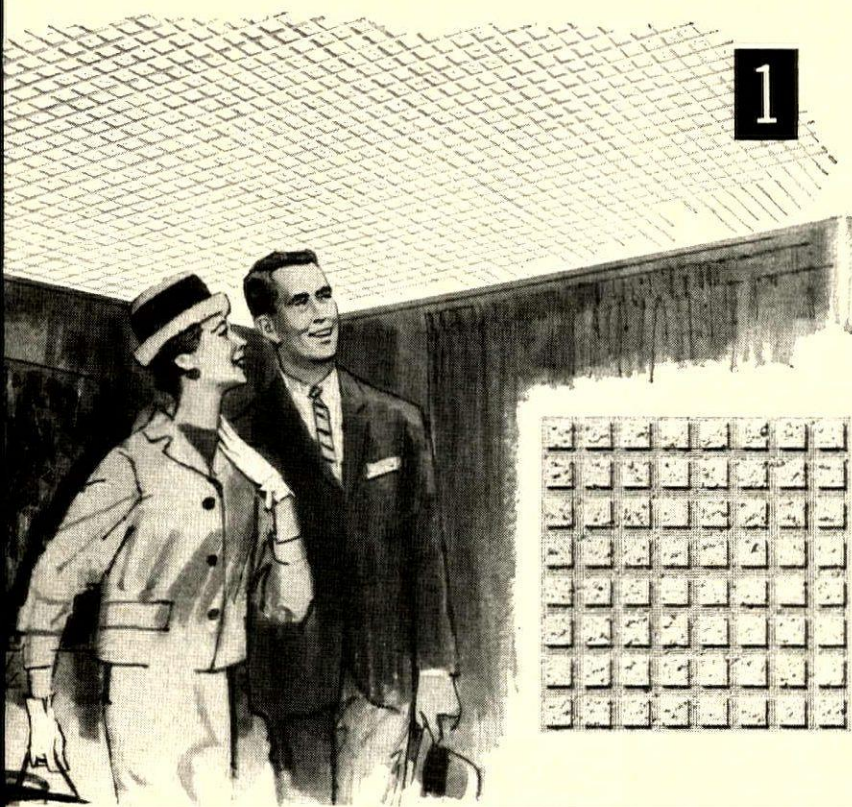
To help you capitalize on this fast-growing buyer demand, Celotex offers a helpful brochure defining noise problems and showing drawings for tested-rated constructions. Send coupon for your free copy today.

1

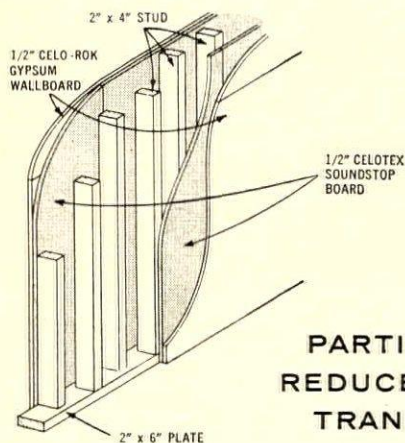
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2



PARTITIONS THAT REDUCE SOUND TRANSMISSION

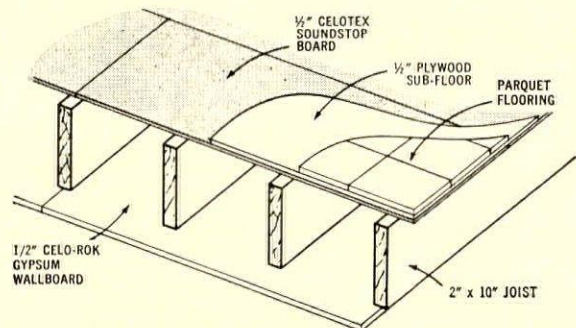
Construction shown here provides vastly improved Sound Transmission Loss over ordinary partition construction (1/2" gypsum wallboard on both sides of 2x4 studs 16" o.c.).

In this partition, both sides have lining of 1/2" Celotex Soundstop[†] Board and laminated facing of 1/2" Celo-Rok tapered edge Gypsum Wallboard. Excellent Sound Transmission Class (STC) :50.

*Based on tests conducted by Geiger and Hamme Laboratories, Ann Arbor, Michigan.

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3

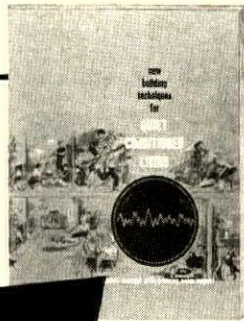


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DECORATED LAVATORY BOWLS. 4 pages. Shows patterns; lists sizes and prices. Regency, San Diego, Calif. (Check No. P7)

FILING SYSTEMS. 8 pages. Hanging plan racks, cabinets for rolled plans. Photos and sizes. Plan Hold Corp., Los Angeles. (Check No. P8)

PACKAGED CEILING KITS. 8 pages. Typical applications, installation instructions, and specs. Also ceiling planning sheet for ordering custom kits for rooms of any size. Arterest Products, Chicago. (Check No. P9)

ELECTRIC HEAT. 16 pages. Ceiling cable, convection and forced-air baseboards, bathroom, infrared, portable, and unit heaters. Specs, diagrams, and photos. Hunter Div., Robbins & Myers, Memphis. (Check No. P10)

TEMPLATES. Illustrations of 68 templates and lettering guides. Templates for all kinds of construction drawings are included. Pickett Slide Rule Co., Alhambra, Calif. (Check No. P11)

Technical literature

PLYWOOD FOR TODAY'S CONSTRUCTION. 20 pages. Strength and rigidity, nail-bearing, bending, vapor-

transmission, acoustical, and thermal data. Types, grades, sizes, and uses. Specific products with DFPA recommendation and FHA requirement charts. Douglas Fir Plywood Assn., Tacoma, Wash. (Check No. P12)

PAINT PERFORMANCE. 10 pages. Explains how paint performance is improved by sound construction. Drawings show proper placement of vapor barriers and vents, drainage techniques, and siding application. National Lumber Manufacturers' Assn., Washington. (Check No. P13)

SEPTIC TANKS. 6 pages. Step-by-step explanation of septic tank systems and their use with garbage disposers. In-Sink-Erator Mfg., Racine, Wis. (Check No. P14)

BELT-DRIVEN UTILITY FANS. 36 pages. Charts of performance data and dimensions for units with 12" to 36" wheels, handling from 700 to 23,000 cfm. McQuay, Minneapolis. (Check No. P15)

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ZONE CONTROL for heating and air conditioning. 4 pages. Dial control is described and diagram shows a two-zone installation. Multi-Zoner Inc., Lynchburg, Va. (Check No. P18)

PORTABLE TWO-WAY RADIO. Data sheet. Cadre Industries, Endicott, N.Y. (Check No. P19)

MUSIC-COMMUNICATIONS SYSTEM. 4 pages. Photos and features of components and accessories. Broan Mfg., Hartford, Wis. (Check No. P20)

STEEL DOOR FRAMES. 4 pages. Features, construction, sizes. Drawings show frames in typical wall sections. Amweld Building Products, Niles, Ohio. (Check No. P21)

SURFACE-MOUNTED WIRING. 12 pages. Photos show problem installations in houses, motels, etc. using Flexway. General Electric, Providence. (Check No. P22)

FOOD CENTER: six built-in appliances. 4 pages. Photos and specs. Also shows separate electric barbecue. Nutone, Cincinnati. (Check No. P23)

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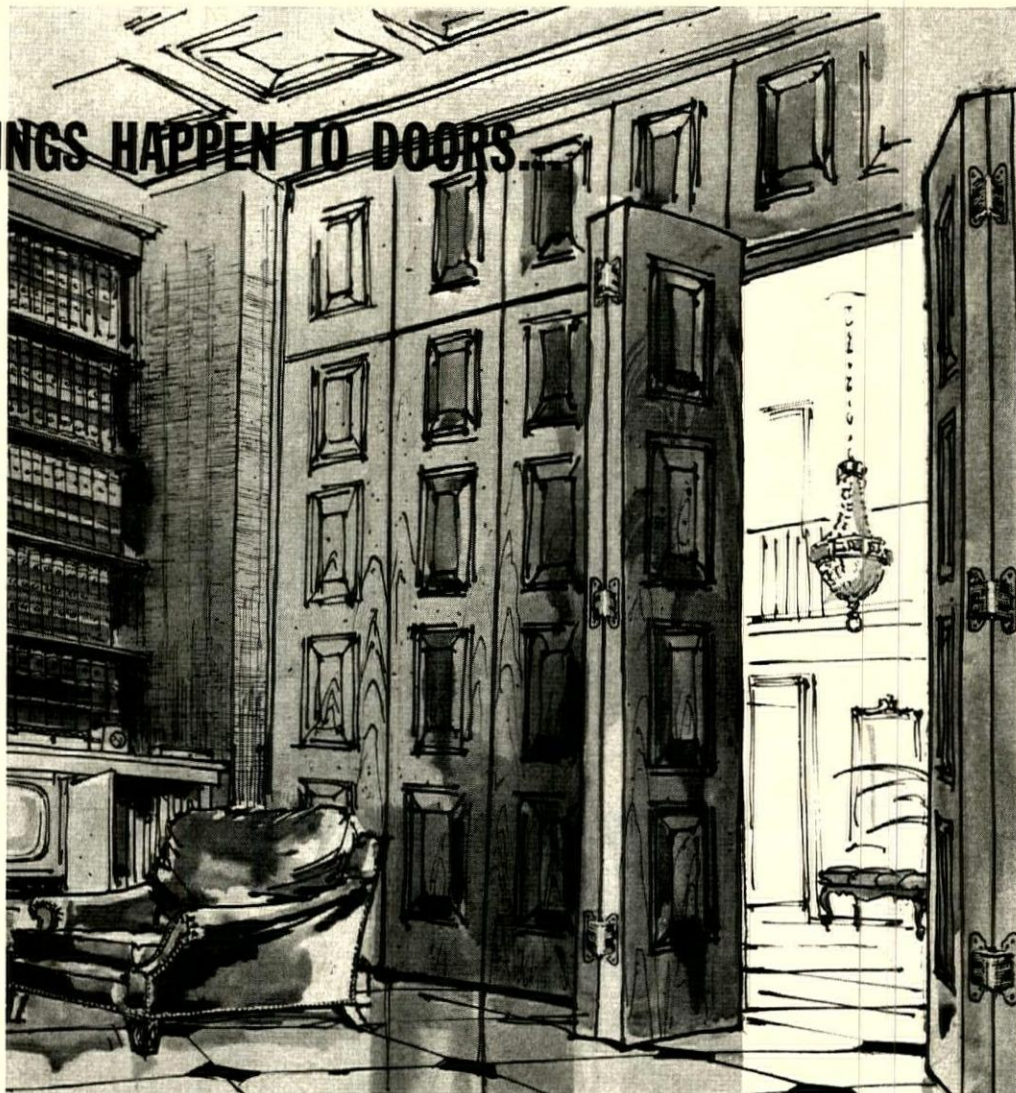
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BACKHOE-LOADER COMBINATIONS. 12 pages. Photos of equipment in action, operating data and specs. Deere & Co., Moline, Ill. (Check No. P31)

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FHA MINIMUM PROPERTY STANDARDS. 8-page guide explains the procedures to follow in providing data to FHA when new materials, products, and construction methods are proposed. Federal Housing Administration, Washington. (Check No. P30)

CERAMIC TILE. Quarterly booklet has articles on bath and kitchen color and style trends as well as showing new patterns, types, and installation techniques. For free subscription to *Stylon News*, write on your letterhead to Stylon Corp., Box 341, Milford, Mass.

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9. Stanley mirrored closet doors
10. Caradco interior doors
11. Lightolier faceted pendant
12. Moe filigree globe
13. Habitat walnut frame pendant
14. Natale mercury-vapor light
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17. Standard Steel stall shower base
18. Ventrola bath vent fan
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21. Day & Night forced-air furnace
22. Radiant Systems electric heater
23. Peerless compact cooling unit
24. Greenlawn window-well cover
25. Precision Mouldings milled moldings.
26. Apex safety hat
27. G.E. radio transmitter
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29. Auth alarm system

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- P1. Playground equipment catalog
- P2. Intermatic automatic light controls
- P3. Moe lighting catalog
- P4. Lightolier wall light fixtures
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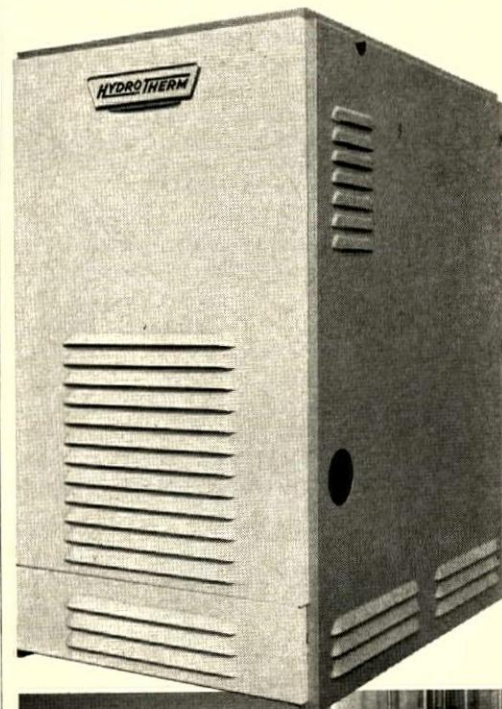
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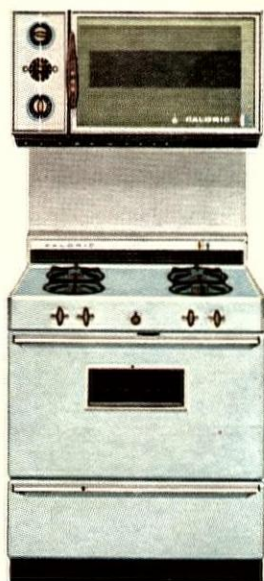
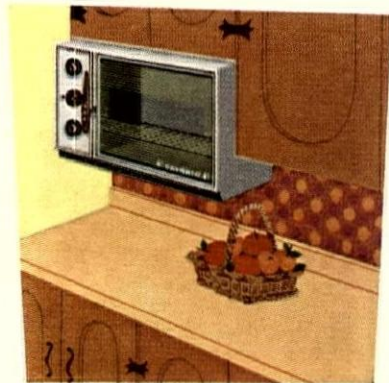
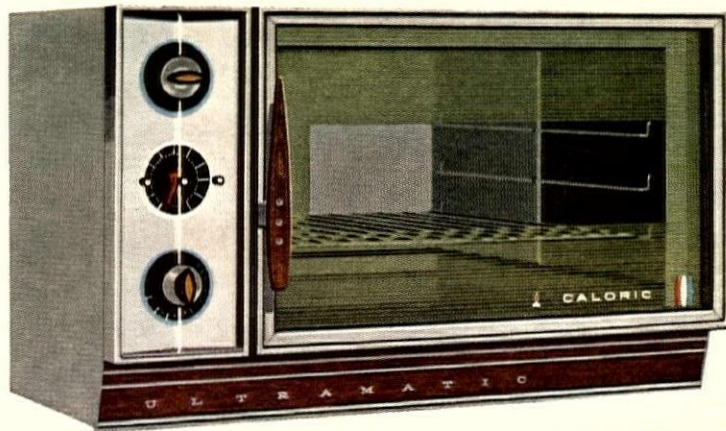
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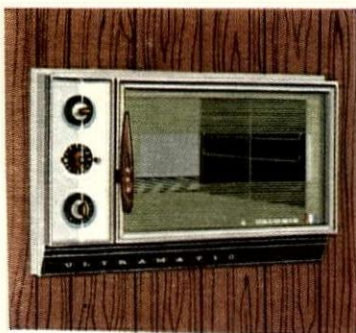
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