House & Home

MANAGEMENT PUBLICATION OF THE HOUSING INDUSTRY DECEMBER 1965

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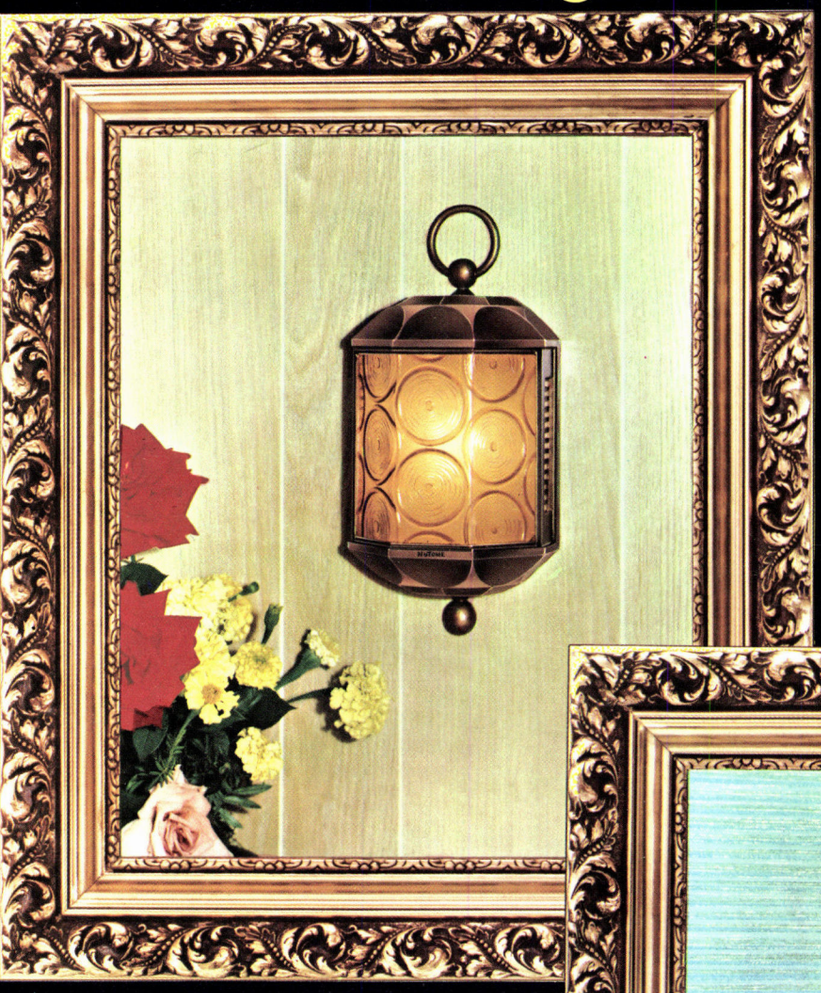

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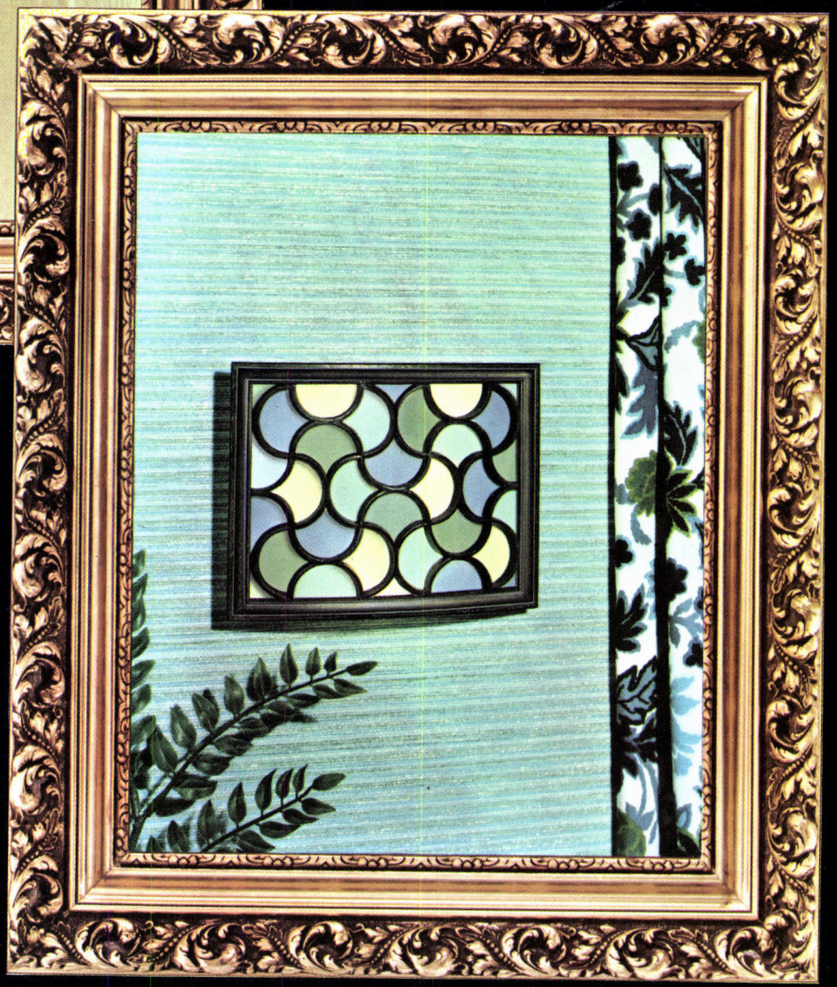

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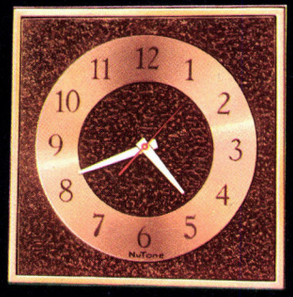

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e previous page

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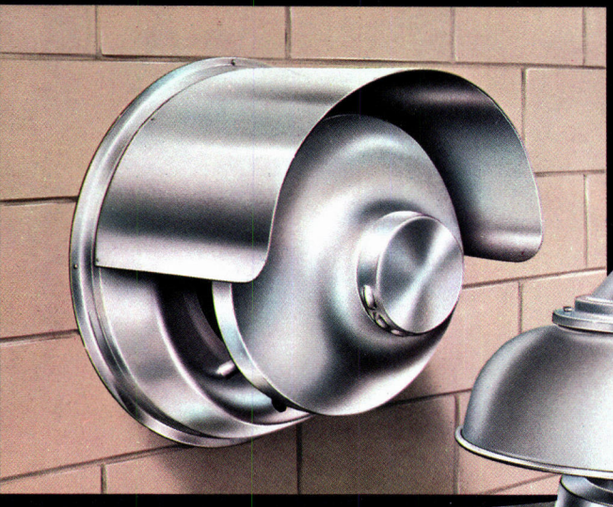

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House & Home

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WASHINGTON WIRE

FHA rate in peril?
Administration economists are working hard behind the scenes to keep Fanny Mae (the Federal National Mortgage Assn.) from having to lower its price for FHA-insured mortgages and perhaps trigger a hike in the FHA's maximum 5¼% home-loan interest rate. Fanny Mae's purchases are up tremendously, and it had to raise its rates on short-term discount notes to attract the financing for this extra activity. Best guess: Fanny Mae might raise its fees to slow the surge of offerings it has been getting. FHA Commissioner Philip Brownstein foresees no interest rate hike.

Fanny Mae a 'pawn'?
At the drop of a hint about FHA being forced to raise its rate, Rep. Wright Patman (D., Tex.) thought he spotted his favorite foe, the bankers, as the cause behind Fanny Mae's problems. So he directed Housing Subcommittee Chairman William Barrett (D., Pa.) to find out if the quasi-government agency is a "pawn of the bankers." Barrett has promised hearings early next year "to see what can be done to prevent a higher interest rate."

More than pin money
FHA has officially acknowledged something millions of women have always known—working mothers make money.

Commissioner Philip Brownstein told his field office directors to stop looking at wives as potential mothers and recognize their income in qualifying for a mortgage. Or as FHA's bureaucratic prose says, "The new policy recognizes that the trend in recent years has been for working wives to resume employment after the birth of a child and the period of interrupted income is typically short."

Selling the foreclosures
Sen. John Sparkman (D., Ala.) plans to have his housing subcommittee probe FHA's methods and policies of selling government-owned foreclosed homes. The investigation would update a study he did several years ago. Recently FHA has reduced its inventory by about 8,000 houses; it's now at approximately 42,000 untis.

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LBJ tags housing cabinet package, 'Do not open till after Christmas'

After 13 years of Congressional strife, the Housing and Urban Development Dept. officially came alive in Washington last month—as a name on a rubber stamp.

The top office of secretary is vacant and President Johnson says it will remain that way until Congress reconvenes January 10.

The delay makes obvious a bitter behind-the-scenes battle raging over President Johnson's choice. The combatants:

- Housing and civil rights groups who favor promotion of HHFA Administrator Robert C. Weaver to become the first Negro cabinet member.
- Big-city mayors, who want a fellow mayor like Jerome Cavanaugh of Detroit, now president of the National League of Cities, or Richard Lee of New Haven.

Post-Christmas present. The White House said President Johnson would not unwrap his secretary choice until after a task force studying makeup of the department reports to him about Christmastime.

Former Budget Director Kermit Gordon, now with Brookings Institution, chairs the task force. Other members are Walter Reuther of the United Auto Workers; Prof. Charles Haar of Harvard Law School, a zoning and land planning law authority; William Rafsky, Philadelphia's former renewal coordinator; President Edgar Kaiser of Kaiser Industrial Corp.; Executive Director Whitney Young of the National Urban League; Chairman Ben Heineman of the most prosperous commuter railroad, the Chicago & Northwestern; and Prof. Robert C. Wood of the Massachusetts Institute of Technology.

Sen. Abraham Ribicoff, (D., Conn.), chairman of the Senate committee which shaped the cabinet legislation, is working with the task force.

Some close observers regard the task force as window dressing for the President's efforts to get a consensus formed behind one man.

Weaver, or . . .? The fundamental issue centers on whether Weaver will be promoted to the top job.

The late President Kennedy publicly promised the job to Weaver in 1962 during a heated Congressional battle. Now Johnson's delay is widely interpreted in Washington as meaning Weaver will be passed over. Texas Democrats tell H&H, "The only decision that has been made is that Weaver definitely will not get the job."

But Weaver supporters are not giving up. "Nobody is better qualified than Bob Weaver," Whitney Young told public housing and renewal officials last month.

"Many politicians, especially mayors, want a politician in that job. If you sit here and say nothing you will get an astute politician who knows little or nothing about housing."

Weaver is in the most delicate spot of all. When newsmen last month asked him whether he still wanted to be secretary he candidly replied, "Yes." Why? "Because this is the field in which I've spent most of my adult career."

Six names. The White House says President Johnson will choose from a list of six names. Weaver is on the list.

The other five are believed to include R. Sargent Shriver, director of both the Peace Corps and poverty program; Gordon, task force chairman, and Mayor Cavanaugh. Retired House housing subcommittee chairman Albert Rains is a possibility. The shifting of Defense Secretary Robert McNamara to housing is another possibility.

Lusk Corp. falls into bankruptcy

Lusk Corp., the nation's eighth largest publicly owned homebuilder a year ago, is trying to reorganize under federal court protection in Tuscon, Ariz.

Three materials suppliers filed petition of involuntary bankruptcy on Oct. 29. Six days later Lusk filed a voluntary petition under Chapter 10 asking for reorganization.

The proceedings do not affect two Lusk subsidiaries which are building townhouses in St. Louis and Westchester County near New York City.

President Robert F. Lusk Jr. told HOUSE & HOME he took the action because the parent company faces "loss of several million dollars" on a $4,078,000 contract of a subsidiary to deliver 500 prefabricated units to the Corps of Engineers for overseas shipment. "We had very heavy losses due to the degree of severity of inspection," he said. "We guaranteed payments by the central company, so we took a Chapter 10 to protect ourselves." All 500 units have been delivered and the company is trying to reach some agreement on change orders and holdbacks, he said.

The Corps says final acceptance is withheld because overseas contractors have not completed erecting the units.

As a result, Lusk stock plummeted from 75¢ in September to 3¢ bid over-the-counter last month. Its sales of $19.8 million in the year ending June 30, 1964 ranked eighth among publicly owned building companies. Net income hit $477,932 that year. The company has not reported results for the June 30, 1965 year.

Lusk Corp. was founded in 1948 by Robert F. Lusk Jr., a Harvard Business School graduate. It gained national acclaim as a management-minded company and went public in 1961 with stock valued at $5 a share. Quotations ranged up to $6 a share in 1962.

Second battle rages over rent aids: Will Congress vote the money?

The Johnson Adminstration and homebuilders must sell the historic rent-supplement program to Congress all over again.

An unexpected defeat in the dying days of Congress killed an appropriation to pay actual rent subsidies. The battle involved $30 million for rent aids, an amount President Johnson pledges to seek again in January.

Johnson says he is confident Congress will "cut through the propaganda of fear and mistrust to provide shelter for the families who need it now—today."

New ball game. This second debate promises to range far beyond the issue of spending the money.

It is a new ball game, say opponents of rent supplements, and they are rallying their forces in hopes they can kill permanently a program they deride as "Renticare."

House Republican Leader Gerald Ford (Mich.) says he will make a major 1966 campaign issue of the rent aids. "Congress saw through this radical, revolutionary rent subsidy gimmick," argues Ford. "When the program was sidetracked, it was not the nation's poor who suffered. Rather the big contractors, the big property owners, the big lending institutions were denied multi-million-dollar windfalls."

But some of Ford's 139 fellow Republicans do not see the issue entirely that way. Rep. James Harvey (Mich.), who led the floor fight against the rent-aid appropriation in the House, says: "It was not, and is not, my intent to attempt to kill this program."

Rules of the game. Harvey's big concern is the rules FHA rushed into print to get the rent subsidy program going in a hurry (NEWS, Nov.). He claimed these rules would let persons with $25,000 in assets have up to 70% of their rent paid by the federal government. The President says such allegations "had no basis in fact."

Later Harvey promised President Johnson he would support "reasonable" rules but he and other Congressmen will probably insist on seeing city-by-city income limits for persons receiving rent supplements. During the first battle over rent supplements last summer, HHFA said income limits would be at public housing levels. But HHFA added that income limits set by many city public housing agencies were outdated and that new local market surveys were needed to find out what the legal limits were.

Congress has voted $450,000 to begin these surveys, but they may open up yet another battle. For some public housing officials confide to H&H they are quietly pressing to have public housing agencies, presently locked out by law, take over rent supplement processing from FHA. "When and if the funds are granted, the rules will bear no resemblance to those first proposed," said one who declined indentification.

Race undertones. This second debate may also touch on the issue of race mixing in rent-aided projects. The proposed FHA rules opened this issue by reciting a 1962 Presidential ban on race bias in federally aided housing.

The recitation was superfluous, but as a result, 25 Southern congressmen switched their June stand and voted against the rent-supplement appropriation in the crucial roll-call in the House.

Capital observers say any thoughts of rent supplements being passed without Presidential arm twisting are foolish.

But they point out that Administration strength in the House may be greater than votes have indicated. When rent aids passed the House last June by a six-vote margin, another half-dozen freshmen Democrats voted against the measure for home consumption but had promised LBJ to vote his way if their votes made the difference. In a crisis, these six could give the Administration victory.

Labor: court vetoes union-set quota

Unions must bargain collectively with builders before setting work quotas for their members.

That landmark decision—which applies to all unions and employers—was handed down by the U.S. Court of Appeals for the Ninth Circuit in San Francisco last month in a case involving the area's HBA and a shinglers union.

The Associated Homebuilders of the Greater East Bay Inc. appealed a 1962 National Labor Relations Board ruling that had enjoined Shinglers Union Local 478 from enforcing work quotas by fining its members and threatening them with loss of work. The builders wanted a more far-reaching decision—and they got it.

In court, the union claimed that a work quota is part of a local's internal policy, such as dues and meeting attendance, and therefore is not an issue for collective bargaining.

Said the court: "The rule [work quota] is not directed merely at employees; it fixes the conditions and terms under which the employer may procure services of his employees."

The court returned the case to the NLRB on technical grounds and asked that it determine whether the shinglers union had bargained collectively with builders before setting the quotas. Meanwhile the union has bargained—and lost.

Work quotas in homebuilding are usually set by shinglers, masonry and brick-layers locals where they occur.

Dallas leaders back biggest test of self-help housing

In do-it-yourself Dallas—a city which still shuns federal renewal funds—businessmen and civic leaders last month started the most ambitious test yet of sweat equity as a way to house low-income families.

The group, headed by furniture dealer Larry A. Hart, set up Dallas Homes, Inc. to build 500 houses in the next year. Dallas Mayor Erik Jonsson and Builder David Fox are among incorporators. Buyers will be invited to substitute their own labor for down payments.

FHA and some savings and loan associations have permitted limited use of sweat equity in special cases. Most widespread use to date has been in Indianapolis, where Flanner House, a neighborhood center, bought cleared renewal land and helped families build 371 houses in ten years. The three-story ranches average $14,000 in price.

Since 1962 HHFA has been testing the feasibility of self-help plans to build new housing in Bethesda, Md., Rapid City, S.D. and for Indians in Arizona and Eskimos in Alaska. Volunteers will prefabricate building panels and erect them in the Rapid City test.

A group associated with Flanner House is trying to apply self-help techniques to rehabilitate 100 houses in Indianapolis.

Voters split on bond issues for renewal, nix public housing

New York State voters last month turned down a $200 million bond issue to pay half the cost of local public housing. A companion measure to let the state spend $13.5 million annually for a state rent-supplement program met the same fate.

Homebuilders and realty groups opposed both proposals, arguing rent aids and public housing "have totally failed to meet the need for which they were intended."

Columbus, Ohio, voters trounced a $6 million renewal bond issue, 54,596 to 26,-367, despite its endorsement by organized labor, the Chamber of Commerce and other organizations. There was no organized opposition, and Renewal Director Patrick Phelan blamed defeat on voter resentment of a proposed boost in the state sales tax.

Philadelphia approved a $27.5 million issue for capital improvements that officials said were needed to qualify the city for $30 million of renewal aid.

Louisville approved a single $29.8 million proposal including renewal funds.

Texas voters killed a proposed $200 million bond issue to buy land for resale to veterans and extend a program which expires December 1.

Florida builders lost a fight as state voters approved taxing mobile homes as motor vehicles, with a license fee of $20 to $80. Until now mobile homes have been taxed as personal property. In most cases, the change will reduce taxes.

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New legal trend: homebuilders face unlimited liability

The builder's long-recognized moral obligation to produce a safe house is fast becoming a legal requirement that could expose him to unprecedented damage suits.

Reason: courts are beginning to apply the doctrine of unlimited liability to homebuilding.

Here's what the doctrine means to builders:

1. They can be sued for damages caused by any defective product in their houses.
2. Their liability continues indefinitely. The courts have set no firm deadline, and a second or third owner can collect years after the original sale.
3. In some cases, an owner can collect without even proving the builder negligent.

Until this year, the principle of broad product liability or implied warranty had been applied mainly to food, drugs and autos. It had been extended to homebuilding only cautiously through negligence rulings in six states—California, New Jersey, New York, Oklahoma, Pennsylvania and Wisconsin—and the District of Columbia. In Oklahoma, for example, a second owner collected enough after his roof came tumbling down to put his house back together. But the court based its decision primarily on simple negligence—not on the far-reaching doctrine of implied warranty.

But a trend toward broader liability is apparent. The latest and most decisive ruling was made by the New Jersey Supreme Court against one of the nation's most respected builders, Levitt & Sons.

Landmark decision. In reversing a lower court, the New Jersey court purposely used the negligence case* to expose homebuilders to unlimited liability. The justices found that Levitt, now an international developer (*see p. 9*), had practiced false economy by declining to add $10 mixing valves to the hot-water boilers in its Levittown (now Willingboro), N.J., houses. In holding Levitt responsible for the scalding of a 16-month-old boy, the court could have based its opinion solely on negligence. But it also applied the principle of unlimited liability — and even added that homeowners can sue for property damages, although in this case the owner was suing only for the personal injury of his child (74 days in the hospital and two skin grafts).

The court's theory: there are no differences between companies that mass-produce cars (they have faced liability since a 1960 Jersey court opinion†) and those that mass-build houses. The justices stressed the point in their opinion by quoting a Levitt executive who compared development homes to mass-produced autos and by referring nine times to Levitt as a mass builder.

Triple test. The case brought the three standard product-liability tests to bear on homebuilding. The court found:

1. The product (the boiler without a mixing valve) was defective.
2. It had not been abused by the owners.
3. It caused the child's injury.

Testimony established that Levitt, despite recommendations by the supplier of the gas-fired boilers, declined to install mixing valves that would have prevented water at 200°F from reaching faucets. Instead, Levitt relied on combination spigots and written warnings in booklets distributed to new homebuyers.

The court added only one requirement for unlimited homebuilder liability: the defect must be present when the house is originally sold. The justices thus cleared the way for other Jersey homeowners, even years from now, to sue for damages caused by originally defective boilers.

Caveat emptor? The court brushed aside Levitt's claim that a ruling for the homeowner would produce chaos in the courts, with buyers suing builders, who in turn, would be suing product suppliers. And to Levitt's argument of caveat emptor —"Let the buyer beware"—the justices replied:

"Buyers of mass-produced development homes are not on an equal footing with the builder vendors and are no more able to protect themselves in the deed than are automobile purchasers in a position to protect themselves in the bill of sale."

The court said the buyer of an advertised, mass-produced development house ". . . clearly relies on the skill of the developer and on its [the developer's] implied representation that the house will be erected in a reasonably workmanlike manner and will be reasonably fit for habitation."

Modern Robin Hoods. The lower court had been impressed by Levitt's contention that the company should not be forced to protect itself with expensive long-range liability insurance. That point is sure to be raised again, especially by small builders, because of the courts' current tendency to take from the richest defendant to reimburse the injured party. Attempts to find the defendant with the deepest pockets could let small builders shift liability to larger product suppliers or manufacturers.

The justices may have been opening such an escape hatch when they ruled against Levitt. Said the court: "Whatever bearing this [the ability to carry long-range insurance] might have when dealing with solitary vendors [small builders], it has clearly none when dealing with mass-builder vendors . . ."

In the New Jersey case, the court cleared the boiler supplier, York Shipley Inc. of York, Pa., by noting that Levitt had chosen to assemble the boilers without mixing valves. The justices ruled that in effect Levitt built its own boilers.

Contrary opinions. Builder liability will remain an issue for the state courts despite the national trend toward broader decisions. Half of the 50 states have now adopted by statute a uniform commercial code that includes unlimited liability or implied warranty. It will now be up to the courts to apply the statute to homebuilding.

Chances are that court interpretations will differ widely for years. As late as 1963, for example, the Appellate Court of Illinois ruled that there is no "implied warranty" on the fitness, condition or quality of a new dwelling. In this case,** the court affirmed many of the same arguments rejected by the Jersey court. An allegedly faulty gas-fired burner had supposedly caused a fire that gutted a $23,000 home, but the court ruled that the acceptance of a deed without specific warranties was the cut-off point for liability.

*In the case of *Schipper v. Levitt & Sons,* 44 N.J. 70, 207 A. 2d 314, Feb. 1965.

†*Henningsen v. Blooffield Motors Inc.,* 32 N.J. 358, 161 A 2d 69, 75 A.L.R.2d 1, 1960.

**_Coutakon v. Adams,_ 188 N.E. 2d 780, Appellate Court of Illinois, March 1963.

FHA softens its buried wire edict

The housing industry has won part of its protest against FHA's July order requiring underground utilities in all new tracts (NEWS, Aug. & Oct.).

Under pressure by the housing and oil industries, FHA warned power companies they may face Justice Dept. action if they try to use the buried-wire order to squeeze developers into using one power source exclusively. Oil interests had protested to Commissioner Philip Brownstein that electric utilities were demanding builders use electric heat and appliances in return for lower installation costs for buried wires.

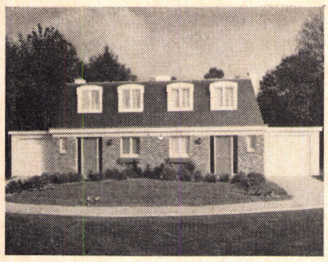
The FHA warning came in a letter telling local underwriters how they should calculate whether underground wiring was "economically feasible"—a phrase that builders said was fuzzy and subject to misunderstanding in the original order.

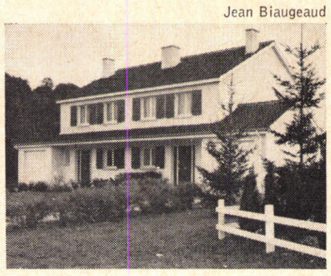
FHA told underwriters to consider the effect of all-electric installations on homebuyers' total housing expenses and the impact these expenses would have on incomes required for buyers. Underwriters were also ordered to report all cases in which charges paid by developers for underground wiring hinge on how much electrical equipment they install.

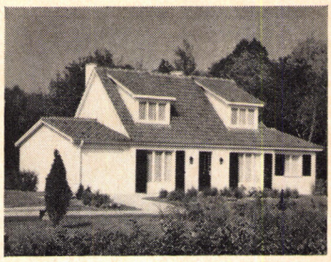
FHA notes that some utilities make no extra charge for buried wiring while others charge only "modest amounts." And, the agency says, the "modest cost" of underground utilities will probably be more than offset by the increased value of the lots. But FHA must still determine whether prospective buyers will be willing and able to pay this extra amount, especially in projects designed for middle-income groups.

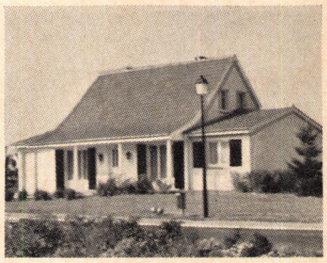
Developers extending tracts already served by overhead wires will escape the buried-wire edict unless FHA proves "clearly" that going underground is economically feasible.

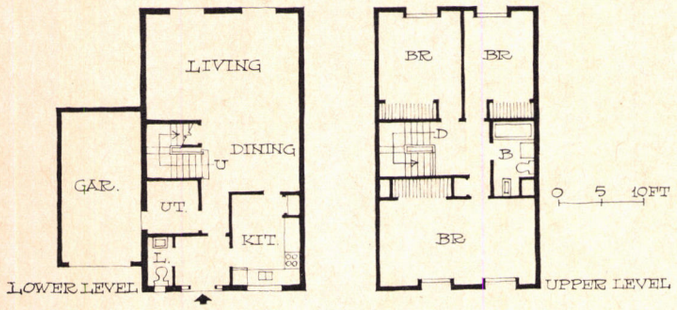
Jean Biaugeaud



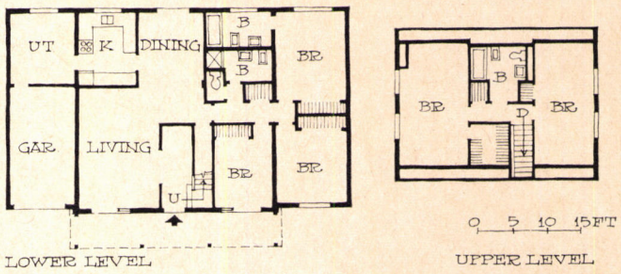








TOWNHOUSES are offered with identical plans and two exterior styles. Prices range from $22,000 to $24,000 for end units with attached garages.



SINGLE-FAMILY HOME (*left*) is $4,100 less than the $33,700 model (*right*) because it does not have a finished attic. Its dormers are optional.

Levittown, France: U.S. floor plans in Gallic garb

The prices were higher—$22,000 to $33,700—and the name was French. But Les Residences du Chateau was Levittown, Long Island, all over again. And last month thousands of prospects flocked to the opening of Levitt & Sons' first French subdivision 20 miles southwest of Paris.

In the first three weeks, 950 buyers placed orders by opening $100 bank accounts—far above the 650 units available. Plans call for 370 houses, 170 duplexes and 12 garden apartment buildings.

Once again, Levitt's market studies were deadly accurate. France today, like Long Island in 1948, is starving for houses. Studies of France show:

1. Although 90% of France's new units are apartments, 76% of Frenchmen prefer one-family houses. Levitt says he can sell 3,000 homes a year for cash. And even 10,000 homes a year would be only 3% of what is needed.

2. French tastes are more than satisfied by Levitt's models and his American floor plans. Levitt gives the French what they expect: parquet floors, all-masonry construction, glass doors and tile roofs. And he adds pleasing surprises: refrigerators, ranges and ovens, central heating and big closets.

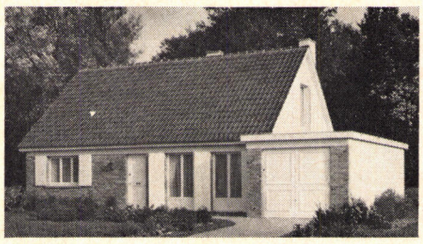
Teacher Levitt. "We're educating as we go along," says Bill Levitt. "There is no reason why we can't build houses in France for the same cost as in America." Today the French models cost 30% more than they would in the U. S., and they take a year longer to build. Immediate problems: workers aren't familiar with mass-building, and some European products are expensive.

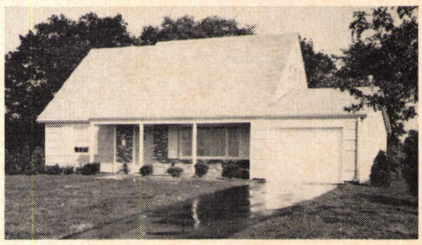
But if Levitt is to revolutionize European homebuilding, he must deal with even more difficult, long-range problems. Two examples:

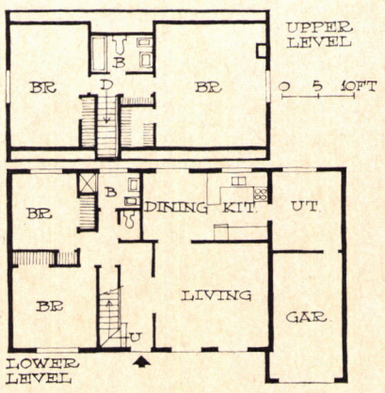
1. Stiff mortgage terms. Buyers must meet 30% down payments on 12-year mortgages at 10%. Levitt is pushing for 20 years, and already he has won 14-year mortgages for Chateau.

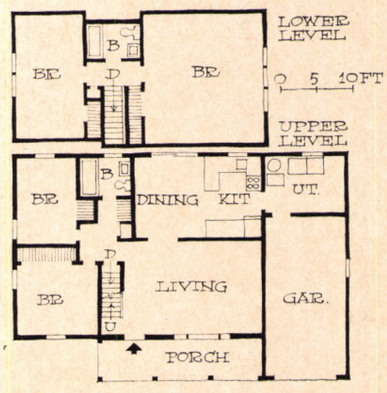
2. Complex laws. Levitt has struggled with edicts set by the French Ministry of Housing that govern everything from roof pitch to the location of upstairs windows. But, as an experiment, the ministry will let Levitt build about 15 houses exactly as he wishes.

More ahead. Levitt says his next French development will be a "pace setter for all of Europe." To get things moving, Levitt has begun market studies in five French towns, explored a possible development in northern Italy and begun a $17-million apartment project in Madrid.



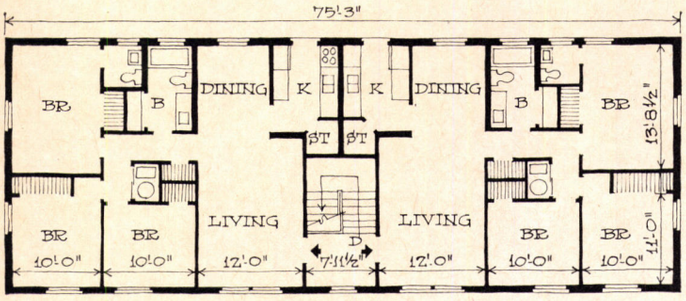






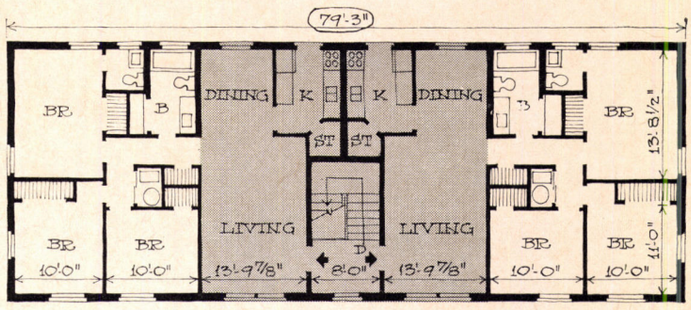
The floor plans are nearly identical but the prices are $16,610 apart

The French model (*left*) costs $30,600 and the American home costs $13,990. The reasons: expensive European products and extras in the French model such as tile roofs. A home with such extras would cost 30% less here.



KINGSBERRY HOMES

COPYRIGHTED PLAN, called Georgian III, is a two-story brick garden apartment which Kingsberry Homes officials claim was copied by Knox Homes.



KNOX HOMES

ALLEGED COPY, called "Bible Apartment Model No. 33," appear similar to Georgian III except for room dimensions in the shaded area.

Is one plan copied? Giant prefabbers clash in court

Kingsberry Homes, nation's second largest prefabber, has filed a suit charging a subsidiary of giant National Homes of Lafeyette, Ind., with piracy of alledgedly copyrighted apartment plans (*above left*).

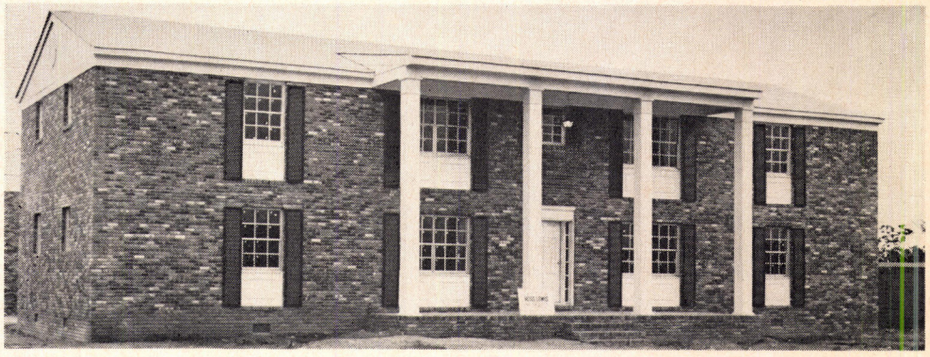
Last month, a U.S. District Court judge in Atlanta confiscated plans that the National subsidiary, Knox Homes of Thompson, Ga., used in a five-apartment project in Macon, Ga., (*above right*). Construction continued at the complex, however.

Kingsberry Attorney John H. Boone says that a set of Kingsberry's apartment plans were given to a prospective builder who didn't build them. This summer a Kingsberry salesman noticed similar apartments under construction in Macon.

After investigation, Kingsberry of Chamblee, Ga., sued Knox Homes, Builder J. C. Bible of Augusta, and the apartment owners. Bible's connection with the suit was unclear, although Kingsberry referred to the disputed plans as "Bible Apartment Model No. 33."

What's new, copy-cat? There have been few design piracy cases because plagiarism is so widespread that it is almost impossible to prove that any plan is original. But federal courts have given builders this sketchy rule:

Drinnon, Inc.-Hank Griffin



CONTESTED APARTMENTS are located in Macon, Ga. This is one of the apartments there. Kingsberry Homes would like to win court permission to destroy the nearly completed complex.

If a builder draws from a common design source and then designs a house that is similar to an existing one, he probably is not guilty of plagiarism. But, if he copies from a copyrighted plan and adds minor changes, he probably is guilty (NEWS, Oct. '61 and June '64).

In speaking for Kingsberry, Attorney Boone says, "We feel that builders are hurting the industry by copying instead of creating. And a quick way to spur originality is to protect copyrights." In this case Kingsberry alleges Knox used a duplicating machine to copy Kingsberry's plans.

What copyright? "We didn't copy anything," answers William Keyes, home counsel for National Homes. Knox attorneys claim:

1. Kingsberry's plans are not original.
2. Kingsberry lost its copyright because some plans were published without an official copyright notice as required by law.

Kingsberry attorneys are asking the court for profits from the Macon complex, plus damages for the alleged copyright infringement.

Retirees sue to stop 'Big Brother' management of co-op

Residents of Ross Cortese's Leisure World cooperative in Seal Beach, Calif., don't like the way things are going in that promised retirement paradise. Most want a new professional management team and are willing to go to court to get it. Others are offering to come out of retirement to run things themselves.

Whether they realize it or not, Cortese's irate buyers have raised a fundamental question for developers of co-ops:

When does the developer's natural desire to protect his investment and his reputation start to conflict with the residents' natural desire to manage their community's affairs?

Father knows best. Seal Beach retirees are offended by what they call the paternalistic attitude of the co-op's management team, Leisure World Inc., which they claim, is controlled by the developer's national promoters.

In theory, co-op owners run their own project. But, say Cortese's buyers, the promoters have the final say at Seal Beach.

Last month, the co-op's board of directors sued to find out whether it can dump Leisure World Inc. Specifically, the directors asked the Superior Court to define the board's jurisdiction and to interpret its contract with Leisure World Inc.

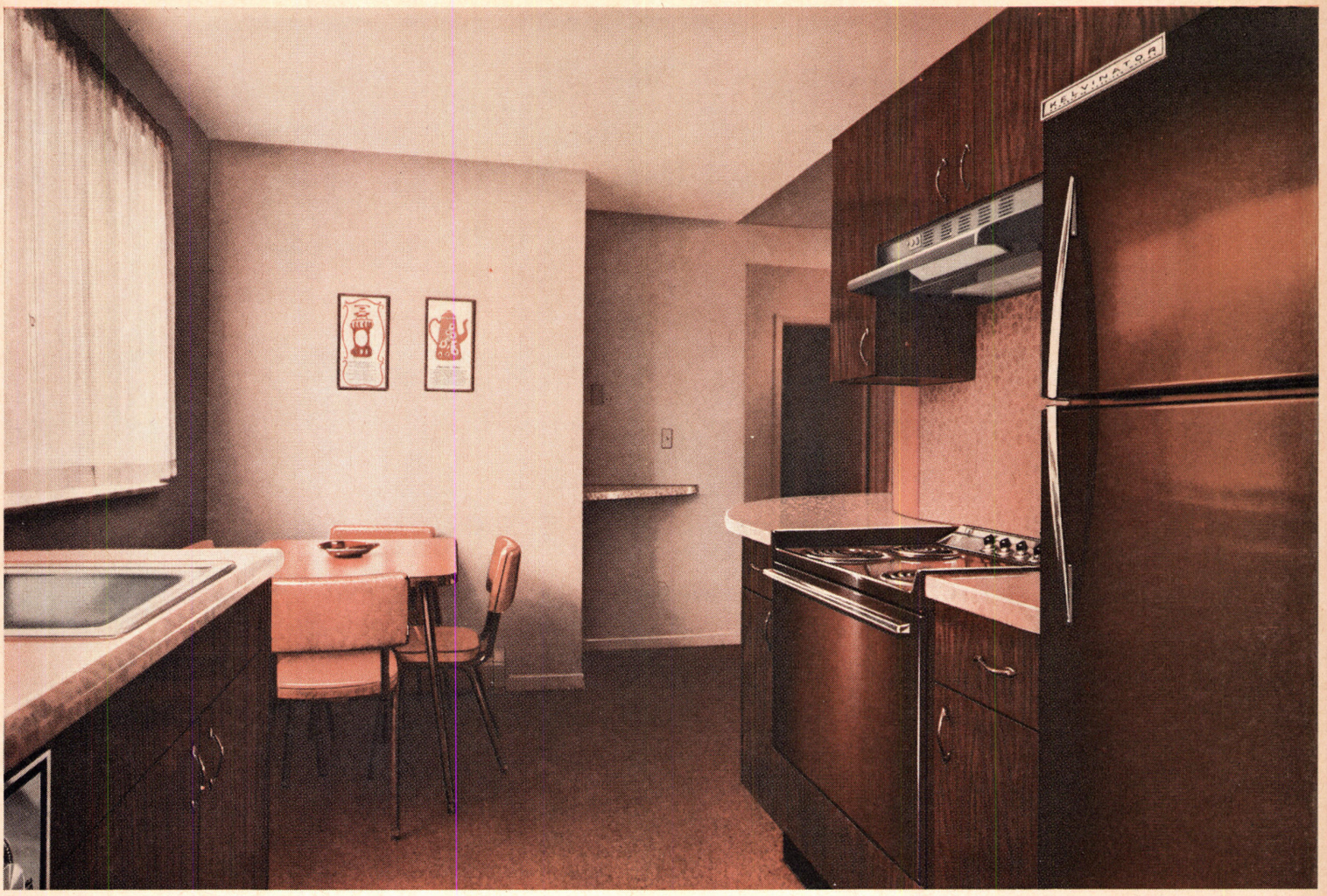
Says Board Chairman H. Dean Campbell: "We find this parental attitude distasteful. Of course we're all old. But we didn't accumulate our competence in the corner pool hall. There are good, competent people here."

A spokesman for Leisure World Inc. says little more than, "It's only a contract dispute that will be worked out soon." But he stresses that the suit named the management corporation only, not the builder, Rossmore Corp.

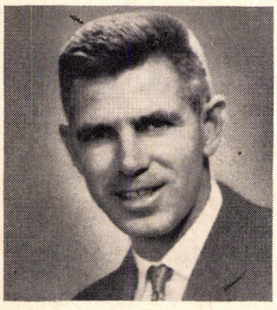
FHA's point. For two years, the retirees have been unable to win much sympathy from FHA, which insured Seal Beach's 6,740 apartments, nor from Builder Cortese, who developed the project as a showcase for his nationwide retirement chain. Both FHA and Cortese favor outside professional management. FHA's reasoning: only professionals can manage a village of 10,000 elderly persons.

Campbell says, "I can see FHA's point. If given a chance we'll hire a sound management company. But we don't want promoter management."

Campbell's group won control of the co-op board early this year but departing members signed the disputed contract.



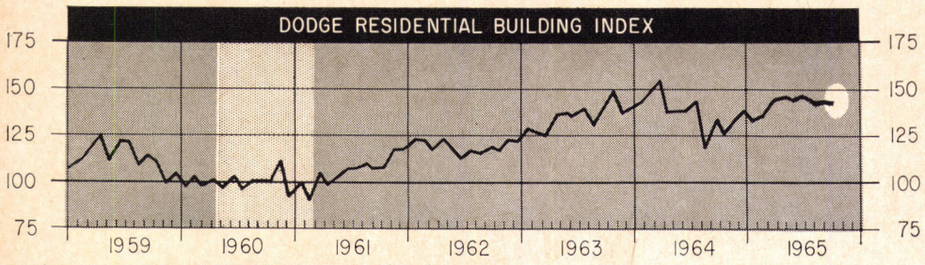
How do you put maximum "sell" in kitchens at minimum cost?



Ask Builder William Kilpatrick

He did it with an efficient design and the economical luxury of Kelvinator Appliances. In his picturesque, 300-unit Lake Hill Village apartments in Wolcott, Conn., Mr. Kilpatrick installed a low-cost Kelvinator slide-in range that gives built-in beauty without wasting expensive counter top or requiring a built-up base. A big Kelvinator 2-door refrigerator provides for modern frozen food living with a huge 100-pound separate freezer. And a 6-cycle Kelvinator undercounter dishwasher offers the ultimate in convenient dishwashing. All are beautifully color-coordinated in Antique Copper to blend with the cabinets.
Mr. Kilpatrick likes the results so well he's also installing Kelvinator Appliances in a 400-unit "country club" type project. Now you know: you can put maximum sell in your kitchens at minimum cost with Kelvinator!

Kelvinator *Division of AMERICAN MOTORS CORPORATION, Detroit, Michigan 48232*
Dedicated to Excellence in Rambler Automobiles and Kelvinator Appliances



Based on contract value, 1957-59=100 (seasonally adjusted). Lighter shaded areas represent general business recessions.

F. W. Dodge Co., a division of McGraw-Hill Inc.

Rehabilitation market gets a boost as builders team with public housers

With housing starts still on a plateau and the Dodge residential index stalled at 140 (*see graph and indicators*), more builders are taking a hard second look at the rehabilitation market.

Rehabilitation of older houses has been talked about for 15 years, but builders have been able to make it work in only a few cities (H&H, Aug.).

Now that outlook is brightening considerably. The picture came into sharp focus last month at the National Association of Housing and Redevelopment Officials convention, where little publicized sections of the 1965 Housing Act emerged as a new way to make large-scale rehabilitation profitable for homebuilders.

Eleven-week jobs. Builder Joe Singer and Thomas McCoy, executive director of the Philadelphia Housing Authority, startled the public housers by describing a pioneering method they are using to rehabilitate dwellings for $1,000 less a unit than the housing authority could do on its own.

Under the plan, 12 Philadelphia builders, including Singer, are buying houses preselected by the housing authority, renovating them to public housing standards, and reselling them to the public housing authority at firm prices set in advance.

Singer told the public housers he can cut costs by moving faster than the public agency. Here is how he has worked:

First he got a list of 76 houses that the agency was willing to buy at fixed prices after rehabilitation. In eight weeks, he took options to buy 32 houses at prices ranging from $3,000 to $4,200 (16 other owners turned him down). Meanwhile, he developed a "punch list" to show quickly what repairs each house needed.

Singer expects the repairs to take three weeks. So only 11 weeks after buying the houses, he will be ready to sell them for $10,000 to $11,400. What's more, he hopes to cut this time as both he and the housing authority become accustomed to processing the work.

Singer also gains time by financing his work conventionally and thus avoiding lengthy FHA processing. His bank treats each public housing sale agreement as any other commitment and advances 90% of the sale price.

Union wages. Many rehabilitation jobs founder on high wage rates. But Singer is paying prevailing commercial wages for all but four trades—laborers, plasterers, electricians and cement finishers—which have set residential rates.

"I talked to the labor unions and made them understand that I might bring in some people with special rehabilitation skills who might become union members," he said.

Both Singer and McCoy conceded that wage rates boost the total cost of rehabilitation about $1,500 above what the houses would command in the real estate market.

Said McCoy: "We are overvaluing—there is no doubt about it. But we think this is repaid in conserving the area."

New partnership. The Philadelphia plan is the beginning of the end of the "estrangement" of public housing and homebuilders, Public Housing Commissioner Marie McGuire said.

Mrs. McGuire pointed out that the 1965 Housing Act provided PHA with the money to buy or lease 100,000 units in the next four years through plans like the one in Philadelphia, and asked:

"What better laboratory could there be for private industry to help shape and hone the techniques of rehabilitation?"

KEY HOUSING INDICATORS

		DOLLARS (millions)	% change from '64
Dodge resid. contract	Sept.	$1,756	+ 2
	9 mon.	16,326	+ 1
ENR adv. resid. plans	Oct.	1,010	+17
	10 mon.	7,891	+10
ENR adv. house plans	Oct.	89	—58
	10 mon.	1,430	UC
ENR adv. apart. plans	Oct.	777	+80
	10 mon.	4,442	+13

		UNITS (000)	% change from '64
Starts, priv. nonfarm	Sept.	120.1	— 1
	9 mon.	728.2	UC
Starts, ann. rate	Sept.	1,407	— 1
Permits, ann. rate	Sept.	1,158	— 7
Starts, one-family	Sept.	79.8	+ 4
	9 mon.	728.2	UC
Starts, multifamily	Sept.	40.4	—10
	9 mon.	405.0	—11

Sources: F. W. Dodge Co., division of McGraw-Hill; **Engineering News-Record**; Census Bureau; HHFA; UC—change less than 1%.

U.S. Supreme Court rejects Negro's bid for a home

What began as a housing racial discrimination case, in three years of inchworming through the courts was transformed into a complex question of real estate law.

In 1961 Dr. Ronald E. Barnes was refused a specific house in an all-white subdivision in Rockville, Md., near Washington. In 1962 he became the first person to appeal to the FHA under the Presidential order banning race bias in federally aided housing. He contended developers held out the possibility of FHA financing, but his appeal was rejected.

Then a lower court awarded him a nearby house and damages of $1,500. But he appealed to get a special warranty deed and the appellate court set aside his claim to any house. Last month the Supreme Court let that decision stand.

During the three-year court fight, Builder Abraham Sind & Assoc. have been enjoined from selling one of the houses.

Now a lower court must decide whether Barnes deserves damages for non-performance or whether Sind can collect for the delay in selling his house.

What is so wrong—or right—about California's bias law?

There is little doubt that state officers will have to enforce California's constitutional amendment, adopted by voters a year ago, that voids antibias laws in housing.

"But the question is," mused California Chief Justice Roger Traynor "what's so wrong about that state action?"

It was a thoughtful question that California's Supreme Court must face. Legal tests of Proposition 14, now officially Section 26 of the state constitution, were appealed last month to Justice Traynor's court after civil rights groups suffered defeats in lower courts.

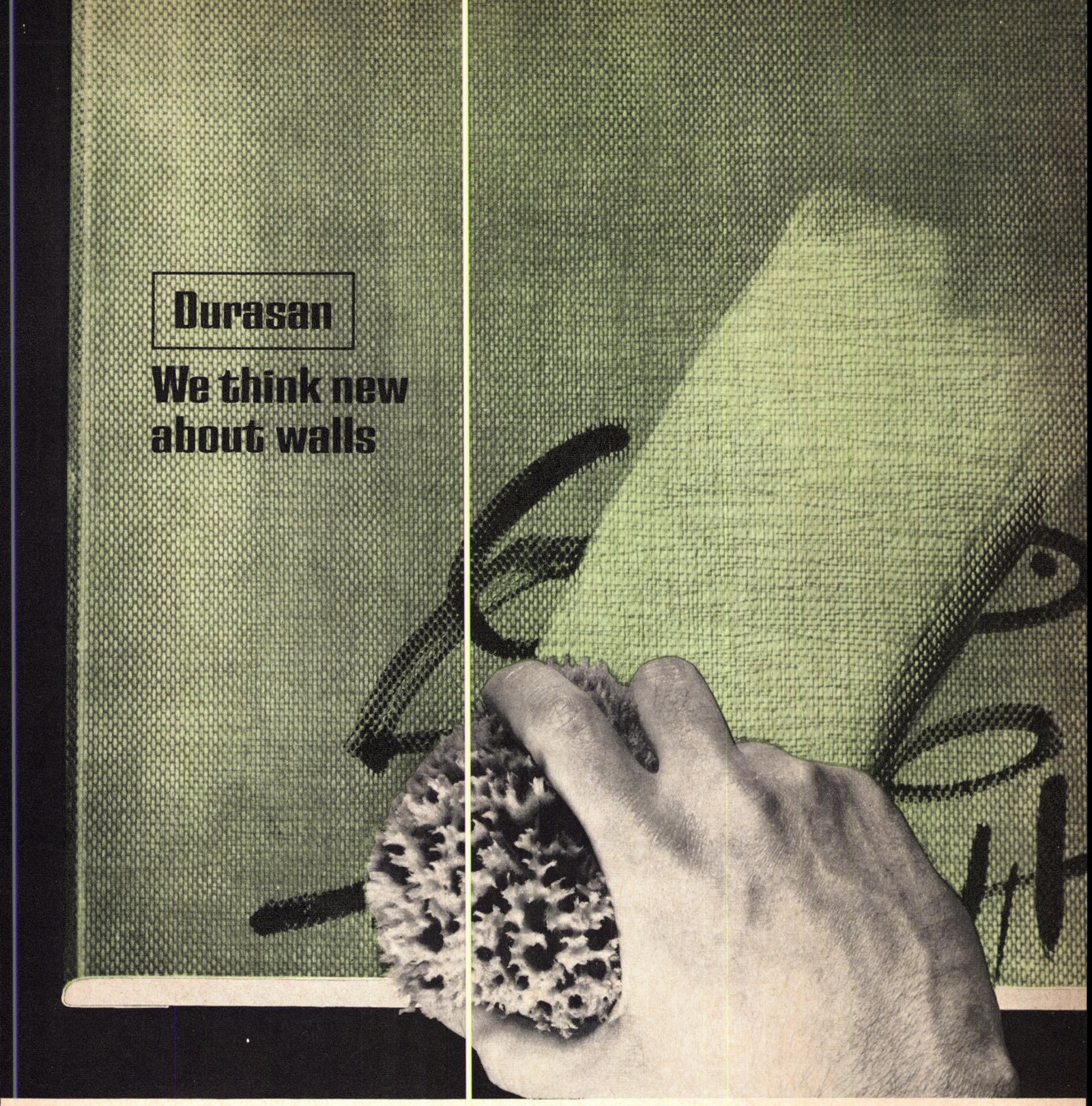
Lawyers arguing against Proposition 14 in seven consolidated cases said the right to acquire housing is as basic to life as the right to acquire food. Wrong, said lawyers for the California Real Estate Assn. They claimed the only inalienable right involved is the individual's right to sell—or not to sell—to anyone. Attorneys for both sides documented their arguments by citing the U.S. Constitution's 14th Amendment.

Wisconsin adopts a timid housing anti-bias statute

Wisconsin became the fifth state* this year to ban race bias by outlawing discrimination in 25% of the state's housing.

The law bans bias in all cases where housing "is a business" and in apartments over four units. State officials may not reveal facts of a complaint publicly unless the charge is proved, and victims of unfounded charges can be awarded $100.

* Others: Indiana, Maine, Ohio, Rhode Island.



New Durasan vinyl-covered gypsum wallboard saves money when you put it up,

saves time and money for the home buyer year after year. Stands up to heavy traffic. Tough vinyl surface resists scuffing. Stays new-looking with soap and water. Its beauty comes with the wall attached. Available in a wide range of colors and patterns. Each panel has a fireproof gypsum core. Thinking about giving more buyer appeal to your new homes? Think new with Gold Bond®. Ask your Gold Bond Building Supply Dealer about Durasan®. National Gypsum Company, Department HH-125, Buffalo, N.Y. 14225.

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Rates up again: builders lose control of mortgage prices

Nothing better demonstrates this loss of control than today's paradox in the national secondary market in FHA loans: investors' yields and the discounts charged to builders are still rising despite a 5% decline in private housing starts for the first nine months—and a staggering 26% drop in the West which generates more than 20% of the nation's mortgages.

Not since the money squeeze in 1958 has a similar anomaly developed. Declining starts customarily translate into a scarcity of mortgages, forcing secondary-market investors to pay higher prices for the loans and to accept lesser yields. When money is reasonably plentiful—as it has been for most of the 1960s—the builder exercises leverage against rising mortgage rates through his control of production.

But the builder has now lost all such authority. Yields and discounts are rising for the third consecutive month in the face of building cutbacks (NEWS, Oct. *et seq.*). The discount charged to builders has jumped from 1½% to 2% in southern California, where, in August, the dollar volume of residential permits for 14 counties was down 40% from August 1964. Discounts are also up ½% in Atlanta, Chicago, Detroit, Oklahoma City and Washington. And yields have risen by .06%, to a range of 5.19%-5.25%, in New York.

"Yields are up another .06% since the 5.19% established at the Chicago mortgage bankers' convention in September," says Mortgage Broker Ernest E. Rutgers of New York. "Our company had $15 million in deals, closed in Chicago on a handshake, that had to be renegotiated at 5.25% when we put them on paper."

Finger in dike. Now counterpressure is developing. For the Administration, Chairman John E. Horne of the Home Loan Bank Board and Treasury Secretary Henry Fowler insist that interest rates have gone high enough. Executive Vice President Felix M. Beck of the J. I. Kislak Mortgage Corp. in Newark, N.J., cites stabilizing factors—the government's avowed intention of sitting on long-term rates and the Federal National Mortgage Assn's. increasing purchases of mortgages in the secondary market at an effective yield of only 5.09%. And HOUSE & HOME's mortgage observers in 18 cities now report that builders are resisting higher discounts.

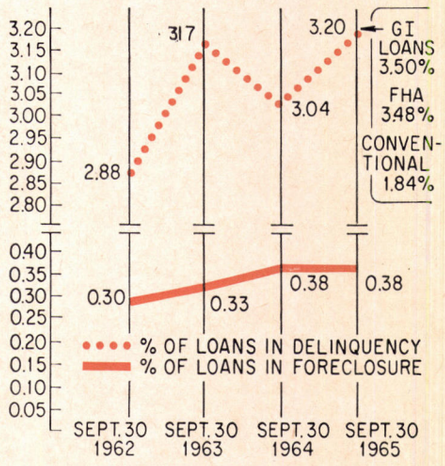
Non-liquidity. "But it isn't what the builder does that counts," says Senior Vice President August M. Strung of the Bowery Savings Bank in New York, "it's the short supply of dollars."

Strung is talking about bank liquidity, now perhaps the most important of all factors affecting mortgage prices. The ratio of loans to deposits in the nation's banks has gone from 18% in 1945 to 64% in 1965. Putting it simply, banks no longer have unlimited funds for mortgage purchases, and they need what they have for loans that bring higher interest.

The future. In spite of the near crisis in liquidity, one of the nation's most respected mortgage analysts says rates have now probably reached their peak. Senior Vice President Proctor H. Barnett of the Prudential Insurance Co. takes account of tighter money but still attributes much of the recent rate rise to a change in investor psychology, triggered by the Vietnamese war.

"The typical investor has abandoned his fears of a slower rate of economic growth," Barnett says. "The changed psychological climate—call it expectations—has contributed to marking up the rates."

Mortgage delinquencies rising



DELINQUENCIES LEAP 16 POINTS but foreclosure rate levels off in latest Mortgage Bankers Assn. survey of 3.4 million FHA, VA and conventional mortgages on 1- to 4-family properties.

SECONDARY MARKET FHA & VA 5¼%

Money center	Sec. 203b & VA houses Yield to Investor	Trend	Sec. 207 Apts. Yield to Investor	Trend
Boston	5.10-5.24	Steady	a	a
Chicago	5.19	Steady	5.12-5.16	Static
New York	5.19-5.25	Up. 07	5.12	Static
Philadelphia	5.19	Up. 07	a	a

a—No activity

CONVENTIONAL LOANS RESALE MARKET

Packages of conventional loans, privately insured by MGIC, available for purchase by S&Ls. Loans are in metropolitan areas, originated by mortgage bankers and commercial bankers and listed with Mortgage Guaranty Insurance Co., 600 Marine Plaza, Milwaukee. Address inquiries c/o Jack Dittmann. Typical offerings reported the week ending Nov. 5.

Loans available (millions)	Location	Net % Yield to investors[a]
$1.0	Alabama	5.75
3.0	Arizona	5.75
4.0	California	5.50
0.5	California	5.60
4.3	California	5.75
2.0	California	5.875
0.5	Georgia	5.6
3.0	Hawaii	5.75
1.0	Iowa	5.75

a—Net after insurance fees and servicing.

NEW YORK WHOLESALE MARKET

FHA, VA 5¼s

Immediates: 96-96½ Futures: 96-96½

FHA, VA 5¼ spot loans (On homes of varying age and condition)

Immediates: 96-96½

Note: Prices are net based on a servicing fee of ½%. Majority of loans being sold today include concessions made by servicing agencies which would be reflected in higher prices. Prices cover out-of-state loans, reported the week ending Nov. 5 by Thomas P. Coogan, president, Housing Securities Inc., New York City.

HOMEBUILDER's MORTGAGE MARKET QUOTATIONS

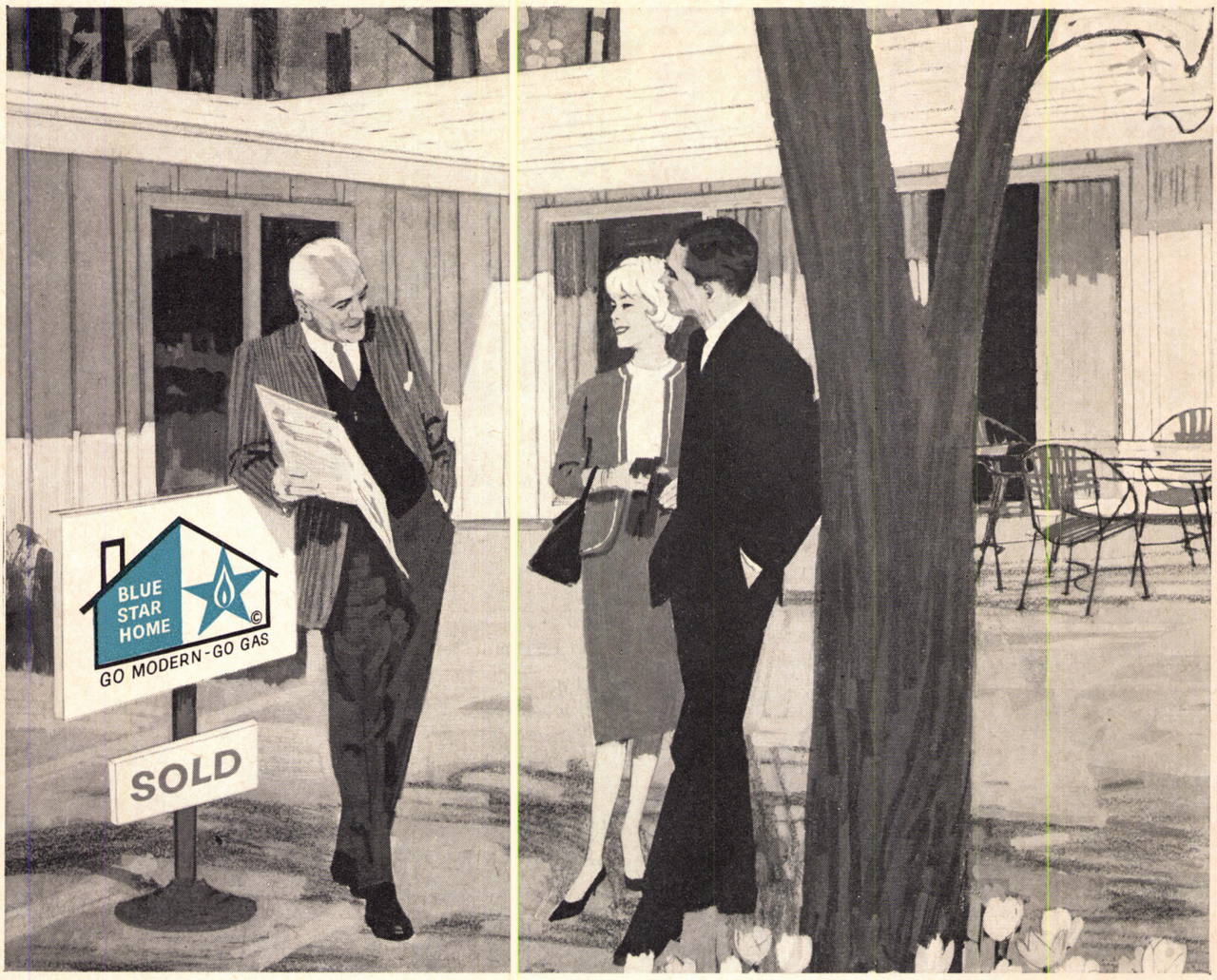
Reported to HOUSE & HOME in week ending November 5.

City	FHA 5¼s (Sec. 203b) Discount paid by builder FNMA Scdry. Mkt.[xy]	Min. Down* 30-year Immed.[w]	Trend	FHA 207 Apts. Firm Commitment	Conventional Loan Rates Comm. banks, Ins. Cos. 75%	Savings banks, S&Ls 80%	Savings banks, S&Ls Over 80%	Construction Loan Rates Interest+fees All lenders
Atlanta	2¾	2-3	Up ½	a	5¾-6	6-6¼	6¼-6½	6+1
Boston	1¾	par+1-par	Steady	par+1-par[b]	5½-5½	5¼-5½	5½[b]	5¼-6
Chicago	2¼	1-2½	Up ½	a	5½-5½	5½	5¾-6	5½-6+1-1½
Cleveland	2¼	1-1½	Steady	a	5½ 5¾	5½-5¾	6-6½	6+1
Dallas	2¾	2-3	Steady	½	5¾-6	5¾-6	6-6¼	6+1
Denver	2¾	1-2	Steady	a	5¼-5½z	5¾-6	6-6½	6+1-2
Detroit	2¾	½-2	Up ½	1-1½	5½	5¾-6	6-6¾	6+½-1
Honolulu	2¾	1½-2½	Steady	a	5¾-6½	6¼-7	6¾-7¼	6½-7+1-3
Houston	2¾	3	Up ½	a	5½-6	6¼	6¼-6½	6+1½
Los Angeles	2¾	2	Up ½	par+1-par+½	5¾-6¼	6-6.6	6¼-6¾	6-6.6+1-2
Miami	2¾	2½-2¾	Steady	½-1	5½-6	5¾	6	6+½-1
Newark	1¾	1½	Steady	par	5¾	5¾	5¾-6	6+1
New York	1¾	par	Weaker	99½-par	5½	5¾	6	5¾-6+½-1
Okla. City	2¾	2-3	Up ½	a	5½-6	5½-6	6-6¼	6-6½+1-1½
Philadelphia	1¾	par-99½	Weaker	par-1	5¾	5¾-6	6	5-6+1
San Fran.	2¾	2-2½	Up ½	par+½-par	5¾	6	6¼-6.6	5½-6½+1½-3½
St. Louis	2¾	1-2½	Steady	par-1	5½-6	5¾-6	6-6¼	5¾-6½+1-2
Wash., D.C.	2¼	1¼-2	Steady	½	5½	5¾	6[b]	5½-5¾+½-1

* Immediate covers loans for delivery up to three months, future covers loans for delivery in three to twelve months.
• Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones.
• Quotations refer to houses of typical average local quality.
* 3% down on first $15,000; 10% of next $5,000; 25% of balance.

Footnotes: a—no activity. b—limited activity. w—for comparable VA loans also x—FNMA pays ½ point more for loans with 10%. y—discounts quoted are net after seller pays ½% marketing fee and ¼% adjustment for stock purchase. Seller must pay 1% of mortgage for stock calculated in $120 units, of which $20 is contribution to FNMA capital and $100 is for a share trading at about $84. z—applies to 66% loans.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, pres., Boston 5¢ Savings Bank; Chicago, Harry N. Gottlieb, vice pres., Draper & Kramer Inc.; Cleveland, David F. O'Neill, vice pres., Jay F. Zook Inc.; Dallas, M. J. Greene, pres., Southern Trust & Mortgage Co.; Denver, Clair A. Bacon, exec. vice pres., Mortgage Investments Co.; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, vice pres., T. J. Bettes Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Newark, William W. Curran, vice pres., Franklin Capital Corp.; New York, John Halperin, J. Halperin & Co.; Oklahoma City, M. F. Haight, 1st vice pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice-pres., First Pennsylvania Banking & Trust Co.; St. Louis, Charles A. Keller, vice pres., Mercantile Mortgage Co.; San Francisco, John Jensen, vice pres., Bankers Mortgage Co. of California and Charles E. McCarthy, vice pres., Bank of America; Washington, James C. Latta, sr. vice pres., Frederick W. Berens Inc.



THE SIGN OF SATISFACTION

. . . for the homebuyer

Your women prospects know that modern Gas cooking is fast, clean and wonderfully automatic. Gas ranges are the only ones that have the Burner-with-the-Brain,* true "Keep Warm" ovens, smokeless broiling, and controlled heat. Women like fast, gentle Gas clothes dryers, too, and Gas water heaters because they know they give all the hot water the family needs fast.

Men prospects look at that Gas furnace and they know they are going to have the cleanest, most dependable heat, and save plenty of money over the years. A Gas water heater makes them smile in satisfaction, too.

Give the most prospects the appliances that they want most—go Gas!

. . . and the homebuilder

When you display the Blue Star Home sign in front of your houses you can count on sales. That's because you will take advantage of the high-powered pre-selling behind the Blue Star Home program . . . tremendous advertising campaigns, both national and local, print and television.

You will also be backed up by a complete set of selling tools for the Blue Star Home program which are available.

Let your local Gas Company representative give you full details about how the Blue Star Home program can help you sell more homes . . . and sell them faster.

AMERICAN GAS ASSOCIATION, INC.

Visit the Gas Industry Center at the Builders' Show—Booths 1423 to 1430 and 1523 to 1530

USE A.G.A.'s MESSAGE CENTER FOR INCOMING CALLS (TEL: CODE 312 • 326-6500 • EXT. 1045-6)

With today's home buyers,

Gas makes the big difference

*A.G.A. Mark

. . . costs less, too

Circle 34 on Reader Service Card

Realty trusts begin to convert some Wall Street skeptics

Five years ago Congress granted special tax treatment to real estate investment trusts—and thus unlocked what looked like a new source of Wall Street money for housing. The key to investors' wallets was to be "conduit" tax treatment: trusts would pay no income taxes if they passed on 90% of their profits to stockholders.

But not until recent months have investors shown any signs of buying the deal. One indication: stock of Continental Mortgage Investors of Boston, the only realty trust listed on the New York Stock Exchange, has spurted from 25 to 33 in the last two months. CMI shares came on the market at 15 in 1962.

Two other large mortgage trusts—First Mortgage Investors of Boston and Southeastern Mortgage Investors of Charlotte—are also selling above their issue prices. FMI, sponsored by Miami S&L man Jack Courshon, is quoted at 20½—up 5½ from its offering price. SMI, sponsored by ex-NAHB President George Goodyear, is selling at 11¾—up 1¾.

Mortgage trusts, which, like S&Ls, hold only mortgages, have channeled more than $100 million into housing and residential land development. By contrast, equity (non-mortgage) trusts have largely turned to office and commercial buildings. Only 17% of their assets are in apartments.

Most equity trusts are selling at near or below their issue prices because investors have difficulty analyzing their property. Typical are the only two equity trusts listed on the American Stock Exchange. Real Estate Investment Trust of America, issued at 20, is traded at 20⅞. National Realty Investors is selling at 11⅛—well below its 15 issue price.

Why the slow buy? Realty trusts of both the mortgage and equity variety have been "subject to misunderstanding by the public and the government."

So said CMI Manager M. J. Wallace after his election as president of the industry's trade association, the National Association of Real Estate Investment Funds, at its annual meeting in New York City last month.

Much of this misunderstanding stems from investors' memories of their losses in real estate syndication scandals of 1962. Although there is no basis for their fears, investors still tend to associate the realty trusts with the syndicators.

At last month's NAREIF meeting, it was clear that Wallace and his colleagues are out to lay the ghost of syndication and strengthen NAREIF's voice as spokesman for this new form of realty investing.

For one thing, NAREIF has collected financial data and operating procedures of 21 trusts into a handbook* and distributed the book to security analysts, mutual funds, pension trusts and other investors.

Ground rules. Even more important, says Wallace, is NAREIF's adoption of a code of ethics for member trusts. Security analysts say it is almost impossible for real estate outsiders to analyze the holdings of trusts, so investors must rely heavily on the competence and reputation of management. Hence the code to prevent the misuse of funds which brought the syndication scandals.

Results of NAREIF's efforts are crucial to the real estate and housing men still crowding into the trust field. The number of trusts soared from 47 in 1961 to 112 by 1963, latest year for which figures are available. And net income distributed to shareholders amounted to $7,462,000 in 1963, according to the Internal Revenue Service.

This form of real estate investment may expand even more if Congress extends conduit tax treatment to real estate corporations. A bill to do just that has already passed the House, and its sponsor, Rep. Eugene Keogh (D., N.Y.) says prospects for Senate passage in 1966 are "encouraging."

*Available at $15 from NAREIF headquarters, 105 Mansfield Ave., Darien, Conn.

Poor earnings reports take the glow off S&L stocks

Savings and loan issues fell 8% last month as third-quarter earnings reports failed to confirm expectations that the Viet Nam conflict would bolster housing in California, base of most stock S&Ls.

Two S&L holding companies, San Diego Imperial and Far Western Financial, highlighted the disappointing performance by passing their normal stock dividends.

Mortgage Guaranty Insurance Co. of Milwaukee rose 3⅝ to 28¼ last month as directors declared the first cash dividend of 10¢ a share. MGIC also strengthened its ties to mortgage bankers by electing Walter C. Nelson, president of the Eberhardt Co. of Minneapolis, a board member. Eberhardt was 1959 president of the Mortgage Bankers Assn.

HOUSE & HOME's average of 78 housing companies fell 3% to 7.79. The averages:

	Sept. 7	Oct. 11	Nov. 8
Building	4.33	4.24	4.19
Prefabrication	6.25	5.95	5.60
S&Ls	12.65	11.63	10.70
Mortgage banking	12.78	13.13	13.56
Land development	5.38	5.59	5.73
AVERAGE	8.29	8.03	7.79

Short-term business loan rates are up in almost all areas in September, the Federal Reserve Board reported. Sharpest rises are for loans under $200,000 in the South and West (*see table*).

HOUSING'S STOCK PRICES

COMPANY	Nov.9 Bid/ Close	Chng. From Prev. Mo.
BUILDING		
• Adler-Built Inc.	5/16	+16¢
• Capital Bld. Ind.	75¢	.....
Cons Bldg. (Can.)	3.20	—80¢
• Dev. Corp. Amer.	K	.....
Dover Const.	2	— 5/8
Edwards Eng.	4¼d	— 5/8
Edwards Inds.	1⅜	.....
Eichler Homesh	3d	— ½
First Hartford Rlty.	6a	+ ⅛
First Nat. Rlty.b	1½	+ ⅛
• Frouge	5¼	— 5/8
General Bldrs.b	2⅛	+ ⅛
Kavanagh-Smith	3⅝	+ 5/8
Kaufman & Bd.b	12½	+ 5/8
Levittb	9½	+ ¾
Lou Lesser Ent.b	4⅝	+ ⅛
Lusk	.03¢	—34½¢
Pres. Real. A.b	9¾	— ½
• Sproul Homes	3¾	+ ⅛
U.S. Home & Dev.	9/16	— 1/16
Del. E. Webbc	4⅞	+ 3/8
PREFABRICATION		
Admiral Homes	1¾	.....
Aibee Homes	2⅛d	+ ¼
Gt. Lakes Homes	5/8	—1
Inland Homesb	5⅞d	+ ⅞
Madway Mainline	11¾	+ ¾
Modern Homes	2	— ⅛
Natl. Homes A.9	3⅛	+ ⅛
• Nationwide Homes	1¼	+ ⅛
• Scholz Homes	3	— ¼
• Seaboard Homes	1/16	— 1/16
Steel Crest Homes	5¾	— ¾
Swift Industries	2¼	.....
Jim Walterc	20¾	— ⅞
S&Ls		
American Fin.	16½	— ½
Brentwoodb	8	— ⅛
Calif. Fin.c	4¾	— ¼
• Columbia	5½	— ½
Empire Fin.	9¾	— ½
Equitable S&L	17	— ⅝
Far West Fin.c	10⅛	—1½
Fin. Fed.c	21⅝	—2½
First Char. Fin.c	23⅛	—1⅞
First Fin. West	7⅛	+ ⅛
First Lincoln Fin.	9⅝	—3¾
First Surety	3⅞	—1¼
First West Fin.c	5⅞	— ¾
Gibraltar Fin.c	19⅝	—2
Great West. Fin.c	10¾	—1⅝
Hawthorne Fin.	8¾	+ ¼
Lytton Fin.c	10¼	—1⅜
Midwestern Fin.b	3¾	+ ⅜
San Diego Imp.c	7	—1
Trans-Cst. Inv.	4⅛	— ⅞
Trans Wrld. Fin.c	10⅛	— 5/8
Union Fin.	8	+ ½
United Fin. Cal.c	8¾	— ⅞
Wesco Fin.c	17⅝	— ½
MORTGAGE BANKING		
Advance	8⅛	+ ⅛
• Amer. Mort. Ins.	19½	.....
Associated Mtg.	9	.....
• Atlas Cred.c	8¾	— ½
Charter	1⅞	+ ⅞
Colwell	13¾	— ¼
Cont. Mtg. Inv.c	33	.....
• Cont. Mtg. Ins.	9⅛	+ 5/8
• FNMA	86	— ¾
First Mtg. Inv.	20⅜	— ½
• Kissell Mtg.b	4⅜	— ⅜
Lomas & Net. Finp	3⅛	+ ⅛
MGIC	28¼	+3⅝
• Mortg. Assoc.	5¾	— 5/8
• Southeast Mtg. Inv.	11¾	.....
United Imp. & Inv.b	4½	— ⅛
LAND DEVELOPMENT		
All-State Prop.b	5/8	.....
• American Land	1⅜	— ⅜
Am. Rlty. & Pet.b	2⅜	— ⅛
Arvida	7⅞	+1⅜
Atlantic Imp.	20	+2
Canaveral Intl.b	1⅝	+ ⅛
Christiana O.b	4¾	+ ⅜
Coral Ridge Prop.	3¾	+1⅛
Cousins Props.	14	— ½
Crawford	3⅛	+ ¼
Deltona Corp.b	11¾	+ ¾
• Disc Inc.	2¾	.....
Fla. Palm-Aire	2⅛	.....
Forest City Ent.b	4¾d	.....
Garden Land	5	— ¼
Gen. Develb	4¼	— ⅞
Gulf Americanb	7¾	— ½
Holly Corp.b	¾	+ 1/16
Horizon Land	2	+ ⅜
Laguna Nig. A.h	9⅛	+ ⅛
• Laguna Nig. B.h	3⅞	.....
Lake Arrowhead	7	—1
• Macco Rlty.	14½	—1¼
• Major Rlty.	20¢	—8¢
• McCulloch Oilb	10⅛	+2⅝
So. Rlty. & Util.b	1¼	— ⅜
Sunset Int. Pet.b	6⅜	— ⅛

a—stock newly added to table. b—closing price ASE. c—closing price NYSE. d—not traded on date quoted. g—closing price MSE. h—closing price PCSE. k—not available. p—formerly Wallace Investments. •—not included in averages.

Sources: New York Hanseatic Corp., Gairdner & Co., National Assn. of Securities Dealers, Philip Beer of Russell & Sachs, American Stock Exchange, New York Stock Exchange, Midwest Stock Exchange, Pacific Coast Stock Exchange. Listings include only companies which derive a major part of their income from housing activity and are actively traded.

SHORT-TERM BUSINESS LOAN RATES

Percent interest and (net change) in year

LOAN SIZE	New York City	7 other Northern & Eastern cities	11 Southern & Western cities
$1-10	5.65 (+.01)	5.88 (— —)	6.02 (+.07)
$10-100	5.37 (—.03)	5.62 (+.06)	5.73 (+.06)
$100-200	5.13 (+.12)	5.31 (+.06)	5.45 (+.09)
$200 & over	4.64 (+.03)	4.87 (+.01)	5.03 (—.06)

Source: Federal Reserve Board, September, 1965.

Flagg & Co. gets the Action-People*. Do you?

"A very large part of my new business comes from the Yellow Pages," says Mr. C. H. Flagg, owner, C. H. Flagg & Co., Reno, Nevada. "And as far as I'm concerned, the real estate business can't get along *without* the Yellow Pages; too many new customers find us in the Yellow Pages to even consider doing without it. It's as simple as that. What else can I say that is more indicative of the importance of Yellow Pages advertising?"

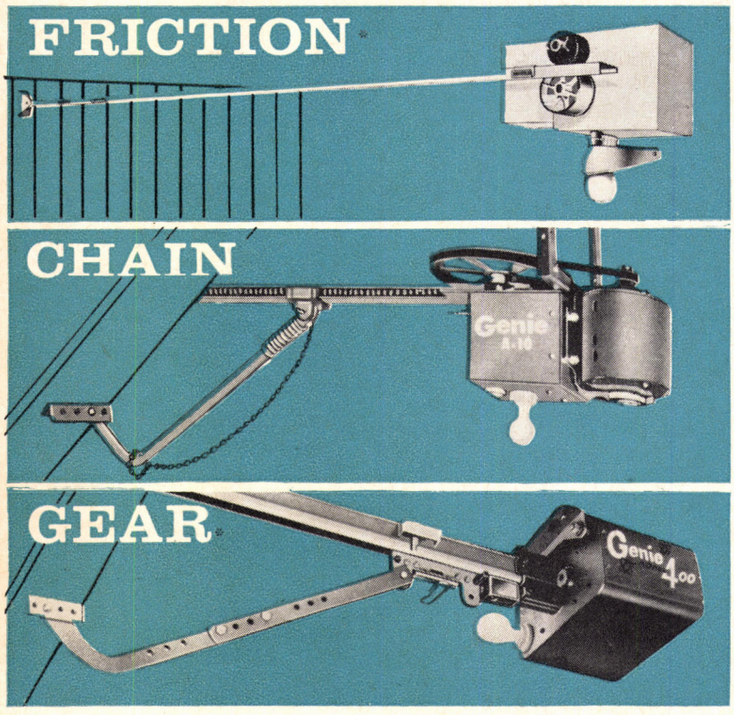
Advertise for action...

Display ad (shown reduced) runs under REAL ESTATE. Call your Yellow Pages man to plan your program. Find him in the Yellow Pages under: ADVERTISING — DIRECTORY & GUIDE.

*The 3 out of 4 busy Americans who shop the Yellow Pages way.

THE COMPETITIVE EDGE
WITH
ALLIANCE Genie®

Genie® Automatic Garage Door Operators



What a pleasant surprise, when prospects find this quality convenience already installed on your houses! Choose from three types of Genie radio, remote control garage door operators — friction, chain and gear — to fit your building needs. All are available from one convenient source — Alliance. ■ Genie is distributed nationally. Factory service is available everywhere. Contact Alliance today for full information.

GENIE KEEPS YOU IN THE DRIVER'S SEAT!

The **Alliance** Manufacturing Co., Inc.
Alliance, Ohio
(Subsidiary of Consolidated Electronics Industries Corp.)

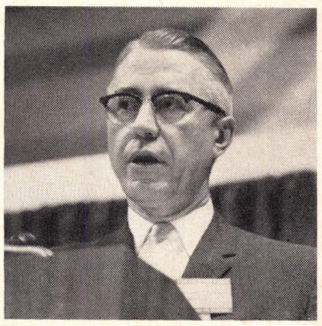
Good Housekeeping GUARANTEES PRODUCT OR PERFORMANCE DEFECTIVE REPLACEMENT OR REFUND TO CONSUMER

One of the world's largest producers of Sub-Fractional H.P. Motors. Manufacturers of the famous Alliance Tenna-Rotor and Genie Remote Control Garage Door Operators.

NEWS

continued from p. 16

Fred Schnell



NAHB's PRATT
"NAHB is not doing the job"

NAHB's WEINER
"Fantastic strides in two years"

NAHB insurgents try to cut ladder to presidency and knock off Weiner

A dissatisfied group of NAHB directors is trying to saw two rungs off the ladder of offices which in recent years has led automatically to the presidency of housing's largest association.

The group wants a bylaw change that would cut the number of national officers from four to two and let anyone with one year's service as one of twelve area vice presidents compete for the two top offices. Two years' service are now required.

At the same time, one of the insurgents—**Edward W. (Ted) Pratt** of Royal Oak, Mich.,—is seeking the first vice presidency, NAHB's second highest office and the spot for which Vice President Secretary **Leon Weiner** of Wilmington, Del., is next in line.

Traditionally, aspiring NAHB presidents have fought for the lowest of four national offices, vice president-treasurer, and the winner has then advanced without opposition to the presidency. The last time this succession was challenged was in 1958, when **Martin Bartling** ran against **Carl Mitnick** for the first vice presidency and lost.

"Many men of excellent caliber feel that they cannot make the four-year commitment to NAHB," explains Builder **Kimball Hill** of Rolling Meadows, Ill., a backer of the bylaw change.

Pratt, 56, was elected NAHB treasurer in 1958 but withdrew from the ladder a year later for business reasons. He is running now "because there are certain areas in which we feel NAHB is not doing a job." He cites:

- "There is a shortage of building tradesmen, and NAHB has done very little about it. It is not a local problem and will get worse."
- "We are dragging our feet on expanding housing markets. We should expand our research to develop cheaper housing without cutting quality."

Weiner disputes the charges: "Our industry has come of age in business management and concern for broader housing issues. NAHB in the past two years has made fantastic strides in environmental design, in establishing a Research Foundation for broader technological research, in expanding our workshops and field services and in many other ways. We held a national manpower training conference and some of the complainers were not there."

Two years ago many of Pratt's supporters backed Hill when he opposed Weiner for the bottom rung on the presidential ladder. Weiner won then by 13 votes.

Two land developers pick new officers

A new team will direct Macco Realty Co. of Los Angeles, recently purchased by the land-rich Pennsylvania Railroad, and a new president will head a second California developer, Christiana Oil Corp.

Macco has named **Angus G. Wynne Jr.** as board chairman and chief executive officer and **Carl C. Gregory** as president. Wynne, who replaced **John McLeod,** is also president of the Great Southwest Corp. of Texas, which was purchased by the Pennsylvania two years ago. Gregory, a veteran banker who was vice president of United California Bank for the past two years, replaces **John B. Parker,** now Macco's executive vice president and general manager.

Macco owns 100,000 acres in southern California and Great Southwest is developing what's said to be the nation's largest industrial park, a 5,680-acre tract between Dallas and Fort Worth.

Christiana's new president is **Samuel W. Banowit,** who succeeds **L. W. Douglas Jr.** Banowit, Christiana director for five years, owns 16% of the company's stock. Christiana is developing Huntington Harbour, a marina community in Huntington Beach.

NEWS continued on p. 22

Helps presell your prospects: this full-color, full-page advertising of a recreation room that features Kentile® Vinyl Asbestos Holland Tile—in *Life, Look, The Saturday Evening Post, American Home, House Beautiful,* and other national magazines.

KENTILE
VINYL FLOORS

Kentile's newest vinyl floor is Holland Tile! Clean, clear styling with a neat but random ceramic look to brighten any room. Easy to keep clean. Grease-proof. Comfortable underfoot. Texture helps conceal spiked-heel dents. Check the economy of Holland Tile—and Kentile quality eliminates costly call-backs. Ask your Flooring Man about Holland Tile.

WHY IS FLAMELESS ELECTRIC HOME HEATING THE CHOICE OF MODERN BUILDERS THROUGHOUT AMERICA?

Representative builders offer candid comments which help to explain why over 300,000 new homes built this year will feature flameless electric heat

Despite their widely scattered locations, builders Henry Motycki in Pennsylvania, Roy Segall in Louisiana, Alfred Hoffman, Jr., in Illinois and William Schneider in Maryland all enthusiastically agree that flameless electric heating is a major sales feature, recognized and asked for by prospects, in the homes they build.

Behind their switch to electric heat lies one simple fact: installing electric heating assures them a bigger—and faster—return on their investment.

Throughout America, more and more builders are recognizing the growth in national acceptance of flameless electric heating, and are taking advantage of its great profit potential. Already, over two million homes are heated electrically, and new electrically heated homes are being built at the rate of over 800 a day.

Why not find out how you, too, can profit with modern flameless electric home heating? First chance you get, talk it over with your local electric utility company.

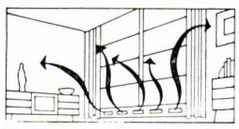
LIVE BETTER ELECTRICALLY

Edison Electric Institute, 750 Third Ave., New York, N.Y. 10017

TOTAL ELECTRIC GOLD MEDALLION HOME LIVE BETTER ELECTRICALLY AWARD

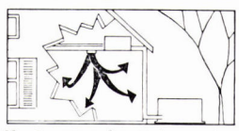
Remember to visit the Live Better Electrically exhibit in booths #1818 and 1819 at the NAHB Home Show

ONLY FLAMELESS ELECTRIC HOME HEATING OFFERS YOU SO MANY DIFFERENT TYPES OF EQUIPMENT TO CHOOSE FROM!

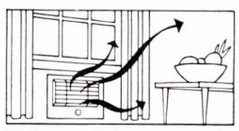


Baseboard units take up little space, permit room-by-room temperature control. Two types are available: radiant or hot water.

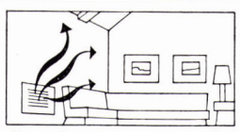
Ceiling cable is invisible. Wires less than 1/8" thick are concealed within ceilings. Each room's temperature is individually controlled.



Heat pump heats home in winter, cools it in summer. One thermostat setting maintains any desired year-round temperature.



Wall panel heaters, with heating coils behind decorative grilles, provide radiant heat with natural or fan-forced convection.



Central systems are available for either hot water or warm air heating in which flameless electric units supply the heat.

"EXTRA SALES APPEAL is the big benefit I get by installing electric heating in my new homes," says Henry Motycki of Charleroi, Pennsylvania. "My customers all want the newest, latest features—and I find that flameless electric heat is the thing that closes the deal."

"LOWER CONSTRUCTION COST switched me over to electric heat," reports Roy Segall of New Orleans. "To all intents, I can put my heating system in right along with the basic wiring. The result is that I end up with considerable savings in both time and labor."

"UNMATCHED COMFORT is one of the advantages that makes electric heat so popular with prospects for our new homes," reports Alfred Hoffman, Jr., of Chicago. "If the growing demand in our area is any indication, it seems clear that more and more homes in the future will be total electric."

"EASY INSTALLATION is what has me thoroughly sold on flameless electric home heating," reports William Schneider of Sykesville, Maryland. "Equipment like this, for example, is so easy to work with that all I need is just eight hours' worth of labor to put a complete electric heating system into one of my new houses."

MagiVac

BUILT-IN CLEANING SYSTEM

CAPTURES THE IMAGINATION OF EVERY HOUSEWIFE!

The house without central vacuuming will soon become as obsolete as today's home without central heating and air conditioning! That's why you should include MagiVac in your plans NOW to safeguard the present and FUTURE value of your homes! MagiVac says "completely modern" to prospects . . . puts you one giant step closer to the dotted line!

• Up to 5 times more powerful than leading portables • Outcleaned the two most commonly used commercial rug cleaning units in tests by the National Institute of Rug Cleaners* • Reaches deep down dirt other cleaners miss — sends allergy-irritating dust out of the house . . . out of the air you breathe • Operates at peak efficiency start to finish because there's no dust bag to clog and gradually reduce cleaning power • No heavy equipment to lug . . . no cords to tangle . . . remotely located power unit for "noiseless" operation • Built and warranted by the John E. Mitchell Company, AAA-1 manufacturer of the famous Mark IV automobile air conditioner and other fine products.

*Details of tests available on request

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3800 Commerce • Dept. E • Dallas, Texas

Gentlemen: Please rush free literature on the MagiVac central cleaning system.

Signed:_____

Circle 37 on Reader Service Card

NEWS

continued from p. 18

Severin, Lesser map stock sales

Nels G. Severin, 1958 president of NAHB, has given an Oklahoma City life insurance company an option to buy 25% of the stock in his Palomar Mortgage Co. of San Diego.

And **Louis Lesser** and the management of his Louis Lesser Enterprises, Los Angeles, have given Santa Anita Consolidated an option to exchange Santa Anita stock valued at about $14,850,000 for all of Lesser Enterprises' shares.

Southwestern Financial Corp., subsidiary of Standard Life and Accident Co., will buy about 400,000 of Palomar's 1,631,383 outstanding shares. The price was not revealed, but Severin said it is above the recent $2.125 bid price.

Severin will retain 15% of Palomar stock and continue as president. Both Standard and Palomar operate in Nevada and Arizona, but Standard is not licensed in California where Palomar has the bulk of its mortgage banking operation.

Palomar, formed by Severin in 1950, has become the nation's 16th-ranked mortgage banker (servicing: $434 million). In recent years Palomar followed other mortgage bankers into land buying and development. This led to a loss of $596,000 in the year ending June 30. But Severin expects a profit this year.

The Lesser option would let Santa Anita Consolidated, a shopping-center and race-track owner, buy management-owned shares of Lesser stock by exchanging one share of its stock, valued at about $33 after a proposed 10-for-1 split, for seven shares of Louis Lesser Class A stock. Lesser management holds 776,117 shares of Class A. Santa Anita would offer to buy another 500,000 shares now listed on the American Stock Exchange. They traded at $4.75 on the date of the announcement. Lesser went public by selling Class A shares at $10 a share in September 1962.

Holders of 2,751,201 Class B shares would get one Santa Anita share for each 10.1 shares, or a price of about $3.26 a share. Class B holders cannot collect dividends until 1970, but this restriction would not carry over to the new Santa Anita shares.

In a third California deal, United California Bank of Los Angeles is buying Marble Mortgage Co., the nation's 21st largest mortgage banker. UCB will pay $1 million of its parent Western Bancorporation's stock for Marble. Marble services $384 million in 20,000 loans.

President **James P. Alger** and the Marble staff retain their posts. The company will operate out of its San Francisco headquarters as a separate division.

Renewal innovator leads NAHRO

Richmond, Va., is a city "mindful of its past," says **Frederic A. Fay.** But thanks to Fay's work as head of the city's Redevelopment and Housing Authority, Richmond is a leader in housing innovation, numbering one of the first U.S. condominiums among its accomplishments.

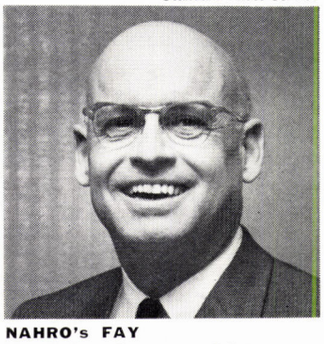
For his work, the men who run the nation's renewal and public housing agencies last month elected Fay president of the National Association of Housing and Redevelopment Officials. He succeeds **Ira S. Robbins** of New York City.

Fay, 54, acknowledges that he and his housing and renewal colleagues are in a "produce or else" spot. "Congress has given us virtually every tool we need to improve our environment," he says. "The 1965 Housing Act was a mandate to do a better job. In the months ahead the jobs we do will be reviewed in the light of this mandate."

Although NAHRO disagreed with the Administration on rent supplements, Fay expects that "our voice and counsel will need to be heard [in Washington]."

Chances are that Fay's relaxed Southern manner will succeed.

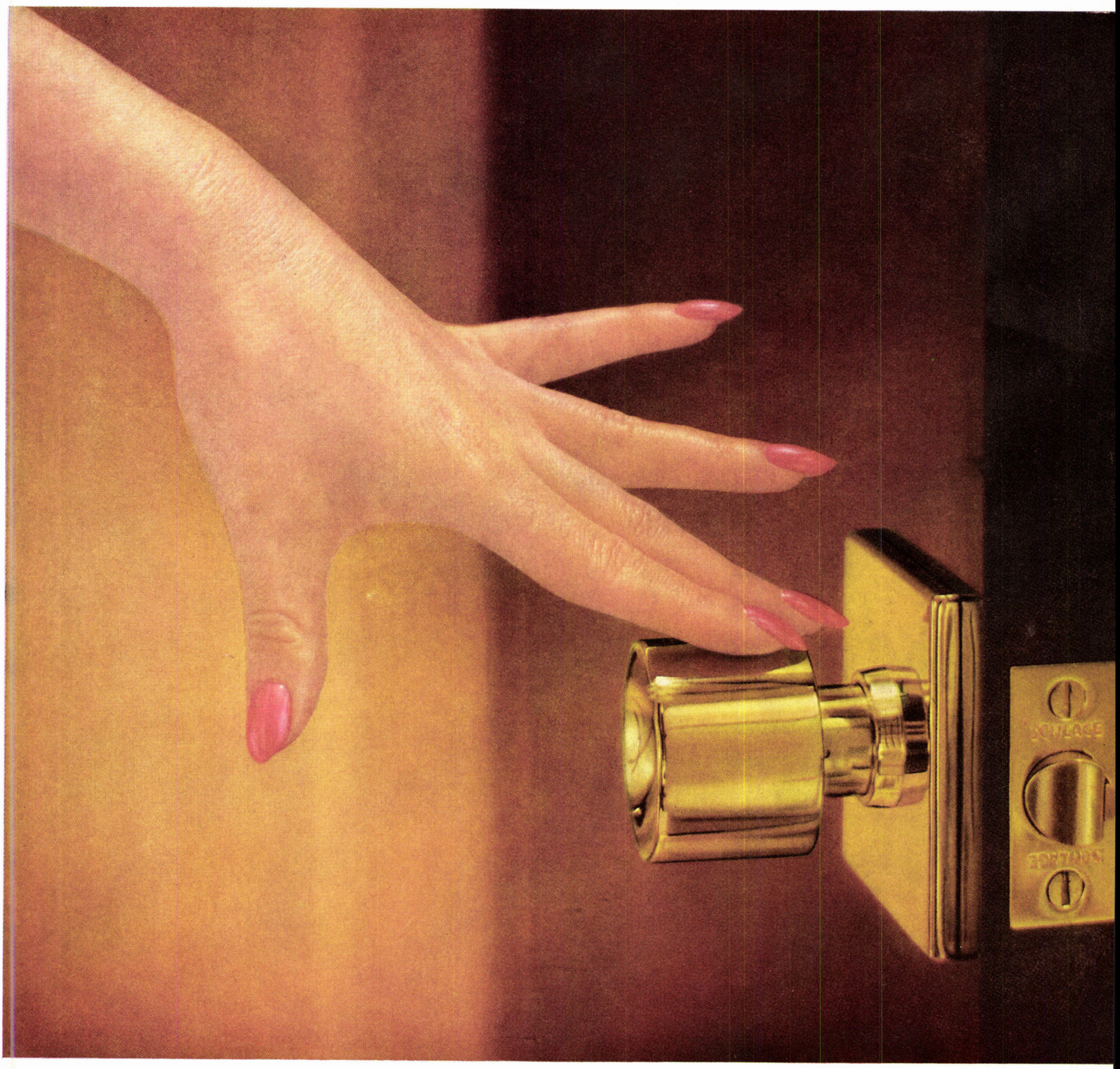
Standard Photo Service



NAHRO's FAY
Mindful of the past and future

Died: **William J. DuBrucq,** 72, retired chief inspector of the National Oak Flooring Manufacturer's Assn., Oct. 5 in Memphis: **Joseph A. Maloney,** 79, a homebuilder for 58 years who helped develop communities on Philadelphia's main line, Oct. 14 in Chester Springs, Pa.; **Edward Richard Murphy,** 62, managing director of the Vermiculite Institute, Oct. 19 in Chicago.

You get so much more with SCHLAGE



METEOR Shown here in bright brass, available in other standard finishes. Knob, 2" diameter; rose, 3 1/4" square.

Schlage offers 101 different lock designs–23 different finishes

Meteor is beauty gone modern, one example of Schlage beauty and quality. All over the world those who buy, manage, plan or construct residential and commercial buildings turn to Schlage for the finest in locks. And for the best *selection* of locks. You can choose from 101 different locks—with the widest possible range of different finishes for each design. Your Schlage sales representative can tell you more. Or write directly to Schlage Lock Company, 2201 Bayshore Boulevard, San Francisco 19, California.

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Circle 38 on Reader Service Card

See this slate?.....

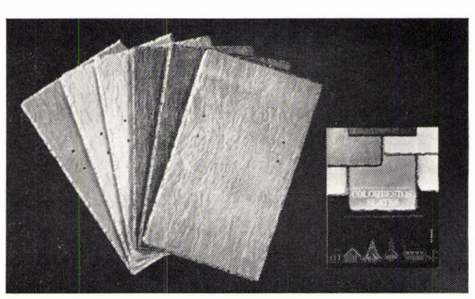
..It isn't!

It's Colorbestos...the new slant on roofing from Johns-Manville

Believe it or not, these J-M Colorbestos® Slates are asbestos shingles . . . the *first* shingles to capture the age-old "quarried" beauty of natural slate. The grain is the same. So are the weathered striations and soft, blending colors. Each slate is unusually thick, with jagged sloped edges to suggest cut stone and emphasize the deep shadow line. Combine them in random patterns, arrange them in varied exposure designs—you'll create the most distinctive roofs possible for any fine building.

With all the advantages but none of the disadvantages of quarried stone! Colorbestos Slates are just as strong, fireproof and permanent, but far more economical to install. They're lighter to handle, easier to cut, nail and fit—without wasteful breakage. You can specify almost any color combination, including shades difficult to obtain in natural stone.

Exciting Colorbestos Slates are just one of the new generation of roofing materials from Johns-Manville. All designed to provide you with the most advanced, most attractive roofs to sell *every* customer.



Ask your J-M Representative for samples and sales aids. Or write for details to Johns-Manville, Box 111, New York, N.Y. 10016.

Johns-Manville

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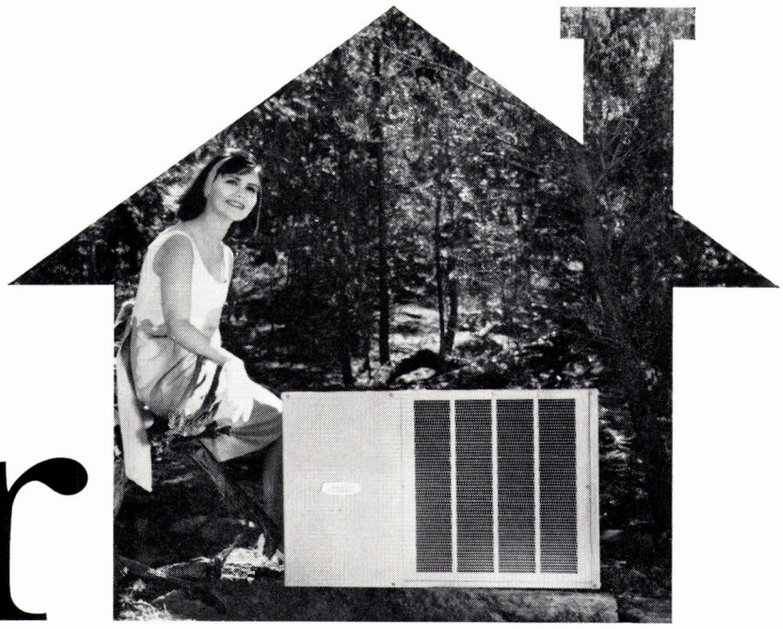

"Air Conditioned by Lennox"

WHAT APPEALING WORDS TO HOME BUYERS!

Nature's Freshness Indoors: Nothing else says quality so surely to millions. And with the exclusive Lennox RFC™ System, the cost is amazingly low. Install when you build as an integral part of Lennox AIRE-FLO® heating. Write Lennox Industries Inc., 516 South 12th Avenue, Marshalltown, Iowa.

Don't be satisfied with less than

AIR CONDITIONING • HEATING **LENNOX®**

TOP: Left—Colonial Plank; Right—BondWood; BOTTOM: Left—Straight Edge; Right—BondWood Domino

Designed For Castles—Priced For Cottages

The unmatched quality, superb performance and down-to-earth prices of Harris hardwood flooring . . . BondWood Parquet, Colonial Plank and Straight Edge Flooring . . . combine to give you more and faster sales. Join the ever-growing number of cost conscious, sales-minded builders who specify and use Harris . . . the versatile flooring.

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Finest in flooring since 1898

HARRIS FLOORING®

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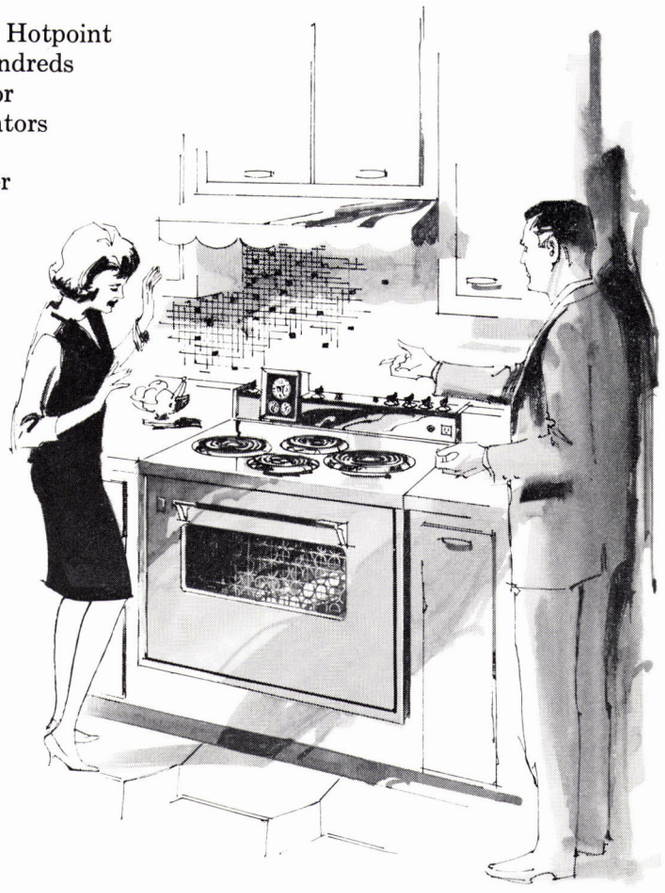
Circle 41 on Reader Service Card

"Nothing sells a home like a kitchen. And nobody makes kitchens sell like Hotpoint!"

James R. Price, Chairman of the Board,
National Homes Corporation
Lafayette, Indiana

"For many years, National Homes has offered Hotpoint appliances in our programs. Today we serve hundreds of builders in 42 states and we use Hotpoint for several reasons—like roll-out wheels on refrigerators and Quick-Clean ranges. People know and respect these features. And they make it easier for our builders to sell homes. Hotpoint has quality features specially-designed for builders, too. Their RF-38 Drop-In Range, for example, is built to fit snugly and cover up the exposed ends of the countertops; it eliminates the need for making cut-outs and purchasing extra countertops. We're very proud to be offering Hotpoint appliances. They will play a major role in our 1966 Family-Tailored Homes program."

National Homes uses Hotpoint appliances for one good reason: they make sales. Take a tip from this successful home manufacturer. Call us.

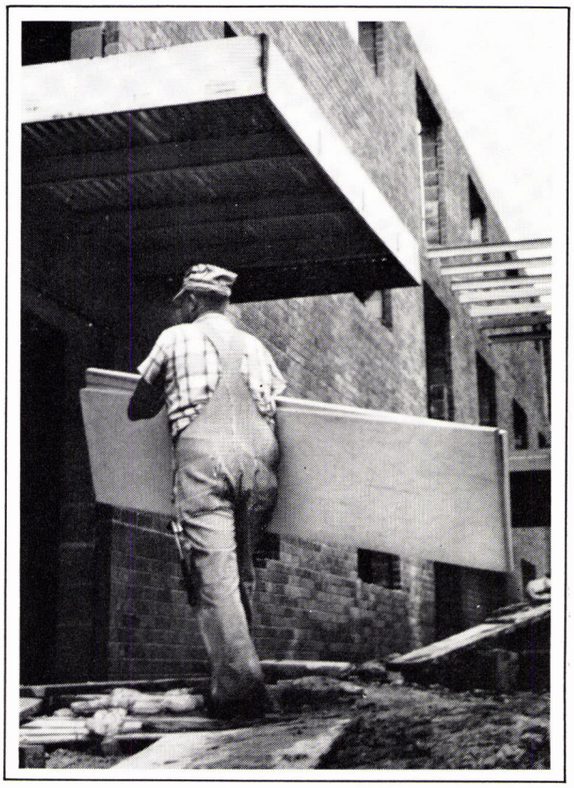


Hotpoint

First with the features women want most

A Division of General Electric Company • Chicago, Illinois 60644

"See Hotpoint's new product ideas for 1966 at the NAHB Convention in Chicago's McCormick Place on Dec. 5-8. Hotpoint's Exhibit covers spaces 834, 835, 836, 935, 936.



Are you building in future lease cancellations?

It costs no more to install Float-Away metal bifold doors. They help attract tenants now and hold them later.

The apartment market may look bright...but like the weather, it's subject to change. One thing *is* certain. Whether the rental climate goes up or down, you'll be faced with the age-old problem of getting and keeping tenants. That's why it pays to go first class and give your tenants the best. Particularly when the best—Float-Away—costs no more.

People today want plenty of closets. With ample storage. Include Float-Away metal folding doors in your initial planning and you utilize storage space to its fullest.

Float-Away doors provide functional, full-access closets that are an important design asset. A truly up-to-the-minute approach to closet doors. Without any increase in costs.

Check these Float-Away plus-factors that can help you enjoy greater satisfaction from your rental investment:

- ☐ Drastically reduced maintenance due to superior materials and construction methods.
- ☐ No rust ever due to exclusive electroplating process.
- ☐ Savings on painting time and cost.
- ☐ No problems with odd sizes. They fit all openings.
- ☐ Dependable, speedy delivery on standard and special sizes.
- ☐ 5 models to choose from, each with a 5-year guarantee.

Free! Special High Rise Kit showing how we label doors to simplify unloading and distribution to eliminate problems with odd-size openings in high rise apartments.

NEW! A budget door that meets all specifications of competitive doors, available in most models with a 1-year guarantee.

Write or phone for full information:

FLOAT-AWAY DOOR CO.

1173 Zonolite Road, N.E., Atlanta 5, Georgia
Dept. H-1265 AND London-Lenscrete Ltd.
Queen's Circus, London S. W. 8, England

Circle 42 on Reader Service Card

PRACTICAL WALL AND CEILING SYSTEMS FOR SOUND AND FIRE CONTROL

IN HOMES / APARTMENTS / STORES / MOTELS / OFFICES / SCHOOLS / HOSPITALS

Bestwall Gypsum, a leader in incombustible wall and ceiling assemblies, now makes available for the benefit of contractors, builders, architects, a brochure called "Sound Advice."

This manual describes sound and how to control and isolate it. It reports on various wall assemblies, demonstrating them with cutaway drawings, discusses sound and fire test ratings achieved in each assembly, lists materials, provides complete application details.

WOOD STUD PARTITIONS
(load-bearing)

2 Layers Bestwall Firestop Both Sides
STC-41—Fire rating—2 hrs. Combustible

Bestwall Firestop On Resilient Channel
STC-47—Fire rating—1 hr. Combustible

Bestwall Firestop Over Sound Deadening Board
STC-46—Fire rating—1 hr. Combustible

2 Layers Bestwall Firestop One Side, 1 Layer On Resilient Channel Other Side
STC-48—Fire rating—1½ hrs. Combustible*

Bestwall Firestop On Resilient Channel With Fiber Glass Insulation In The Cavity
STC-50—Fire rating—1 hr. Combustible

STEEL STUD PARTITIONS
(non-load bearing)

2 Layers Bestwall Firestop Both Sides
STC-47—Fire rating—2 hrs. Incombustible

2 Layers Bestwall Firestop One Side, 1 Layer On Other Side With Fiber Glass Insulation In The Cavity
STC-50—Fire rating—1½ hrs. Incombustible

Bestwall Firestop And Coreboard With Fiber Glass Insulation In The Cavity
STC-52—Fire rating—1½ hrs. Incombustible*

2 Layers Bestwall Firestop Both Sides With Fiber Glass Insulation In The Cavity
STC-52—Fire rating—2 hrs. Incombustible

GYPSUM STUD PARTITIONS
(non-load bearing)

Bestwall Firestop Over Sound Deadening Board
STC-51—Fire rating—1 hr. Combustible

DOUBLE SOLID PARTITION
(non-load bearing)

Bestwall Gypsum Wallboard Over Coreboard
STC-47—Fire rating—2 hrs. Combustible
(Rated Incombustible with metal track instead of wood runners)

TRIPLE SOLID PARTITION
(non-load bearing)

1 Layer ½" Bestwall Gypsum Wallboard Over Coreboard With Fiber Glass Insulation In One Cavity
STC-57—Fire rating—3 hrs. Combustible*
(Rated Incombustible with metal track instead of wood runners)

WOOD FLOOR AND CEILING ASSEMBLY WITH BESTWALL FIRESTOP APPLIED TO RESILIENT METAL FURRING
STC-47—Fire rating—1 hr. Combustible

Get your free copy of this valuable manual from our division headquarters, or from any of our district sales offices. Call or write promptly.

*Estimated, pending completion of official fire tests.

GP GEORGIA-PACIFIC / BESTWALL GYPSUM DIVISION
2 INDUSTRIAL BOULEVARD, PAOLI, PENNSYLVANIA

1 **Use crystalline glazed scored tile** in stripes carried down the wall and across the floor. Crystalline glazes have a rich, lustrous texture that gives the room a look of luxury for little extra cost. Tub wall and floor is scored design SD-4 in 350 Cr. Gray, 355 Cr. Pink and 365 Cr. White. Vanity top: SD-1, 350 Cr. Gray. Side Wall: 66 Hydrangea. Fixtures: American Standard Venetian Pink. Plate 156.

2 **Feature octagon floors and decorated tile** behind the tub to give a touch of individuality that impresses home buyers. Tile to the ceiling around the tub is a practical feature that costs very little more. Wall: 76 Sage Gray. Decorated tile: Galaxy K-3. Vanity top: Scored design SD-1, 76 Sage Gray. Floor 4¼" octagon. 390 Cr. Salt & Pepper with dots in 76 Sage Gray. Plate 147.

3 **Get dramatic color effects** by using small ceramic mosaics on walls, as well as on floors, in small bath and powder rooms. A sure way to put an immediate stamp of luxury on your home. American Olean has dozens of patterns and a wide range of colors from which to choose. Walls here are Cerulean, Emerald, Haze, Cobalt, Pepper White and Teal. Floor and vanity: Teal. Fixtures: American Standard Fawn Beige. Plate 158.

3 Ideas for bathrooms that will help sell homes

Ceramic tile bathrooms are regarded by home buyers as an essential feature in a quality home. Give your bathrooms extra selling punch with American Olean . . . the best tile made!

For lots more sales-building ideas, write for new booklet 470, "New Decorating Ideas."

CERAMIC TILE
American Olean

AMERICAN OLEAN TILE COMPANY—EXECUTIVE OFFICES: 2001 CANNON AVE., LANSDALE, PA. • MANUFACTURERS OF GLAZED TILE, CERAMIC MOSAICS AND MURRAY QUARRY TILE • A SUBSIDIARY OF NATIONAL GYPSUM CO.

BUSINESS IN THE MAKING

HOUSE & HOME *presents locations, sponsors, architects and estimated costs of representative new projects costing over $500,000 as gathered by* ENGINEERING NEWS-RECORD *and F. W. Dodge Co., division of McGraw-Hill Inc. to alert builders, lenders and contractors to new business.*

CALIFORNIA—EL CAJON: 70 residences, $1 million. Builder: Dass Construction, San Diego. ESCONDIDO: 84 residences, $1 million. Builder: Bob Strinkorb & Thomas Finn, LaJolla. Plans: Paul W. McKin, San Diego. ORANGE: 94 residences, $2 million. Builder: Butler Harbour Construction, Anaheim. SAN DIEGO: Townhouses, $1 million. Sponsor: William Starr & Drogin Homes Inc. Plans: Thomas & Richardson, Santa Ana. SANTA ANA: Senior citizens housing, $2.8 million. Sponsor: Evangelical United Brethern Home. Architect: Strange, Inslee & Senefeld, Los Angeles. SANTA MARIA: Apartment, $2.5 million. Sponsor: Santa Maria Acres.

CONNECTICUT — BRIDGEPORT: Apartment, $2,475,000. Sponsor: G.B.C. Realty, Hartford. Plans: Schulman & Soloway, Jamaica, N.Y. MYSTIC: 123 houses, $2,250,000. Builder: Ramblebrook, Madison. NEW HAVEN: Housing, $500,000. Sponsor: Better Community Corp. Plans: Polak & Sullivan. STRATFORD: Apartments, $600,000. Sponsor: Hilton Construction, New Haven.

DISTRICT OF COLUMBIA—Garden apartments, $3,362,000. Sponsor: Marby Assocs. Plans: Cohen-Haft Assocs., Silver Spring, Md.; Townhouses and apartments, $1.6 million. Sponsor: S.F.I. Construction Corp. Plans: Robert Schwinn, Silver Spring, Md.

FLORIDA—MIAMI BEACH: Apartments, $4.5 million. Architect: Morris Lapidus. MIRAMAR: Apartments, $1,250,000. Sponsor: New Horizons at Miramar Inc., Miami Beach. Plans: Philip Pearlman, North Miami Beach. NORTH BAY VILLAGE: Apartment, $1.5 million. Sponsor: Sam Joseph, Miami.

ILLINOIS—CARBONDALE: Dormitory, $1.1 million. Architect: McClurg, Shoemaker & McClurg, Chicago. DES PLAINES: 41 houses, $1.6 million. Builder: M & D Monarch Construction. Plans: Tucheschmidt & Assocs., Chicago. HINSDALE: Apartment, $1 million. Architect: John S. Townsend Jr., Chicago. LA SALLE: Apartments and swimming pool, $5 million. Sponsor: Charles H. Steffey Inc., Baltimore, Md. LINCOLNSHIRE: $4,950,000. Builder: Riverwood Development Coals Co., Niles. ROCKFORD: 56 houses, 26 row houses, $1.5 million. Builder: Charles N. Debes & Assocs.; Apartment, $2 million. Sponsor: Oswald & Schaider Inc. ST. CHARLES: Apartment, $1 million. Architect: Sellegg, Stevens, Peterson & Flock. WEST CHICAGO: 200 houses, $3 million. Builder: Cooper Bros., Chicago.

INDIANA—BLOOMINGTON: Apartment, $800,000. Sponsor: Gellman Construction, Milwaukee, Wis. Plans: Glen Scholz, Milwaukee. INDIANAPOLIS: Apartment, $1.8 million. Sponsor: Grant Holliday Construction, Washington, D.C. SOUTH BEND: Apartment, $1,250,000. Sponsor: Fred Checci, Mishawaka. VINCENNES: Dormitory, $1.3 million. Sponsor: Vincennes University. WHITELAND: Apartment, $1 million. Sponsor: Marley Williams. Plans: David Hill & Assoc., Seymour.

LOUISIANA—BRIDGE CITY: 76 houses, $836,000. Builder: Heritage Homes Inc., Metairie. HARVEY: Apartment, $3.5 million. Architect: Edward F. Jemison, Metairie. METAIRIE: Apartments, $500,000. Architect: A. George Ducorbier & Assoc.; Apartment, $1.5 million. Sponsor: Lattie Construction, Kenner. Plans: Richard C. Mouledous.

MARYLAND—ANNAPOLIS: Apartments and swimming pool, $8 million. Architect: Harold Liebman, New York City. BALTIMORE: Garden apartments, $500,000. Sponsor: The Lenkin Co., Washington, D.C. Plans: MacLane & Chewning, Washington, D.C. BETHESDA: Apartment, $2.5 million. Sponsor: Grosvenor Park Apartments, Washington, D.C. Plans: Donald Drayer, Washington, D.C. MILLWOOD: 97 houses, $1,455,000. Builder: Suburban Homes, Lanham. Plans: Walton & Madden, Riverdale. ROCKVILLE: Garden apartments and townhouses, $2,176,000. Sponsor: Artery Enterprises, Kensington. Plans: Cohen-Haft Assoc., Silver Spring. UPPER MARLBORO: Garden apartments, $2,065,000. Sponsor: Joel Assocs., Silver Spring. Plans: Cohen-Haft Assocs., Silver Spring; Housing development and swimming pool, $25 million. Sponsor: B. Francis Saul & Assocs., Washington, D.C. Plans: William L. Mayne & Assocs., Alexandria, Va. WHEATON: Apartment, $3 million. Sponsor: Morton H. Levine, Silver Spring. Plans: Leo Kornblath & Assocs., Washington, D.C.

MICHIGAN—ANN ARBOR: Apartments, $5 million. Sponsor: Tower Plaza Inc. Plans: King & Lewis, Detroit. GRAND RAPIDS: Apartment, $2 million. Sponsor: Multicon Inc., Columbus, Ohio. Plans: Schooley, Cornelius & Schooley, Columbus: STERLING: Apartment, $1 million. Architect: Ziegelman & Ziegelman, Birmingham. WEST BLOOMFIELD: Apartment, $2 million. Architect: Ziegleman & Ziegleman, Birmingham. WINTERFIELD: Housing development, $500,000. Sponsor: Stanley Chase Jr., Grand Rapids.

MISSOURI—HAZLEWOOD: Apartments, $2 million. Sponsor: Hazelwood Development c/o Westview Realty Co., Clayton. KANSAS CITY: Townhouse apartment, $1 million. Sponsor: River Park Townhouse c/o Terrydale Corp. Plans: Geis-Hunter & Ramos; Apartment, $1 million. Architect: Robert E. Newell & Assoc. OVERLAND: Apartment, $3.3 million. Sponsor: Benton Taylor, Clayton. ST. LOUIS COUNTY: 61 houses, $1,250,000. Builder: Burton W. Duenke, Creve Coeur; 40 houses, $1.5 million. Builder: Spartan Builders, Creve Coeur. Plans: George Berg, Kirkwood.

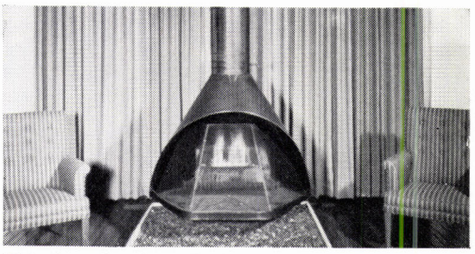
NEBRASKA — LINCOLN: Dormitory, $500,000. Sponsor: Nebraska Wesleyan University. Plans: Davis & Wilson; Apartment, $600,000. Sponsor: Dr. George Place. Plans: Jim Haberlan. PAPILLION: Apartment, $500,000. Designer: Scholz Homes, Toledo, Ohio.

NEW JERSEY—BAYONNE: Housing development, $1 million. Sponsor: Stevalex Corp., New York City. FAIR LAWN: 43 houses, $1,290,000. Builder: Glen Side Estates, Clifton. Plans: Neal M. Tanis, Clifton. GOSHEN: Garden apartments, $900,000. Architect: Martin Gebhardt & DiPaoli, Fairview. EAST PATERSON: 23 houses, $805,000. Builder: J&H Cosden Construction, Wayne. Plans: Leonard G. Feinen, Hasbrouck Heights. LINDEN: Apartment, $1 million. Sponsor: Sweet Sign Advertising. Plans: Peter Grygotis, Roselle.

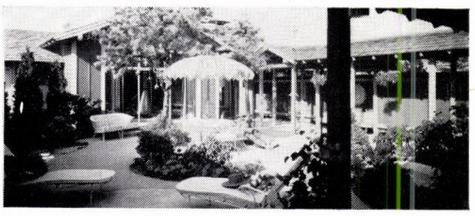
NEW YORK—ELTINGVILLE: 40 houses, $1.2 million. Sponsor: CMD Corp., Brooklyn, N.Y. Plans: Diamond-Sanko, Staten Island, N.Y. MOUNT

Business continued on p. 34

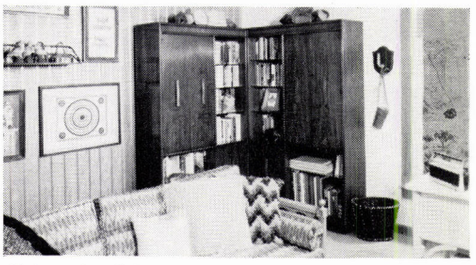
A few of the ways Emil Hanslin is using copper, brass and bronze at New Seabury



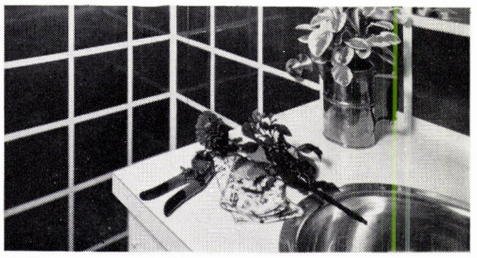
This free-standing all-copper fireplace with a dark statuary finish is made by the Condin-King Company, P.O. Box 133, Seattle Heights, Wash. It's a perfect mate for a custom-made polished copper fireplace hood in the same home made by PM Manufacturing Company, 4689 Third Avenue, Bronx 67, New York.



To enhance the beauty of both the homes and the community, all distribution wiring is underground (URD) and, of course, is copper. For technical data and case histories on Underground Residential Distribution write to the Copper Development Association's new URD Information Office, 405 Lexington Ave., New York, N.Y. 10017.



Strips of solid copper add a handsome accent to fir wall paneling. A low-sheen finish permanently protects the copper. Called "Copper Inlaid Vintage Fir", it comes in standard 4' x 8' panels and was recently introduced by Georgia-Pacific Corp., Equitable Building, Portland 4, Oregon.



Solid copper wall tiles with a statuary finish, made by Vikon Tile Corp., Washington, N.J., fit in beautifully with a polished copper sink developed by the Copper Development Association. All water supply and drainage lines are also solid copper. All hardware is solid brass or bronze, supplied by Schlage Lock Co., P.O. Box 3324, San Francisco 19, Calif.

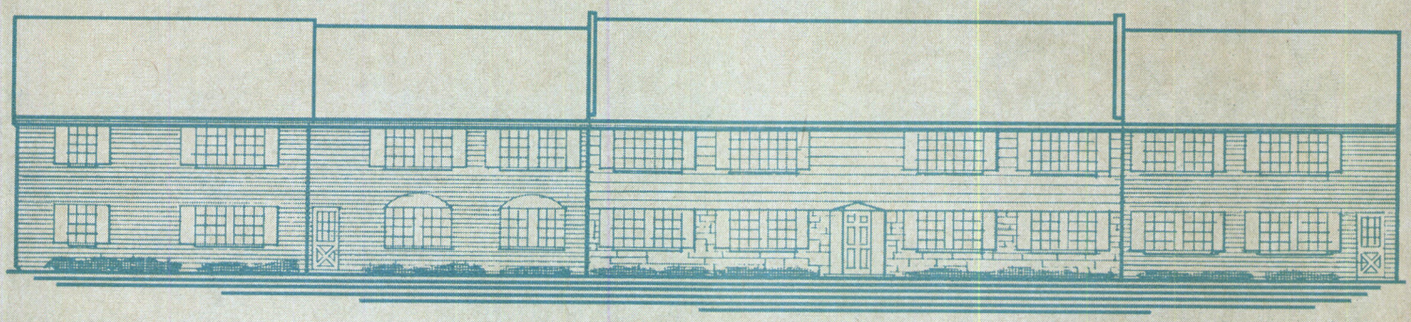
For further information write to:

COPPER DEVELOPMENT ASSOCIATION INC.

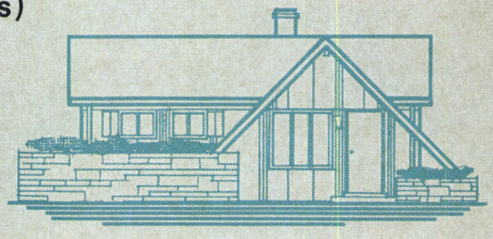
405 LEXINGTON AVENUE, NEW YORK, N.Y. 10017

Circle 45 on Reader Service Card

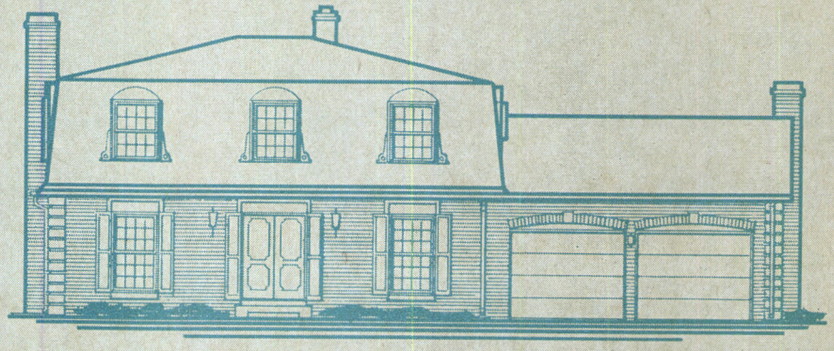
NOW...
U. S. Steel Homes Dealers can have a market-proof lineup in 1966



Large... (apartments, town houses)



small... (cottages)



or anywhere in between...

(two-story, ranches, bi-levels and split-levels)

As a U. S. Steel Homes Dealer, you can go in the direction the market goes. If you're in an apartment market, there's a wide selection of multi-family plans to fit any requirement, from small to luxury units. The same goes for single-family homes, from low-cost ranches to luxury split-levels. There are town houses, cottages, motels and nursing homes, too. U. S. Steel Homes offers the industry's most complete selection, and every U. S. Steel Home features the exclusive steel framed structural system plus other steel components—soffits, siding, and exterior doors, for instance—that add up to a real solid value.

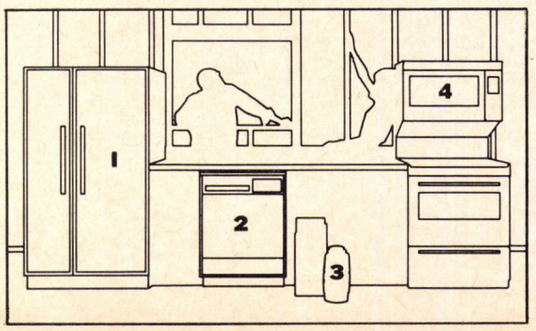
U. S. Steel Homes Dealers get expert assistance in financing, program planning, advertising and marketing, sales training and merchandising aids. It all adds up to a solid, profitable opportunity for you. If you want to find out more about your opportunities as a U. S. Steel Homes Dealer, call or write U. S. Steel Homes, 2549 Charlestown Road, New Albany, Indiana. USS is a registered trademark.

Steel This mark tells you a product is made of steel.

USS **United States Steel Homes**
Division of United States Steel

Build in

NAHB CONVENTION
See the Tappan Time Machines • Booths 1159-1164 • 1261-62
December 5th thru 9th, 1965



1. **Tappan Refrigerator-Freezer:** Tell her it's like having a 20-cubic foot supermarket right in her kitchen, and no defrosting ever. Fits in a space just 36 inches wide, and has a built-in look with cabinet-matching door inserts. Also white, coppertone or Lusterloy finish.
2. **Tappan Reversa-Jet Dishwasher:** The built-in dishwasher with reversing spray arms that work in one direction, then the other—to remove sticky foods most dishwashers can't get. Choice of three models, which Tappan thoughtfully made very easy to install.
3. **Tappan Disposer:** Cutting blade with 60-degree setting makes short work of hard-to-handle foods. Power reverse clears jams quickly, easily. The quiet food waste disposer with more do's than don'ts!
4. **Tappan "Holiday 400" Range:** Give her what she likes —a choice of *either electric or gas*. Two ovens, one at eye level and one below. Infinite heat control on surface units. And Tappan's easy cleaning features.

Tappan Time Machines

Today's housewife has better things to do than cook food and wash dishes. She runs a family taxi service, plunges into civic activities, shops, entertains. And often she has a full time job outside the home.

So, she needs and wants a kitchen she can get out of. Tappan can help you give her just that, in the home you want her to love and buy.

Feature Tappan Time Machines—appliances designed to save her time and do more of the kitchen work automatically. Set and forget cooking, more thorough dishwashing, fast garbage disposal, big refrigerator and freezer storage that never needs defrosting. And all made so that they clean like new in minutes instead of hours.

You get what you want from Tappan: a wide variety of models and prices, including Tappan's new Profile Line range in gas or electric. (You've never had a range this good at prices so low. It's a built-in that slips in. And helps you sell houses.)

Remember Tappan when you plan your models. Because once she loves your kitchen, can a sale be far behind? For information on Tappan Time Machines (and how to merchandise them) write, Dept. H12, The Tappan Company, Mansfield, Ohio.

TAPPAN
APPLIANCES

The Tappan Company, Mansfield, Ohio • Tappan-Gurney, Ltd., Montreal

Circle 54 on Reader Service Card

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

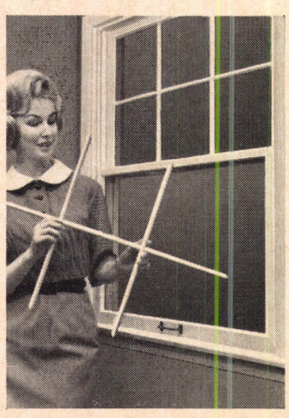
Give your customers these benefits of a "care-free" double-hung window... at no premium in price!

☐ **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.

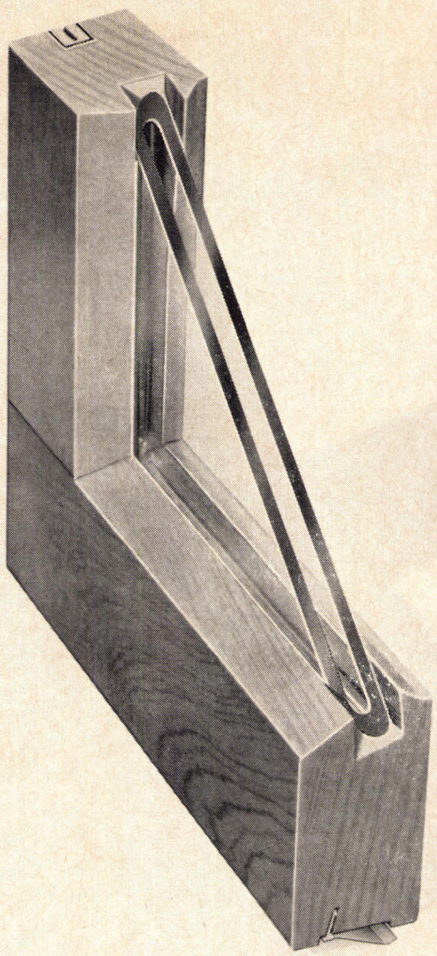
☐ **Removable grilles for easier cleaning!**

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®)



Andersen Windows AW

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_____

Firm Name_____

Address_____

City_____ Zone____ State_____

Andersen Corporation • Bayport, Minnesota

Andersen Windowalls AW
TRADEMARK OF ANDERSEN CORPORATION

. . . America's Most Wanted Windows

HH-125

1965 HORIZON HOMES INTERNATIONAL AWARD WINNER

PROGRAM

Vern C. Hardman Jr., Research Homes, Inc., Salt Lake City, Utah, winner of the 1965 International Award. The awards jury chose the home for its many design and livability features, and for the notable merchandising program supporting it.

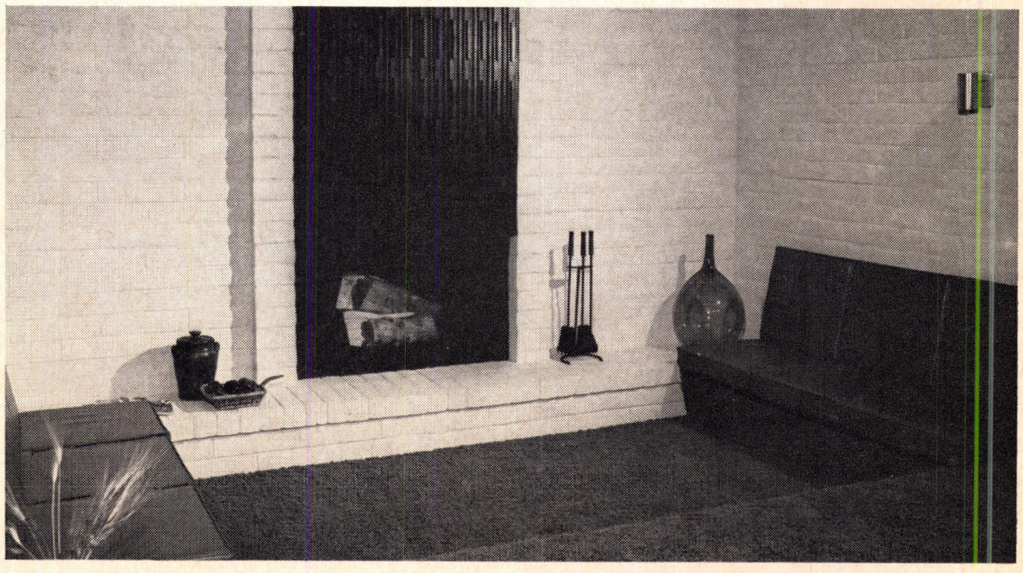
Beauty and sales appeal of concrete again dramatized in newest award-winning home design. The 1965 international award winner tops an expanding list of sales-minded builders who are benefiting from the Horizon Homes Program.

Participating builders gain a tremendous advantage in stimulating buyer interest and sales through the Program's strong encouragement of home ownership and effective merchandising, advertising and publicity support.

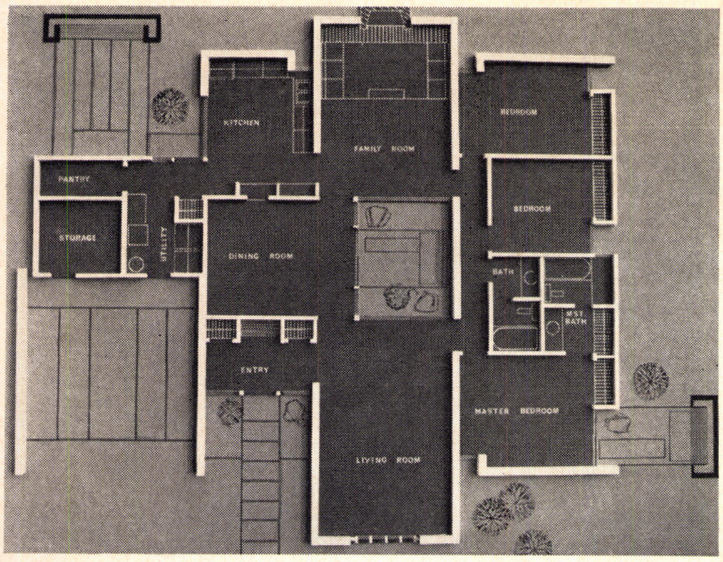
Visit the PCA exhibit at the NAHB Convention and see the winner. Grand International Prize for 1965: a trip for two to anywhere in the world. Also, regional awards.

pca 1966 50th year

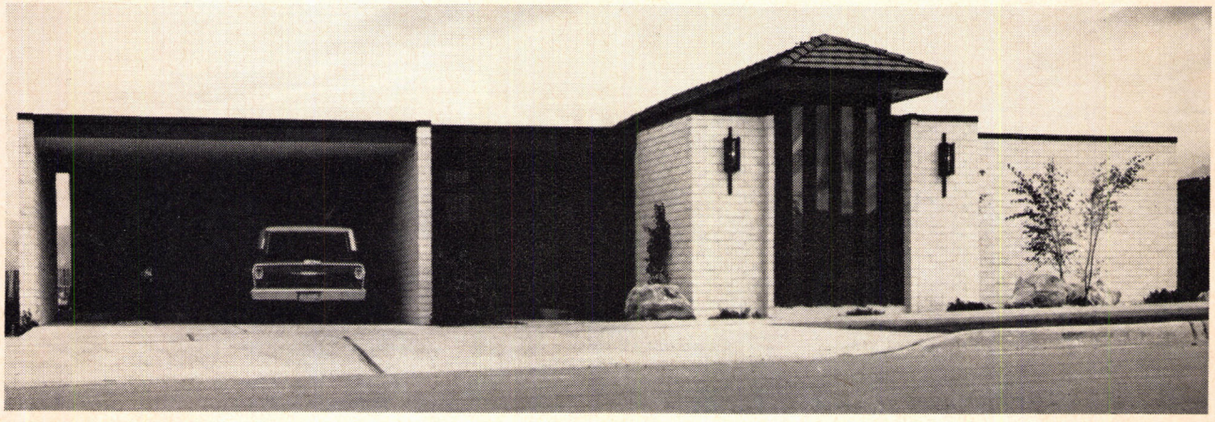
PORTLAND CEMENT ASSOCIATION
33 West Grand Ave., Chicago, Ill. 60610
An organization to improve and extend the uses of concrete, made possible by the financial support of most competing cement manufacturers in the United States and Canada



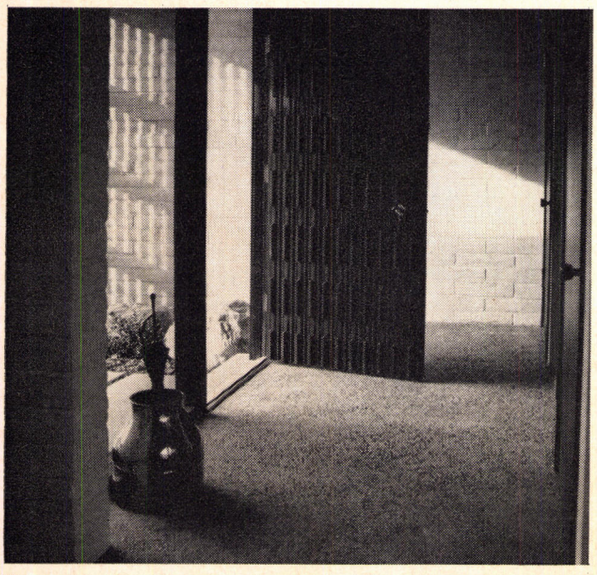
Warmth and charm of family room is accented by concrete masonry fireplace in contemporary design, and conversation pit with built-in couches.



Floor plan shows excellent arrangement of living areas around atrium. Separation of bedrooms into "quiet zone" is valuable design feature that has strong sales appeal.



Award-winning home features "adobe look" slump block walls that emphasize both utility and beauty. Floating pitched roof over living room area has slate gray concrete roof tile.



Entry is given dramatic interest with an impressive floor of exposed aggregate concrete. Exterior walks repeat the exposed aggregate texture.

SEE THE 1965 HORIZON HOMES WINNING DESIGNS AT THE NAHB CONVENTION

SPACES 544 & 545
McCORMICK PLACE
DECEMBER 5 TO 9

Specified in MORE and MORE fine construction...

HOMASOTE "EASY-PLY" ROOF DECKINGS

Residence: Darien, Conn.
Architect: Harry M. Buckingham, A.I.A.
Contractor: Andrew W. Kish

MORE SPAN — structural **and** insulating panels for spacings up to 60″ o.c. on steel or wood rafters — for clean, uncluttered ceilings with more exciting dimensions and design latitude.

MORE THICKNESS — Homasote Decking is available in 15/16″, 1⅜″, 1⅞″ and 2⅜″ thick panels that are standard 2′ x 8′ with T & G long edges. On special order, panels can be supplied up to 4′ x 12′ and T & G all edges.

MORE FINISHES — Ceiling side of panels is available in white kraft (with vapor barrier) or color-coated white, beige or other latex paints to order. Also, finish can be white or wood-grain vinyl, fire-retardant paints or white polyethylene film.

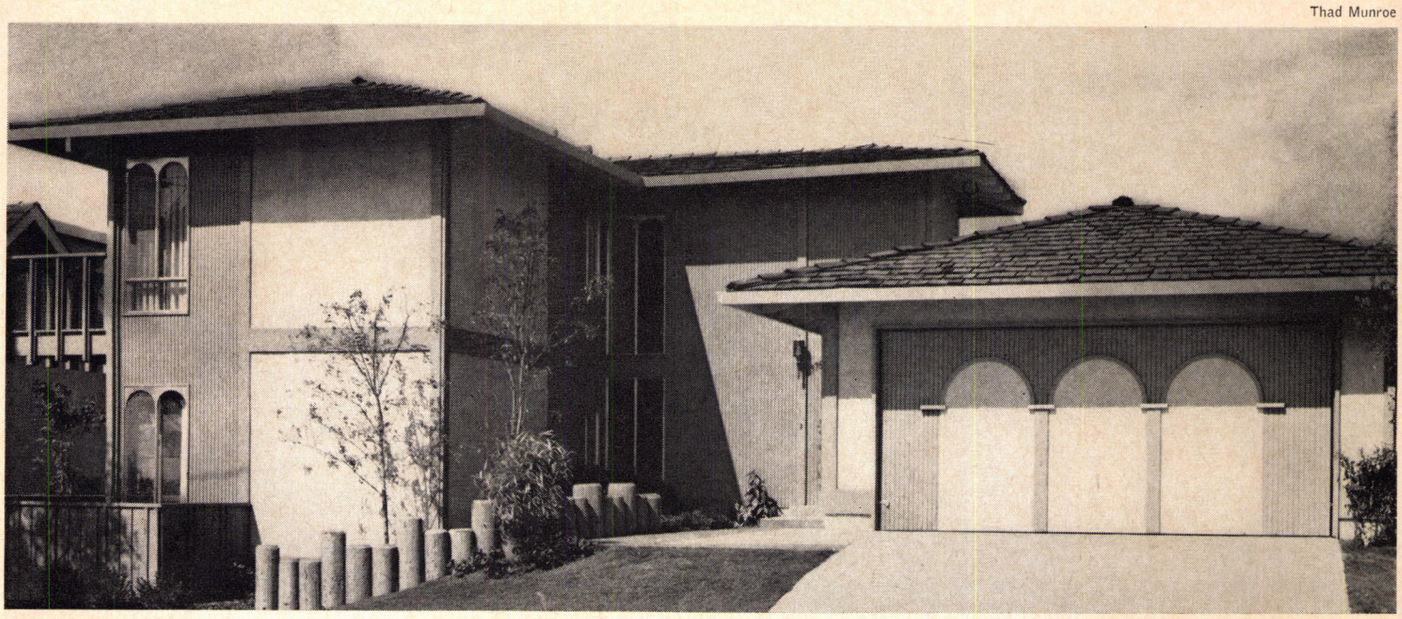
MORE DETAILS? For technical bulletins describing application of Homasote Decking on conventional roofs, on metal-frame, A-frame and in bonded built-up roofing, write Dept M-3.

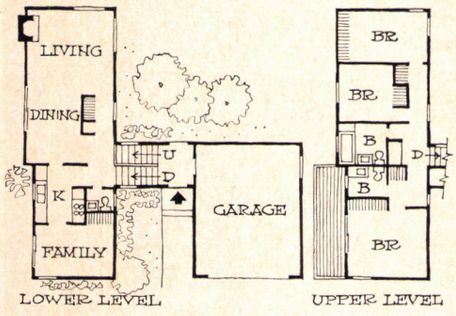
homasote *Company*

Trenton, N. J. 08603

5-425

Thad Munroe



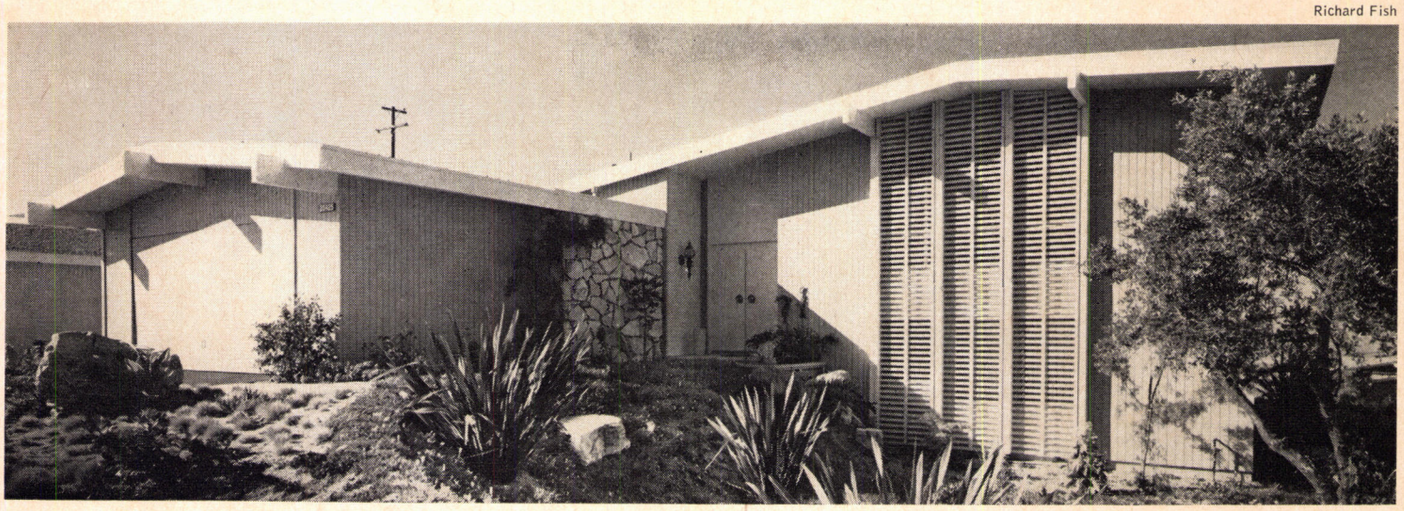


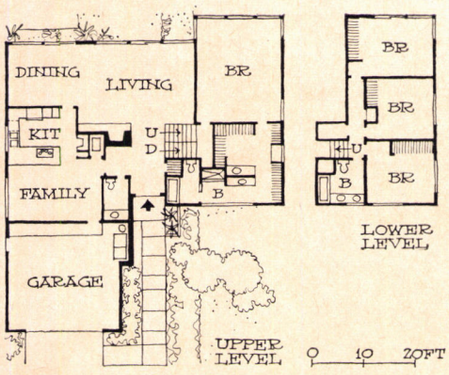
Here's something new in split-entry design . . .

This split-entry model departs from the ordinary on three counts. First, the mid-level entrance gallery, two stories high, is outside the rectangular plan, freeing usable living space and linking the house to the garage. Second, the end of the plan is turned toward the street so that living areas along the side yard have more privacy. Third, the small-scale exterior design, influenced by the design of Scandinavian housing, makes the 1,590-sq.-ft. model appear larger.

Priced at $25,000 on a ¼-acre lot, this model has accounted for 8 of 42 sales since the May opening of Le Mount Corp.'s Pleasant Hill, Calif., project. Le Mount offers four other models—all with similar overtones of Scandinavian styling—at the 254-home community. Prices range from $23,500 to $26,125.

Richard Fish



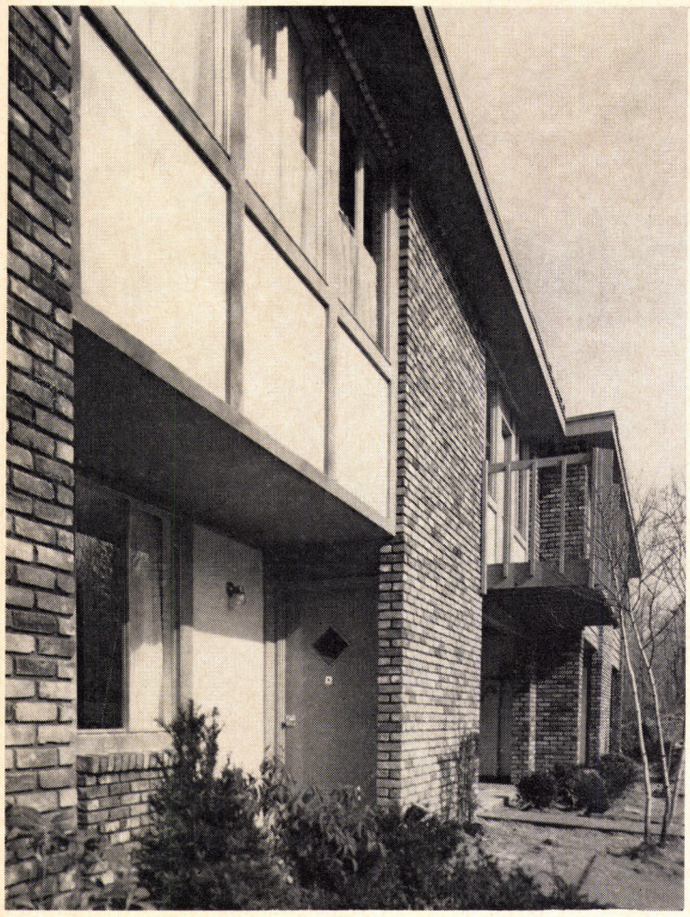


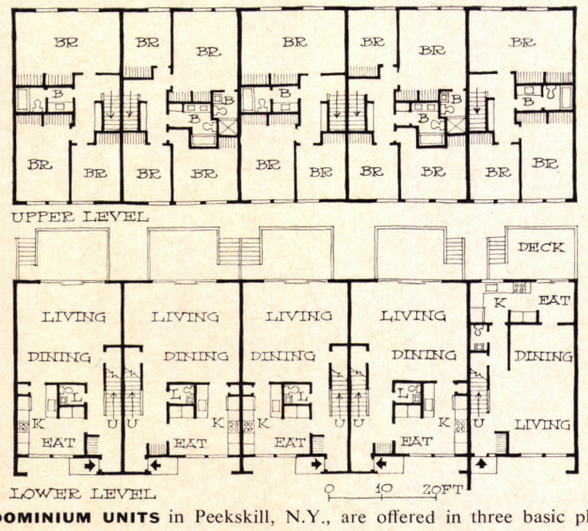
. . . and here's a split-level for terraced lots

Right through the center of this ⅙-acre corner lot runs a 4½′ change in grade. To suit the terraced lot, and others in the same subdivision, Architects Russell C. Harris and James W. Rice designed a tri-level plan that uses the higher portion of the land for mid-level living areas and a central entrance and puts the two-story bedroom wing on the stepped-down section of the lot. Both the middle and lower levels have access to the rear grade.

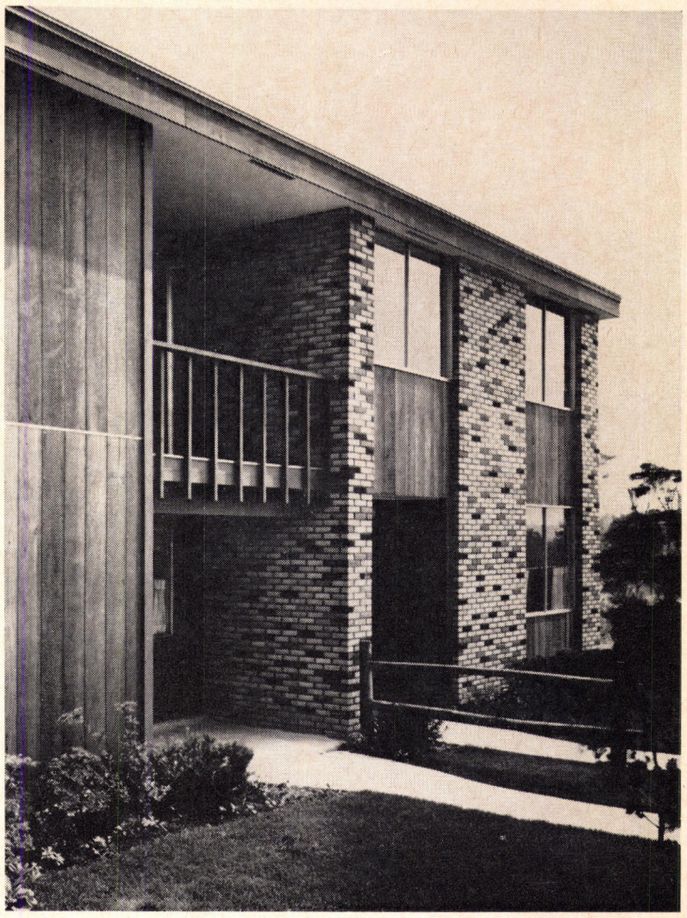
The $47,700 split-level, one of seven models in Edward K. Zuckerman's project at Palos Verdes Peninsula, Calif., has accounted for more than 25% of 200 sales. Its other features: 2,477 sq. ft. of living area, a minimum of hall space, a large master suite (with a dressing room and compartmented bath) on the bedroom wing's top upper level, two-story wooden screens that hide the bathroom windows from the street.

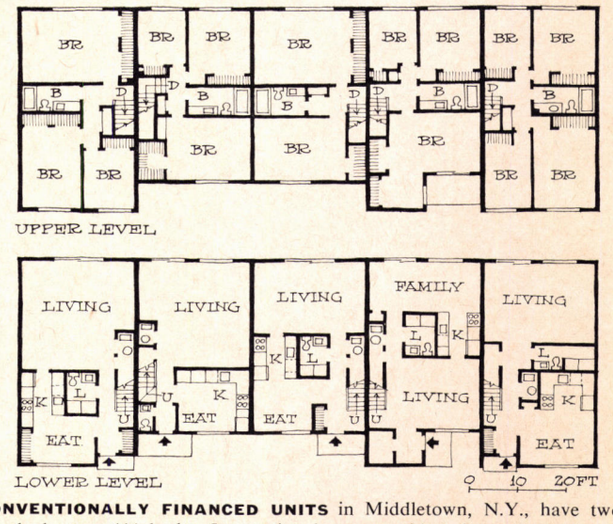
Leaders continued on p. 54





CONDOMINIUM UNITS in Peekskill, N.Y., are offered in three basic plans. Variations available: garages, extra baths, full basements with playrooms.





CONVENTIONALLY FINANCED UNITS in Middletown, N.Y., have two to four bedrooms, 1½ baths. One optional extra: a side balcony for end models.

Townhouse look-alikes: similar designs click for two different builders

At first glance, these townhouses appear to be in the same project. Actually, they are 30 miles apart.

The units at left were built by Syracuse Bros. on a 23-acre hilltop in Peekskill, N.Y. Those at right were built by P. C. Construction Co. on a ten-acre site in Middletown, N.Y.

The Syracuse Bros'. houses, designed by Architect Joseph Kaprow, were the first condominiums in New York State when they opened in May 1964. So far 95 of the 150 units have been sold.

Three basic three- and four-bedroom plans are offered with many variations. Living space ranges from 1,450 to 1,700 sq. ft. and prices from $17,500 to $22,540. Owners pay a $5 monthly fee for maintenance of community areas and a swimming pool.

P. C. Construction's conventionally financed units are the first townhouses in New York's Orange County. Twenty have been sold since the project opened two months ago. Five models, designed by Architect Frank Howe, range from 1,250 to 1,500 sq. ft. in size and from $12,990 to $14,500 in price. Community areas and landscaped parking malls will be maintained by the city.

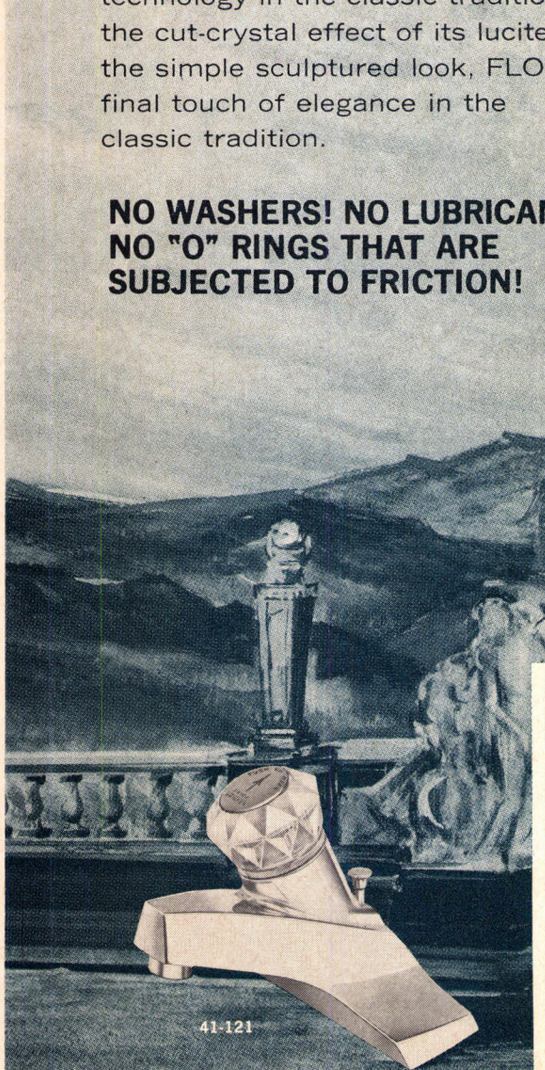
Letters start on p. 70

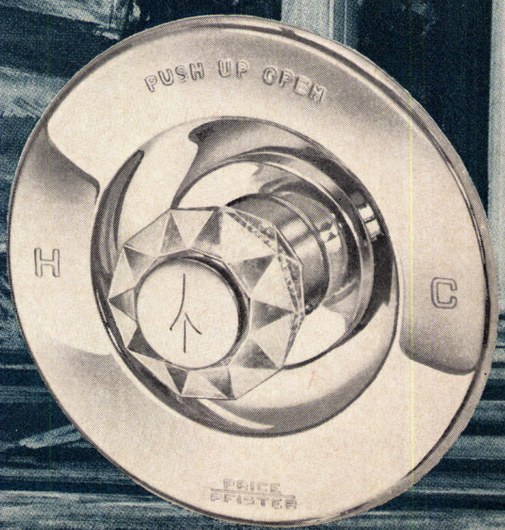
New!
FLOW-MATIC®

single handle mixing valves and lavatory fittings by PRICE PFISTER

FLOW-MATIC — Created by modern technology in the classic tradition, the cut-crystal effect of its lucite handle, the simple sculptured look, FLOW-MATIC the final touch of elegance in the classic tradition.

**NO WASHERS! NO LUBRICANT!
NO "O" RINGS THAT ARE
SUBJECTED TO FRICTION!**





MIXING VALVE — 09-411

MIXING VALVE WITH BATH SPOUT — 09-421

MIXING VALVE WITH SHOWER HEAD SET — 09-431

MIXING VALVE WITH SHOWER HEAD SET AND DIVERTER SPOUT — 09-441

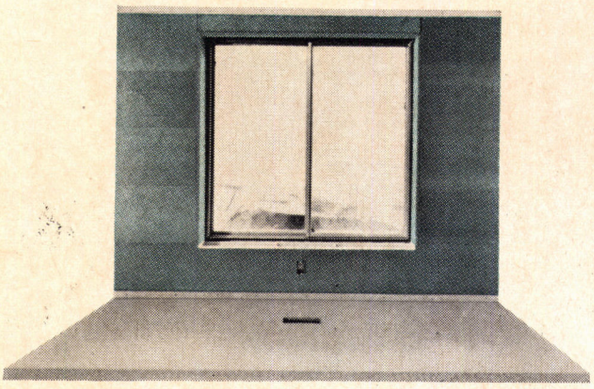
Available with integral valves. Also available in either Iron Pipe or Copper Sweat Connections.

FOUR INCH LAVATORY FITTING
Dramatic one-piece styling with aerator combines cast brass pop-up assembly featuring easy-out plunger, with crystal-like handle of brilliant long-lasting Lucite. Anti-siphon code approved.

Price Pfister
BRASS MFG. CO.
ESTABLISHED 1910

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

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

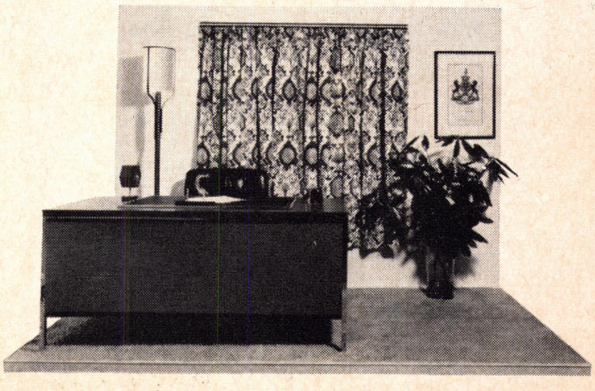


Remember Styrofoam.

(Use it to insulate masonry walls. Finish with wallboard or plaster.
Costs about the same as furred, uninsulated walls. Good deal?)

You bet. That's one of the things you'll like about Styrofoam® FR brand insulation—its versatility in accepting finishes for masonry walls.
Going to use wallboard? Easy does it. Styrofoam FR applies quickly to walls with the help of Styrotac® bonding adhesive. No furring. Then wallboard goes up.
No nails to "pop" or holes to fill.
Or if you're using plaster, it can be applied directly to Styrofoam FR.
This insulation's textured surface provides an excellent key for wet plaster. And eliminates the need for furring and lathing.
Whichever method you use, Styrofoam FR resists the passage of moisture, eliminates the need for a vapor barrier, takes care of itself.
Permanently. The result is a solid, insulated wall at nearly the same cost as a furred, uninsulated wall.
To make Styrofoam FR even more memorable, we've made it blue.
There's nothing like it. For more facts worth remembering, see Sweet's Light Construction File 4a/Do.
Or write us. The Dow Chemical Company, Plastics Sales Department 1321BP12, Midland, Michigan.

Styrofoam is Dow's registered trademark for expanded polystyrene produced by an exclusive manufacturing process. Accept no substitutes . . . look for this trademark on all Styrofoam brand insulation board.



O.K. Now forget it.

(You'll never have to worry about it again.)

DOW

This emblem on a building product is more than just a symbol. It's your assurance that the manufacturer offers you a product of proven performance and that he uses Geon vinyl, "The Material Difference in Building."

Why is Geon vinyl different? It has already proved itself in a number of varied products—windows, siding, gutters and downspouts, electrical raceways, and others.

Geon vinyl is remarkably versatile. It is flame resistant, impact resistant, lightweight yet strong, won't conduct electricity, and it resists corrosion. In building products, Geon vinyl means lower installed cost, improved performance and reduced maintenance.

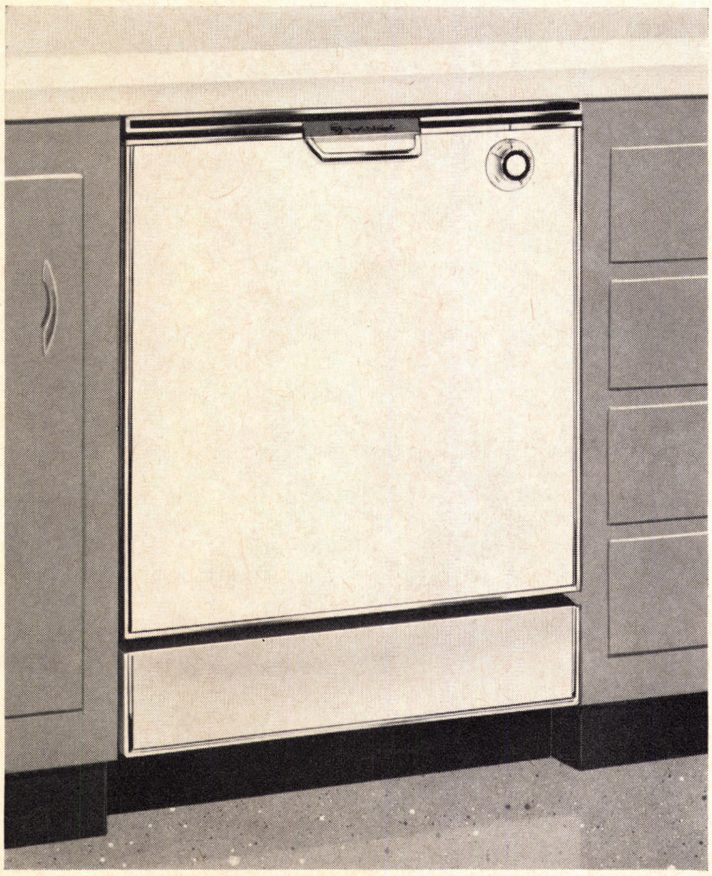
For more information telling why Geon vinyl is the material difference in building, write B.F.Goodrich Chemical Company, Dept. GN-12, 3135 Euclid Avenue, Cleveland, Ohio 44115. In Canada: Kitchener, Ontario.

B.F.Goodrich **B.F.Goodrich Chemical Company**

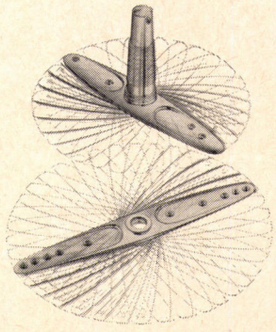
a division of The B.F.Goodrich Company

Circle 58 on Reader Service Card

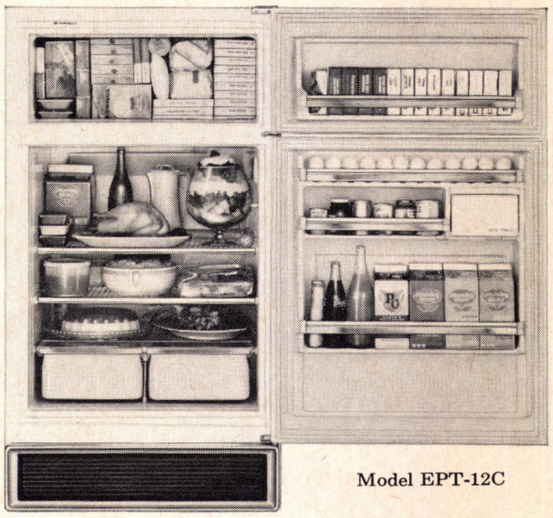
NEW! RCA WHIRLPOOL appliances with new styling...new features (and they're easier than ever to install)



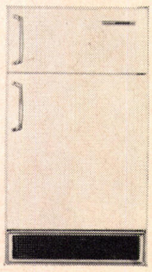
Model SPU-70



NEW! Built-in dishwashers with automatic pushbutton cycles, full-size spray arms, self-cleaning filter and much more. Easy installation with unobstructed work area for rough in; no struggling with difficult connections after unit is in place. Custom decorate dishwasher fronts with wood panel or any other ¼" decorative material to match or contrast with kitchen cabinets. Choice of decorator colors.



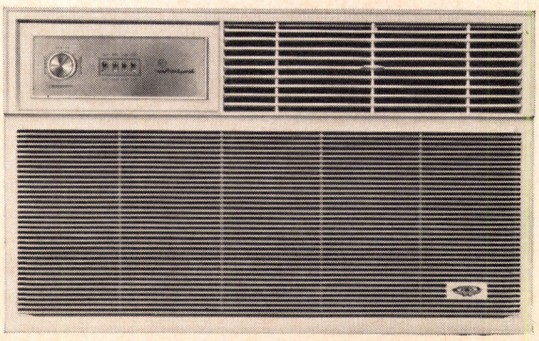
Model EPT-12C



NEW! Refrigerators to fit any building need. Single-doors, two-doors, freezers at the top or bottom. No-Frost models, some with IceMagic® automatic ice makers. Capacities from 11 to 18.5 cubic feet.

NEW! Complete selection of through-the-wall air conditioners with 8,500 to 14,000 BTU's. Choice of 208- or 230-volt models. Exterior and interior temporary fronts for pre-installation use are included with each model.

Model APW-085-5



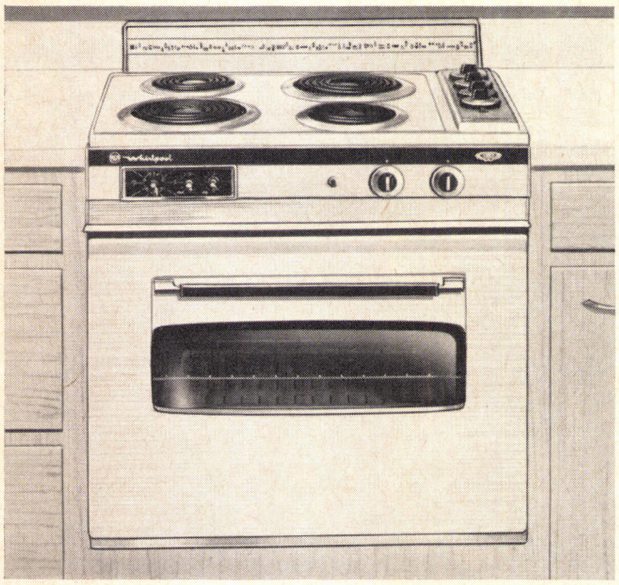
FULL-LINE CONCEPT

© WHIRLPOOL CORPORATION 1965

Don't fail to see the many new, exciting models that have joined Whirlpool's full line of gas and electric appliances. This is the Full-Line Concept that is benefiting successful builders from coast to coast. The main advantage is that it saves you time and paper work. You have *one dependable source* for a full line of gas or electric appliances. You deal with one man, instead of three or four, sign one order, receive undivided responsibility and service. You have a brand name working for you that your prospects know and respect. Millions of dollars in national and local advertising have helped pre-sell your prospects on these quality appliances. Call your RCA WHIRLPOOL distributor and find out how this Full-Line Concept can help you.

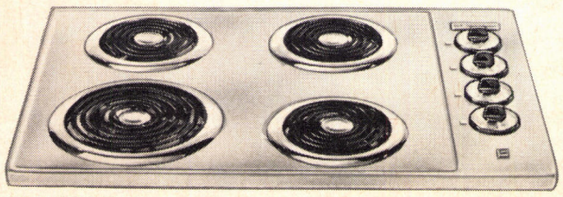
RCA Whirlpool

GAS AND ELECTRIC APPLIANCES

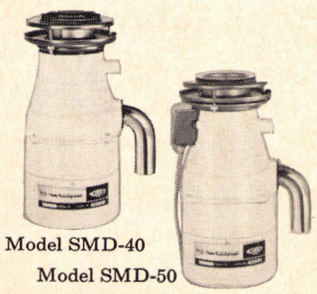


Model RPE2800

NEW! Two new set-in electric ranges, making a total of five 30″ and one compact 24″ model to choose from. A cinch to install! Simply slip them into cutout with cooktop resting on cabinet top, no bracing needed. Make one electrical connection, and that's it. Door panels are available in brushed chrome or colors.



Model RLE840

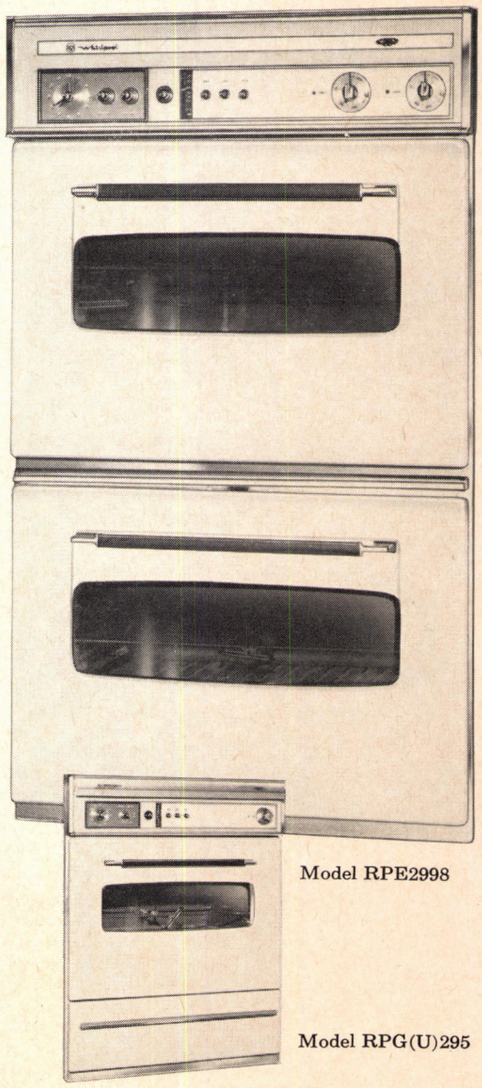


Model SMD-40

Model SMD-50

Complete selection of matching gas or electric cooktops.

Extra quiet food disposers. Entire power assembly and impeller can be removed for servicing *without* disturbing plumbing or tying up sink.



Model RPE2998

Model RPG(U)295

NEW! Two gas built-in ovens and one new electric double-oven model. Gives you a total of seven electric and four gas built-in ovens to please any prospect and fit any budget. Each in choice of decorator colors or chrome.

RCA WHIRLPOOL Appliances are Products of Whirlpool Corporation, Benton Harbor, Michigan. Trademarks ® and RCA used by authority of trademark owner, Radio Corporation of America.

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At space 1154-7, McCormick Place, see the most builder-minded array of home and commercial cooling and heating equipment and packaged systems ever assembled. Also, see how you can get a free trip to Vienna for you and your wife with the card in this ad.

Smart builders will be making the Vienna trip this Fall. By jet! For Free! On Fedders!

Just by stopping off at Fedders space, or even by mailing the card in this ad, you could win that Free Vienna Trip. What's more, you can *earn* an extra trip or two in the Fedders "Big Boom" Program you've been hearing about!

And Fedders makes it easy! You want *price*—you get price! You want models that fit your plans—Fedders gives you the biggest line of central air conditioning and heating equipment you've ever seen for outside or inside installation . . . in attic, garage, closet, basement, breezeway, back-yard—you name it, we have it! Cooling and heating! Split or packaged systems!

Plus new ideas to help you move more homes and apartments—ways to get prospects to your tracts and developments in a buying mood! So don't miss the big Off-Broadway ON McCormick Place Show! (Especially, don't miss the Big Boom Drum Majorettes!) At Space 1154-7. In Chi.

*(**P.S.** If you're not coming to the show, don't forget to send the card to us before December 9th. We'll check it off for you. Wire you if you win! So help us.)*

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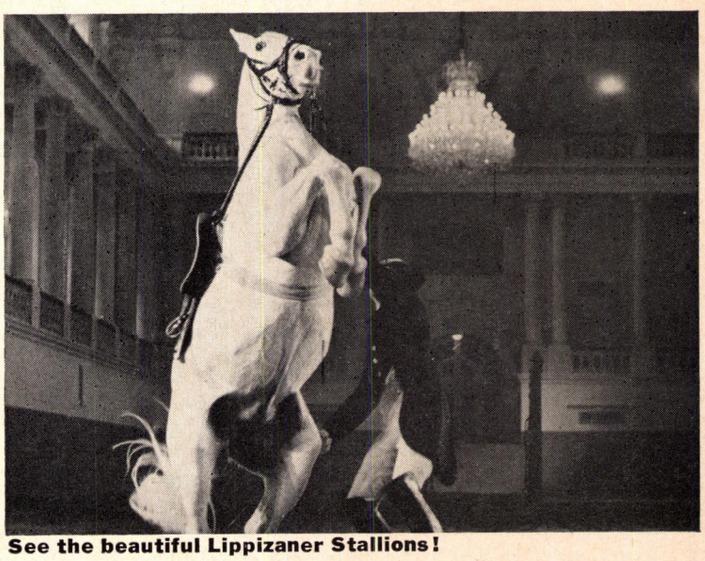

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Enjoy the sparkling Viennese Ballet!

Live it up in Vienna's most glamorous nightclubs!

Circle 59 on Reader Service Card

All-Electric Report U.S.A.

News of all-electric Medallion homes and apartments across the country

Every day, more and more builders of modern homes and apartments are switching to total-electric construction, equipped by General Electric.

The many advantages of total-electric living have proven such outstanding sales values that Medallion homes and apartments equipped by General Electric are consistently outselling competitive units.

But added saleability of your product is only one of the advantages to you as a builder. You also get:

- Engineering and design assistance for heating, cooling, lighting, kitchens and laundries.
- Customized promotional programs to take your sales message to your prospects effectively and efficiently.
- Coordinated scheduling of equipment deliveries to save you headaches and speed your construction.

Interesting? For details on how General Electric's program for total-electric homes and apartments can go to work for you, contact your General Electric Major Appliance distributor, or send in the coupon below.

GENERAL ELECTRIC

Construction Market Development Operation
General Electric Co., Appliance Park, 6-230
Louisville, Kentucky

I'm interested in General Electric's program for all-electric construction. Please send me more information on:

☐ Medallion Homes and Apartments
☐ All-electric Commercial Construction

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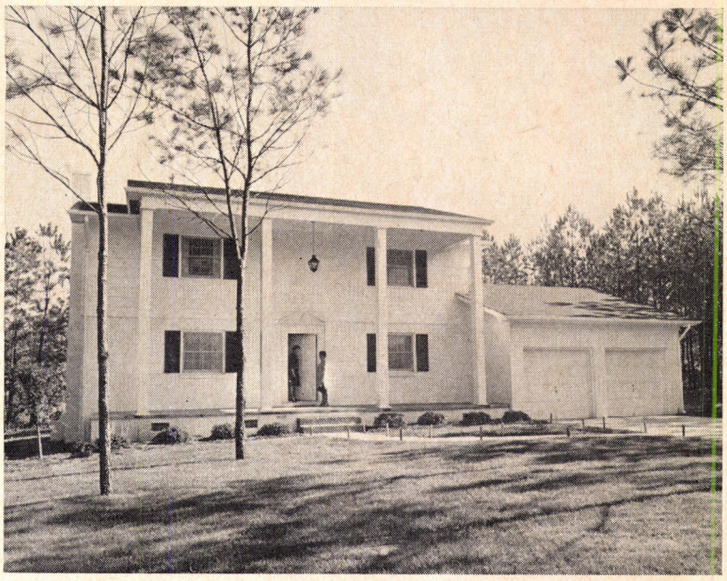
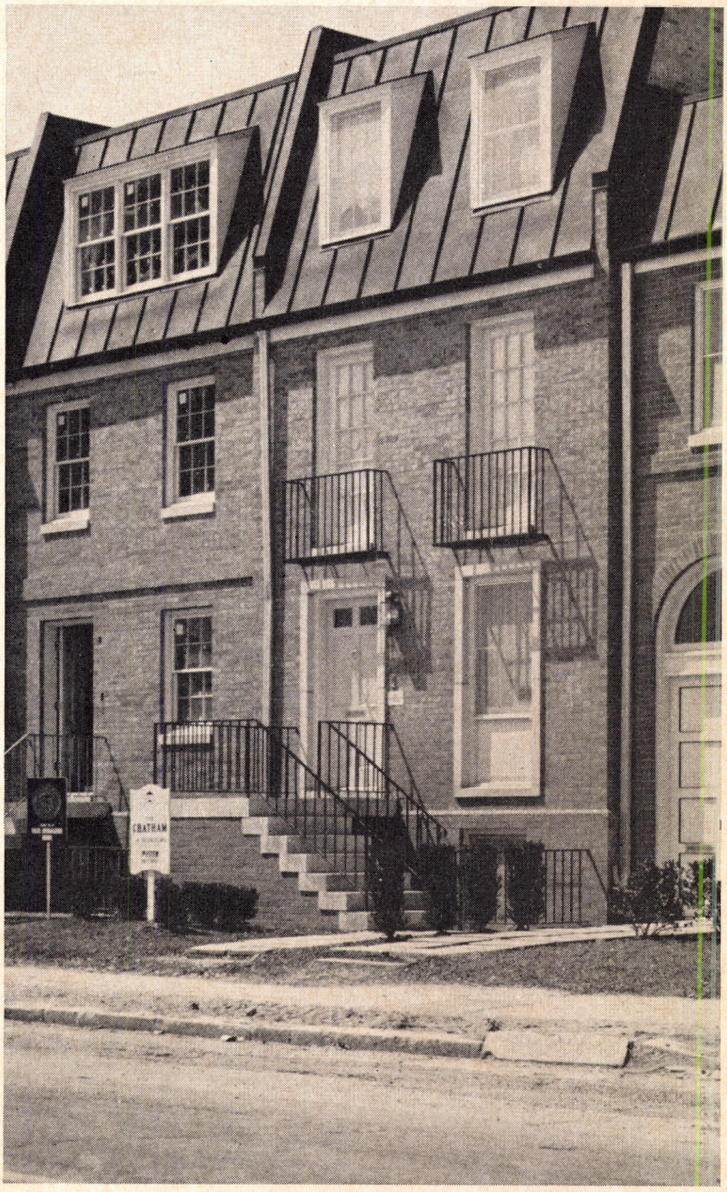
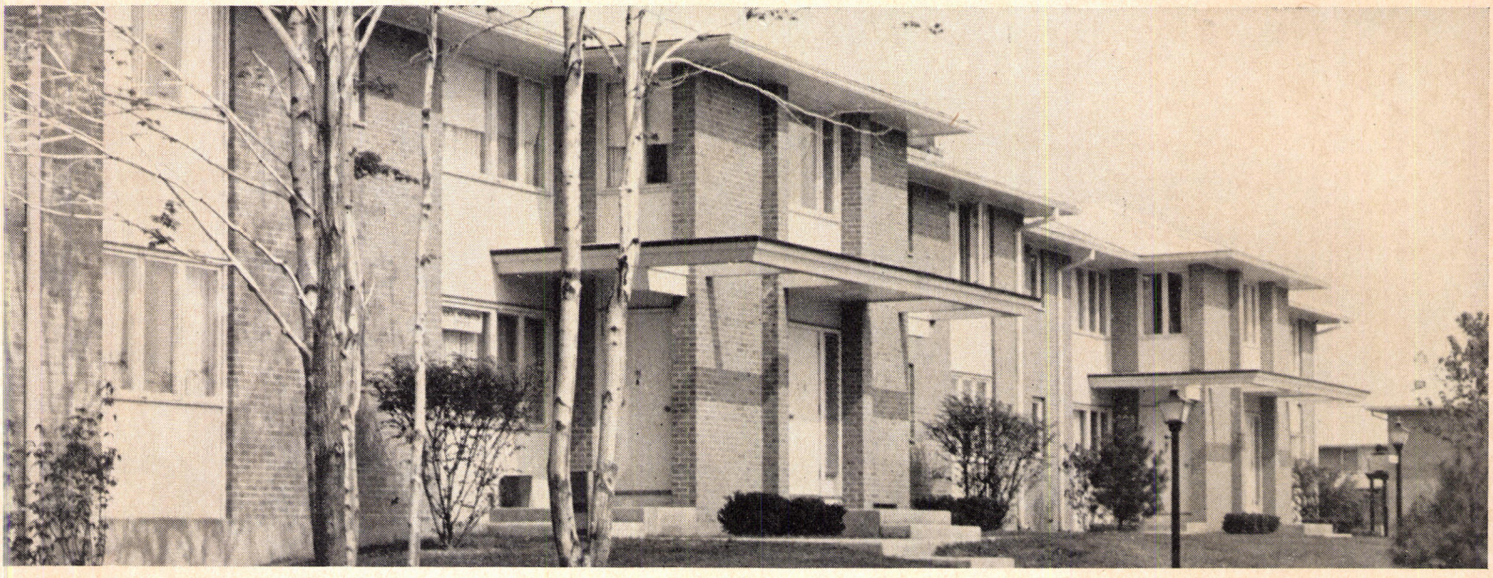


Les Chateau, Atlanta, Georgia, is a project of Lafayette Building Corporation, which has planned 400 houses as different as fingerprints—but uniform in electrical excellence. Each house has a complete General Electric kitchen and laundry room as well as a Weathertron® heat pump for year-round climate control and greater sales appeal. Kitchens and bathrooms have luminous ceilings, all fireplaces are toplighted, and dining room lights feature dimmer controls.



Town Square, Washington, D. C., combines modern Gold Medallion living with authentic Federal architecture. Built by Bresler & Reiner, this townhouse condominium project offers electric heat and cooling by General Electric, as well as appliances and intercoms. Town Square is an example of the best in today's urban renewal.

Vista del Lago, Wilmette, Illinois, is a Gold Medallion project by J. S. James & Company. Over 90% of the 104 luxury cooperative apartments were sold before topping-out ceremonies. In addition to a complete General Electric kitchen with individual washer-dryer combination, each apartment features room-by-room climate control with ceiling-cable heat and individual Zoneline air conditioners. Vista del Lago was designed by Hausner & Macsai, Architects, and the general contractor was George Sollitt Construction Co.



The 600, Bloomfield, Connecticut, developed by Green Acres, Inc., is the first all-electric apartment community in the Greater Hartford area. Each of the 156 units will feature General Electric refrigerator-freezer, built-in range, dishwasher, Disposall®, an 80-gallon water heater and ceiling-cable heat. Each apartment has its own G-E washer, dryer, and two-ton air conditioner located in the basement. Except for exterior lighting, all wiring is underground.

Whispering Palms, Rancho Santa Fe, California, is an attractive 297-acre residential-recreational community built by the Cavanaugh Development Company, which has completed such successful projects as Foxglen, Glenmeade, and Laguna North. Each home has a General Electric kitchen and two 30-gallon quick-recovery water heaters. Interior and exterior lighting equipment was custom-designed. Both utility lines and fire hydrants are underground to maintain the beautiful setting.

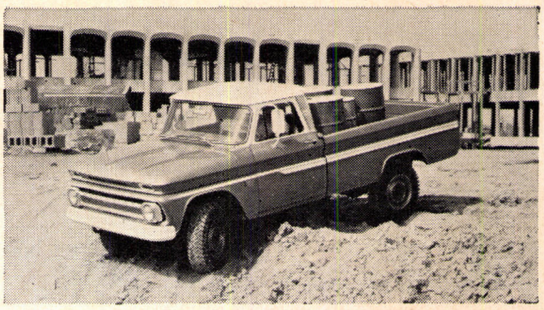
Chevrolet offers 18 pickups....just to be sure there's one that's right for you!

3 FLEETSIDE MODELS—Trim-lined Fleetside bodies are offered in 6½-ft. and 8-ft. lengths. Double-wall lower body side panels keep cargo dents from marring exterior appearance, and tough wood floor planking is joined by full-length steel skid strips. Maximum GVW ratings from 5,000 to 7,500 pounds.

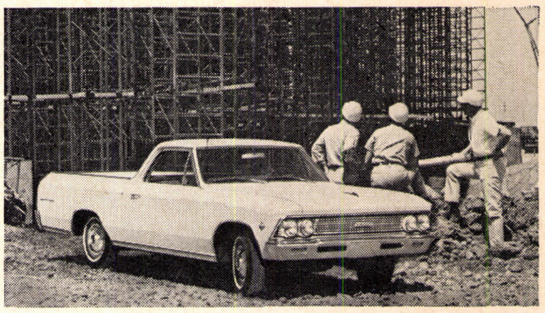
Chevrolet builds 18 basic pickup models to cover the whole range of pickup jobs. Whether you need a smart El Camino runabout, 4-wheel drive for backwoods work or a big 9-ft. body, you can get it from Chevrolet!

Standard power in most models is the big new 250 Six—a real going combination of economy and performance. Also available is the rugged 292 Six and the snappy 283 V8. And, for the first time, you can now get a big 327 V8 in all but 4-wheel-drive models. Transmission offerings include both 3-speed and 4-speed gearboxes, plus two automatics—a smooth 2-speed Powerglide and an all-new 3-speed Turbo Hydra-Matic.

But this is only the beginning! For the big choice in pickups, plus the big choice in truck equipment, your Chevrolet dealer is the man to see. . . . Chevrolet Division of General Motors, Detroit, Michigan.



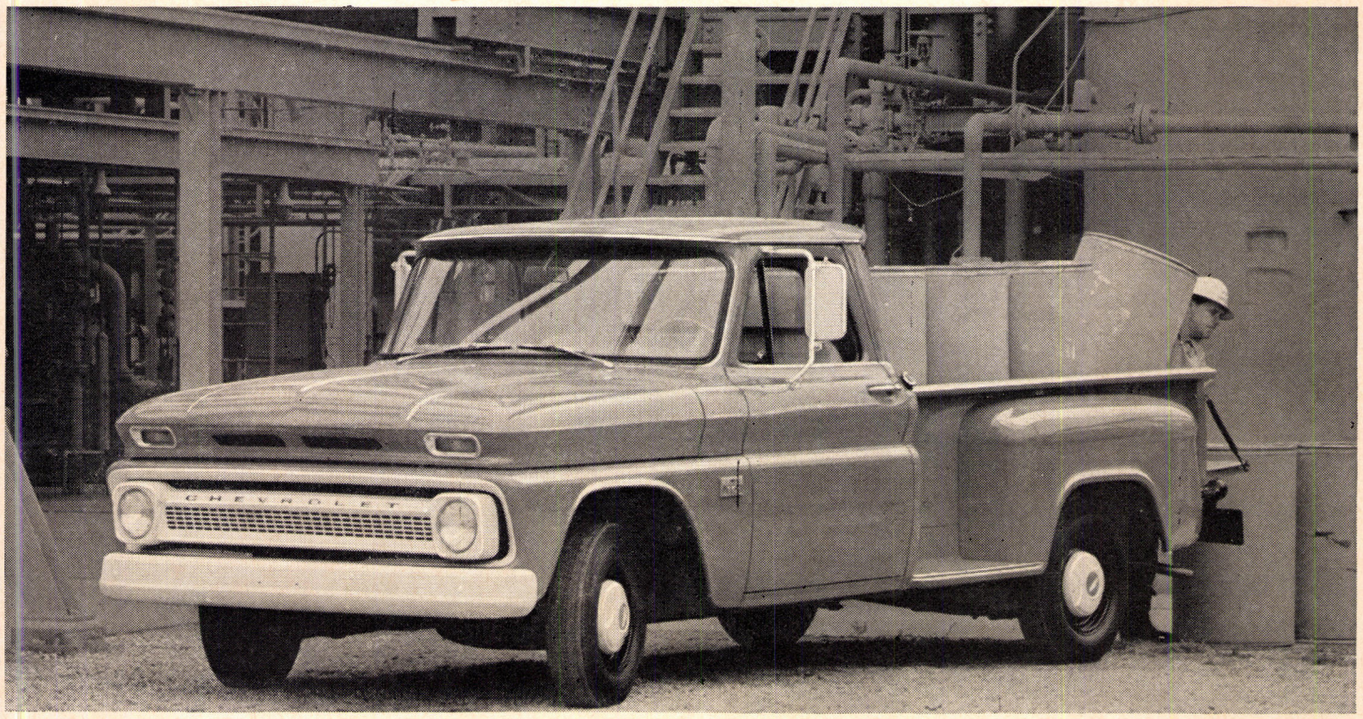
6 FOUR-WHEEL-DRIVE MODELS—Go-anywhere traction is offered with either Fleetside or Stepside bodies in 6½-ft. or 8-ft. lengths. Extra rugged chassis and drive line includes 2-speed transfer case. Maximum GVW ratings from 5,600 to 7,600 pounds.



4 EL CAMINO MODELS—Carry over half a ton of cargo in these sleek, stylish haulers. Six or V8 power. Luxurious interiors, smooth ride and a host of luxury options—air conditioning, bucket seats, Comfortilt steering wheel.

CHEVROLET

NEW '66 WORKPOWER TRUCKS

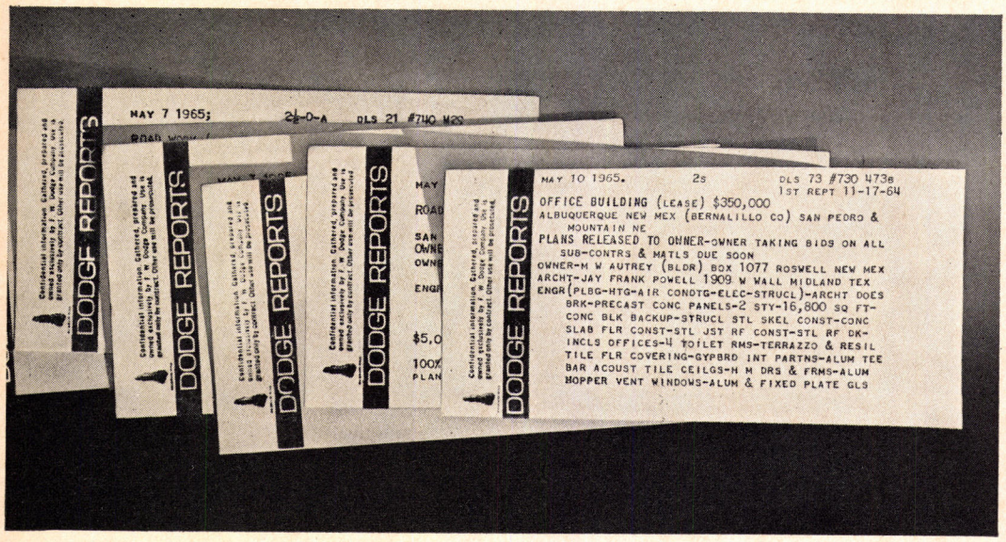


5 STEPSIDE MODELS—Available with 6½-, 8- or 9-ft. bodies. Feature flat interior body walls and handy side steps between cab and rear fenders. Same rugged planked floor construction with full-length steel skid strips as in Fleetside models. Maximum GVW ratings from 5,000 to 7,800 pounds.

Circle 61 on Reader Service Card

What keeps the $68 billion dollar construction industry so uniquely well informed?

on new jobs...on selling opportunities...on new materials and trends...

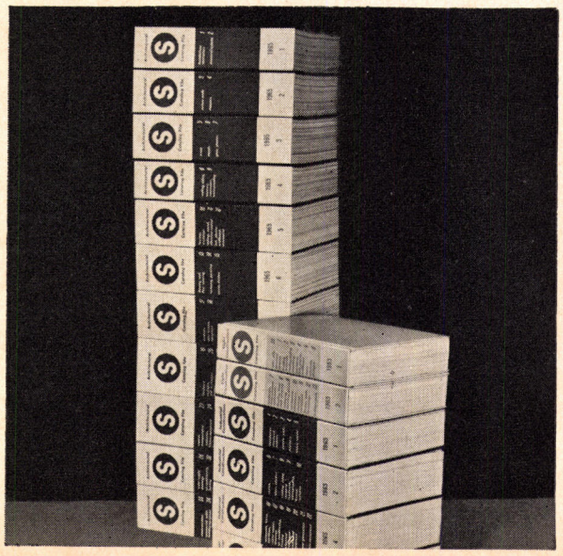


UP-TO-THE-MINUTE PROGRESS REPORTS on 120,000 construction jobs per year. 45,000 alert, aggressive contractors, subcontractors and material suppliers daily employ Dodge Reports, a unique kind of construction news service: unique in format; unique in completeness of information supplied; unique in flexibility. Each day, two million individual job slips tell firms selling new construction what actions to take to find the best job opportunities available for them. Now available in 38 states, Dodge Reports will soon expand into other areas. **If you operate in Arizona, Nevada or Southern California watch for the arrival of . . .**

Dodge Reports

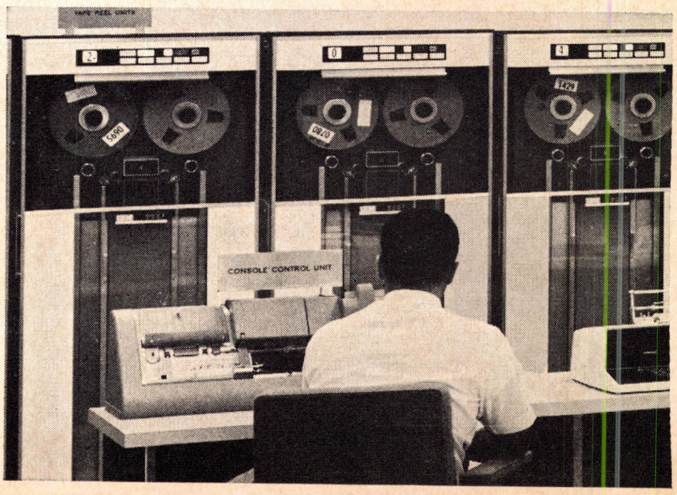
PREFILED MANUFACTURERS' CATALOGS covering products of more than 2000 manufacturers—containing more than 23,000 pages of detailed information. Sweet's Services include design and production of manufacturers' catalogs for distribution to specifiers and buyers of architectural, light construction and industrial products and materials. Complete sets of catalogs are distributed each year to more than 100,000 architects, engineers, general contractors and leading industrial firms. For product specifications, the standard of the industry is . . .

Sweet's Catalog Service



SALES MANAGEMENT TOOLS for firms selling to new construction. Construction Activity Statistics and descriptions of individual projects are combined in tailor-made sales management information systems to provide guidelines for establishing territorial potential, deploying manpower, evaluating performance and forecasting future demand. More than 1400 regional and national companies now employ Dodge Marketing Systems at national, district and field selling levels. In planning marketing strategy to the construction industry there is no substitute for . . .

Dodge Construction Statistics

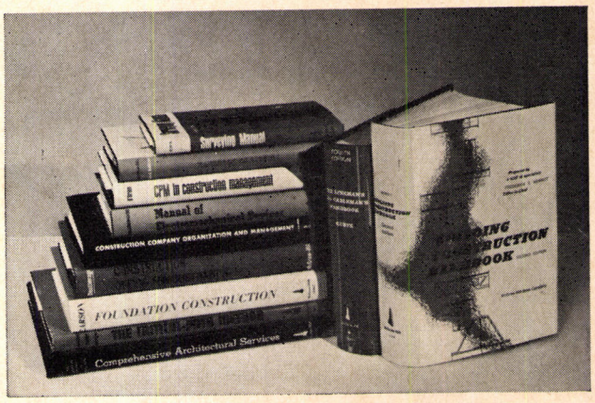


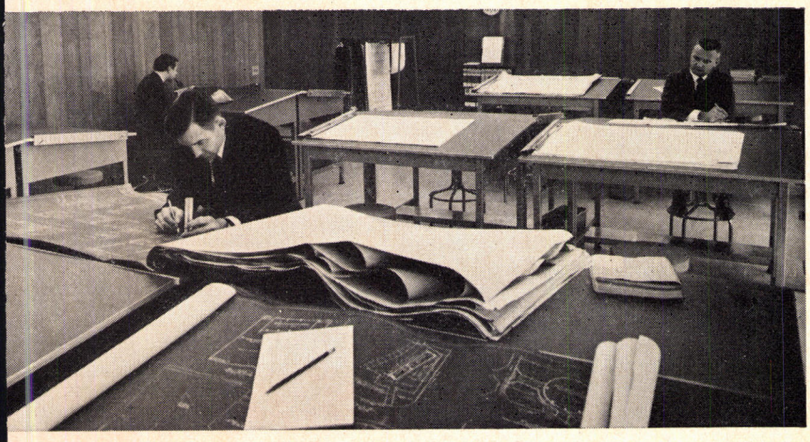
INDUSTRY NEWS, data, new product developments and applications through 7 well-known McGraw-Hill Publications. Business leaders get news and information about industry, finance and government through *Business Week* (circulation 448,411), America's leading general business magazine. Contractors and engineers rely on *Engineering News Record* (circulation 89,229) and *Construction Methods and Equipment* (circulation 51,696). Architects — and engineers who work with architects in the design of buildings — depend on *Architectural Record* (circulation 42,124). Home builders read *House and Home* (circulation 132,534), for news and trends of the industry. Electrical contractors and distributors subscribe to *Electrical Construction and Maintenance* (circulation 51,522) or *Electrical Wholesaling* (circulation 13,291).

McGraw-Hill Publications

SPECIALIZED TECHNICAL BOOKS covering standards, theory, application data for the entire industry. Illustrated below are a select few of the many familiar McGraw-Hill Books which are found in the libraries of professionals of all types in the construction industry . . . to train personnel, to design, to select materials and to establish construction standards.

McGraw-Hill Technical Books

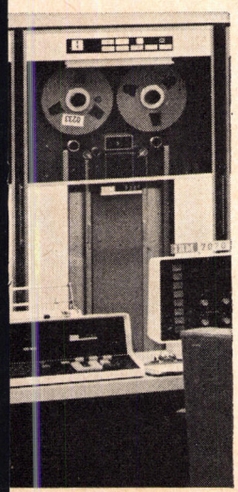




THOUSANDS OF ARCHITECT PLANS and specifications are available in Dodge Plan Rooms. To help material suppliers and subcontractors figure current jobs out for bids, Dodge now maintains more than 100 Plan Rooms in principal cities in 38 states — and will soon open additional rooms in strategic spots in Arizona, Nevada and Southern California.

This service to the construction industry speeds up the bidding process; saves countless hours of valuable time; simplifies communications between architect and potential subcontractors and suppliers. Each year, many thousands of plans and specifications on important construction projects are filed by architects in . . .

Dodge Plan Rooms



...or in three words Dodge/McGraw-Hill

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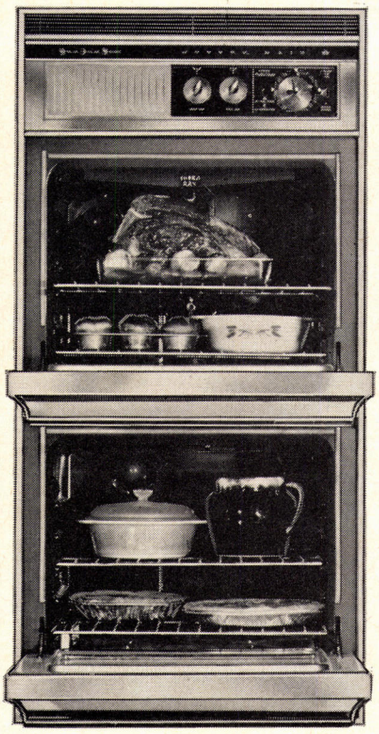
BAKE & BAKE
...or
BAKE & BROIL
in both ovens
at the same time at
different temperatures



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A new and vastly superior way to cook meat. Modern Maid's special Infra-Ray® gas burner cooks with microwaves and infrared rays, instead of circulated oven heat so all the flavorsome meat juices are sealed inside. You enjoy the same tempting taste of outdoor grilling. Broiling's quicker, cleaner and cooler, too.

NAHB SHOW
Space 148-150 Dec. 5-9, 1965

MODERN MAID
TENNESSEE STOVE WORKS
Chattanooga, Tennessee 37401

West Coast: Modern Maid of California
Los Angeles, California 90058

LETTERS

Better management

H&H: Your six stories on business management [Oct.] have stimulated a great deal of discussion among the people we see regularly in the housing industry. Of particular significance is the experience of crisis that runs through each article. We find this in almost every operating building company.

James V. Rice, vice president
Pease Woodwork Co.
Hamilton, Ohio

H&H: May I compliment House & Home for the excellent presentation of the better-management articles.

When I first learned of your intended use of the material gathered about our operation, I was a bit apprehensive—as no one particularly wants to see all of his mistakes in print for national distribution. The material was gathered with depth and persistance. At no time did I feel that a reporter was in our midst, but rather someone who was not only interested in our problems but was also vitally interested in the betterment of our industry through a studied approach to reporting.

John R. Minchew, president
The Minchew Corp.
Annandale, Va.

Investment-minded buyers

H&H: I agree that every time a buyer looks at a house he's making an investment decision. But I take exception to a few things in Sociologist Carl Werthman's study on why people buy in two California communities [Nov.].

California buyers are more conscious of status and more mobile than people in other parts of the country. I think this accounts for a lot of their consciousness of investment value.

I do not think most builders can talk about moving to a family that looks on a house as a place to settle down in. And, certainly, most of the buyers I'm familiar with in New Jersey are not thinking about moving out of the house they are just about to buy.

But I think builders can make great use of the desire of many buyers to move up into a bigger house without increasing their monthly payments. If builders would play up this aspect of moving, and forget about price, I think they would be able to get the trade-in market to work—and really increase their sales.

William S. Becker, president
Bill Elliott Assocs.
Teaneck, N.J.

H&H: We don't wish to detract from the points made in the study but they are very strongly correlated to a rising local economy and appreciating property values. Unfortunately, this is not a situation that exists in most of the country.

C. C. Tomlin Jr., executive vice president
H & M Construction Co. Inc.
Winter Park, Fla.

H&H: I thoroughly concur with the ideas expressed in the study. Here in Memphis we have very conservative customers, architectually speaking. Nevertheless, we frequently have requests for "something different" and occasionally for "something way out." The people making these requests may really want to buck custom and tradition. But when it comes to placing money on the line—making the investment—they almost invariably temper their decision because they are concerned about resale value.

Your story is interesting and complete.

Sam Baker, vice president
Mid-Continent Corp.
Memphis

H&H: From now on we're adding a question to all the questionnaires we send out. We're asking buyers not only what they like in a house but also what they think other people like.

William R. Smolkin, president
William R. Smolkin Assoc.
New Orleans, La.

Land speculation

H&H: Your article on California companies that package land for builders and speculative investors [News, Sept.] included the following quote: "It is a service to the unsophisticated. They don't do any service on the land. The builder does the rezoning and the engineering and the solving of the problems."

This does not apply to Property Research Corp. The following methods of building value as used by our firm increased appreciation of ten parcels from 54% to 90% in three years: 1) preparation of zoning requests, 2) financing, 3) aesthetic enhancement, 4) property management, 5) land planning and 6) public and quasi-public liaison.

Property Research Corp.'s services are for the sophisticated investor and developer. Our average transaction exceeds $1 million. The net worth of corporations with whom we are currently engaged exceeds $100 million.

Lois Gaines, director of public relations
Property Research Corp.
Los Angeles

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EDITORIAL

Rent supplements

The question is not whether to subsidize the poor, but should we expand our market

Like it or not, we as a nation are already subsidizing the poor in our slums. A slum exacts a subsidy from a city in the taxes it does not pay. It exacts a subsidy in the extra police and fire protection it needs. And it exacts a subsidy in the social and economic problems its residents create. To put it another way, we cannot hope to combat poverty, or its economic drain on our cities, so long as the poor are ill-housed.

The rent-supplement program, enacted by Congress in August, is the first effort to find a free-enterprise solution to the problem of housing the poor. As such, it offers a market that private builders have been unable to touch for more than a decade. The homebuilding industry is already condoning—and using—housing subsidies for veterans, elderly people, farmers, middle-income families and families living in urban renewal areas. So why shouldn't it be given a chance to prove it can house poor through the free enterprise system.

In enacting the rent-supplement program, Congress was clearly seeking a way to harness the profit motive for the public good. And even when the House-Senate conference scuttled rent supplements until next year (*see p. 6*), the chief critics, Congressmen James Harvey and George Mahon, said they did not intend to kill the program but just wanted better regulations.

The Administration will use all of its muscle to push through a $30 million rent-supplement appropriation in January. Working for the supplements will be the fact that 1966 is an election year. But working against them will be 1) forces in the South and the suburbs who fear racial and economic integration in rent-aided projects and 2) an opposing attitude best summed up by House Republican Leader Gerald R. Ford: "When the program was sidetracked, it was not the nation's poor who suffered. Rather, the big-city contractors, the big property owners, the big lending institutions were denied multi-million-dollar windfalls."

If Ford thinks that wrestling a 221d3 project through to completion for a 6% profit is a windfall, he has an oddly Spartan view of the profit motive. And if he thinks the nation's poor weren't hurt when rent supplements were sidetracked, he is ignoring the facts of life.

More than 9 million of the nation's primary families (two or more related persons residing together) have incomes of $3,000 or less. In today's affluent society, these families are desperately poor. Moreover, 15 million primary families have incomes of less than $5,000—and thus cannot afford to buy new housing.

The nation's housing stock includes 11 million substandard units (dilapidated or lacking hot-water or other plumbing facilities), most of which were built before the Depression of the 1930s. There is no exact correlation between the number of poor families and the number of substandard dwelling units. But at least 8 or 9 million substandard dwelling units are occupied by primary families too poor to improve their housing. So there is an immediate need for at least 8 or 9 million new dwelling units.

There are those who will complain that subsidizing a market of this size will lead to an astronomical giveaway. But rent supplements are small stuff compared to the subsidies already exacted by slums—and peanuts compared to the $30 billion to be spent to put a man on the moon. What's more, if the U.S. economy continues to expand at its current rate of 4% to 5% a year, and if there are no new tax cuts, government revenues will jump $50 billion in the next five years—from $120 billion in 1965 to $170 billion in 1970. So it's nonsense to complain that we can't afford rent supplements.

The housing industry asked for a rent-aid program. Now the Administration needs the industry's backing to get appropriations to make the program work. Senator Paul Douglas warned homebuilders a few months ago that if rent supplements don't provide new housing for low-income families, Congress will turn to other means—i.e., more and larger direct subsidies. His warning should be clear enough. The housing industry must support rent supplements. With them, it will expand its market, make a reasonable (6%) profit, and contribute to economic and social welfare— all worthy goals for the entrepreneur. —RICHARD W. O'NEILL

Housing technology: it's time for a realistic reappraisal

The photos at left represent a dream that has bemused the homebuilding industry since the end of World War II: there *must* be a way to build houses faster, better, and much, much cheaper than we do today.

In pursuit of that dream, manufacturers, builders, architects and associations have spent millions of dollars to develop and introduce new construction systems. And each new system has been accompanied by the confident statement that here at last is the technological breakthrough which the industry has breathlessly awaited.

We're still waiting.

What's the trouble? Has research been barking up the wrong trees? Have codes and restrictive labor practices blocked new ideas? Are buyers dead set against innovations in housing? In a word, what has kept America's second largest industry mired in what most theorists consider a backward technological state?

Realistic answers to these questions can only come from people familiar with both the theory of housing technology and the actual practice of building and selling houses. So to prepare this issue, HOUSE & HOME's editors conferred at length with Builders Andy Place of South Bend, Ind., and Bob Schmitt of Berea, Ohio. Both are engineers; both have been chairmen of NAHB's Research Institute; both have worked extensively with manufacturers in testing new materials and systems; and, above all, both have been successful builders for almost twenty years.

Builders Place and Schmitt agreed with HOUSE & HOME that on the surface, at least, times have never been more ripe for technological progress in homebuilding.

A wealth of new materials is available to the homebuilding industry

Most dramatic are the plastics. They are tough, light in weight, exceptionally durable, decorative and easily formed into a variety of sheets, laminates, extrusions and molded shapes. And as foams, they offer high insulating value plus the strength to serve as core material for stressed-skin wall panels.

New adhesives are easy to work with and have tremendous bonding power.

Lightweight aggregates and prestressing have made concrete a versatile and low-cost material.

Steel and aluminum are available in new standard shapes and sizes and with improved finishes.

And fibers of wood, paper, asbestos and gypsum have been combined with resins to produce a host of materials for specialized jobs.

A wealth of engineering talent is working to create new building systems

So great are the potential profits to be gleaned from a technological breakthrough in homebuilding that it's hard to find an industry that isn't doing research in the field.

Besides the established producers of building products, chemical companies, metal manufacturers, aircraft corporations, paper companies, and even the Atomic Energy Commission (which has developed a plastic-impregnated wood) are panning for gold in the hills of homebuilding.

So, with all these possibilities at hand, why are we still building houses in basically the same way we built them a hundred years ago?

continued

We're still building houses in the same old way because under today's conditions, there's no better way

It's time for the engineers and theorists to wake up to what builders have known all along: the time-honored system of a wood frame faced with skins and sitting on a masonry foundation is a very good system indeed. Certainly if it were the obsolete, inefficient system it is often claimed to be, it would not be the standard for homebuilding today.

This is not to say that the old way can't be improved. Changes have been and still are being made in both skins and framing methods. And there is at least one possibility of a major breakthrough in foundations (*p. 103*). But today's houses are built in basically the same way our great great grandfathers built them when they started nailing boards over sawn lumber.

(Let's be clear on one point: prefabrication is *not* a basic technological change; it is a change in production methods. Most prefab panels have the same studs and skins as conventional houses built on site. They have the advantage of being built under weatherproof shop conditions and with more or less mass-production economies.)

Homebuilders aren't sticking to the old ways out of sheer obstinacy. They're doing it because the old way offers advantages that no new system has yet come close to equaling. Specifically:

The old way of building is still the cheapest way of building

An analysis of both Andy Place's and Bob Schmitt's operations shows that their exterior wall costs, from inside finish to outside finish, range from 60¢ to 80¢ a sq. ft. (The lower figure reflects sheathing and siding combined in a single skin.) Partition costs vary from 40¢ to 50¢ a sq. ft.

These are hard figures to beat. The only new system that came close was Koppers Co.'s Dylite foam core panel. Delivered as a complete wall, with door and window openings cut in but with no siding on the outside and only unfinished faced plywood on the inside, it cost from 50¢ to 55¢ a sq. ft. And it fell short of the old way on several other counts.

The old way of building is still the easiest and most flexible way

The basic reason is that the traditional building material—wood—is an extraordinarily versatile material. Shaped to standard dimensions in the mill, it can be cut almost as quickly and accurately by a man in the field as by a piece of heavy machinery in a factory. It can be fastened by the simplest method ever devised—nailing. It is cheap, relatively light, easy to finish, and, if properly cared for, good for several lifetimes. And recently developed electromechanical stress grading makes it possible to engineer wood structures with great accuracy, and thus to use lighter framing members and less expensive species of wood.

These properties give the conventional wood building system an all-important asset: flexibility. There is virtually no limit to the variety of design that can be easily created with wood framing and skins. Last-minute buyer changes, such as resized windows or shifted partitions, can be made on the job without extensive re-engineeering. And most minor job errors can be corrected with either a hatchet or a small sledge.

The old way is still the basis of local building codes and labor practices

Contrary to the opinion of many in the homebuilding industry, these traditional whipping boys are not the most serious barriers to technological progress. The record shows that any innovation that really saves money without impairing quality will be accepted by codes and labor—eventually.

But getting this acceptance can be a long and expensive process involving legal hearings, engineering expense and retraining of workmen. Unless the innovation promises real financial advantage, few builders find this torturous process worth the time and money it inevitably requires.

The main obstacle presented by codes and labor is not deliberate resistance to innovation. Rather, it is the deep-seated human resistance to any change in long-standing habit. And this psychological resistance is supported by physical facts. Standard materials, tools and labor skills are all geared to the old way of building. Changing this vast complex of men and material would be an enormous undertaking; it could be justified only by a major technological breakthrough.

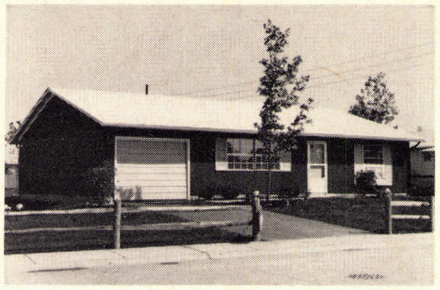
And, most important, the old way best meets the demands of today's biggest market

That market no longer wants the most space for the least money, as it did ten years ago. It wants bigger, more comfortable, and more glamorous houses. Most particularly, it wants individuality —design and plans tailored to the buyers' personal wants. And the old way of building, with its great flexibility, is the cheapest and easiest way to provide this individuality.

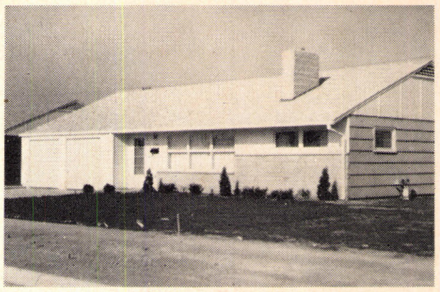
The old system offers something else—the traditional look. Says Andy Place:

"It's an emotional thing. People remember the banker's house on the hill from the old days, and when they themselves can afford a bigger and more luxurious house, that's the kind they want."

Ten years ago both Place and Schmitt were known for their ability to produce lots of space for the money. Today their success stems from their ability to produce lots of glamour—and individuality—for the money. The pictures below show the extent of this change.

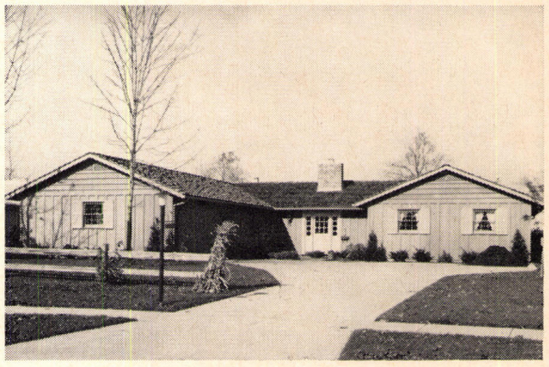


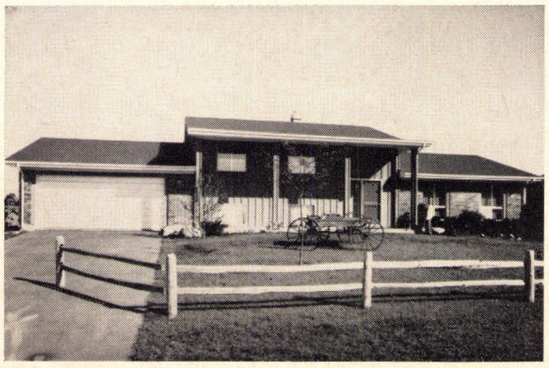
Ten years ago, Andy Place offered this 1,100-sq.-ft. house for $14,000. Today it brings more as a used house, and its original owner is probably in the market for one of the houses below.



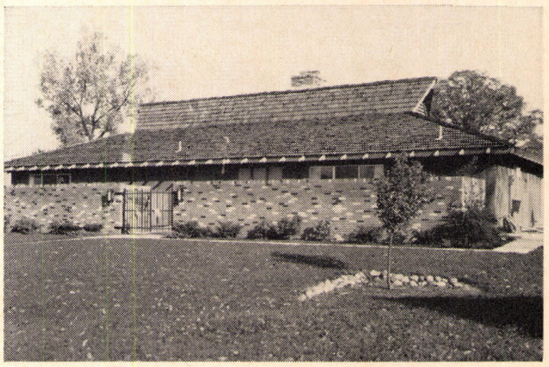
At $13,500, this Bob Schmitt model of the late 1950s was priced $2,000 below FHA's appraisal. "I could produce this house for the same price today," says Schmitt, "but nobody would buy it."

Henry M. Barr Studios





Today the bulk of Place's sales are models like these, priced at $24,000 and up. "We don't particularly like all the embellishment," says Place, "but buyers want it, so we build it."



For prices starting at about $25,000, Schmitt now offers the kind of custom design shown above. "But we must build even more efficiently," says Schmitt, "to afford the glamour."

So, in light of these facts, it's easy to see why so many technical innovations have gone down the drain during the last ten years

continued

House systems like these lack design flexibility and stray too far from conventional methods

None of the systems shown here can be changed appreciably in appearance. What's more, all of them are strongly contemporary in design, and while demand for this style of architecture is growing, it is still far too small to constitute a mass market. Had any of these systems offered a big price advantage, it might have gotten off the ground. But, in fact, some of them turned out to be not just a little more but a great deal more expensive than conventionally built houses.

Moreover, all these systems require equipment that few builders possess—heavy cranes and metal-working equipment, for example. They demand unusually close tolerances. They make it necessary to work with unfamiliar trades—and thus often arouse resistance by regular trades. And, finally, most of them are bound to face opposition by local code officials.

Like all sectional houses, this space-frame design had too many limitations

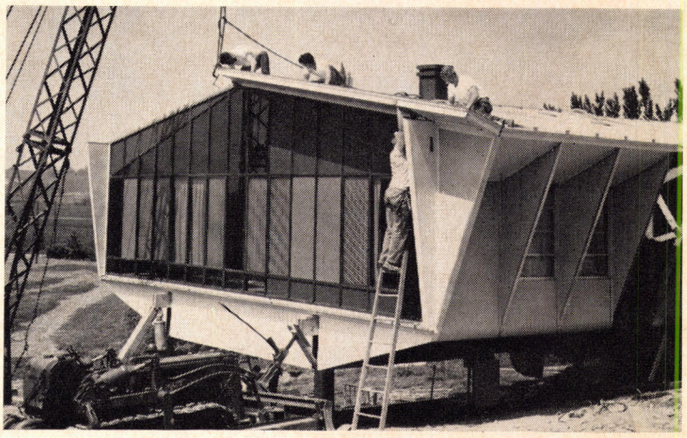
In one respect it was more flexible than most sectional systems: because the sections were transverse, both the length and width could be varied to a much greater degree. But the shape had to remain rectangular, and the appearance was limited by the dictates of the space-frame design. A wood model, (*top photo at right*) needed the added structural support of unusual looking fins on the sides, and a steel model (*cover photo*) was limited to one roof pitch.

Equipment was a limitation: the 12′ x 30′ sections shown here had to be placed on the foundation by a heavy crane.

Shipping was a limitation. Trucking costs for a four-section house could run well over $2 a mile, so effective geographical distribution would have required many plants.

And builders were a limitation. More than 90% of the construction was in the factory, leaving little room for profit and thus little incentive for the local builder to market the house.

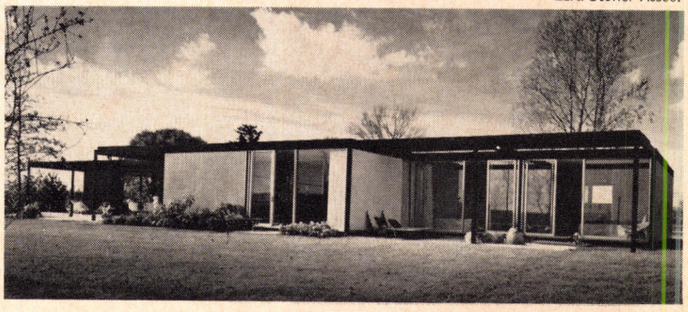
The system's inventor, John Slayter, gave up on the housing field in 1963. He is now marketing a steel-framed model (*bottom photo*) as an automobile sales office through Richardson Homes Corp., a mobile-home maker.



This aluminum-and-steel system was the most expensive flop of the decade

Alside Inc. spent nearly $8 million on an automated plant to build its highly contemporary models, then closed shop in 1964 after producing less than 200 units. Reasons for the flop: starkly contemporary design and high prices. Alside talked first about a price of just over $7 a sq. ft. without land, wound up charging almost twice that much when their production models finally came on the market.

Ezra Stoller Assoc.



This system for commercial building didn't make the grade in residential building

When Rheem Mfg. Co. bought the system about four years ago, it was being used in schools, plants and other commercial structures in California. Rheem adapted the steel components to a contemporary house, with a prebuilt utility core, designed to sell for around $9 a sq. ft. About seven houses were built—one in Florida and the rest in Palm Springs, Calif.—but builder interest was nil and the house was discontinued.

"Builders just didn't want to take on a completely unfamiliar construction system," says a Rheem spokesman. "And the contemporary appearance pretty much limited the market to California and Florida."

Rheem has not given up entirely on the system. In an attempt to work more within common building practice, it is now trying to interest California builders in a modular steel wall-panel system designed for use with conventional wood roofs, windows and partitions. But thus far a prototype house in Fullerton, Calif., has failed to stir up builder interest. Probable reason: the difficulty of integrating the steel panel with the wood portions of the house.

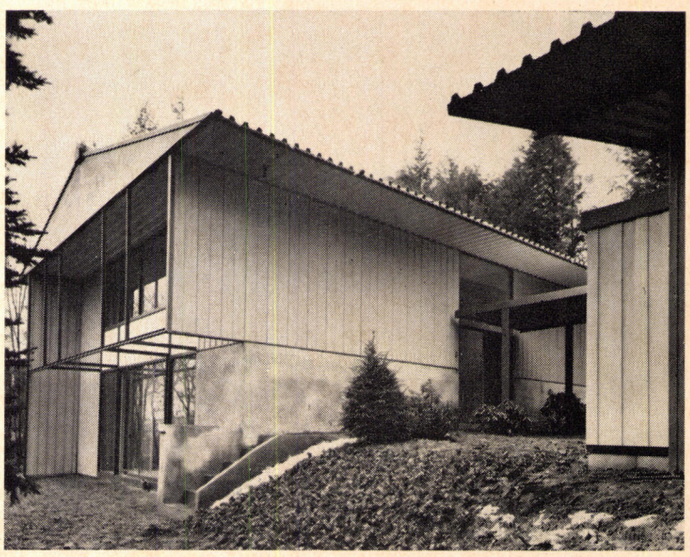
This all-steel Techbuilt misses the mass market because it is too expensive

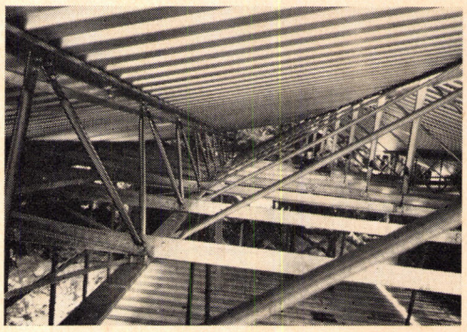
Its price of approximately $15 a sq. ft. is almost twice as high as a some production builders' houses, and it is half again as high as Bob Schmitt's completely customized houses. At that price, the house could hardly be expected to compete—and it doesn't.

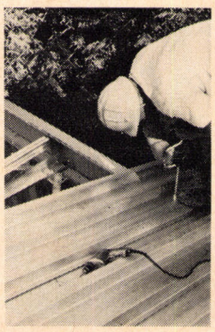
Nor is the price the only problem. When the prototype model appeared late in 1962 (H&H, Feb., '63), its roof framing was a terrifying conglomeration of nuts, bolts, beams and struts (*photo, bottom left*) that took hours to assemble and violated a basic principle of component construction: use big parts rather than small pieces.

But if the manufacturer—Techbuilt Products Inc., a wholly owned subsidiary of Armco Steel Corp.—has given up on the idea of selling to a mass market, it still has hopes for modest success in a high-priced market ($25,000 and up). There has been considerable interest, the company reports, among such innovation-minded groups as college professors, and Techbuilt hopes to sell about 100 houses a year.

Codes, however, may prove a difficult obstacle. In Princeton, N.J., for example, it took almost a year to convince tradition-bound local officials that steel was strong enough.







continued

Panel systems like these go up fast, but they create problems for jobs that come later

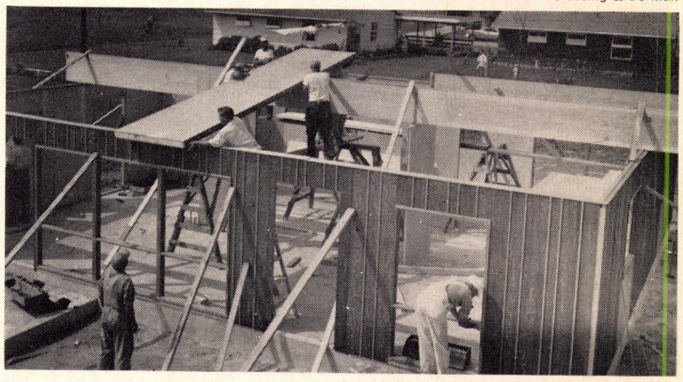
They are delivered to the site with their inner and outer skins already applied. This creates problems for the carpenters, who must join the panels with unfamiliar spline systems. It creates problems for the electricians, who normally set boxes and run wires before the inner skin is put on. And if the skin material is something other than wood, it often creates problems in attaching partitions to the inner face of exterior walls.

The surprising thing is that so much time and effort has been lavished on faster ways to build walls. Conventional stud-and-skin walls can be put up very quickly, particularly when they are prebuilt or panelized; they are very cheap; and at most, they account for only about 10% of the total cost of the house.

This foam-core panel system failed because builders feared buyer resistance

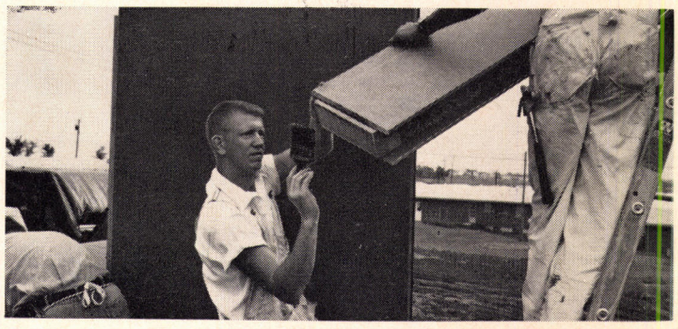
And since the system offered no price advantage over conventional walls, there was no reason for builders to pioneer it in the face of inevitable code resistance. Koppers Co. developed the Dylite panel and then bought a prefab company to market it as part of a complete house package. But a year's operation produced only about 300 sales, so the project was dropped. Koppers is still selling Dylite panels for prefabricated cold storage rooms and buildings.

Cloeting & De Man



These tempered hardboard panels caused too many problems in the field

Joints had to be strengthened with adhesives (*photo, right*); seams on the panels' interior faces had to be filled by a tricky epoxy process; and although the panels were more or less conventionally framed (1x4 spacers in place of studs, with batt insulation) and wiring could be pulled through, the cutting and fishing was time-consuming. Johns-Manville Corp. built a few test houses with the panels but never actually put them on the market.

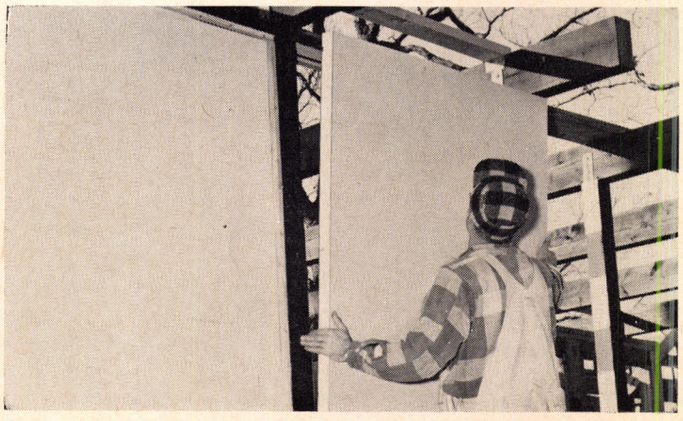


These aluminum-faced panels present too many fastening problems

Jay Bee

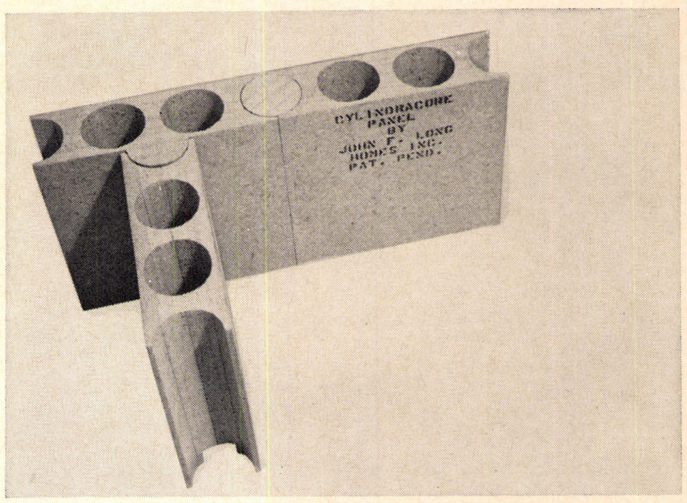
Aluminum cannot be nailed together like wood; it must be riveted or splined, and the joints must be sealed with plastic or gunk. While early panels (*shown at right*) had square edges, a newer system has edges formed for splining, making it impossible to cut panels in the field. Since it is impractical to put siding over the outer aluminum skin, the only exterior finish option is color.

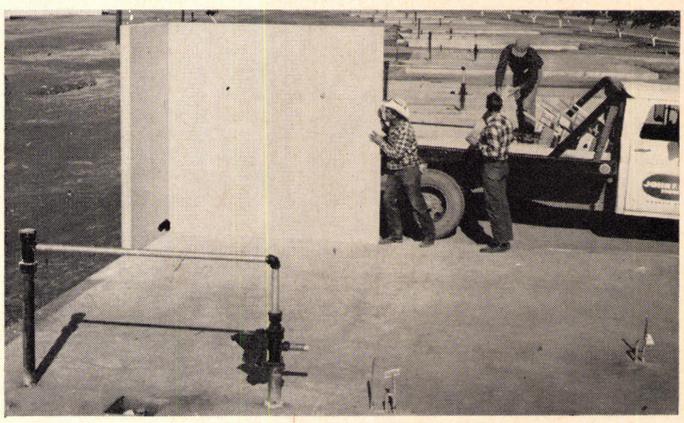
Alcoa, which introduced the panel to builders in 1962, is still experimenting with housing applications. One idea: a small vacation house (H&H, Dec. '64).



Buyers' resistance keeps these 'miracle material' panels out of the market

Markow





Homebuyers in Phoenix are accustomed to—and generally insist on—masonry walls. Otherwise Builder John Long, who developed and patented this system in 1962 (H&H, Feb. '62), would be building houses with it today, and perhaps selling it to other builders as well.

On paper at least, Long's Cylindracore panels are the answer to every homebuilder's prayer. They are made of a compound (developed in Austria) of sawdust, Portland cement and diatomaceous earth. And they have this astonishing combination of qualities:

Easy workability. The panels can be nailed or sawn almost as easily as wood.

Light weight. A 4′x8′x4″ panel weighs just 154 pounds.

Fire resistance. The panels have a one-hour fire rating.

Strength. The material can take a compressive load of 1,200 psi.

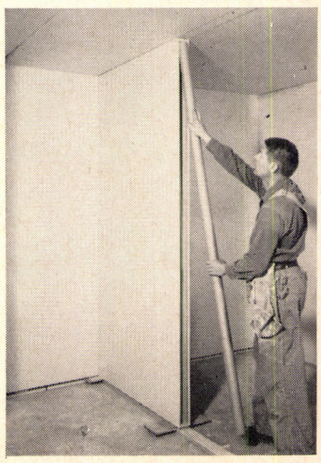
Moisture resistance. A 24-hour submersion test showed no weight increase.

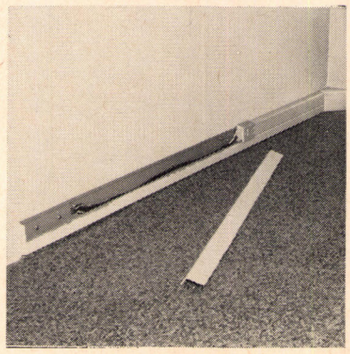
Panels are joined by a cylindrical spline, which fits into half-round channels on the panel edges (*photo, top right*) and is fastened with adhesive.

Long estimates that the panels could cut wall costs to as little as 30¢ a sq. ft. And he still has hopes of bringing the system to market.

Partition panels like these may be cheap, but neither builders nor buyers like them

Hedrich-Blessing





Builders don't like them because they are tricky to set up and join. Ceiling and floor rails must be installed precisely (*photo, top right*); door headers must have their edges carved out to fit splines (*photo, bottom left*); and wood nailers must be installed wherever doors and trim are placed.

Buyers don't like the panels because they result in a thin wall that looks insubstantial—particularly at exposed ends and door openings—and because they are poor sound barriers. Futhermore, since wires cannot be easily run inside the panels, they must be run through baseboard raceways, putting outlets at uncomfortably low levels and creating problems in carrying wires past door openings.

Generally speaking, the chief reason why these partition panels (developed by both U.S. Gypsum Co. and National Gypsum Co.) have never caught on is this: the conventional method of building gypsum board partitions is easier, more familiar to builders, more desirable to buyers, and, all things considered, no more expensive than any new systems offered thus far.

continued

Ideas like these seem good in theory, but they all run afoul of costs, codes or buyer dislikes

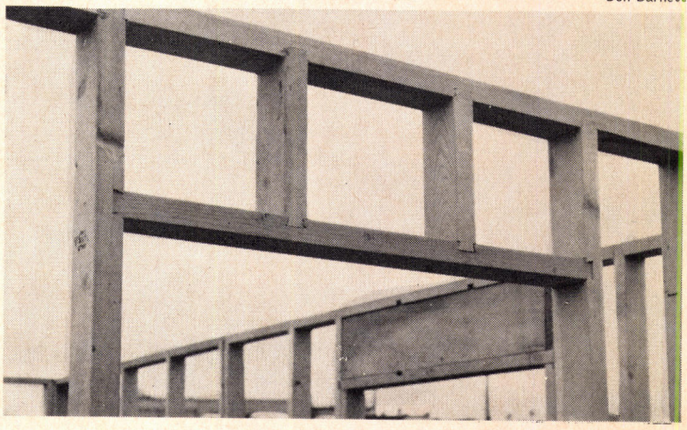
And they all point up a fact that every housing innovator should keep firmly in mind: no new technological idea will succeed unless it makes sense at every point in the homebuilding process.

In other words, technology cannot be isolated from design, marketing, or local conditions.

Not all of the ideas shown on these two pages can be called flops. Some were frankly experimental, and some have achieved limited success. But, like hundreds of other housing innovations, they solve one problem only to create other more serious ones. And in most cases, the most serious problem they create is a house or a feature unacceptable to the prospective buyer.

This dovetail-joint framing system looks clever, but it doesn't save a nickel

Don Barnett

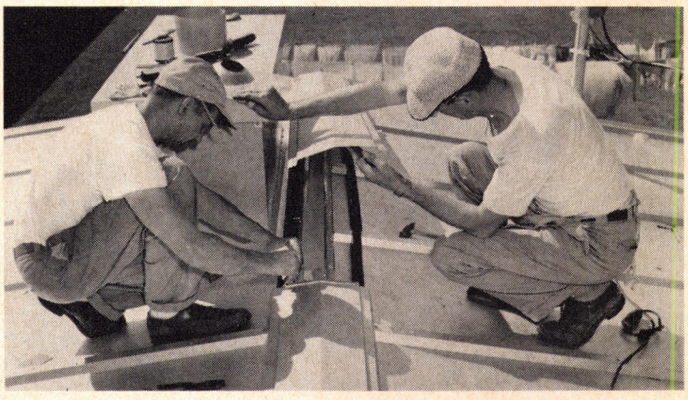


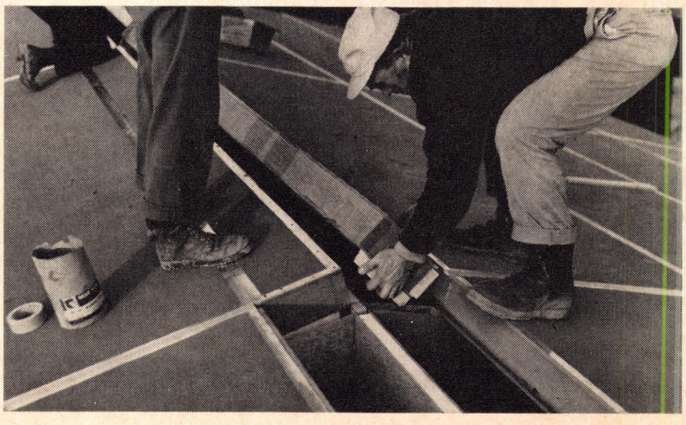
It has two purposes: to eliminate all frame nailing and to produce a far stronger frame than can be made by conventional methods. But FHA ruled that each joint must be end-nailed anyway, thus wiping out one advantage. And since most of a house's strength comes not from the framing but from the sheathing, the second advantage is of questionable significance.

The precutting and joint forming are done on an electronic assembly line which reportedly cost more than $500,000. But the system saves the builder nothing on his framing costs.

These two experimental roofs were hard to apply and not very attractive

Lattimer Studio





The aluminum roof (*top photo*) was used on an NAHB research house built in one of Andy Place's tracts in South Bend. It consists of 4′-wide sheets with raised overlapping joints, plus a gasketed ridge cap and a complex gutter system. Joints required drilling and the use of pop rivets, and on this house they leaked badly. And finally, buyers weren't enthusiastic about the roof's unusual configuration.

The urethane-coated roof (*bottom photo*) was used on an NAHB research house in Lansing, Mich. Roof panels were coated in the factory, but the joints had to be taped and coated on the job. The roof coating itself was sound, but the taped joints failed. And even when the roof was new, the tapes created an unattractive pattern.

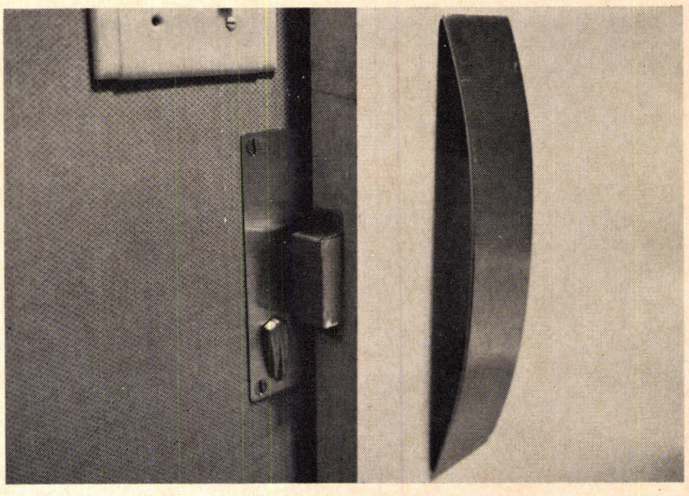
Both Bob Schmitt and Andy Place agree that economy is not the builder's big roofing need today; he can apply asphalt shingles for about 12¢ a sq. ft., less than either of these two systems. What's needed is a roof with more buyer appeal that is not a great deal more costly than asphalt. Schmitt has tried a new roof (*see p. 106*) which he thinks has these qualifications.

These two door systems saved lots of money, but buyers turned them down flat

They were based on the perfectly sound premise that a door that closes against the wall will be much easier to fit, hang and trim than one that closes into the wall.

One system consisted of a ceiling-height flush door (*top photo*) with a refrigerator-type lock. Andy Place used the door throughout one of his models —and found that every buyer was eager to pay an extra $68 to get conventional-height recessed doors instead.

The Mon-o-fin door (*bottom photo*) was a much more radical departure. Developed by U.S. Plywood, it consisted of two sheets of veneered plywood joined at the outer edges by glue and held apart at the center by a spline inserted on the job. Like the door above, it was face mounted, but it was so light that a magnetic catch could hold it shut. Bob Schmitt tried it in a model home and got no takers. Buyers found the door had an insubstantial feel and gave no sense of privacy.



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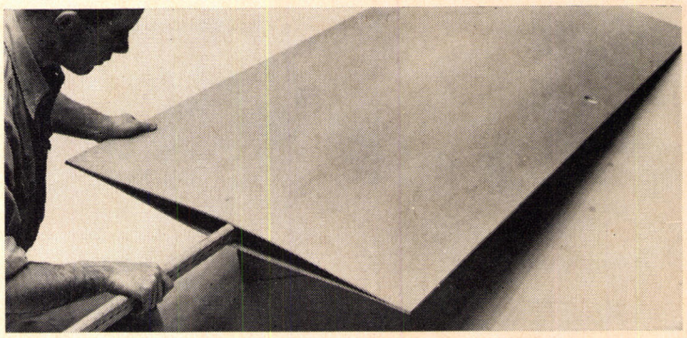


Plumbing walls and cores put a limit on design and have code problems as well

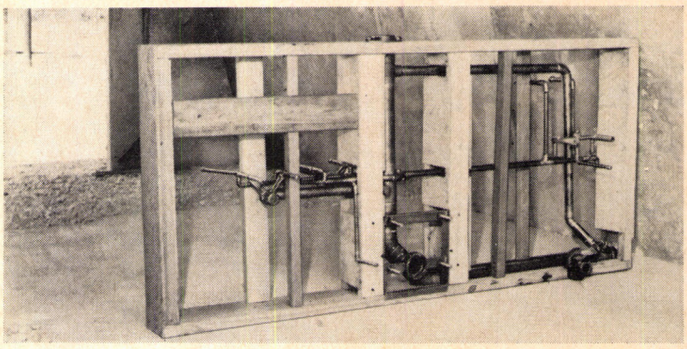
James Murray

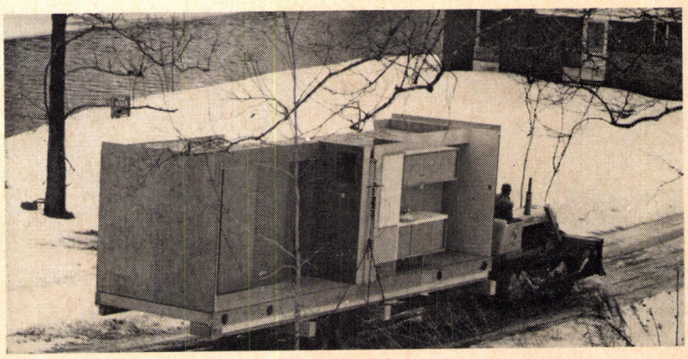
Today's higher-priced market puts a premium on varied design, especially in bathrooms and kitchens. But both prefabbed wet walls (*top photo*) and complete utility cores (*bottom photo*) make sense only if they are mass-produced with virtually no variation.

"I could probably use one plumbing wall for 90% of my houses," says Schmitt. "But the other 10% are different and would make it impractical to set up a prefab plumbing operation."

Place, who has tried a utility core, agrees. "It didn't work because my buyers wanted too much variety, and a plumbing core locked me into one layout."

Plumbing cores have an advantage in outlying areas, such as isolated vacation country, where labor is in extremely short supply. But in some other areas, builders must have a local plumber disassemble the entire plumbing wall and put it back together before the local inspector will approve it.





But not all new ideas go down the drain. Some of them have made it big—and they have established the old way of building more firmly than ever

continued

Trusses and sheet materials made the grade because they solved problems without creating new ones

Trusses made sense because they made the house much stronger and easier to erect. They didn't require any design modifications, and they weren't visible, so they caused no buyer resistance. And because they offered these advantages, builders everywhere plugged for them and pushed them through considerable early code resistance.

Sheet materials — especially plywood — also made the house stronger and easier to build. They encountered only moderate labor and code resistance. And because they brought features like wood paneling within moderate budgets, they actually added buyer appeal to the house.

These two technical advances should be vastly encouraging to homebuilding's innovators. They show that, despite the industry's seeming backwardness, a new idea will gain rapid acceptance if it really makes sense. Neither were used to any extent until after World War II, yet both are standard construction practice today.

Trusses do more than simplify roof framing—they speed the entire building process

They all laughed when, at an NAHB cost-cutting seminar nine years ago, Bob Schmitt announced that he was saving nearly $1,000 a house by using trusses instead of conventional rafters. But the laughter stopped when Schmitt analyzed his areas of saving, starting with the foundation:

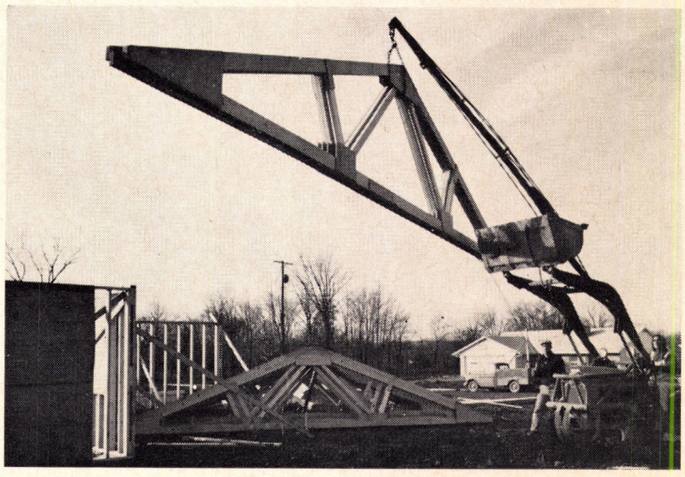
Footers for interior bearing walls are eliminated.

Materials handling is simplified. A few trusses (*top photo*) replace dozens of separate pieces (*second photo from top*).

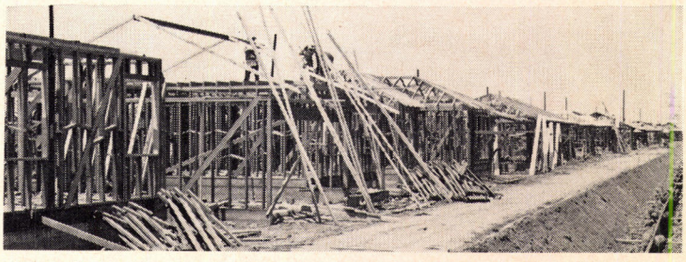
Houses can be closed in faster, reducing expensive delays caused by bad weather.

Closed-in shells aren't cluttered with bearing partitions (*photo, bottom left*) so floors and ceiling can be applied in one continuous operation (*photo, bottom right*).

The absence of bearing partitions also means unlimited plan flexibility. Big ceiling spans don't require extra heavy joists, or joists set closer together than the standard 16″.

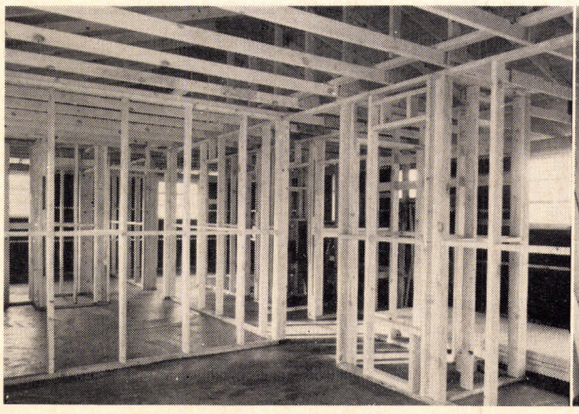


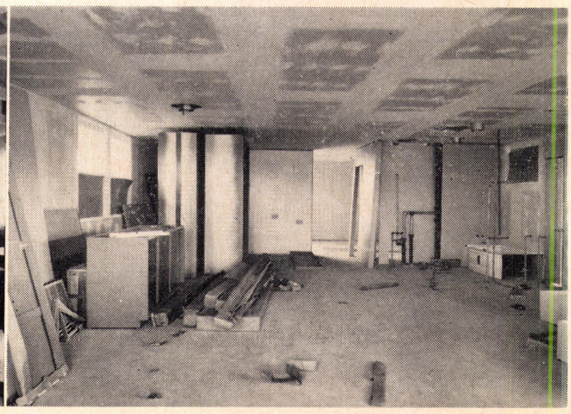
James Mason



Andrews Studios

Dewey G. Mears





Sheet materials are the big reason why the old way of building is so hard to beat

They have turned the old, laborious process of applying inner and outer skins to studs into a fast, simple process. They have strengthened the house shell tremendously. And they have made it possible for builders to offer finishes that twenty years ago were limited to the most expensive custom houses.

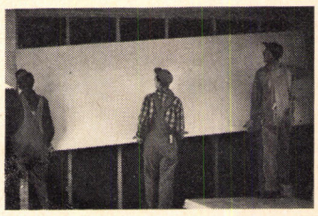
Specifically:

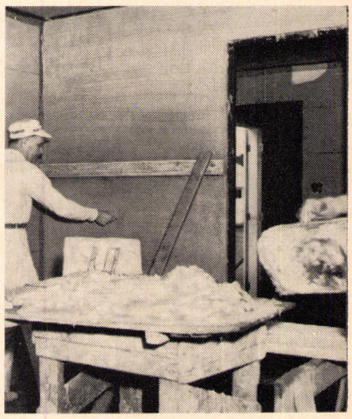
Sheets of gypsum board up to 12′ long, and sheets of veneered plywood up to 10′ long, have largely replaced wet plaster on interior walls (*three photos, top right*). Plaster requires at least three steps—lath, base and finish coats, with days of drying time between coats. Gypsum board needs three finishing operations on joints, but one-day finishing systems are beginning to appear. And a gypsum-board skin costs about half as much in place as a wet plaster wall.

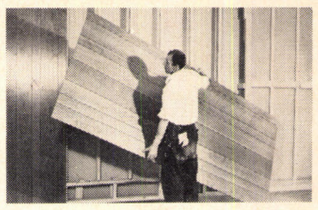
Sheets of plywood and hardboard—some of them combining both sheathing and siding—have largely replaced strip sheathing of shiplap or t&g lumber (*two photos, center right*). They go up faster, are tighter and stronger and leave far less waste.

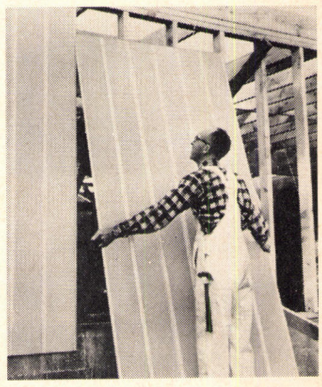
Sheets of plywood—some of them, with t&g joints, strong enough to span 4′ joist spacing—have largely replaced strip decking (*two photos, bottom right*) which had to be laid diagonally if wood strip flooring was to be applied over it.

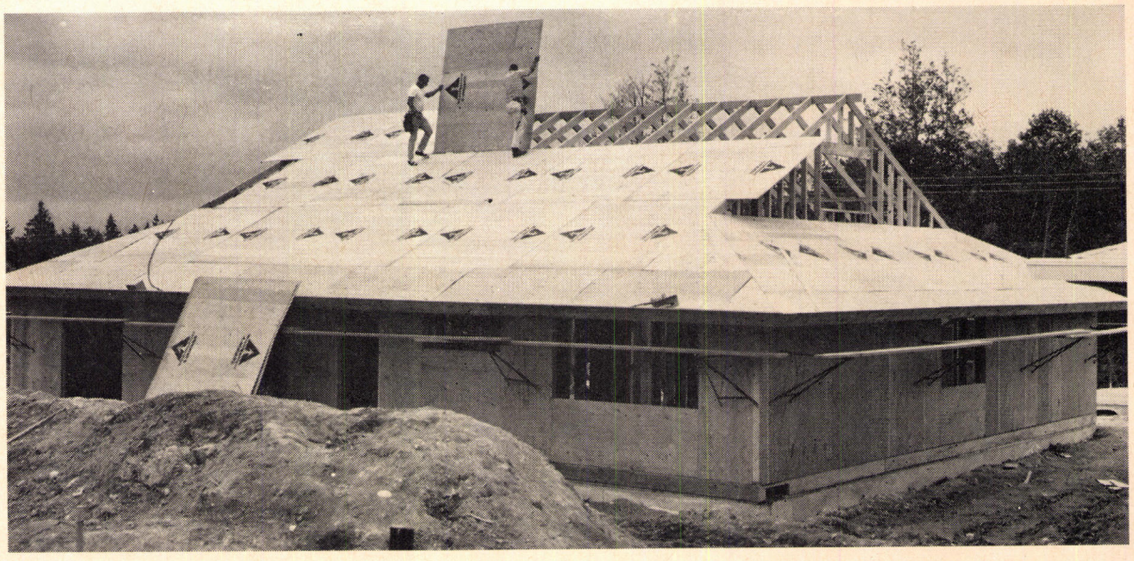
While most sheet materials are currently standardized at 4′ x 8′, bigger pieces, at least of plywood, may be on the way. Weyerhaeuser, for one, is trying out 8′ x 8′ sheets for sheathing and decking (*photo, below*). The only possible problems are handling, particularly in a high wind, and transportation: the 8′ x 8′ pieces are too big to lie flat in a pickup truck.











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If new systems like these make the grade, they'll cut costs in the most expensive parts of the house

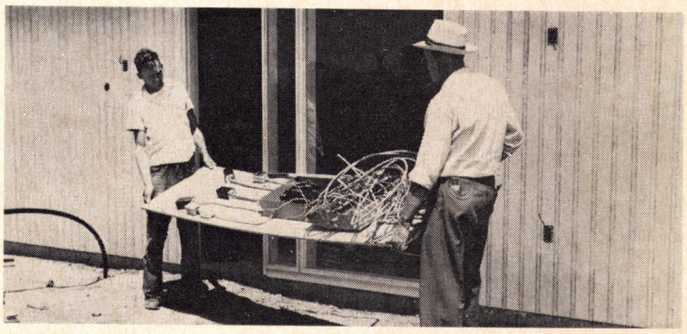
The big question is, can they make the grade? Two of the systems involve plumbing and wiring —traditional areas of great code and labor resistance. The third—a new type of foundation—will almost certainly encounter code problems. And because it involves a major change in building materials, it may also bother buyers.

The acceptance of these systems will depend on how strongly they are pushed—and who pushes them. Only the manufacturers have the money and the influence to convince code and labor groups that the new systems should be used. But unless builders see their value and back them at the local level, the manufacturers will be wasting their time.

Wiring harnesses could take most of the work out of hooking up service panels

All the terminal wiring would be done in the factory; the site electrician would simply plug house circuits into prewired receptacles near the panel.

A homemade harness was tried out in a 1958 NAHB research house (*photo, right*). Everyone concerned with the project agreed it had promise, and at least one major electrical manufacturer considered putting it into production. But labor resistance appeared so formidable that nothing more has been done.



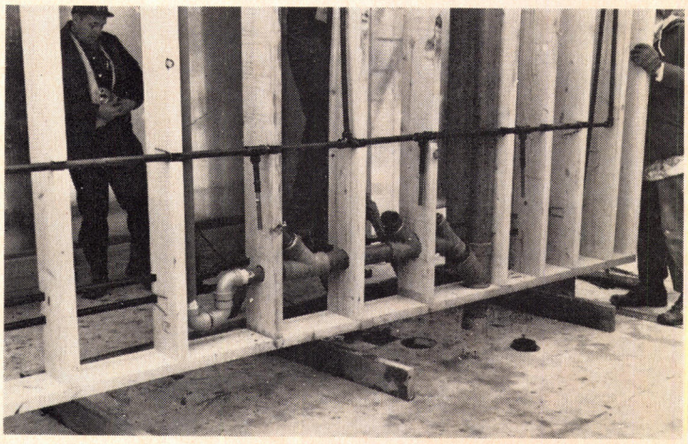
Plastic plumbing is beginning to gain acceptance, but its price is still too high

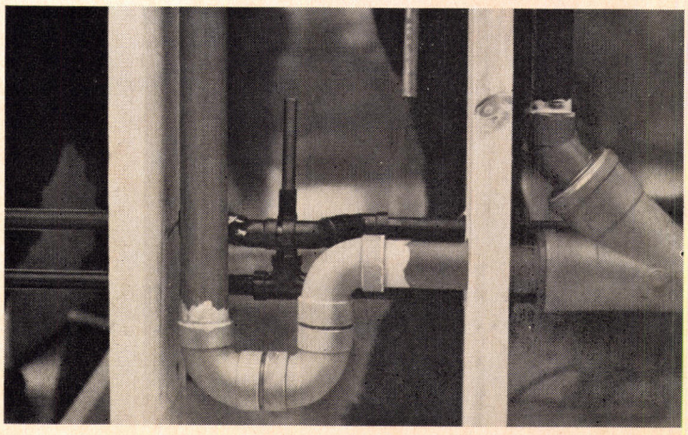
Two types of plastic are gradually winning approval for DWV use: PVC (polyvinyl chloride) and ABS (acrylonitrile-butadiene-styrene). Polyethylene is widely accepted for water distribution systems. And in a very few areas, rigid PVC may be used for residential hot and cold water pipes.

But, says Bob Schmitt, who has considered using plastic plumbing: "It wouldn't lower my costs appreciably because the fittings are too expensive."

The reason for this high cost is, of course, the current low production rate of plastic plumbing. As acceptance grows, the cost of the molded fittings (*photo, bottom right*) will certainly drop.

Plastic plumbing already has distinct advantages. It is light (the entire plumbing wall in NAHB's 1960 research house, shown in the top photo, weighed less than 800 lbs.), it is easily cut with a saw and joints in DWV pipes can be solvent-welded. (FHA requires that joints in plastic water supply pipes be made mechanically. The reason: the chemicals currently used in the solvents are not considered safe enough to come into contact with water that may be drunk.)





Steel foundations could go in fast and take the curse off winter building

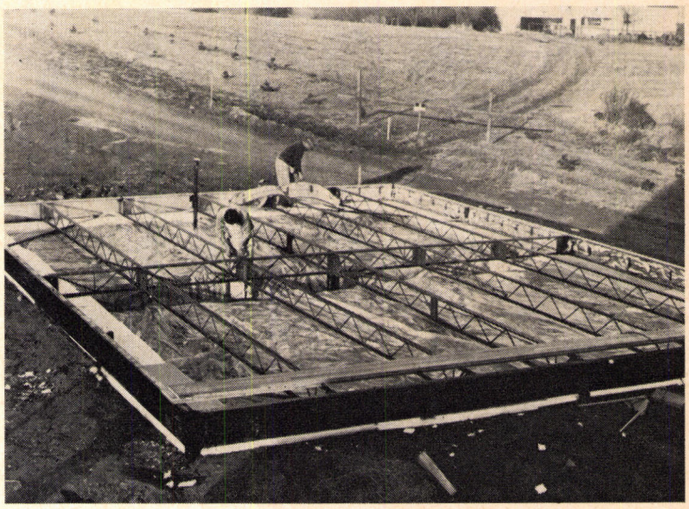
James T. Strong

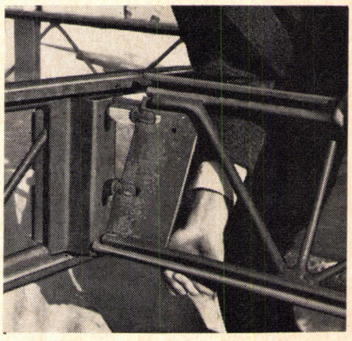
The only concrete necessary for such a foundation would be in pads or piers, which are relatively easy to pour even in cold weather. Steel grade beams and floor joists could be set under almost any conditions.

The practicality of steel foundations has already been demonstrated. NAHB's 1963 research house was built on steel bar joists set between solid perimeter girders (*photo, top right*). Fastening was by a slot-and-button system similar to that used in bedsteads (*photo, lower left*). And NAHB is experimenting with an improved system that uses galvanized box beams resting in steel hangers (*photo, lower right*). Flooring is screwed into holes site-drilled in the beams.

(Andy Place has used a simpler version of this system for a couple of years. It is shown on the next page.)

Steel foundations have limitations, of course. They would be limited to crawl spaces; they would have to be made to exact dimensions by a local steel fabricator; little site adjusting would be possible; and buyers would have to be educated to the fact that their foundation wouldn't rust away.

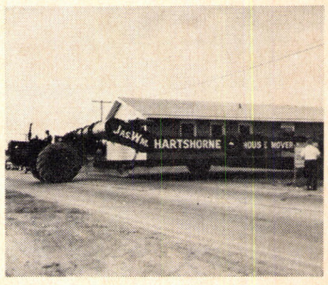


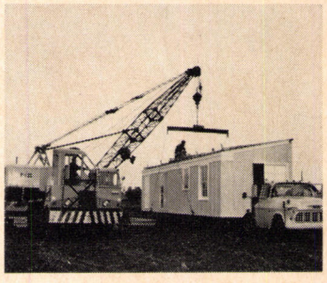


Steel foundations could trigger a real breakthrough for the sectionalized house . . .

James T. Strong

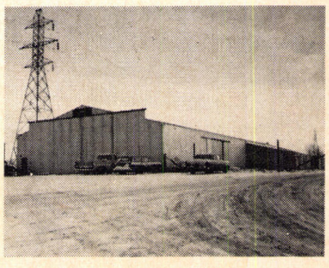
Today, sectionalized houses must either be moved with full-scale house moving equipment (*photo, left*) limited to short hauls by special permit, or built with rigid floor systems which become superfluous after the house is set on its permanent foundation. One unsuccessful sectional house (*photo, right*) had a glued wood floor, but most use a steel base like those in mobile homes.





. . . and conventional builders could build house sections in their own field shops

Andy Place already builds complete walls in the on-site plant shown at right. Steel foundations would let him erect completely roofed sections, put them on dollies, tow them to the lot and drop them on concrete piers. "The steel would keep the house from wracking in transit," says Place, "and I'd be completely immune to weather."



But a few new systems have quietly made the grade. And lots of builders could be using them—and saving money—if they knew about them

continued

These new systems made the grade because a builder realized their value and developed them

Lots of builders see the shortcomings in their construction methods; few builders ever take the time and spend the money necessary to devise new methods to correct the shortcomings. But those who do may make important contributions to the industry.

Andy Place suffered heavily from the extra costs of winter building (H&H, Feb., '64), chiefly because of the problems of digging in frozen ground and pouring concrete in freezing temperatures. So he designed a prestressed concrete grade beam foundation and had it made by a local concrete fabricator. Later he added a faster flooring system. And finally, since he was now building crawl spaces rather than slabs, he used the crawl space as a heating plenum and slashed his heating costs.

Few builders have the technical background for such development work. But these systems are already developed—and waiting to be used.

Andy Place's foundation and framing systems are the most advanced in the industry

They let him set foundation walls, put down floor beams and lay floor decking in less than a day and a half. Here's how the system works:

If possible, the site is graded and the piers are poured in advance of cold weather. If this isn't possible, the ground is thawed with a steam jenny and augered out for piers.

Prestressed grade beams are set on top of the piers (*top photo*) and leveled with shims.

The beams are fixed by arc-welding steel fingers, cast in the beams, to reinforcing rods protruding from the piers.

Steel saddles are hung on the beams, and 3″ x 7″ galvanized steel box beams are dropped into them (*center photo*).

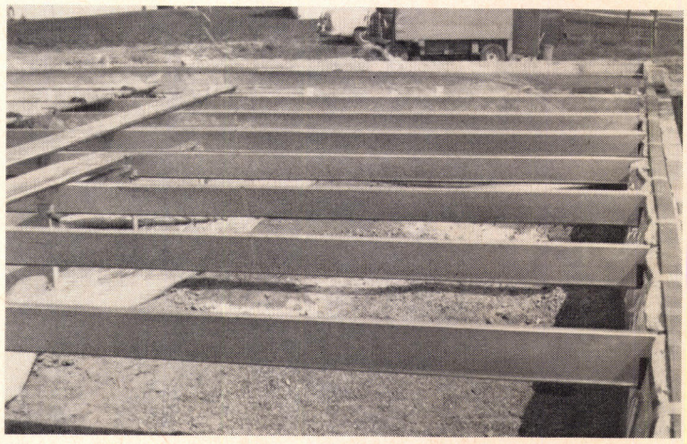
Plywood decking, 1⅛″-thick with t&g edges, is nailed directly into the box beams with tempered nails.

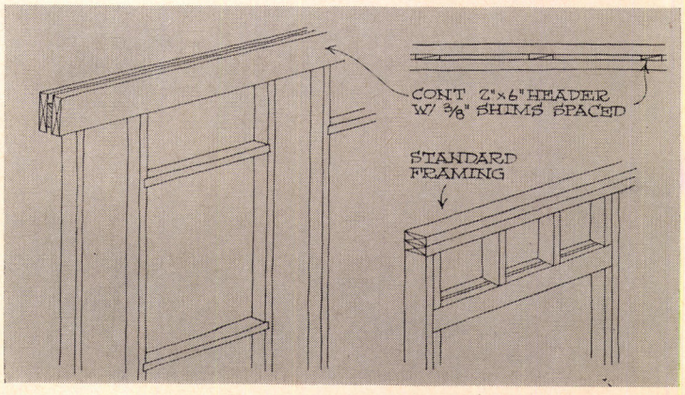
The deck is covered with polyethylene until the shell is closed in over it.

Result: a wood deck, which most buyers prefer, at slab costs.

Place has had to make several changes in the system since he began work on it five years ago. He tried double 2 x 8s, plywood box beams and junior I-beams before settling on his present steel box beams. He had to give up prefinished plank flooring because the manufacturer wouldn't make it in long enough lengths. And he has had to return temporarily to poured grade beams because his precast supplier jacked up prices 33%.

Place's continuous-header framing method (*drawing, right*) was "stolen from Al Balch of Seattle." It uses less lumber than conventional framing, eliminates costly cripple and jackstud work at openings and ventilates the wall cavity to reduce paint failures.





New ideas like these might make the grade if manufacturers recognized their value and developed them

To anyone not intimately familiar with the home-building process, these ideas may not seem earth-shaking. Certainly, none of them involve radical changes in our present building methods. But like trusses and sheet materials, they would greatly improve the old way of building. And most important, they point to the type of innovation most valuable to the builder.

This is not to say that if these new ideas became reality, builders would immediately start breaking down doors to get hold of them. Taken as a group, builders tend to be skeptical and conservative, and only a few—like Place and Schmitt—are willing to test any and all ideas that seem to make sense.

But both Place and Schmitt, who suggested these ideas, agree that if they became realities, they would eventually win wide acceptance. The reason: they all offer solutions to problems builders have had to live with for decades.

Land developing costs could be cut by better ways to work frozen ground

The big problem is trenching. Sites for winter building can be graded in the fall, but trenches for footings and utilities depend on what model goes on each lot and so cannot be anticipated. Possible solutions: more powerful trenchers with harder teeth and more efficient spot-thawing equipment. (Place, who needs only piers for his foundations, uses an old steam jenny.)

Decking costs could be cut by systems that used fewer parts and are weatherproof

Most efficient to date was Place's deck, which used planks combining subfloor and finished floor over 4′ o.c. beams. But installation had to be done in dry weather. A possible improvement: planks protected by a clear waterproof coating. Another idea for the entire deck: steel pans, incorporating beams and deck, to which flooring would be fastened by adhesives.

Flooring could do more to sell the house if the luxury look were less costly to apply

Schmitt, who builds mostly slab houses, says he would use poured-on resilient flooring, like Torginal, if it were less expensive (it costs considerably more than top-of-the-line vinyl sheet) and if it were easier to apply. And both Schmitt and Place want a wider choice of authentic looking and long-wearing synthetics to simulate accent flooring like slate and marble.

Exterior wall costs could be cut by sheet material applied from rolls at the site

According to Schmitt, such material—probably plastic film—would permit the use of low-grade unfinished plywood as both sheathing and siding. It would make it easier for the builder to offer a wide range of colors and designs, since he would need to stock only the film, not entire plywood sheets. And the buyer would benefit from a tough, easily maintained finish.

Electrical costs could be cut by more efficient wiring devices and fittings

The average electrical cost in one of Schmitt's houses is $830. A big chunk of this, he believes, could be saved by simplified connections—push-locks, for example—and by combining the typical outlet or switch box, with its three components that must be assembled on the job, into a one-piece device. Light fixtures also could be simplified in this manner.

But manufacturers should remember that when it comes to new ideas that show, success depends not on low cost but on how buyers react

continued

To be successful, a new idea must upgrade the house without radically changing its appearance

Painful as it may be to architects and designers, most homebuyers are traditionalists. They want their houses to have the feeling of long-established security, and in most areas the builder who ignores this desire won't sell many houses. It follows logically that the manufacturer that ignores this desire won't sell many products to the builder.

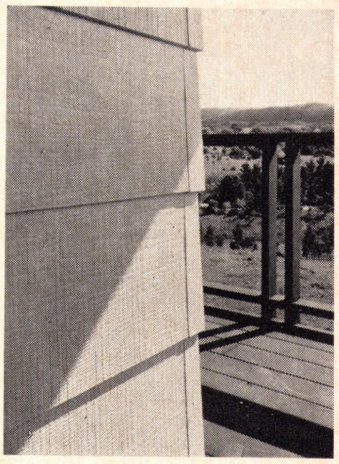
Those who doubt this statement have only to look at the facts. No highly contemporary or unusual looking building system has ever been really successful, even when it incorporated traditional homebuilding materials. On the other hand, many materials comparatively new to homebuilding but designed to look like traditional materials have found quick acceptance—particularly when they offer advantages the old material doesn't have.

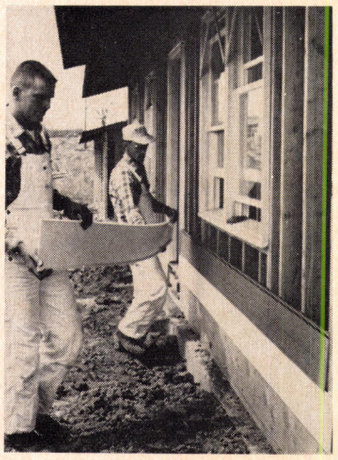
Siding is being made from many new materials, but most of it looks like clapboard

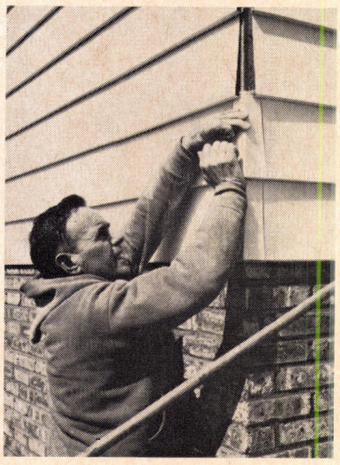
The pictures at right all show comparatively new siding materials. They are (reading clockwise from upper left) hardboard with a molded texture, solid vinyl mounted over a fiber base strip, galvanized steel and aluminum with foam-plastic backing.

All these sidings have advantages over conventional wood clapboard. They come in longer lengths and generally include pre-engineered systems for faster installation. They all have factory-applied finishes which save painting costs for the builder and which promise lower maintenance costs for the buyer.

There's a particularly important market lesson to be learned from the case of solid-vinyl siding. Despite its extremely high cost—about twice that of cedar and almost three times that of redwood—it is making inroads in many parts of the country. Buyers are apparently willing to pay the extra price for a no-maintenance material—providing it is almost indistinguishable from the siding on grandpa's house.

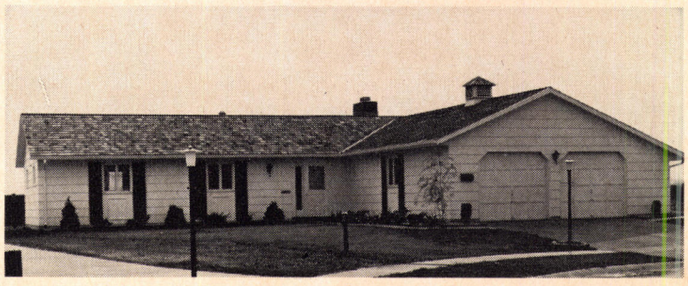






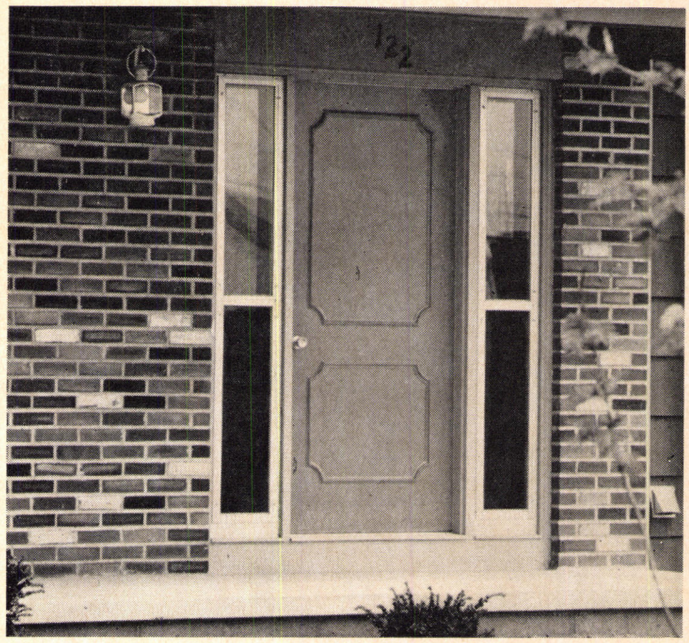
This experimental wood-and-rubber roof looks exactly like a cedar shingle roof

And in fact it is made of cedar. Bob Schmitt put a coat of butyl rubber on the roof, then applied cedar shims (narrow scraps of shingles sold for shimming) over the butyl. The rubber is the real roof, and the shims are simply decorative. This is the first such roof Schmitt has built, but he thinks that in production the cost would be about 15¢ per sq. ft.



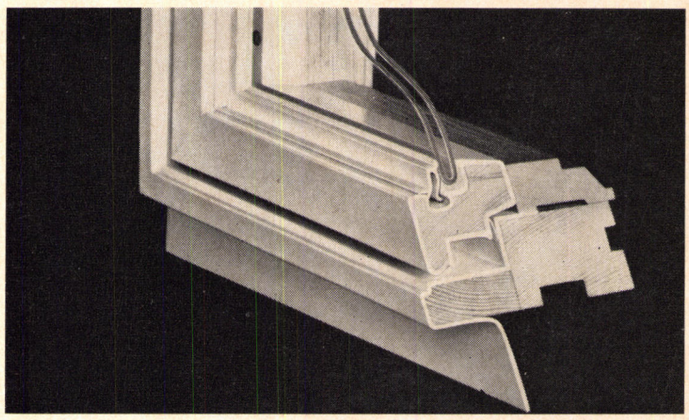
This looks like a raised-panel wood door, but it's actually made of steel and plastic

Though the materials are new—a steel skin surrounding an insulating core of foamed plastic—the designs in which the door is offered are almost all traditional: raised panel, rectangular light and Dutch door. Reassured by these disguises, buyers are free to appreciate the advantages of the unit: it is warpproof, very well insulated, and made so tight by magnetic weatherstripping that a storm door would be superfluous. The door has been very well accepted, and the country's two biggest prefabbers are now including it in their lines.



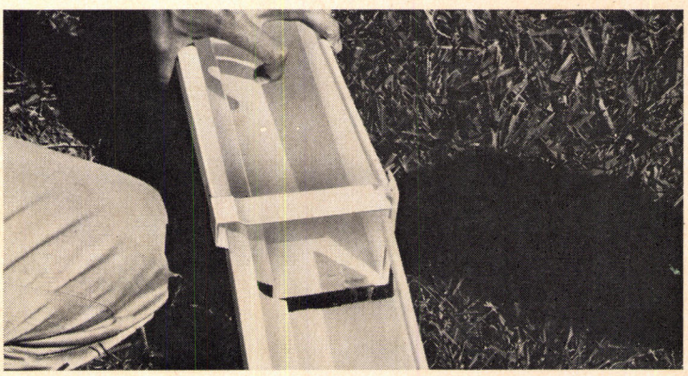
The wood in this window is covered with plastic, but it looks like painted sash

Like doors, windows are a detail about which tradition-minded buyers are apt to be touchy. They like the appearance of wood with its heavy trim and moldings, even though they don't like painting it any more than the builder does. So the manufacturer of this window retained all the wood detailing and simply wrapped it in a coating of white vinyl. The unit has only just been introduced, but it seems reasonably certain of success.



This plastic gutter has the same configuration as the old wood ogee gutter

And it thus follows in the footsteps of copper, galvanized steel and aluminum gutters. As each new material was introduced, it was given the ogee profile in order not to upset buyers. Chances are that few buyers have any knowledge of different gutter styles. But the gutter is an important visual part of the cornice, and even though half-round gutters have been used in the most traditional of houses for decades, manufacturers and builders prefer to play it safe.



But even "new ideas" like these come slowly. And they won't come faster until manufacturers start spending more time at the building site

continued

Homebuilding technology won't really advance until manufacturers discover what builders really need

All too often, the sole purpose of a new system is not to solve a homebuilding problem, but to sell the manufacturer's material. When the system is introduced, the builder sees no practical need for it and turns it down, and a lot of research and development money goes to waste.

"The manufacturer should find out what our problems are before he designs his new product," says Schmitt. "And he should find out how that product will fit into the whole process of building —and selling—houses.

"The only way he can do this is to go to our sites and study what goes on."

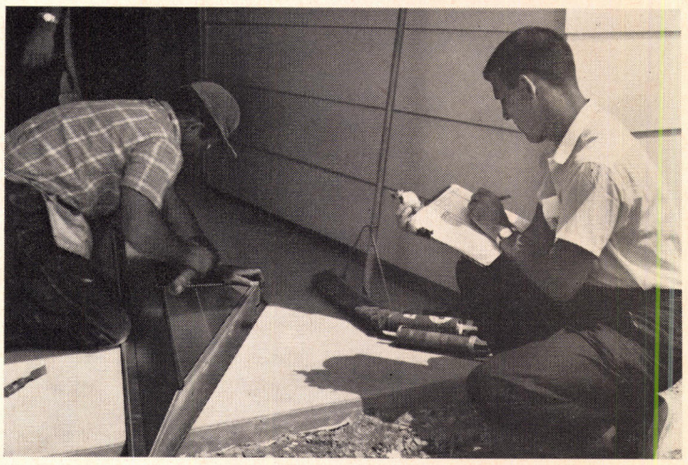
When the manufacturer does come up with a new product or system, it's up to him to bear the expense of applying and market-testing it.

"Don't expect us to do the pioneering," says Place. "If we do, and the product flops, it's our pocketbook that suffers. And if the product goes over, we don't make a dime out of it."

Project TAMAP showed the right way for manufacturers to study homebuilding

Purpose of the project, sponsored by NAHB and The Stanley Works, was to look at homebuilding through the eyes of modern industrial engineering. TAMAP studied Bob Schmitt's operation and came up with dozens of recommended improvements, many of which Schmitt adopted. More to the point, Stanley came up with dozens of ideas for specific tools and products designed to solve problems uncovered by the TAMAP study.

Sadly, the product portion of the project was largely wasted. A year ago, after producing only a few TAMAP-inspired products, Stanley quietly closed its Building Products Division.

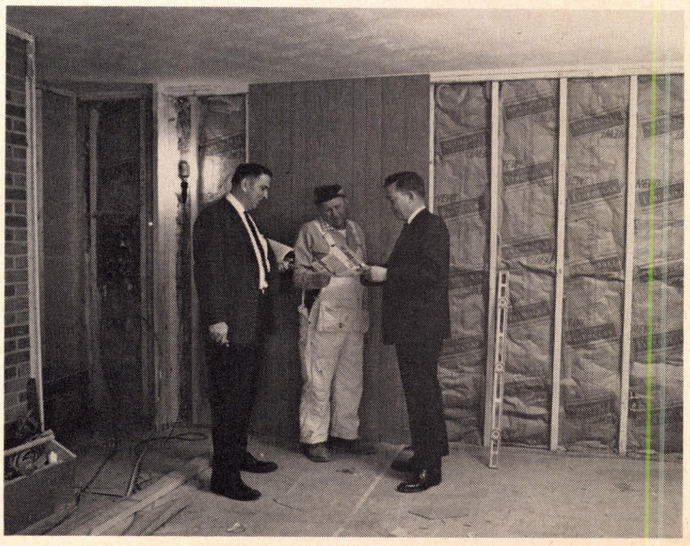


On-site study has opened up a whole new market for an adhesives manufacturer

Three years ago, B. F. Goodrich representatives approached Bob Schmitt and asked him how their adhesives could fit in his construction system.

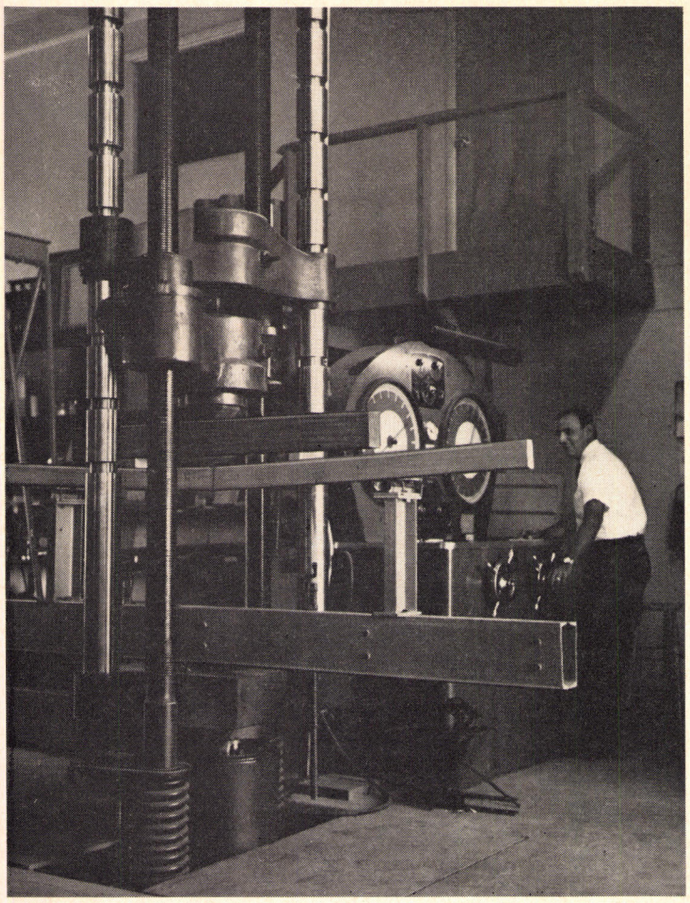
"How should I know?" said Schmitt. "You know your products better than I do. Why don't you come down here and find out for yourself?"

B. F. Goodrich did. For the past two and a half years, a company engineer (*right in photo*) has virtually lived on Schmitt's jobs (Schmitt's staff has dubbed the engineer "Sticky"). The result: Goodrich modified one adhesive—PL200—and Schmitt now uses it to seal plates, block subflooring edges, keep stair treads from squeaking, hang mirrors and reduce wall panel nailing to six nails per panel.

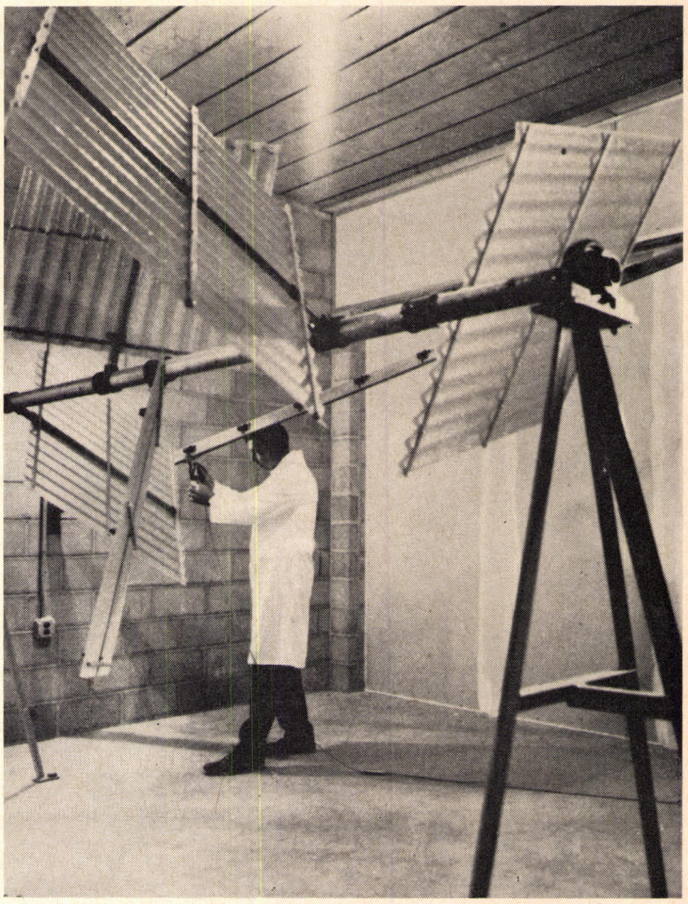


Meanwhile, back at the laboratory, the search for better ways to build goes on

Sherwin Greenberg Studio

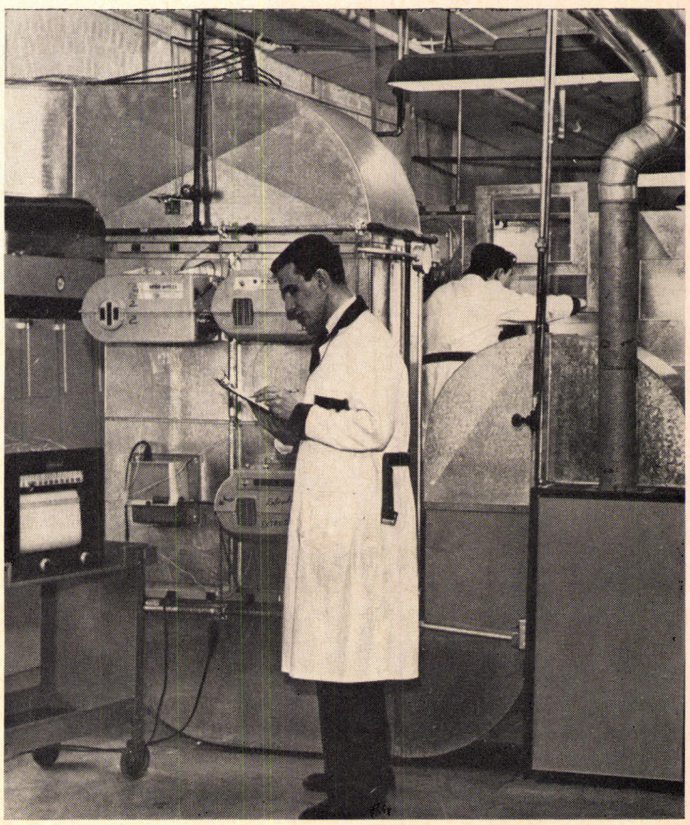


GLUED-UP STUD, made from shorts, is tested at NAHB Research Institute.



SOUND-DEADENING WALLS are rated in new National Gypsum Co. lab.

MOISTURE-ABSORPTION of insulation is checked at Owens-Corning lab.



HUMIDIFIER CHARACTERISTICS are evaluated in Lau Blower Co. lab.

—MAXWELL C. HUNTOON JR.; H. CLARKE WELLS

The best new ideas move faster than ever from city to city

Of course, all markets have their own local peculiarities, but they also have many common problems. Today, when a good design, land plan or marketing innovation succeeds for one builder, it will sweep not only his home city, but it will also pop up in other areas within weeks or months.

One of the objectives of this report is to shorten the travel time for such ideas. Another is to act as your eyes and ears to bring you those ideas that inventive designers and builders find work for them, and to identify those trends in housing that will affect all markets sooner or later.

Over the past 60 days, HOUSE & HOME editors and our local McGraw-Hill News bureaus took the housing pulse of more than 50 major metropolitan areas. Twenty-one of them are summarized on the following pages. Out of almost 1,000 pages of raw research and interviews, seven definite trends emerged. The seven:

1. Whatever price range is offered, buyer demands tend to push sales prices to the top end. In Chicago, buyer preferences in one project lead to a higher price in the next. And each new Levitt & Sons development has been at a higher price level.

2. Recreation facilities and "a way of life" sells houses and rents apartments. Buyers and renters alike shop the extras as critically as the housing. Pools, lakes, golf courses, community buildings, included as part of the housing package, are bonuses that families weigh carefully.

3. Townhouses are here to stay. People love maintenance-free projects and the community facilities they get. When well planned, the higher densities are not objectionable.

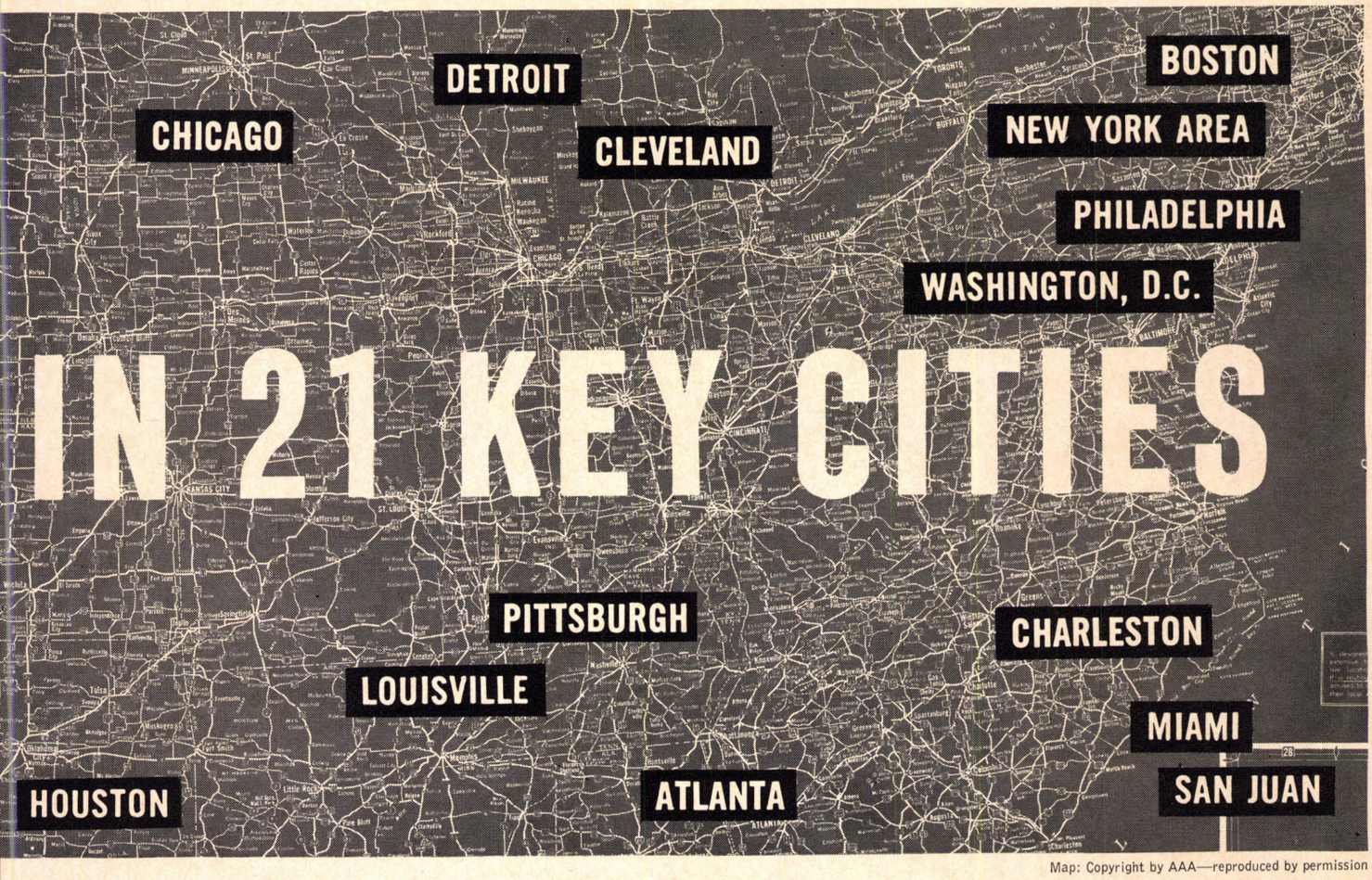
4. Planning and zoning boards are more receptive to good land planning innovations, and every one that does get passed and built makes the next one easier for everyone.

5. Houses in the $25,000-and-up price range are the strongest speculative market because of second-time buyers.

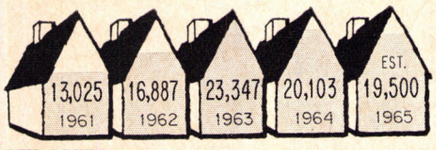
6. Transferee families make up an important segment of many local markets.

7. Growing buyer sophistication has almost eliminated "economy model" equipment and products. Not only name brands, but tops-of-the-line, are growing as standard, non-option items.

Ed. note: estimated housing starts for 1965 are based on H&H's analysis of all building permits in these metropolitan areas issued through August 1965 (as reported by the Census Bureau). To this we have added our projection for the rest of the year, plus any adjustment indicated by our on-the-spot observations and bureau research.



Map: Copyright by AAA—reproduced by permission



ATLANTA: *a subtle market that often frustrates out-of-town builders*

The statistics say Atlanta's housing boom is continuing, but out-of-town builders rushing to cash in are finding more trouble than profits.

The biggest problem: labor is short because booming highway and office construction pays higher wages. Hence Atlanta's old-line small custom builders—average annual production by HBA members: eight houses—with long established ties to subcontractors are moving steadily along while outsiders scramble for labor.

Typical is the plight of the Berne Co. (Houston and New Orleans) in its Edinburgh Estates tract, where Sales Manager Lew Wynne says he can sell houses faster than labor can be found to finish them. Berne builds in two other Atlanta locations. Near Edinburgh Estates, Hallmark Homes is trying to beat the labor pinch by trucking components 140 miles from their Augusta headquarters. Hallmark offers a 1,520-sq.-ft. ranch with three bedrooms, two baths, air conditioning and all-electric appliances for $20,350.

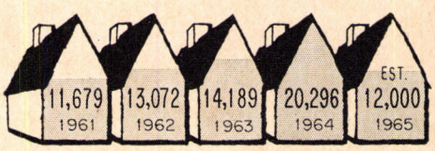
The labor shortage is so acute that Mortgage Banker Robert Tharpe says some out-of-town tract builders are actually phasing out their operations.

But Atlanta's smaller builders are selling strongly in the over-$25,000 market. Typical is Dick Hotaling, who will complete 12 homes in this range this year. Most of his sales this year came before any houses were completed, but change orders and substitutions of materials proved so burdensome that he plans to build only spec from now on. "Next year I'll build only six houses, work less and make more money."

Like many of Atlanta's smaller builders, Hotaling keeps abreast of new technology. He uses from five to ten gals. of adhesives per house, and his plywood panels glued to gypsum board produce solid recreation room walls. He lavishes special attention on closets, adding shelves, shoe racks and other accessories. Most bedroom closets run the full length of the wall.

HBA President Jim Washington falls into the 12-house a year class, although most of his are custom homes in Atlanta's bustling northside area now closer to downtown via a new expressway. Near him are builders like Howard Chatham, who may be Atlanta's largest custom builder, with about 70 sales at $40,000 and up, Fred Fett Jr. and William Bryant of Key Development and Construction Co.

Apartment building has centered along Atlanta's main feeder streets with good bus transportation. One of the hottest apartment markets is along Roswell Road from 10 to 14 miles from downtown. Piedmont Engineeering built the biggest share of 800 units there—and vacancies are only 4%. Apartment starts will be down perhaps 30% this year, says Tharpe, but will rise next year. When vacancies started rising, the pros stopped building. "Now the pros are building again," says Tharpe.



BOSTON: *high tax rates, upzoning of land, have dulled a previously steady market*

Boston property tax rates, among the highest in the nation, have often been

continued

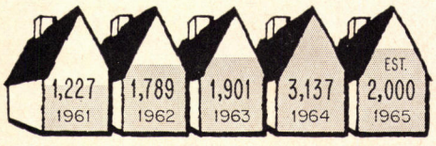
offset by low assessments on individual houses. But commercial and industrial taxpayers are pressing for "full and fair" assessments and have one state Supreme Court decision to back their demand.

Builders and Realtors feel that such reassessment would discourage single-family housing, while stimulating apartments. A state sales tax, which would have taken some pressure off real estate, was having heavy going in the legislature late in the fall.

Two- and three-acre zoning in suburban communities is an especial deterrent to middle-income housing, according to Builder Campbell, of Lowell. He says: "Lots this size might be necessary for a mansion, but not for a $14,900 ranch house for a white-collar worker."

The semi-custom house is getting more popular with buyers who seek more architectural diversification than most developments offer. At Old Stage Estates, in Chelmsford, 25 models are offered by Campanelli Bros. Inc., because Sales Director Dominic Gherin-Ghelli feels "the public likes to look over a wide choice of homes."

Apartments are still adding amenities to meet competition and stay ahead of the demands of renting families. There is strong emphasis on security, with 24-hour watchmen and closed circuit TV in lobbies.



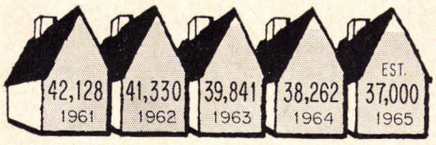
CHARLESTON, S.C.: *business is so good, builders even welcome new competition*

Consolidation of defense installations may have hurt some cities, but it meant nothing but prosperity to Charleston (home district of L. Mendel Rivers, chairman of the House Armed Services committee). Equally important has been the construction of bridges and freeways to give better access to suburbs from peninsula-bound Charleston.

Military families, with their instability of assignment, have boomed the apartment market, but single-family house sales have stayed strong, too. Inventory is almost unknown, and the local FHA office could only find 33 foreclosures —FHA or VA—in a three-county area. The one-story house remains most popular, but split-levels and mid-entry models are catching on. "Tri-levels and two-stories are the houses of tomorrow around here," says Builder Joseph P. Riley. The strongest market is between $12,500 and $15,000, which gives buyers total monthly payments in the $100 range. The bulk of the apartment market falls between rentals of $85 and $125, and higher-priced luxury units are beginning to appear on desirable river-front locations.

Even in houses as low as $10,000, central air conditioning is being demanded, and dens and family rooms are increasing because of new arrivals from areas where such rooms are universal.

In spite of the expected land-cost spiral which now has brought finished lots to $4,000 and up in many areas, all builders predict even greater sales in 1966 and seem indifferent to the idea that outside builders might move into their sellers' market.



CHICAGO: *catching up fast, after a waterlogged spring and summer*

Most Chicago builders will admit to being two to six weeks behind in their delivery dates. Delays are partly due to spotty labor shortages (primarily carpenters), but mostly to a soggy spring and summer that never let builders get out of the mud for more than a few days at a time.

Although many builders say the market is strongest in the $18,000-to-$20,000 range, all claim that they feel the pressure is toward the top level of all price ranges. Builder Dick Smykal insists that most projects should have a wider price spread (his Saybrook houses in Naperville are $32,900 to $41,000). Reason: most buyers want changes to tailor the house to their exact wants, and any price they originally specify can always be raised to include desired amenities.

Also in Naperville, Builder Harold Palmer tries always to have at least one of each of his four models ($28,000 to $36,000) completed ahead of sales. Most Chicago builders start houses only on signed contracts, but Palmer finds the cost of carrying a few unsold houses is offset by his ability to pick up an occasional immediate delivery sale. His houses are centrally air conditioned, like most in this area and price class. Other features: luminous ceilings, one bank of drawers (instead of a base cabinet) and a pantry in every kitchen.

Builder Tom Shannon is aiming at what used to be the custom-house market ($40,000 to $50,000) because he found that buyers kept pushing his price limits upward in a previous $31,000-to-$36,000 project. Also, a firm price offered by the merchant builder is preferred by many upper-income families to the true custom house which often runs way over budget.

A southside Chicago builder since 1911, Burnside Construction Co. (George Arquilla, Sr. and Jr.) sells about 150 houses a year ($18,900 to $40,000), 65% of them to families moving out from closer-in areas. Arquilla finds two classes of second-time buyers: 1) families moving up slightly in price (say from a $16,000 house to a $20,000 new one), and 2) those who have risen rapidly in economic and social status and who have built up a sizeable equity, who might jump to a house double the price of their present one.

In the far northwest, at Crystal Lake, 40 miles from downtown, Builder Roger Ladd has completed 400 houses in his 950-site ($17,400-to-$25,900) Coventry project. Ladd has built 3,000 houses in this area since he pioneered there in the late 1940s when the only market was for vacation homes.

Ladd goes after the transferee market aggressively and will travel anywhere to talk to them. One of his most successful pitches was to 540 United Airlines employees being transferred from Denver. He made five trips West and wound up selling 13% of the transferees.

Ladd is rethinking his willingness to make any and all changes requested by buyers. "We have been willing to make changes for 1½ years now, and it really made our salesmen creative in their selling. If the buyer couldn't think of a modification, they could. We now average 20 major changes per house, and our overhead is outrunning the increase in sales."

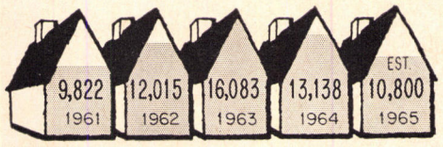
As an indicator of how builders have fallen behind schedule, Winston-Muss will carry few, if any, houses into winter inventory at Winston Park Northwest. Normally it would have about 70 houses on hand when the freeze hits. Sales Manager James Blaeser has analyzed their selling effectiveness and finds they are closing one out of every 11 prospects.

Builder Al Miller, of Miller Homes, has been a leader in introducing new products. Among them: carpeting, aluminum siding, a landscaping package and an ample ($140) lighting-fixture package. Miller feels that most Chicago suburban areas still take a dim view of townhouses because of too-high densities and poor land planning in some of the early projects.

Chicago houses emphasize cubage, and almost every builder's bestseller is a split-level or two-story model. There is little experimenting in design, even in such traditional influences as French Provincial. In spite of one of the country's highest concentrations of award-winning architects, the contemporary house remains unknown except for custom commissions.

An outstanding success in selling houses to Negro buyers is Builder Arch Hermanns. His 900-site subdivision, called Golden Gate, in South Chicago includes side-by-side duplexes and one-floor detached houses. Prices: $14,500 to $20,000.

Hermanns rehabilitated one 18-unit apartment with his own capital and feels there are hundreds more that could be upgraded, but only when lenders stop making entire geographic areas "off limits" for financing and provide capital for the job.



CLEVELAND: *fighting both natural and man-made market handicaps*

Cleveland housing starts will drop in 1965, although the city's economy is sharing in the general Midwest boom and demand is strong in the $25,000-and-up single-family market and suburban luxury apartments.

Reasons: a combination of geography and today's reliance on the automobile. Historically the city has developed east and west along the lake, and an expressway system that will open up the unlimited acreage to the south is still some time away. Because growth patterns were so predictable, land holdings have been heavily concentrated in a few speculative hands. Only a few builders can assemble and develop their own subdivisions. Among them: George Goudreau, Alex Treuhaft, Earl Linden.

One experiment being watched closely is Tanglewood, 400 acres of wooded, rolling land, more than an hour from downtown, well beyond the tightly held close-in land. Builders Hal Farver and Phil English are counting on the completion of an expressway interchange that will cut this travel time to 20 minutes and on the recreational appeal of a 50-acre lake, an 18-hole golf course, riding and hiking trails—all within the limits of Tanglewood. Four single-family models ($35,000 to $45,000) are almost ready, and a townhouse section is planned for next spring.

Farver and English have almost completely rented a 200-unit project, with prices ranging up to $400 a month, in nearby Brecksville. They have found that many families preferred luxury garden-type apartments in a good suburb to what they could rent for the same money in high-rise buildings along the Lake Erie shore.

James Leibrock, local HBA executive officer, is warning apartment builders to plan for a continuing sales and merchandising expense in renting apartments. "These costs don't stop when the building is rented up. Turnover is normal, and advertising and promotion must be budgeted to replace move-outs."

In late fall, material suppliers were trying to get mortgage lenders to remit builders' construction loan advances right to them. Reason: recent failures of major builders left suppliers holding the bag. Builders were fighting the idea bitterly, calling it an intrusion into their business. There was some doubt among lenders about serving as collection agencies for suppliers with careless credit checking.

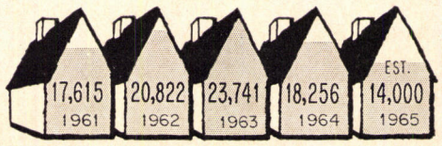
Pittsburgh's Ed Ryan has 12 locations throughout the Cleveland area, and he has his own method of getting needed land. He buys finished lots from landowners, and his agreement to buy is so solid that a landowner can develop his property with the assurance that Ryan will take the lots at a fair price.

One outstanding model-house area built by Flair Builders (Earl Linden) compares favorably with the best merchandising jobs in the country. Called Westview Village, it has six furnished models ($17,000 to $23,000) grouped around a landscaped mall. All visitors pass through a closed trap sales office. No brochures are given out at the site, but names and addresses are taken, and the material is mailed to prospects.

In addition to the 260 detached houses, Linden is building 200 townhouses, which will be sold as condominiums at $15,700 to $18,250. The first group of 25 is sold out and a second group will be ready soon. The original owners are expected to vote to take succeeding groups into their condominium (thus spreading their maintenance costs), and Linden can get the benefits of condominium without having to start and sell all 200 houses at one time.

Linden has also built two-thirds of a 500-unit rental apartment complex called Pleasant Lake, in nearby Parma, with a man-made lake, swimming pool, picnic areas, tennis courts, etc. Strongest market: young marrieds and families whose children have grown and left.

Under the direction of Land Developer Sol Biskind, four builders (including Linden and Ed Ryan) are cooperatively marketing 300 lots in the Bretton Ridge subdivision. Prices are from $26,000 to $31,000, and the four builders and Biskind share the costs of a cooperative advertising and promotional campaign.



DALLAS: *builders are not speculating because buyers' tastes change so quickly*

"Hardly anyone builds more than 20 houses ahead of sales anymore," says Home Builders Assn. President John M. Mahaffey. "Styles preferred by the public can change too quickly."

Builder Wayne Bennett of Monogram Homes knows how quickly. Three months ago he moved into the suburb of Mesquite with four scaled-down models of higher priced houses he had been selling in north Dallas. Pointing to a split-level contemporary, he says, "I can't keep up with demand for that house at $23,500 in north Dallas. Here I couldn't sell one in three months and cancelled the model."

Sales Manager Roger Young traces the flop to the fact that most of his 18 buyers so far have moved up from lower-priced post-war houses in Mesquite. "They want tradition," says Young. Hence they shun the contemporary in favor of an Early American ranch with 1,589 sq. ft., three bedrooms, two baths, two-car garage and air conditioning for $18,750.

Bennett packs his houses with closet space—139 sq. ft. in one model—and includes a bath off the master bedroom in all models. He puts a second sink in his utility room off the kitchen and says housewives really rave over this item.

In two nearby subdivisions by A. B. (Tony) Roffino of Series Homes and Alex Sanders of Al-San Homes, five of every six houses are ranches, even though two-story and 1½- story houses are going strongly in neighboring Fort Worth. But the plain vanilla exterior of yesterday's ranch has yielded to an infinite variety.

In north Dallas, up a notch or two in the price bracket, merchant subdivisions provide an escape from the dreary sameness which today's buyers shun. Here the subdivider sells his lots to a small group of four to eight builders and then promotes his new neighborhood for all the builders. These blossoming subdivisions were boosted in August when Ray Nasher opened his handsome North Park Shopping Center, an enclosed mall with one million sq. ft. of space and three department stores.

Fred Thompson loads a $45,000 model with walk-in closets in every bedroom and two walk-in closets in the master bedroom. All baths have double-bowl washbasins. Thompson achieves an extra touch of plushness by installing a foam rubber pad beneath his carpeting to give prospects the feel of walking in ankle-deep pile.

"Dallas buyers know what they want and are willing to pay for it," sums up Mahaffey, so one-family house builders will just about equal last year's 8,600-house total.

Dallas's design-conscious apartment builders are marking time this year while last year's 10,000 units are being absorbed. So, although starts may fall to the 6,000 range this year, architects report they have enough plans on their drawing boards now to duplicate the apartment boom of the past three years.

The homebuilding market will continue strong, says Dallas Mortgage Banker Aubrey Costa. Reason: the city has diversified its economic base and now adds

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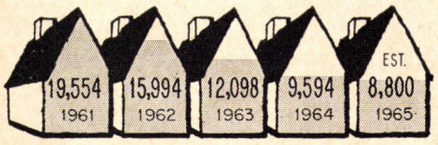
25,000 jobs yearly, a rate that has kept unemployment below 3%.



DENVER: *marketing makes the difference as a sluggish market returns to normal*

"All of Denver must be for sale," says a house-hunting transferee and capsules in seven words the selling job facing Denver homebuilders.

Denver builders peaked at 19,554 units in 1961 and will not build half that number this year. But employment at the giant Martin plant southwest of Denver has stabilized at about 6,000, down from 19,000, and "the market is returning to normal," says Builder Saul Primack, one of a Denver housebuilding family. "For a year and a half my biggest competitors were my former buyers—engineers with 'for sale' signs in their front yards," says Primack.

In this hotly competitive market, Perl-Mack Homes, run by Saul's brother, Sam Primack, and Jordan Perlmutter, still leads the Denver market with a sales and building job that attracts builders from all over the nation.

Perl-Mack displays nine models, and visitors must pass through a large sales office to inspect them. Perl-Mack uses one full wall of this sales office to merchandise brand-name materials. A full-scale kitchen is raised about 3′ from the floor and tilted toward prospects so visiting Mrs. Housewife is literally put inside the kitchen. Perl-Mack displays virtually every material in its houses and is the only builder to merchandise the quality of even its roof shingles.

The models themselves are tastefully decorated and liberally studded with signs pushing the sales theme: "Perl-Mack Homes give you up to $2,000 more value than any other home you can buy." Perl-Mack tells buyers, "We save you money, too, by employing the highest price 100% union craftsmen. Less than 10% is subcontracted. We can build more efficiently. We're not delayed by subcontractors' whims. We don't pay subcontractors' profits."

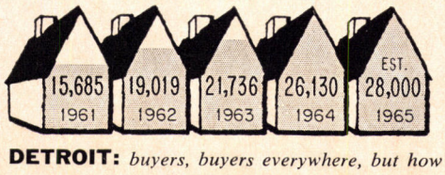
Coming on strong is Phoenix Builder John Hall, who has sold over 600 townhouses since invading Denver a year ago. He now has the city virtually ringed with a trio of townhouse projects.

Hall's sales presentation is sheer professional. Sales Vice President Jim Pennington has organized a corps of "clipped wings"—airline hostesses grounded because they married—into gracious and charming tour guides for the $125,000 recreation center and swimming pool that serves each group of 235 townhouses. Visitors must tour the recreation center before the models.

Hallcraft plugs the theme that townhouse living gives a family "time enough . . . facilities enough . . . features enough . . . savings enough . . . to do what you've always wanted to do" so hard that he even excludes mentioning sales prices. If anyone wanted to pay cash, units would cost between $16,700 to $21,000. Few do. Most take Hall's conventional condominium financing which lets buyers move in for $750 to $1,000. Bestseller is a three-bedroom, 2½-bath model with 1,484 sq. ft.

At Southern Gables, Wood Brothers Co. run by Bob and John Wood Jr. build so efficiently that visiting builders keep saying, "It doesn't add up." Wood made 12 sales in the first three weeks at Southern Gables. Buyers are going for the largest and most expensive model, a two-story colonial with 2,018 sq. ft. The $23,500 price tag includes a two-car garage, 2½ baths, full basement, fireplace, built-in range and dishwasher. Wood offers plenty of options, including air conditioning ($775 to $855) and a shake roof ($500).

Near Lowry Air Force Base east of Denver, Windsor Garden has sold 600 condominium units at $12,950 to $30,000. No children under 17 are permitted. In nearby Aurora, Los Angeles Builder Milt Brock is selling from four models designed by L. C. Major. Aurora (like most Denver area cities) requires that three-fourths of a house's exterior must be faced with brick, but Brock is bringing houses in at $12,250 to $16,500. Sales Manager Jack Ward rarely stresses price; a huge wall chart shows monthly payments for each model and the monthly cost of options such as an electric range, patio sliding door or fireplace. "We're selling payments—half our business comes from staff sergeants," says Ward.



DETROIT: *buyers, buyers everywhere, but how to get the houses built*

"Our builders have taken out permits for 30,000 units, but it's anyone's guess as to how many of them will get built." This pensive remark by HBA Executive Officer Irv Yackness sums up the current state of Detroit's housing market.

The continuing auto boom, coupled with some major new factory building (both Ford and Chrysler have put up giant new plants on a 24-hour, seven-day construction schedule) have more than absorbed the labor capacity of the city. Casual labor has disappeared, and any competent building tradesman can work as many hours a week as he wishes. (One irritant to builders is the workman who works for premium pay Saturday and Sunday and then doesn't turn up on straight-time Monday morning.)

Two major builders, B. L. Smokler & Co. and Kaufman & Broad, are reported to have sold off the remaining lots in successful subdivisions because they couldn't deliver the houses in reasonable time. This labor shortage has led to the breakup of top-notch sales staffs and special arrangements by builders to hold key salesmen.

One successful new project is the 2,000-unit Somerset Park rental apartments, on a 240-acre site in Troy, adjoining the premium Birmingham residential area. Builder Philip Stollman is including a nine-hole golf course and country club, with swimming pool, man-made lake, tennis courts, community building, underground wiring and a major shopping center which will include Saks Fifth Avenue and a long list of high-style specialty shops.

There are 560 apartments and townhouses in all stages of construction—300 completed—and no sign of a single vacancy. Rental range: $150 to $290.

Project Manager Abe Ran is using machinery (forklifts, tractors, cranes) to make up for the manpower shortage. His reasoning: each machine replaces at least three unobtainable laborers. He mourns: "We hated to see college start in September, when all those summer workers went back to school." This winter he intends to shelter his masons with plastic film and blown-in heat so brickwork can continue. He is also building carports of poured concrete in aluminum forms that simulate brick walls.

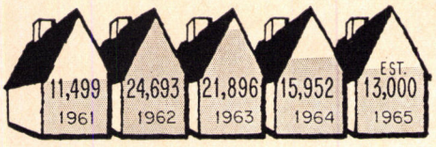
Kaufman & Broad is 478 units behind sales, according to Detroit Manager Robert Zisette, and has cut its land acquisition and advertising budgets to the bone. It is building up its own carpentry crews instead of subbing out the work, hoping to provide regular work and paydays to its men through the winter in order to hold them when spring comes.

K&B just opened a 704-unit townhouse project called Three Fountains in which units sell for $16,000. But it estimates that the labor shortage will cut its Detroit volume from $20 million in 1964 to $15.5 million this year.

Mandell L. Berman, executive vice president for B. L. Smokler & Co., notes that the demand of the middle-income, single-family housebuyer for semi-customizing has taught them how to live with the production problems that change orders bring. Smokler has 18 projects in states as far away as Missouri and has

built over 1,000 units of 221d3s. "It took us a long time to learn to make the 221 program work, and we feel that any builder coming into it now will be that far behind us."

Smokler is readying 30 townhouses in the Elmwood renewal area, thus joining other Detroit homebuilders like Edward Rose & Sons who already operate in the adjacent Gratiot renewal area.



HOUSTON: *buyers demand more amenities whether the house costs $15,000 or $30,000*

"You have to put all the amenities in a $15,000 house that you put in a $30,000 house," says President Jerome Howard of Mortgage and Trust Co. "The buyers have had dishwashers and central air conditioning in their apartments and they want them in their houses."

The air conditioning battle has been won in Houston; Suburban Homes, run by Lawrence O'Donnell of Suburban Lumber Co., offers one of the rare non-air conditioned choices in two of six models in seven subdivisions in Houston. Since all houses are priced at $11,350 or $11,450 (depending upon the subdivision) they offer an accurate test of cooling's pulling power. Even at this price, among the lowest in Houston, buyers pick air-conditioned models by a wide margin.

At nearby Hidden Valley, Builder Raleigh A. Smith offers buyers their choice of gas or electric kitchen appliances with a single servicing agreement. Dishwashers are standard in all Smith models over $15,950.

And Houston is space-oriented. HBA Executive Officer Bob Batten says half of all Houston houses have over 2,000 sq. ft. now. The one-bath house has disappeared and the bath adjoining the master bedroom is virtually standard.

Smith has found another sales aid—a pantry in every house. "It takes the place of about six cabinets—the ladies really like it," says Sales Manager Bob Goolsby.

But if Houston buyers want these amenities, they are willing to dispense with the familiar living room. Builder Harold Hill offers one model with a 12′x14′ living room. Other builders call this a "parlor," not a living room.

Still others, like Smith, have scrapped the living room entirely in favor of a large entry hall opening into a rear spacious family room. At Hidden Valley, this model promptly took over first spot in sales.

Del E. Webb has stopped building at 15,000-acre Clear Lake City, near the NASA space center and all but about 20 of his 288 houses have been sold. Sponsoring Friendswood Developing Co., controlled by Humble Oil and Refining, has brought in ten builders and expects 300 sales this year, says Project Manager Jack Byrd. Glen Norwood, Houston's biggest builder with about 1,100 sales this year, has Clear Lake's highest volume and his leader is a 1,750-sq.-ft. model at $20,950. Norwood tells buyers "no two houses are alike in one block," lets customers choose from five exterior elevations for each floor plan but permits no changes.

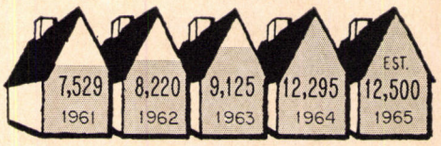
Perhaps Houston's handsomest effect is being achieved at Nassau Bay, 700 acres with water on three sides across from NASA headquarters. Nassau Bay sponsors—a group headed by Stewart Morris of Stewart Title and Jay Kamin of American Mortgage Co.—have banned the word "model" and insist that every house be different. A dozen builders will sell nearly 300 of these one-of-a-kind houses this year—and 90% are built on spec. Prices range upward from $22,500. Sales Manager Bert Cowand tested the townhouse market with 12 units this summer and sold out so quickly at $17,500 to $25,500 that he plans 100 in 1966.

Builders are pointing to the brighter sales in the NASA area as evidence of the power of market research. Until 15 months ago, the area was plugged on a "live where the fun is" theme because of the nearness of water recreation areas. But Market Consultants Rives, Dyke and Co. found that buyers cared more about schools, shopping and cultural activity than recreation.

The 16 developers in the Bay Area Development Council have since sparked little theater groups, night courses by Houston colleges and more stores, to counter the trend, and it is working. "This is an excellent example of how market research turned a market upside down," says Rives, Dyke Vice President Ed Norton.

But the Bay Area is getting only about 30% of NASA personnel, says Builder Frank Marsters. Many are driving nearly 42 miles to Houston's choice Memorial Drive area. There Vincent Kickerillo expects to sell 150 houses this year, up from 124 in 1964, all over $30,000. For this market Kickerillo insists on hand-crafted interior finishing—all kitchen cabinets, stair railings and pillared fireplaces are done on the job. Kickerillo offers to customize, although 70% of his sales are on spec.

Highways have reshaped building here; the north freeway changed Raleigh Smith's Hidden Valley from a 45 minute drive downtown to 12 minutes. Anyone with a freeway location merchandises it, and Norman Dobbins' Pace Setter Homes recently trumpeted in an ad, "The freeway system wasn't built for Pace Setter Homes, it just looks that way," to dramatize the fact that Pace Setter has 13 subdivisions along the freeway network.



KANSAS CITY: *a solid market rarely cursed with booms or busts*

Perhaps because it lies between the West and the Midwest, with its economy based on regional assembly plants and the distribution of a wide variety of manufactured products, Kansas City has avoided the housing rollercoaster that has made so many cities unpredictable. This year, the two-state, six county, market will hit 12,500 units, and a similar total is expected in 1966.

One of the most successful innovations in the market is Builder Alex Bascom's use of the planned-unit development for projects that include duplex units around the perimeter and townhouses and a recreational area (swimming pool and playground) in the center. His Greenbrier project (one of five he has under way) has 70 duplexes ($14,950 to $17,000) and 322 townhouses ($14,000) in its 35-acre site. Bascom makes thoughtful, thorough presentations of site plans and elevations to both planning commissions and individual families living nearby and has won nine straight zoning appeals without a single voice of opposition. Says Bascom: "Past performance is the key. They know I will do everything I say I'm going to do. Each time it gets easier."

Despite the preponderance of traditional design (Kansas City has long featured French Provincial and a Spanish/Mediterranean influence is creeping in in 1965), one builder successfully sticks to contemporary. John Kelly, who has about 50 modern houses in his Galway Domains subdivision (most designed by his architect-son, Steve Kelly), has also built two streets of duplexes for rental. The two-bedroom redwood and glass units rent for $135 a month and have basement garages on the uphill sites and carports on the downhill sites.

The 50-year-old firm of J. C. Nichols continues as one of the leading land developers, and its newest effort is 900-acre Oak Park, where four leading builders have models, all furnished by Macy's. Like most prestige subdivisions, utilities will be underground.

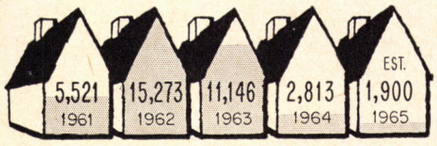
Nichols also joint ventured the 420-unit Kenilworth apartment project with Builder Max Okun, built around an impressive community building and swimming pool. Landscaping, fountains and man-made streams add to the beauty of the site (and keep the project almost

continued

100% rented). A survey showed that only 40% of the tenants used the community facilities the first year.

The all-white bathroom is very popular —wall tiles and painted surfaces as well as fixtures. There is extensive use of recessed ceiling lights, either fixed or swivel type, in entries, bedrooms and living rooms. Oddly, this is one market that has not fallen to the folding closet door, but remains a stronghold of the traditional wood swinging door.

Few luxury high-rise apartments have been built in the downtown area, although a half dozen are under way in the Plaza area, just a few blocks from center city. Reason: the area, created by J. C. Nichols, has the specialty shops, department stores and cultural centers that draw upper-income tenants.



LAS VEGAS: *a few islands of strength amidst the troubled waters of overbuilding*

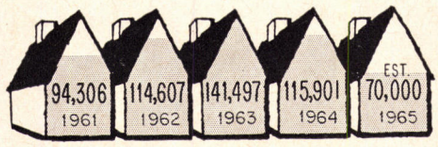
Any city that has seen housing starts fall by 85% in four years can say, "nobody knows the trouble we've seen," but Las Vegas is not despondent. In fact, commercial and institutional construction helped turn this year's $8 million drop in residential dollar volume to a $1 million over-all gain for the first nine months.

But statistics show the length of the road back. A September postal survey showed an over-all vacancy rate of 12.1%, with single family at a 7.6% ratio, and apartments at a crippling 21.6%.

Yet one small "adults only" townhouse condominium—Springhurst—sold 19 of its 45 units within a month of its September opening. Price range: $22,500 to $32,300, and the most expensive model has been the most popular. Strongest appeals: 1) freedom from all maintenance chores, 2) a swimming pool and clubhouse that would be beyond the budget of a single-family house and 3) limited size of the project, which minimizes potential disagreements over policy.

Sproul Homes built a municipal golf course for Clark County alongside their Winterwood subdivision, and almost every house that faces on the course has been sold, although the lots carry a $3,000 premium. Strongest seller has been a luxury two-bedroom model priced at $24,950 (off the golf course), which fits the needs of many smaller families.

Builder Charles Heers (Heers Bros.) is challenging the depressed market with a health-spa-oriented project of condominium attached houses. There are just two models: a one-bedroom unit ($11,250) and a two-bedroom version at $13,250. But a half dozen buyers who wanted more space persuaded Heers to put one of each size together to create a multi-choice, three- or four-bedroom plan priced at $24,500. The clubhouse has full health, medical, and exercise facilities, including a natural hot springs and therapeutic whirlpool baths. Buyers must be over 35, with no children under 18, but the builders are trying to avoid any connotation of a "retirement village." Sales results: 100 units of the first section of 375 were sold in two months. Carrying charges for all facilities (not including mortgage) will be $33.50 and $38.50 per month. A lake in the model house area creates excitement in this desert setting (it is fed by the overflow from the hot spring). Promotional material will be aimed at Los Angeles and Salt Lake City, home towns of many Las Vegas visitors.



LOS ANGELES: *the housing industry's giant takes a temporary breathing spell*

Some builders felt that the southern California housing market could never be satiated, but the past 18 months prove that it can have a little digestive trouble. Says John Parker, president of Macco Realty Co. (now owned by Pennsylvania Railroad): "All this slowdown proves is our industry's ability to produce housing beyond the capacity of the market to absorb it."

Hardest hit have been marginal builders overextended in land and inventory, but most major builders have remained fluid, with inventories kept within bounds. Larry Weinberg, of the Larwin Group, says, "Times like these often represent opportunities for the well-capitalized, sophisticated builder, who can see long-range value in projects with short-range troubles."

Townhouses, last year's Cinderella, have heard midnight strike in many areas, but Larwin's Tanglewood project in Orange County has stayed strong. At prices ranging from $16,900 to $22,300, the one- and two-story models have a strong family appeal (many townhouse projects were conceived as "adults only" housing). Another important plus, according to Marketing Vice President Mike Tenzer, is FHA and VA financing. Since January, 500 units have been sold (of an 1,800 total), and delivery of the most popular house (a one-story, three-bedroom, end unit) is sold out beyond June, 1966.

Some major efforts are being made to develop southern Orange County (including Ross Cortese's incredibly successful Leisure World at Laguna Hills). Mission Viejo is an 11,000 acre piece of the 53,000 acre O'Neill ranch that is being developed by the family, in association with General Contractor George A. Fuller & Co., and a local homebuilder, Donald L. Bren. Three projects are planned on the first 1,000 acres: Harlan Lee and Byron Lasky will build in the $28,000-to-$37,000 price range; the Deane Bros. (Jim and Ben) will have houses from $23,000 to $28,000; and Bren will come in at the bottom of the market, $18,000 to $23,000.

Entrance to Mission Viejo is right at an exit of the San Diego Freeway (and has $150,000 in landscaping in the boulevard entry). Most buyers are expected to come from families who live and work in closer-in areas of Orange County.

Deane Bros. expects to cause real buyer excitement with versions of their garden kitchen in each of their five models. Triple-track sliding windows open all kitchens to sheltered patios outside, and breakfast bars outside these windows make the rooms truly indoor-outdoor.

Each builder will have his own sales area, with fountains, lakes, contoured land, sales offices, etc., and Mission Viejo will contribute to over-all promotion of the area. Southern California still outdoes the rest of the country in presentation of model houses, and investments of several $100,000 in "front money" are taken for granted by the bigger builders. And their merchandising budgets provide for the best they can buy in landscaping, color, sales training, advertising and public relations.

One recreational complex with a different angle is Builder Dick Cavanaugh's Glenmeade, on the eastern perimeter of the Los Angeles market, in the midst of the horse farm country around Pomona. A riding club, stables and corrals will be at the center of the 1,100-house project, and 27 miles of fenced bridle trails will wind through the community. Price range: $17,300 to $24,900.

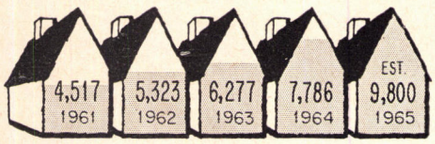
Buried utility lines are the rule in most new subdivisions, showing obvious cooperation between builders, utilities and lenders to provide this amenity to homebuyers. Appliances, too, have been upgraded, and it is unusual to see anything but middle- or top-of-the-line equipment in kitchens. The "builders' model" equipment seems on the way out.

Many West Coast builders have made special trips to see La Costa, a new resort-spa community north of San Diego that is aiming at the same kind of social and financial leaders as nearby La Jolla. There are two focal points: an 18-hole championship golf course with a

$2-million clubhouse that has already attracted two major tournaments, and a completely equipped health spa, with full medical, diet and beauty facilities.

Three Las Vegas builders, Merv Adelson, Irwin Molasky and Harry Lahr are behind La Costa, a 3,000-acre natural bowl of hills overlooking a central valley, three miles inland from the ocean. Clubhouse, health spa, and five model houses were designed by Architect Ed Fickett. Price range: $44,000 to $55,000, including lots priced at $11,700 to $18,500. Condominium townhouses are under way, from $27,900 to $35,000.

La Costa is aimed at professional or business men who can arrange their own work weeks, and at the international jet set, who might keep a house available for use anytime during the year. The favorable year-round climate is expected to give La Costa an edge on desert and/or mountain locations that can be used for only a few months out of the year.



LOUISVILLE: *discovering the apartment boom two years after the rest of the U.S.*

Louisville apartment builders will build as many units this year as they've built in the three previous years combined, according to Jefferson County permits.

By September, they had taken out 2,560 permits, up 71% from 1,501 last year. Only two years ago, when the rest of the U.S. was hitting its peak in apartment building, Louisville builders started just 683 units—16% of the total. Now apartments account for 41%.

There are sound economic reasons for Louisville's new growth. Employment is at record levels and unemployment is under 3%. General Electric alone has accounted for 2,000 of the 10,000 new workers in Louisville and Ford and IBM are expanding.

Though the apartment boom in Louisville appears to have reached its peak (Advance Mortgage observes a slackening in the third quarter), many builders report high occupancy rates. Martin L. Adams' Fountain Square, a half-mile strip of 320 garden apartments, have waiting lists for three-bedroom units ($151 a month), no vacancies in one-bedroom units ($111) and "only a few" two-bedroom units available ($126 and $136). Stan Watson's Carriage House (rents $95 to $160) is fully occupied.

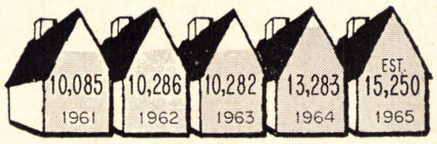
"I would think that apartment building would taper off now," Says William Laufenberg, president of Greater Louisville First Federal S&L, "but I thought that last year."

Single-family starts are continuing a gradual increase. Nine-month permits for 1965 were 3,652, up 2% from 3,585 last year (during the same period) and 3,477 during the same period in 1963. Jack Durrett, Joseph Cambron and other builders are moving low-cost houses with help from FHA's work-equity program, though Durrett finds sales at his McNeely Lake Village ($12,000 to $15,000) "disappointing." He guesses that young, first-time buyers don't have time for lakeside recreation.

Builder Jack Farley's low-cost projects near Dixie Highway in the Southwest are selling well to young buyers, but 30% to 40% of his 250 sales are going to older first-time buyers who have moved away from rural villages or out of rental houses. (Louisville has a proportionately large stock of old houses for rent.)

Bardstown Road is Louisville's dividing line between the low-cost South End and the traditionally higher priced East End. But Elmus S. Ussery's Hollow Creek on "the wrong side of the road," has capitalized on a growing demand for houses in the low $20,000s from transferee buyers who put less stock in location. His project has helped extend the boundaries of the prestigious East End.

The biggest builder in the East End is former HBA President Ron Karzen, who expects 70 sales in a $24,000-to-$32,000 price range (same number as in 1964). Transferees, most of them earning between $12,000 and $14,000, account for over half of his sales.



MIAMI: *higher-priced houses and suburban apartments are buoying starts*

Miami is a study in contradictions: builders of over $30,000-houses are enjoying their best sales in years while builders in lower price ranges are still trying to sell against the competition of Miami's well-advertised clusters of FHA and VA foreclosed houses. And rentals in dozens of smaller low-rise garden apartments in the suburbs are running so strongly that 75% of all Miami units this year may be apartments.

Leading the way are builders like Sam Jennings, this year's HBA president, who is now building nine houses on spec—from $31,900 to $54,900. He has eight other contract jobs in production and will deliver $2 million of houses to West Miami buyers this year. "We pay top dollar for our lots ($6,500 and up for ½-acre lots, $12,000 and up for full acres) and turn out a quality house," says Jennings. "Fortunately people have bought them—rarely does a house stand over three or four weeks."

Today's buyer, says Jennings, "knows more about a house than I do. They tell me about mortgage terms, about the finishes and appliances being offered by my competitors." Most of his buyers are upgrading from post-war houses and want 80% conventional loans. To attract this discriminating buyer, Jennings says, "I use products that people cannot argue with—brand names that are obvious marks of quality."

Builders at the lowest end of the price scale tell a different story. "My biggest problem is qualifying buyers," says Bud Laurence, who, with brother Ken, runs Laurence Construction Co. In recent months Laurence had to take 102 deposits to make 59 sales. "FHA is really bearing down," says Laurence, because Miami's three-year wave of foreclosures is still continuing. At Laurence's Palm Springs North subdivision, the three cheapest models from $12,050 to $13,150 are selling fastest. Says Laurence: "Foreclosures are our biggest competition. We have actually lost sales when FHA has turned down a buyer's credit on a new house and then approved his credit to buy a foreclosed house down the street."

But even in this price range, Laurence finds that plain vanilla houses will not catch the buyer's eye. He includes luminous kitchen ceilings in all models. And he and other builders in this range are swinging heavily to L-shaped models which let the house front on either a shrubbed entry patio or a rear screened patio. And the bath off the master bedroom is standard in all models but a two-bedroom retirement house.

But in southern Dade County, builders at a slightly higher price range are finding that spaciousness doesn't always click. At Fairway Houses (one of four builders who jointly advertise the Colonial Drive area), buyers skip a four-bedroom, two-bath model at $16,900 to buy a three-bedroom, two-bath house with a sunken living room. "It has a little bit of fanciness—that's what people want," says Max Goldstein, the builder.

To stir buyers, builders are openly competing with themselves. Miami's biggest builder, F. & R. Construction Co., has opened models in two different price ranges in the same area under two different names—Point Royale and King's Grant. Not far away, Builder Martin Wollin is selling under *four* different company names in his South Miami Heights. Wollin has also tapped the hot apartment market with 60 units at $110 for one bedroom and $135 for a two bedroom. For $25 a month he adds furniture from his model homes and if the tenant signs a three-year lease, Wollin lets him buy the furniture for $1.

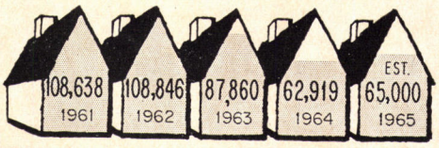
continued

He has never had a vacancy lasting over one week and is pushing 60 more units to completion.

Showmanship can still bring out buyers, as Bernard Janis found when he drew 25,000 people to his Kendale subdivision with massive advertising. Buyers found a striking model home area with six houses circling a lagoon.

In Miami Lakes, a 3,000-acre new community, Bill and Bob Graham say they have almost stopped selling standard model reproductions in Miami's weakest market, $20,000 to $30,000. They call their models "idea houses" and promote the many variations available. They will sell nearly 175 houses this year with an average price of $22,000, up sharply from the $14,000 houses they opened with three years ago. Reasons: today's buyers want more appliances, all underground utilities and lots fronting on the community's man-made lakes.

Miami Mortgage Banker Lon Worth Crow attributes the surge in apartment building to the increased acceptance of apartment life. Tenants can enjoy many amenities, especially a swimming pool, that the homeowner often cannot afford.



NEW YORK CITY AREA: *low-priced condominiums and a suburban apartment market*

This three-state regional housing market, once an industry leader, for some years has had to look to other cities for new ideas. Today, although the sales picture is hotly competitive, the three most successful innovations have been imported: 1) condominiums (especially in the lower priced suburban market), 2) recreational and community facilities and 3) garden apartments for distant suburbs.

The high-rise private apartment industry within the city is almost moribund, and permits were taken out for only 8,874 units during the first eight months of 1965 (compared with 50,000 in 1963 and 70,000 in 1962 and 1961), with only newly accessible Staten Island showing an increase.

Several sell-out condominium projects have brought a rush of activity in this field, and the state Attorney General's office estimates that permits for 5,000 to 10,000 condominium units will be requested in 1966, compared with 2,000 this year.

Tucson-based Lusk Corp. sold out a 215-unit project of townhouses in Westchester County last spring, priced from $15,650 to $24,380 complete with a 4,000-sq.-ft. community building and outdoor swimming pool. Lusk also has plans for a 750-unit project near Tarrytown, which will require rezoning. Prices here will go as high as $30,000.

The units in the new project, according to Manager William Baker Jr., will have larger bedrooms, washer-dryer space in each unit (instead of common laundry facilities) and Dutch Colonial design with mansard roofs.

Seymour Sadkin, who has diversified into every kind of house and apartment, is also doing well with condominiums. In two days he sold out 124 two-story attached houses (priced from $27,000 to $30,000) in outlying Queens County.

The newest "murderers' row" (a heavy concentration of model houses along a main highway) is in Suffolk County, near Bill Levitt's Stonybrook. Builder Donald Partrick's Heatherwood hit the low-priced market hard with a 1,600-sq.-ft. high-ranch model that sold for $15,000 on a ⅓ acre site. Levitt is experimenting with his first basement houses in his Stony Brook development, offering this at a $1,500 premium to test the market.

In northern New Jersey, Levitt's Lakeridge project sold out the first year's production (about half the 315 houses in the development) in three weeks, at the highest prices the company had ever put on houses: $26,500 to $31,500. A 60-acre lake with clubhouse, swimming pool, hiking trails and 45 acres of greenbelt was an eye-opener in this area and price class. (The first Levitt recreation centers date back almost 20 years to Levittown No. 1 on Long Island.) Membership fees for use of the facilities have been guaranteed by the builder at not more than $100 a year per family until 1970. The homeowners' association will own and maintain the facilities.

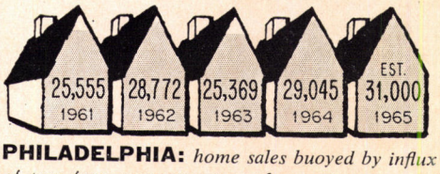
Kevork Hovnanian, who will sell about 200 houses in his Yorktowne development, says he tried to sell the township on a cluster planning scheme but was turned down flat. So far, the Planned Unit Development idea and other forms of new land planning have been proposed by few builders and accepted by even fewer planning commissions and zoning boards.

In both New Jersey and in Suffolk County (the outer end of Long Island), garden apartments continue strong wherever builders can get zoning for them. Donald Partrick will build 400 apartment units this year and hopes to put up 700 in 1966. "The market is solid and we're renting most buildings before they're completed." But a growing resistance on the part of zoning officials in Suffolk towns is choking off some of the growth that the demand would make possible.

Central New Jersey, too, is seeing more garden apartments, and the demand seems unsatisfied. Builders Howard Siegel and Nathan Miller now have 400 units rented or under way between New Brunswick and Matawan. Says Siegel: "The industrial growth here has brought a solid migration of high-income young couples who haven't the cash to buy houses, but who will rent a well-appointed apartment. And the townships much prefer rezoning for garden apartments than for houses." Figures bear him out.

Permits for 3,364 apartment units were granted in Monmouth County last year, as against only 2,443 single-family houses, in spite of the fact that the county is heavily open land.

Everyone is awaiting the all-out opening of Ross Cortese's Leisure World—2,600 acres athwart the New Jersey Turnpike near Princeton. Delays in getting clearance from state agencies in New Jersey and New York prevented an all out advertising and promotional campaign for the scheduled opening. Designed by Royal Barry Wills Assoc., the 30,000-unit project has a timetable of seven to eight years, with the first year's sales goal set at 3,500. The sales compound, a reproduction of a New England colonial village, has 14 model buildings with 15 different floor plans for sale as co-ops from about $16,000 up to $25,000. Several earlier attempts to create retirement housing developments in New Jersey had only limited success, but no one has attempted such an all-out production.



PHILADELPHIA: *home sales buoyed by influx of transferees; apartment market revives*

Transferees, brought in by General Electric, Univac, Boeing's Vertol Division, the federal government and other organizations, are giving the Philadelphia housing market a lift. Permits through September were up 20% with both houses and apartments enjoying an increase, according to Philadelphia's Department of Licenses and Inspections.

About 25% of all transferees coming into the Philadelphia area in the next few months will be looking for houses priced above $25,000, says Ted Robinson, whose publication, "Home Finders Guide," is widely circulated among personnel directors. Requests for information give this further breakdown of transferees: another 35% want houses priced $15,000 to $20,000; 25% want houses in the $20,000 to $25,000 range; and 15% want to rent. Builders like Jim O'Brien, Joe Lenny and Richard Goodwin, says Robinson, are attracting many transferees into their New Jersey projects with a determined follow-up effort.

Main Line communities, west of Philadelphia, are attracting most attention from new buyers, partly because of their good schools. Suburban New Jersey housing is selling well, while Montgomery Co., Pa., northwest of Philadelphia, is running a strong third in transferee preference. Bucks Co., northeast of Philadelphia, is far behind because of its lack of industry and its poor commuting to Center City.

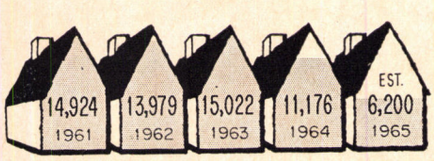
Builder Harry Raff says his 200-lot project in Bucks Co. is "hard-selling," but a well-advertised circular staircase is attracting buyers to the project. Prices begin at $22,900, but most houses sell at $25,000, after upgrading. Raff is opening a single-family project in Norristown, Pa., in the spring, to sell to workers in the space-research labs.

Phil Lindy (Lindy Bros.), already building in this area with a new project, cites good response to his two-story colonial and split-level models, $29,000 to $37,900. Lindy sees a void in the Philadelphia market in this price range to satisfy the influx of families with annual earnings between $15,000 and $18,000.

Philadelphia's Northeast row house market has matured. Hyman Korman's vast 2,500-unit project has just sold out. Sales in his smaller 1,000-unit Pennswood are strong (Korman expects another year of 425 row house sales). But buyers are selective—they want neighborhood facilities and luxury features, such as a full bath off the master bedroom.

Alfred P. Orleans is selling an $800 full-house air conditioning option to buyers who are attracted by his no-money-down offer. Orleans sells 65% of his row houses this way by absorbing the FHA-required 3% down payment on prices ranging from $12,400 to $13,990.

Philadelphia's apartment market is recovering from oversupply. Apartment construction is brisk. Orleans says his apartments are less than 1% vacant. Jack Blumenfeld's Secane (Pa.) garden units are fully rented, and Blumenfeld is planning two other projects. One is on the Main Line (200 units) and another is located within the city limits at the former Thomas E. Mitten 20-acre estate.



PHOENIX: *after the ball, the city has begun working off the headaches*

Phoenix has almost returned to normal after an intoxicating bout of speculation. Out-of-town builders are no longer pouring off in-bound flights, commitments in hand. Repossessions (upwards of 1,100) still hang over the market, though Realtor President John Noble says the used-house market has firmed up considerably, and commercial construction is high.

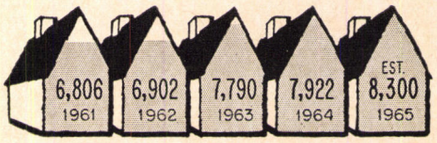
But local builders who didn't fall into the speculative overbuilding trap are still finding pockets of demand, with most strength in the $17,000-to-$20,000 range. Though a three-month strike of building mechanics earlier in the year had a depressing effect on expensive houses, Builder Perry Kruidenier has sold four modifications of a $72,000 Spanish-style speculative house he built in the foothills. "I haven't sold the original yet, but as long as I keep selling houses from it, it's a good investment."

Big Builders John Hall and John Long are both building townhouses in the lower price range, and upper-middle and upper-income buyers are also showing interest in townhouse projects. Builder Dave Friedman is selling between 150 and 200 houses per year in his Villa Monterey subdivision ($20,000 to $28,000), which has one- and two-story attached houses with a Spanish design flavor. Owners have title to their own house and yard, and an undivided interest in common areas and recreational facilities.

An exciting new approach to the upper-income market is Builder Dell Trailor's small (under 50 units) planned area developments of attached houses. Sutton Place is a 47-unit project of $28,000 to $40,000 houses, none of which are more than a few hundred feet from a walled central pool, terrace and entertainment pavillion. Owners wishing to use the area for large-scale entertainment merely reserve it in advance, and the other families honor their privacy. Says Trailor: "To get comparable accommodations on your own grounds would require a $200,000 home." His Beekman Place project, directly opposite Sutton Place, will be even smaller (35 houses), and even more private (no houses will face the main street, and there will be iron gates at the entrance). Both projects were designed by Architects Haver, Dunn & Jensen.

Builders Frank Knoell and Ellis Suggs are doing well in the nearby college town of Tempe. Both sell in the $14,000-to-$18,000 price bracket, and both have special sales appeals. Knoell has a trade-in plan that guarantees purchase of the old house at 85% of appraised value (most are sold before he has to take possession), and Suggs will customize his houses any way the buyer requests.

Since most sources agree that Phoenix has a rock-bottom market for at least 7,000 units a year, and since 1965 output will not reach this, 1966 should see a much healthier market, with unsold inventory reduced to a safe level. One worrisome item: land costs have not dropped even in the present slow market, and an upturn in construction will undoubtedly see raw land continue its upward spiral.



PITTSBURGH: *skyrocket in homebuilding may turn into a sputter next year*

Homebuilders are enjoying their best year since 1956. Apartments for the first eight months are up 63% over last year, according to Advance Mortgage Co. Single-family starts are up 6%.

Underlying the boomlet is an unexpected revival in employment (led by U.S. Steel and Alcoa) and easy money. Financing is so good investors are buying garden apartments, refinancing them and walking away with a 10% profit, says Advance.

Ryan, with about one-fourth of the market's 5,400 single-family starts, expects 1,200 sales this year, compared with 1,050 last year.

But all this prosperity may be short lived. Pittsburgh, despite its sudden upsurge in employment, does not have a deep market for new housing. ACTION Consulting Economist Uriel Manheim warns that Pittsburgh can expect to add only 10,000 households between 1960 and 1970. And yet, homebuilders are currently building at the rate of about 10,250 units a year.

Ryan, who began four years ago to look for markets outside of Pittsburgh, is already gearing for a slowdown in Pittsburgh next year, though an expansion into suburbs north of the city may actually stabilize sales for his company. (Ryan's expansion into 12 new cities has paid off. The company expects to pass $60-million in sales this year.)

Pittsburgh is still three or four small markets, split by the Monongahela, Allegheny and Ohio rivers. In Pittsburgh, few buyers cross a river when they move. Builders in the eastern quadrant are now deriving sales from close-in east side buyers who are moving out of two-bedroom homes built after World War II.

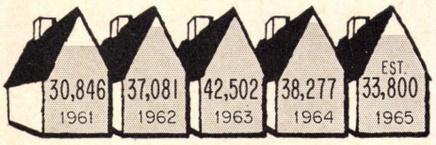
Hilly terrain forces builders to carve plots out of the sides of hills and keep their tracts small. Calvin Crawford is the only other builder who'll sell over 100 houses this year (he'll sell about 150). Roland Caterinalla jumped to 75 sales this year but expects to slip back to 50 again next year, as he expands his apartment building. Vincent Amore opened a new $40,000-a-house subdivision (135 lots) on a rolling golf course. Because of the scarcity of choice land and the high cost of lots, (which

continued

average $5,000 to $6,000 in Pittsburgh), Amore gets $500 deposits from prospective buyers just for the chance to pick out a lot in new sections of this tract.

Pittsburgh builders are also hobbled by the conservatism of their buyers, who have long resisted wallboard, steel tubs, trusses and other innovations. The split-entry, a favorite in New York and other Eastern markets for ten years, is just beginning to make headway.

Builders also have difficulty attracting labor, but labor rates are not high ($3 an hour for a good carpenter). HBA President Norville Lilly expects to build 125 houses this year (in Pittsburgh's deepest market—$18,000 to $25,000), compared with 100 last year. Most of his sales are to second- or third-time buyers. Young people tend to go into apartments in Pittsburgh, he says, which has forced most volume builders into multi-family housing.



SAN FRANCISCO-BAY AREA: *apartments off, but single family stays steady*

In the nine counties around San Francisco, starts are down 23% from 1964, but builders are not panicky, just concerned. Reason: most of the drop is in apartments, where builders have cut back until normal area growth absorbs a temporary surplus.

One project with no cause for concern is the 900-unit Woodlake apartments in San Mateo, about half completed, with few vacancies. Developer Gerson Bakar put together a top design team headed by Architects Wurster, Bernardi & Emmons, and their plan presentation was so convincing that the plan commission asked them to repeat it at a public hearing. Result: not one protest, although the density was 28% higher than traditional siting would have brought. A plush clubhouse and health facilities, swimming pool, central lake and outstanding landscape design by Lawrence Halperin have made Woodlake tough competition for all apartments down the Peninsula. Rentals: from $165 for efficiencies to $325 for three-bedroom townhouses.

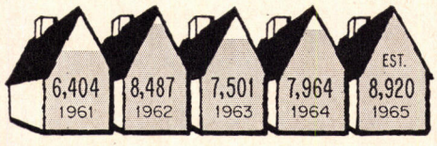
The big volume builders, like Henry Doelger (about 500 a year), are still marching across the hills on the ocean side of the peninsula, but sales are off from last year. Doelger has just added 900 apartments in his huge (3,000 apartments) Westlake development, and can go after the whole market, renting or buying.

In south San Francisco, Builder Mike Callan is countering market disinterest with 200 townhouses in a PUD called West Park (Prices: $27,950 to $35,950). Instead of the tiny side yards common to the city's detached houses, he has assembled all open space into a series of green belts winding through the subdivision. This open space has been deeded to the city, which will maintain it and bill homeowners, eliminating the need for the usual homeowner association maintenance. The handsome contemporary designs are by Architect Ed Fickett, who created so many of the West Coast's outstanding builder houses during the 1950s.

In the East Bay region, at Walnut Creek, Builder Danny Schwartz (Perma-Bilt Enterprises) has eight model houses ($28,500 to $32,500) and his two best-sellers are 1) an atrium entrance four-bedroom, two-bath, U-shaped, one-floor house and 2) a two-story model with four bedrooms upstairs.

A strong practitioner of the "do-it-yourself" method is Lewis Rahlves, who builds between 80 and 100 houses each year in Walnut Creek with one salesman and an office manager as his staff. His houses are lower priced ($20,000 to $25,000) than some of his competition, but a second generation reputation and long familiarity with the area keeps his volume where he wants it.

Executive Officer Bill Leonard says that the increasing willingness of East Bay cities to accept PUD's and new land planning ideas has been accompanied by stricter regulation. Builders are having to learn to work with, and satisfy, the demands of commissions and boards within the economic limitations imposed by the market.



SAN JUAN: *a rising sales market, facing many familiar mainland building problems*

The housing trend is still upward on the island, and the Planning Board predictions are for a 12.4% increase in residential dollar volume for 1965-1966.

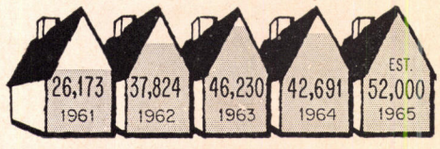
But buyers who were formerly unselective, primarily interested in shelter, are changing fast. Family incomes are rising 8% to 10% a year, and now buyers seek amenities, not just space.

Levitt & Sons is one builder resisting a trend to townhouses (which many builders see as an answer to rapidly rising land costs). Vice President Richard Bernhard says that families prefer detached houses and Levitt will drop even duplexes in its newest 700-unit Section Three. Since opening in January, 1964, it has put up 1,720 houses in Sections One and Two. The "hit" innovation is a two-story, four-bedroom, 2½-bath model, at $16,500. Levitt's 1,000 sales this year have had a huge impact on the market, and buyers particularly like the fact that all community facilities (schools, playgrounds, cultural and commercial centers) were completed and operating when the first families moved in.

Some of the same problems that afflict mainland building are beginning to hit Puerto Rico—soaring land costs, growing shortages of skilled labor, stringent government controls and some spotty saturation in the higher priced market. Builder James J. Wilson (Interstate General Corp.) says: "Our industry will follow the pattern of the mainland, only the trends will appear ten years later." His new project, El Senorial, will have 750 units, with some selling as high as $24,000 to $28,000. He feels the four-bedroom house will be popular, because the average family size is 5.3 persons.

High priced condominiums came a cropper last year, and some completed buildings are only sparsely occupied. The trend this year is to hold them to more moderate prices ($20,000 to $35,000) and to include a higher percentage of efficiency units. FHA is leery of any apartments where the rentals will exceed $200, but there is practically nothing for rent in San Juan in the low or moderate price range.

One controversial governmental program permits the purchase and resale of land by the Puerto Rican Land Administration to builders who will develop low-cost projects. Although many cry "expropriation," the first two projects are under way, one in San Juan and one at Arecibo.



WASHINGTON, D.C.: *more of the same, just better and better*

The only thing that can be added to Housing Consultant Carl Norcross' full page report on the Washington housing market (H&H, Oct.) is "condition continues normal—just great!"

For the first eight months of 1965, residential construction was up 20.6% 35,484 units—and a 50,000-unit year looked very possible. The strength of the market was evident in both single-family houses and apartments, but the apartment gain (23.5%) was four times that of single family (6.1%). The little-used category of two-to-four-unit buildings jumped from 16 units in 1964 to 813 this year, an almost unbelievable increase of 4,981%.

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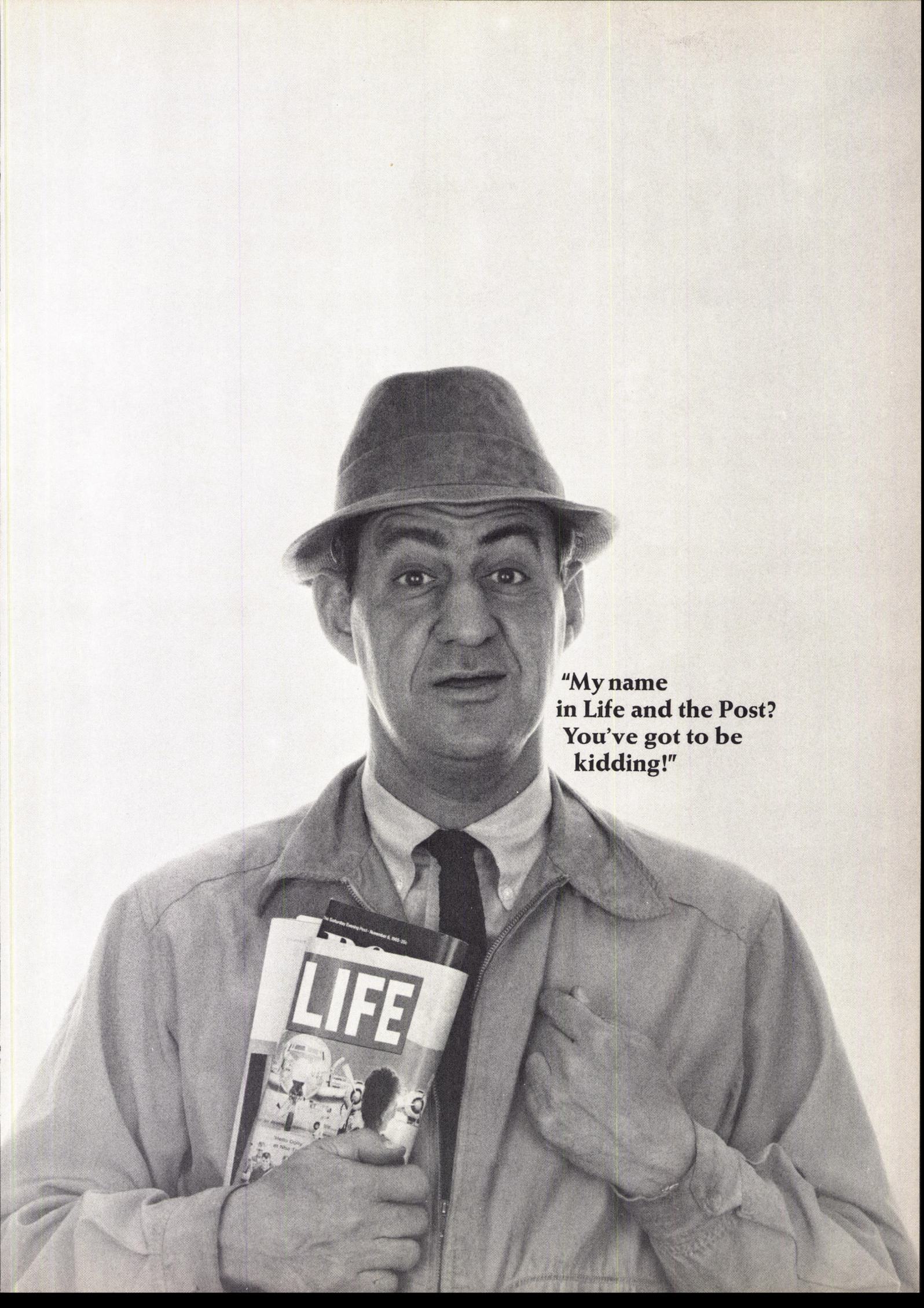
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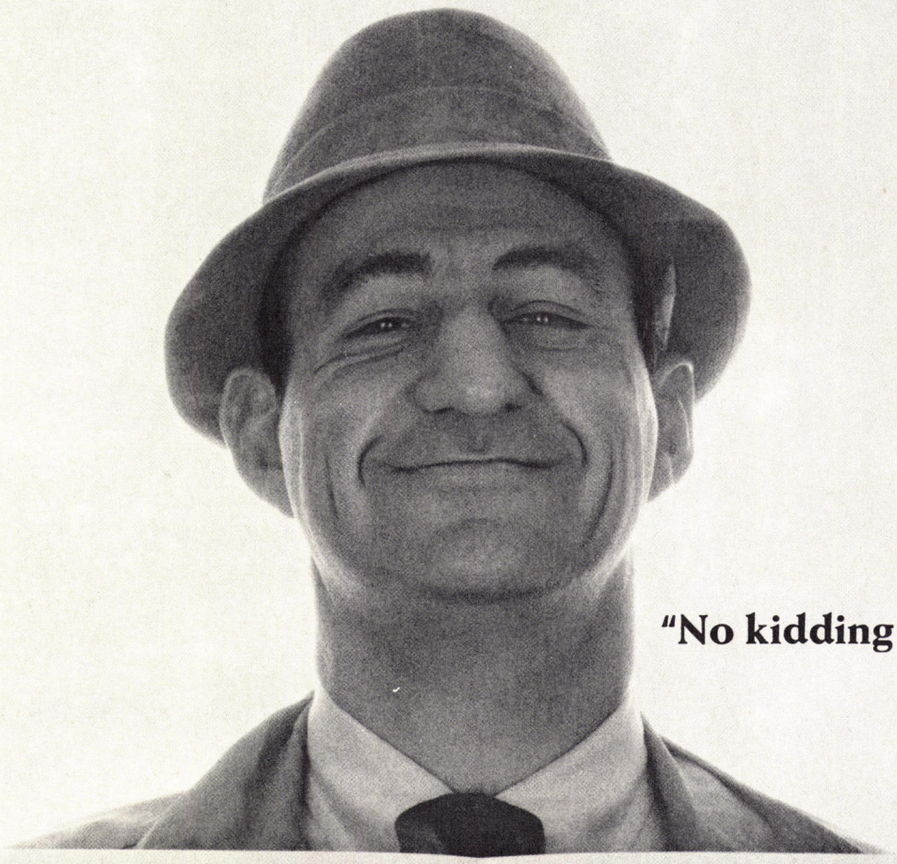

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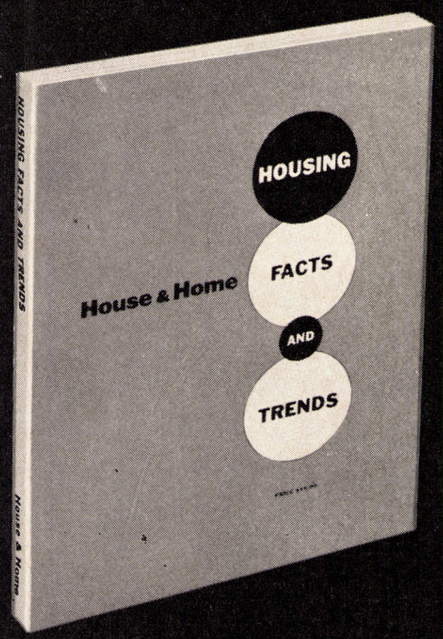

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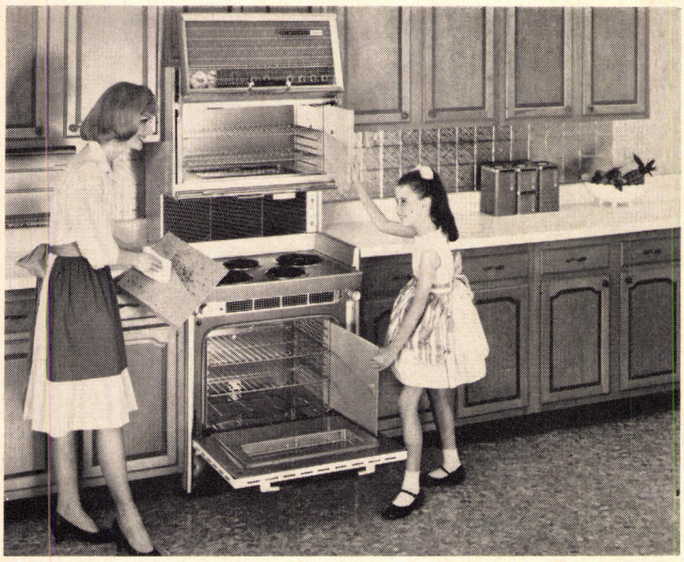
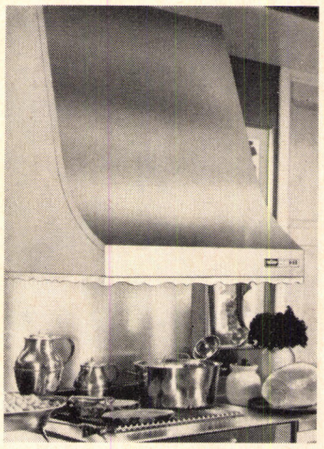
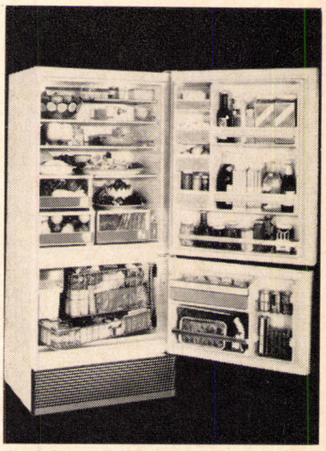
Kitchens



Easy-to-clean range has Teflon-coated, slide-out side panels, back panels and oven floors. Unit also has a glide-out window in the top oven. The 30″ unit has a built-in air vent system. Hotpoint, Chicago. *Circle 201 on Reader Service card.*



Built-in grilles drop into a cut-out counter top and provide 330 sq. in. of cooking area. Units come in wood, metal or masonry cabinets and are gas, electric or charcoal fired. All models have removable grease pans. Majestic, Huntington, Ind.
Circle 202 on Reader Service card

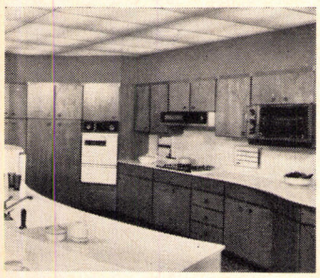


Refrigerator-freezer has 17-cu.-ft. net volume, including a freezer that stores 152 lbs. of food. The 30″ unit is said to cut down on use of electricity. An ice-maker that does not add heat and a 6 lb. storage bin are included. Philco, Philadelphia.
Circle 203 on Reader Service card

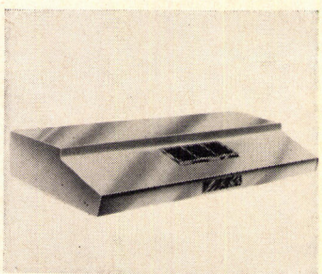
Kitchen cabinets have furniture-finished frames and fronts of solid alder in a dark walnut color. Over 125 individual units are available, all with a scribing allowance for out-of-plumb walls. Major Line Products, Hoquiam, Wash.
Circle 204 on Reader Service card

Gas range has a 20″ upper oven with a tinted glass window. The unit has removable side panels and can be used free-standing, counter-end or built-in. All models of the range come in five colors and white. Waste King, Los Angeles.
Circle 205 on Reader Service card

Wood cabinets are coated with a baked-on, mar-resistant finish. The character markings of the wood are preserved. Continental ring pulls are optional. Three other designs are available. United Cabinet Corp., Jasper, Ind. *Circle 206 on Reader Service card.*

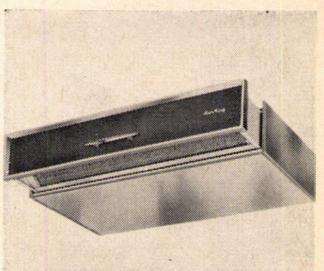


Cabinets come in sizes as narrow as 9″ and as wide as 96″. Further adjustments can be made with filler strips in matching finishes. Birchtone, walnut tone, white and gold and natural finishes are offered in three designs. Long-Bell, Long View, Wash.
Circle 207 on Reader Service card



Range hood needs no venting. Model 293 has aluminum and activated charcoal filters. Four screws and the electrical connection only are required for installation. Available in a range of colors and stainless steel. Rangaire, Cleburne, Tex.
Circle 208 on Reader Service card

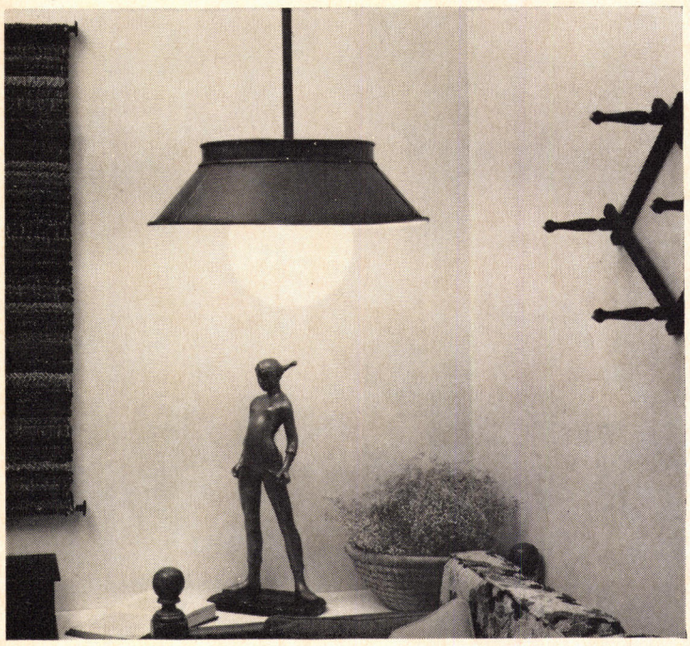
Refrigerator and freezer can be installed side by side or separately. The refrigerator has a 15-cu.-ft. capacity and the freezer holds 408 lbs. of food. Neither unit needs defrosting, according to the manufacturer. Revco, Deerfield, Mich.
Circle 209 on Reader Service card



Roll-out hood is available in ductless and ducted models. Unit has nylon rollers and starts automatically when it is rolled out. When not in use, hood fits flush with the oven. Models in 16″ and 19″ depths are available. Air King, Atlanta.
Circle 210 on Reader Service card

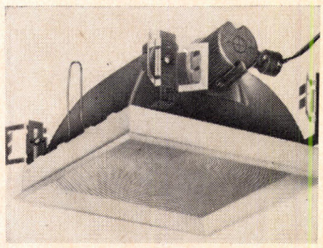
New products continued on p. 142

Lighting fixtures

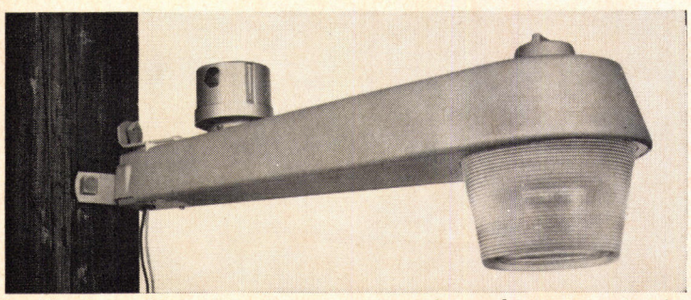


Hanging fixture is an adaptation of an 18th century French lamp. The unit is suspended by four brass chains and a center reeded rod. A 10″ opalescent globe and a colored round tole shade are included. Arco Lighting, New York City. *Circle 220 on Reader Service card.*

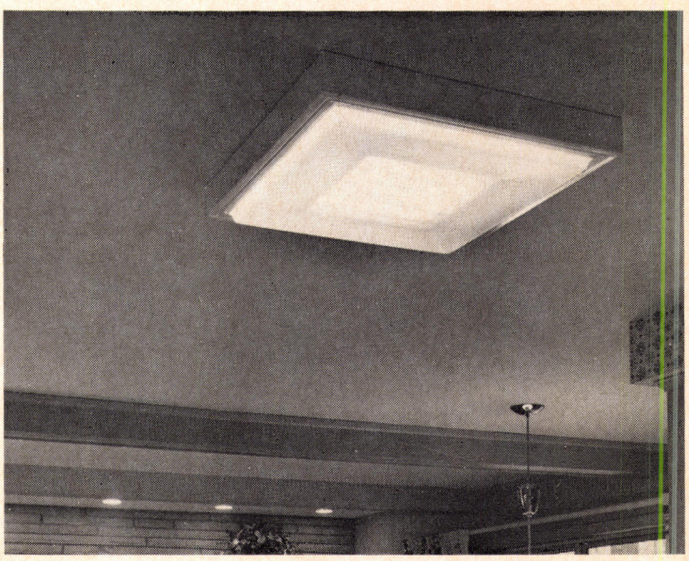
Post-top luminaire is designed for use with mercury lamps. The unit is de-energized by an interlock switch when top cover is removed. All-aluminum fixture, said to be long lasting, is available in nine colors. Line Material Industries, Milwaukee.
Circle 224 on Reader Service card



Incandescent fixture has wide-angle light distribution with controlled brightness. Recessed units are interchangeable with standard 12″ ceiling tiles. A one-piece aluminum reflector distributes light uniformly. Smithcraft, Chelsea, Mass.
Circle 225 on Reader Service card



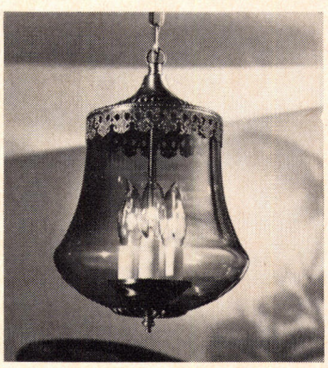
Luminaire, with a 100-watt mercury vapor fixture, has a photo-electric control to turn light on at dusk and off at dawn. One suggested use: at construction sites to discourage vandalism. American Electric, Southaven, Miss. *Circle 221 on Reader Service card.*



Fluorescent lamp is high in lumen output, according to the manufacturer. Mounted in a 2′x2′ fixture, the 1¼′-square light source is bordered with a diffusing plastic. General Electric, Cleveland, Ohio. *Circle 226 on Reader Service card.*

Lantern, made of weatherproof cast aluminum, is designed for post or wall-bracket mounting. Fixture has a charcoal-finish and Cathedral Matte glass. Four other shade styles are available. Lantern is 9¼″ x 19″. Prescolite, San Leandro, Calif.
Circle 222 on Reader Service card

Chandelier for five 40 watt candelabra base bulbs, is 16″ in diameter. Moroccan-influenced fixture is finished in black with a fluted walnut wood center and gold drip over black candles set in a leaf design. Del-Val Mfg., Willow Grove, Pa.
Circle 223 on Reader Service card



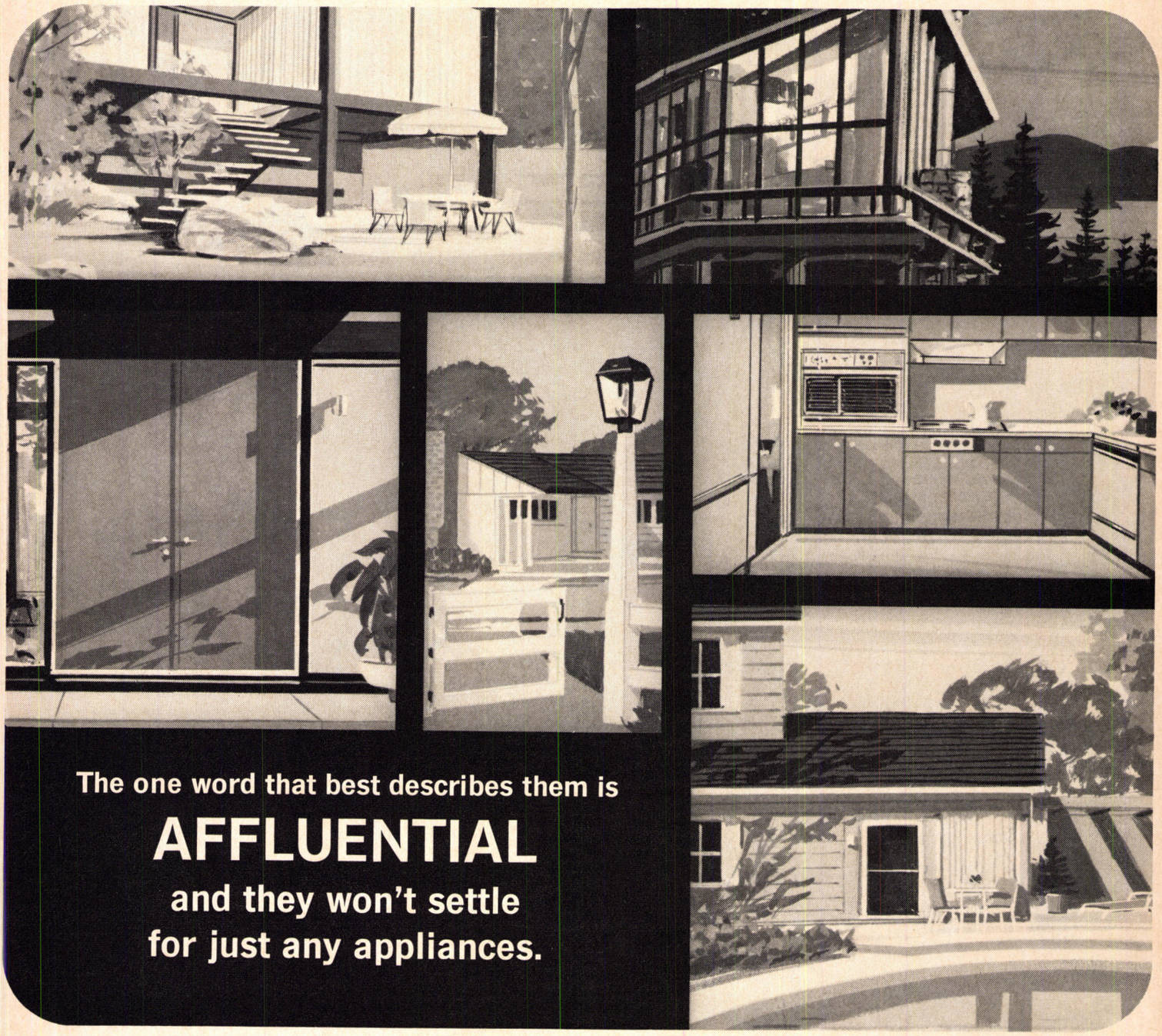
Lantern, for halls and foyers, is made of smoked glass. Gallery, bottom trim and chain are finished in antique brass. Fixture accommodates three bulbs. Unit can be hung 15″ to 32″ from ceiling. Thomas Industries, Louisville, Ky.
Circle 227 on Reader Service card

Coach lantern is made of beveled glass. Available in satin black with brass trim, white with brass trim, weathered brass and oxidized copper. The unit is 24¼″ high, 9″ wide and extends to 9¼″. Model is #340. Artolier, New York City.
Circle 228 on Reader Service card

New products continued on p. 144

TODAY'S HOME BUYERS WANT MORE OF EVERYTHING

and nothing but the best...



The one word that best describes them is

AFFLUENTIAL

and they won't settle for just any appliances.

The Affluentials are like no other home buyers in history. They're a whole new breed. They think differently. They buy differently . . . and *only* what they want. They have a new, youthful outlook, more sophisticated tastes. The impact of their ideas has revolutionized the market. And because they'll be looking hard at *your* homes, *your* kitchens, you should know them better. You can. Get the complete story of "The Home Buying Affluentials." Wire, phone, or write your nearest Frigidaire District Office.

Cater to the taste of the "Affluentials" with the plus of **FRIGIDAIRE**
APPLIANCES
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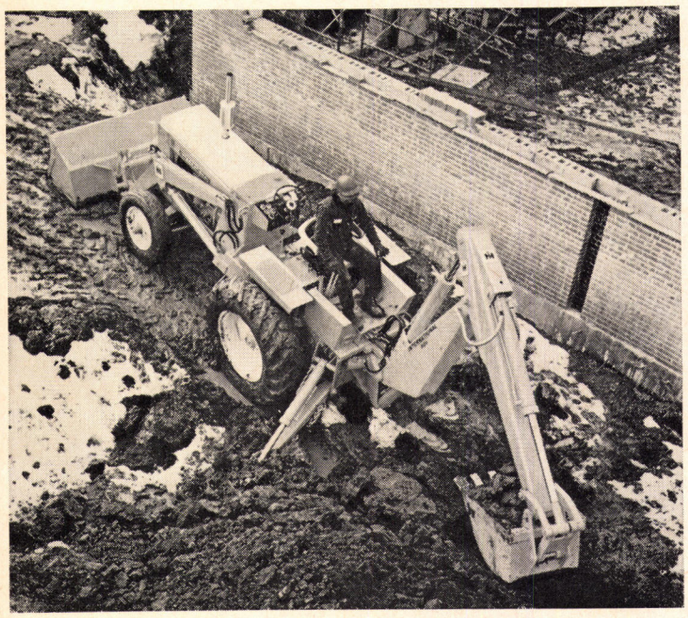
MEANWHILE, see what the "Affluentials" DO want in appliances, on the next 5 pages . . .

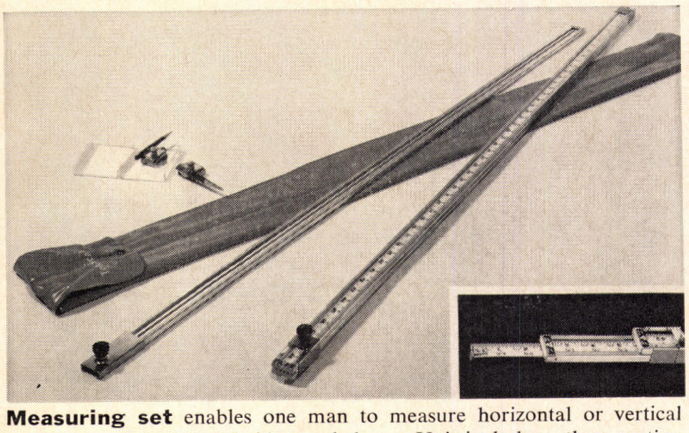
Tools and equipment



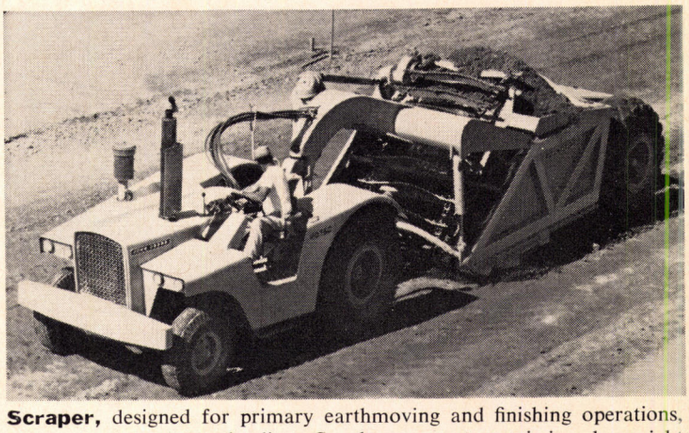
Loader-tractor has a lift capacity of 4,000 lbs. and a breakout of 6,500 lbs. Powered by gasoline or diesel, the unit has a working weight of 6,300 lbs. Five forward gears and one reverse are included. International Harvester, Chicago. *Circle 229 on Reader Service card.*

Hydraulic crane extends to 36′ and will lift up to 650 lbs. to 44′ height. Truck-mounted unit will also lift up to 1,460 lbs. within a 6′ to 22′ boom radius. Boom folds forward over cab or backward over load. Hiab Hydraulics, Wilmington, Del.
Circle 233 on Reader Service card

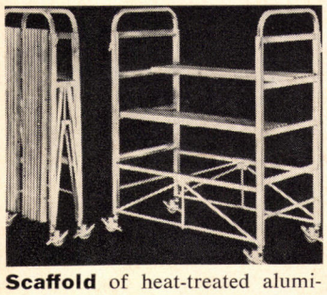
Light-duty pickup has a six-cylinder, 155 hp engine. Standard equipment includes seat belts, windshield washers, backup lights and corrosion-resistant brake lines. Three larger engines are also available for the same model. Chevrolet, Detroit.
Circle 234 on Reader Service card



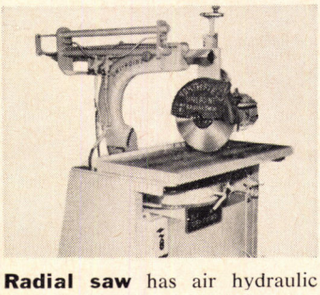
Measuring set enables one man to measure horizontal or vertical areas up to 16′ without ladders or helpers. Unit includes a three-section telescoping tool and a detachable 4′ extension and a vinyl carrying case. Tele-Scale, Buffalo. *Circle 230 on Reader Service card.*



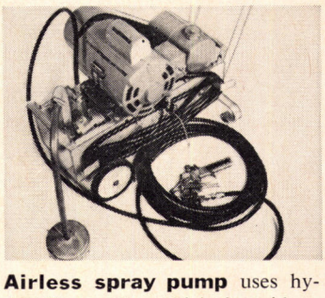
Scraper, designed for primary earthmoving and finishing operations, allows 9-yd.-a-minute loading. Synchro-range transmission has eight forward speeds, three reverse and affords 26 mph haul speed. John Deere, Moline, Ill. *Circle 235 on Reader Service card.*



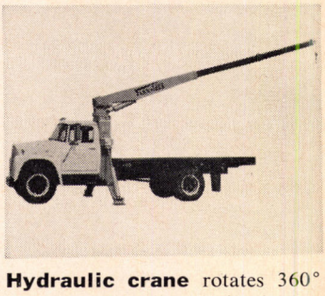
Scaffold of heat-treated aluminum is said to withstand 1,700 lbs. The portable folding unit requires no assembly. Adjustable safety rails for use on top level and four positive locking brakes are included. Roll-A-Fold Scaffold, Seattle.
Circle 231 on Reader Service card



Radial saw has air hydraulic cross feed for automatic cutting. Uni-Point's blade always enters stock at the same point, thus eliminates need for blade adjustments. A blade cooling system is optional. Northfield Foundry, Northfield, Minn.
Circle 232 on Reader Service card



Airless spray pump uses hydraulic energy which is said to save material, permit fast spraying and reduce maintenance. The compact (21″x13″x14″) unit can be cleaned in 90 seconds, according to the maker. Dual heet Inc., Cleveland, Ohio.
Circle 236 on Reader Service card

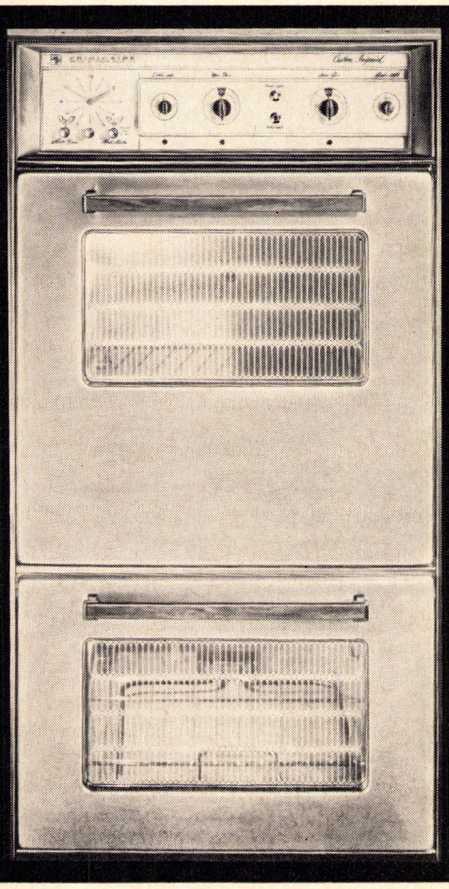


Hydraulic crane rotates 360° in either direction. Unit elevates to 85° to 90° and loads over front, rear or sides with single or double line. Flex-Lift requires 14″ of frame space. It has two self-centering levers. P-M Machine Co., Bryan, Tex.
Circle 237 on Reader Service card

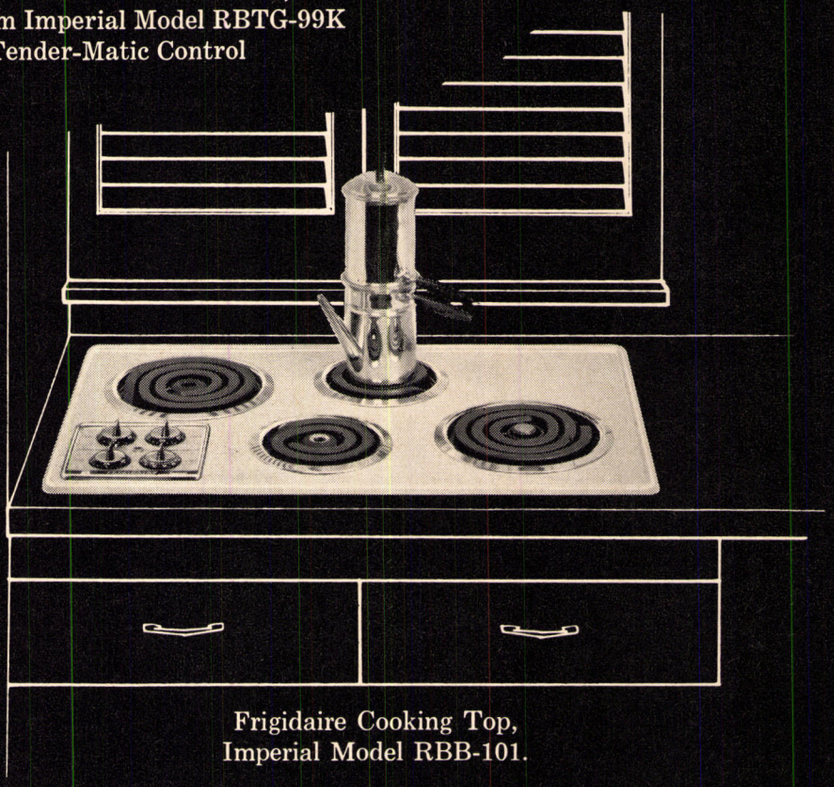
New products continued on p. 146

TODAY'S AFFLUENT HOME BUYERS WON'T SETTLE FOR JUST ANY APPLIANCE

THEY WANT THE FINEST MADE



Frigidaire Built-In Wall Oven,
Custom Imperial Model RBTG-99K
with Tender-Matic Control



Frigidaire Cooking Top,
Imperial Model RBB-101.

FRIGIDAIRE BUILT-INS ARE!

The people who buy homes today don't have to be concerned with price alone. Their bank accounts are bigger. So when they enter a kitchen, they look for symbols of quality. The mere presence of built-in appliances won't impress them as it once did.

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A Frigidaire Wall Oven with drop-leaf door and smooth, rounded oven corners is easy to clean. Saves time. And if the lady of the house is a bit late getting home from an afternoon of shopping, the special Speed Heat Unit on a Frigidaire Cooking Top gets a meal going extra-fast. *This* is added value with a meaning.

Before you settle for just any appliances, look into appliances by the people who know and build for *today's* kitchen buyers. Frigidaire.

P.S. We know builders, too. Frigidaire built-ins are designed for fast, easy installation.

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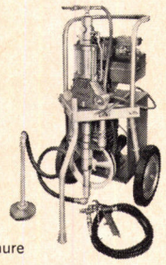

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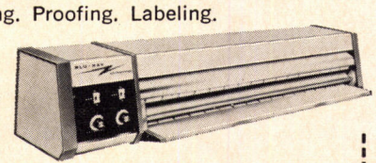

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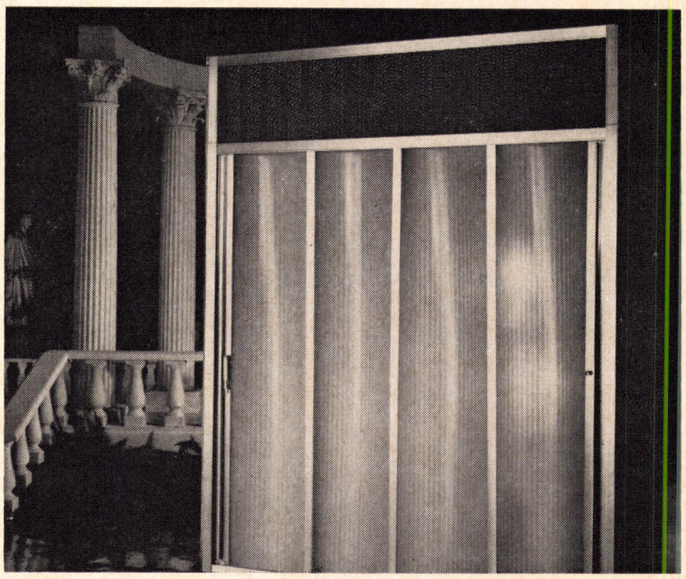
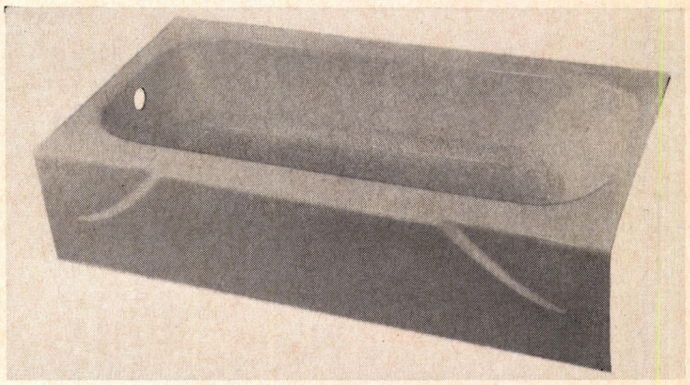
NEW PRODUCTS

start on p. 141

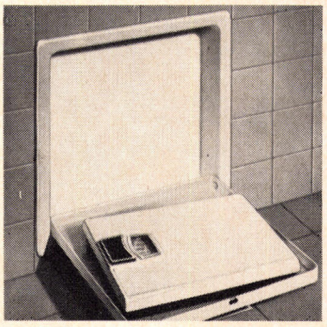
Baths



Shower-tub enclosures are available in colors. Two additional deep colors are offered—Red Apple and Blueberry Blue. Other colors include pastels, white and white with gold flecks. Showerfold Door Corp., Chicago. *Circle 211 on Reader Service card.*



Slip-resistant tub has textured surface of granular enamel that extends up to the beginning of tub walls. A full line of 13 cast-iron tubs is offered with the surface that is said to have four times normal friction. Crane, Chicago. *Circle 212 on Reader Service card.*



Built-in scale folds into wall when not in use. When open, the fold-down handle locks in place to support the scale. Steel, finished in baked white enamel, can be repainted, if desired. Scale is attached at wide angle. Swanson, Owosso, Mich.
Circle 213 on Reader Service card

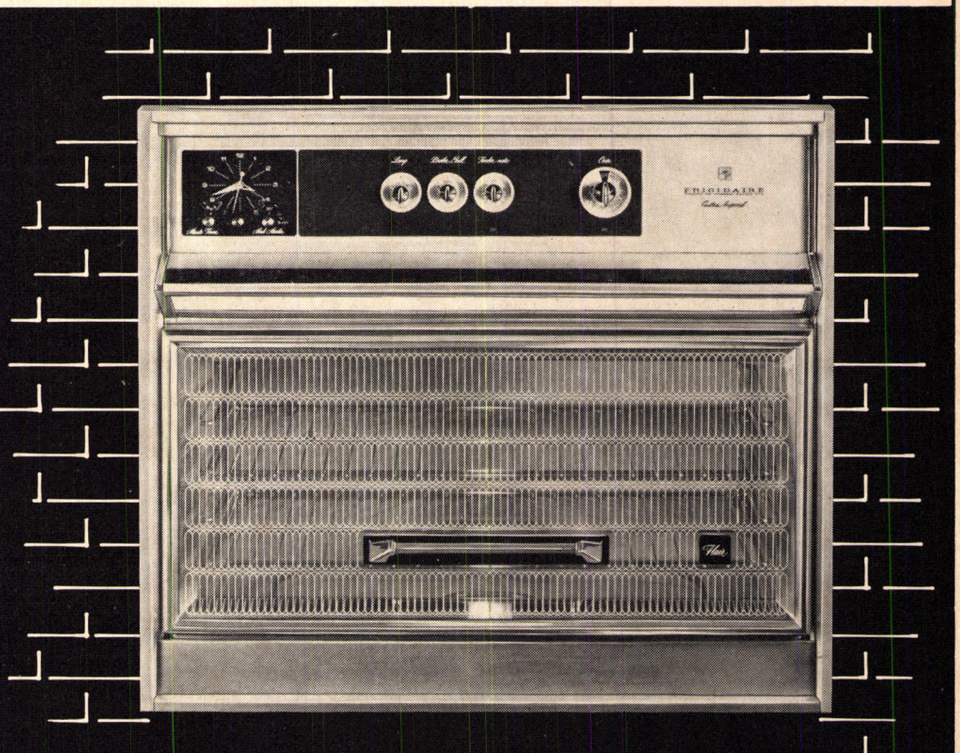
Toilet, called Elongated Mount Vernon Siphon Jet/Reverse Trap Closet Combination, has a positive silent mechanism, says the maker. Unit's bowl trapway exceeds 2⅛" minimum that roughs in at 12". Available in white and six colors. Gerber, Chicago.
Circle 214 on Reader Service card

New products continued on p. 148

TODAY'S AFFLUENT HOME BUYERS WON'T SETTLE FOR JUST ANY APPLIANCE

THEY WANT GOURMET PERFORMANCE

Tender-matic Control tenderizes, flavorizes *every* roast, regardless of price.



Frigidaire Flair Wall Oven, Custom Imperial Model RBG-335K, also features Meal Minder Control, plus GM Styling for smartest kitchen decor.

ONLY FRIGIDAIRE HAS TENDER-MATIC!

Times have changed. So have home buyers. Today's buyers want a kitchen to look quietly elegant. They want even ordinary meals cooked there to taste like they were prepared with a chef's touch.

A Frigidaire Flair Wall Oven lets you satisfy these wants with incomparable GM Styling and incomparable performance provided by Tender-matic and Meal Minder Controls.

Tender-matic Control offers low, slow heat to deliver prime rib tenderness even if a homemaker buys a low-cost chuck roast. The Meal Minder Control does gourmet cooking for her all day, even if she's not home.

The look of a Frigidaire Flair Wall Oven is keyed to the tastes of today's buyers, too. GM Stylists design the fastest-selling automobiles in history. They know what a woman likes and wants in appliance decor: a look as up-to-the-minute as her wardrobe. Frigidaire appliances have it. *This* is added value with a meaning.

Before you settle for just any appliances, look into appliances by the people who know and build for *today's* kitchen buyers, Frigidaire.

P.S. We know builders, too. Frigidaire Flair Wall Ovens are fast and easy to install.

Want to tune in on the thoughts of today's buyers? Get the complete story of "The Home Buying Affluentials." Wire, phone, or write your Frigidaire District Office today.

Cater to the taste of the "Affluentials" with the plus of

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Circle 73 on Reader Service Card

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This disposer grinds in both directions, doubles shredder life, thanks to patented automatic reversing switch. Its exclusive Self-Service Wrench frees accidental jams quickly to help prevent customer complaints and costly call-backs.

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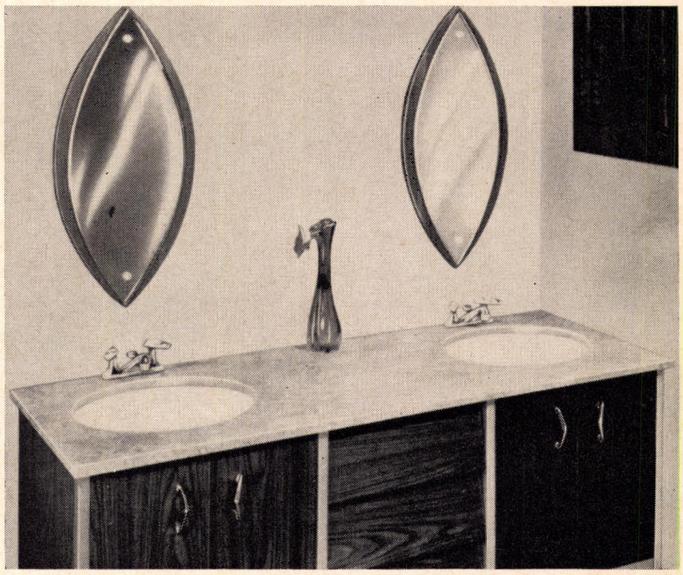
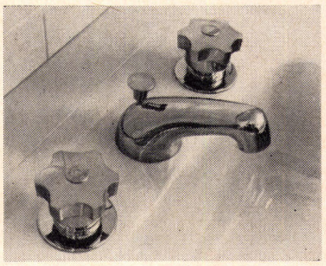
NEW PRODUCTS

start on p. 141

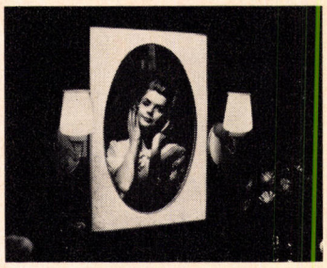
Baths



Cultured-marble vanity top has a hard nonporous surface that will not stain or absorb water, says the maker. Ten Marblsheen tops are offered in a variety of colors with necessary cut-outs. Theodore Efron Mfg., Chicago. *Circle 215 on Reader Service card.*

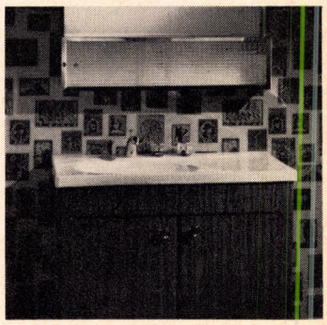


Lavatory combination with pop-up drain, is wide spread. Kent has Monel washer screws, renewable valve parts, nonsplash Vandl-rator and copper or iron pipe union inlets. Autoflo water flow control is optional. Speakman, Wilmington, Del.
Circle 216 on Reader Service card



Medicine cabinet has incandescent side lights. Steel facing is textured golden tracery on an ivory background. Steel frame is finished in baked-on gold lacquer. Plate-glass oval mirror is 16″ x 24″; door size is 18″ x 26″. Lawson, Cincinnati.
Circle 217 on Reader Service card

Vanity has a cultured marble top. The plastic material is said to have lower in-place cost than marble. Vanities are available in all standard sizes in gold-trimmed white provincial style. Simulated marble is easy to handle. Futura Marble, Rosemont, Ill.
Circle 218 on Reader Service card

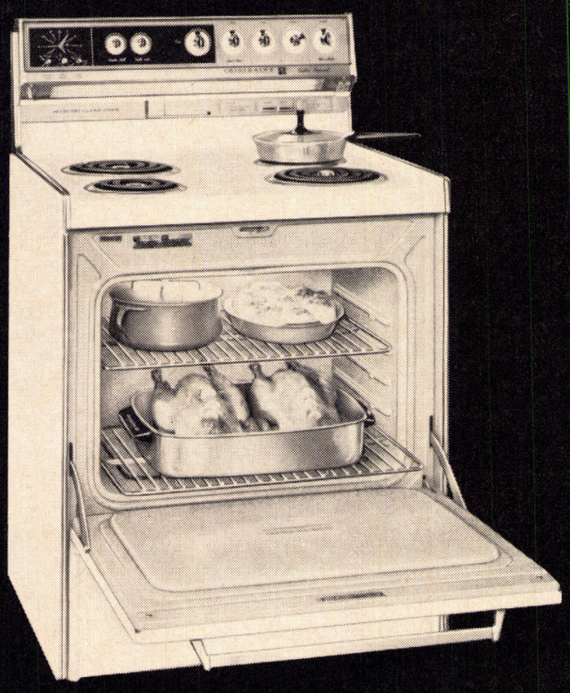


One-piece vanity has oval bowl offset to the left, concealed overflow and cast-in soap depression. It comes in 32″x18″ size with white bowl only. A choice of four cabinet finishes is available. W. E. Joost, San Rafael, Calif.
Circle 219 on Reader Service card

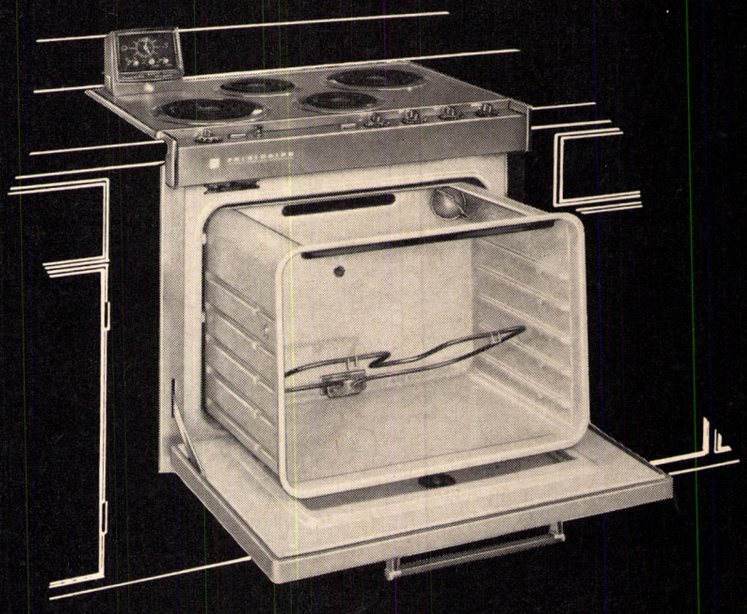
New products continued on p. 150

TODAY'S AFFLUENT HOME BUYERS WON'T SETTLE FOR JUST ANY APPLIANCE

THEY WANT EASIER CLEANING



Frigidaire Electric Range, Custom Imperial Model RCIE-39K, with Electri-clean Oven.



Frigidaire Compact 30 Electric Range, Model RBJ-G535, with Pull 'N Clean Oven.

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Don't spend a penny for anything in your homes unless you're tuned to the new tastes and wants of the new, more affluent breed of buyer. When they buy, they use their money to vote for or veto *your* ideas about luxury and convenience.

So it's smart to pack the most saleable room in the house, the kitchen, with added values and benefits which meet the needs of today's buyers. One thing they don't want to do is waste time cleaning up. Frigidaire has *two* answers for them. Two of the easiest-to-clean ovens ever conceived.

A Frigidaire Electri-clean Oven will clean itself electrically — *automatically* — while a homemaker entertains friends for coffee, perhaps. A Frigidaire Pull 'N Clean Oven slides right out like a drawer. The lady of the house can clean it standing up. And she'll be fresh and ready for bridge or a golf lesson. *This* is added value with a meaning.

Before you settle for just any appliances, look into appliances by the people who know and build for *today's* kitchen buyers. Frigidaire.

Want to tune in on the thoughts of today's buyers? Get the complete story of "The Home Buying Affluentials." Wire, phone, or write your Frigidaire District Office today.

Cater to the taste of the "Affluentials" with the plus of

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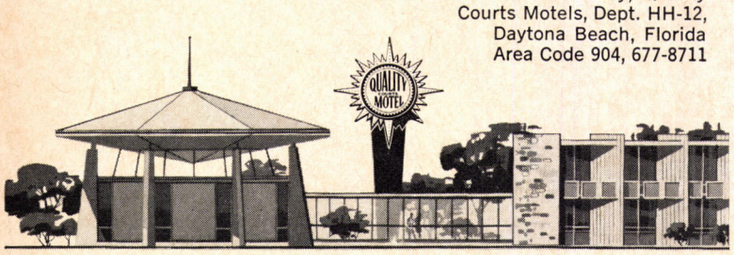
Ten million dollars will be spent in motels within the next 24 hours.

Why not open a Quality Courts Motel and collect some of it. We're opening 100 new motels in 1966. Quality Courts Motels return profits consistently higher than the industry average. Franchises are available now to qualified investors. Call or write: Joe Mobley, Quality Courts Motels, Dept. HH-12, Daytona Beach, Florida Area Code 904, 677-8711



Circle 76 on Reader Service Card

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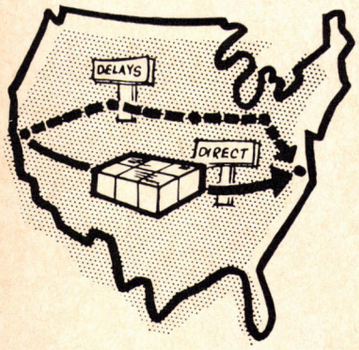

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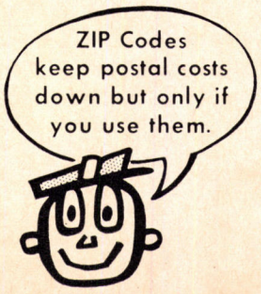
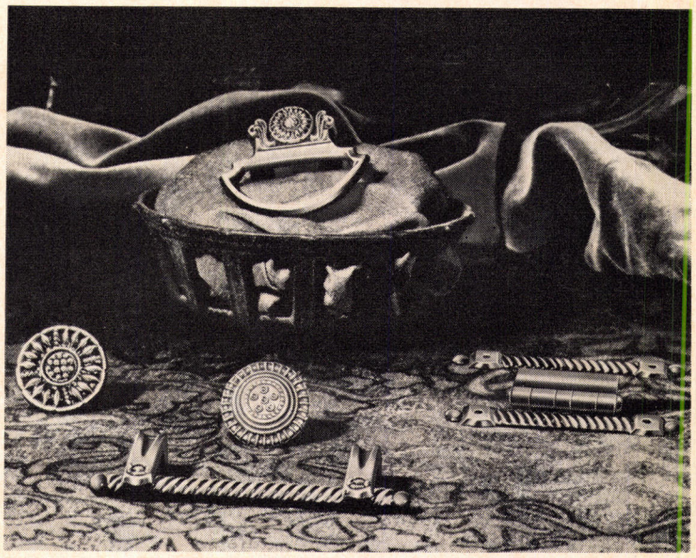


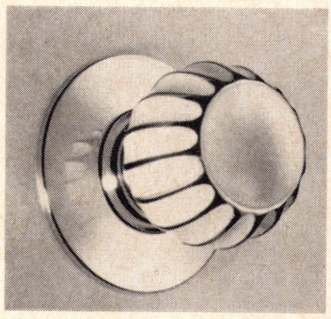
NEW PRODUCTS

start on p. 141

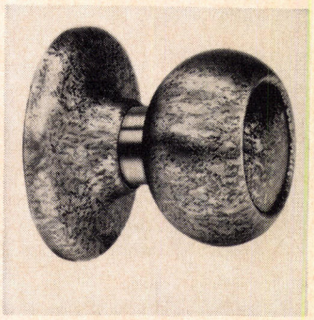
Hardware



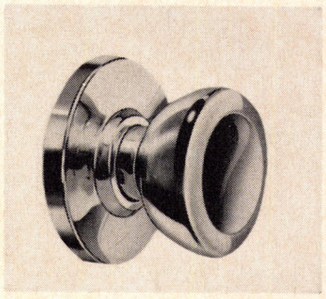
Cabinet hardware, called Espana Royale, has an antique finish. The knobs are made of Zamak; hinges are steel. Three knobs, two pulls and two hinges are offered in a range of colors. Ajax Hardware, City of Industry, Calif. *Circle 247 on Reader Service card.*



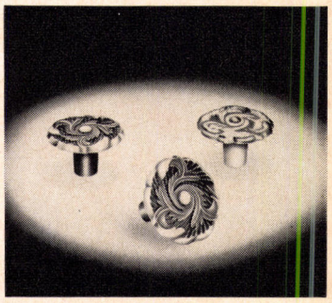
Fluted knob, called Ermine White Lotus, is offered in wrought brass or bronze. The knob has a white baked enamel finish with gold highlights. Dimensions: 2″ diameter with a 2-9/16″ rose diameter. Schlage Lock, San Francisco.
Circle 251 on Reader Service card



Etched lockset, called Copa, has an antique patterned finish protected by a plastic coating. It is offered in satin-etched bronze or nickel. A range of locksets and trim rosettes are available. for entry, exit and passage doors. Kwikset, Anaheim, Calif.
Circle 249 on Reader Service card



Door knob, called Concave, can't be forced open from outside but always opens from inside, says the manufacturer. The guaranteed knobs are offered in four other designs, all with enamel finishes. Weslock, Los Angeles.
Circle 248 on Reader Servce card

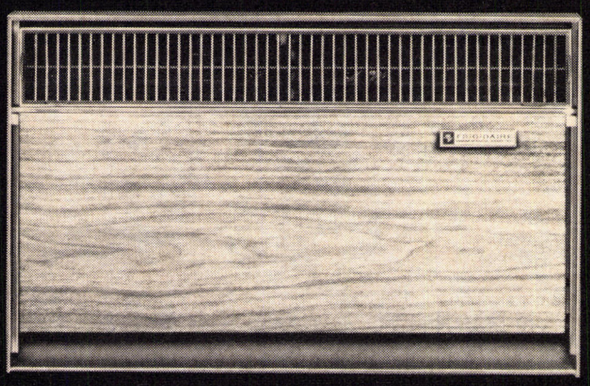


Provincial knob design is available in Antique Copper, Ivory Brass or Antique Brass. The knob, which is 1¼″ in diameter, matches the manufacturer's other provincial pulls and hinges. David Allison Co. Inc., Roosevelt, N.Y.
Circle 250 on Reader Service card

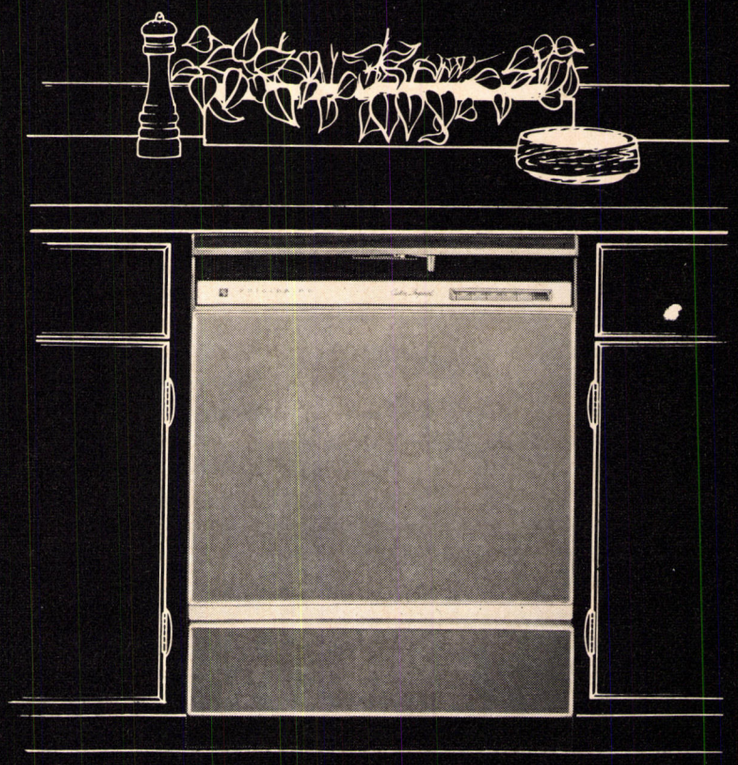
New products continued on p. 152

TODAY'S AFFLUENT HOME BUYERS WON'T SETTLE FOR JUST ANY APPLIANCE

THEY WANT QUIETER HOMES



Through-the-wall Frigidaire Prestige Room Air Conditioner, Model AWP-12K.



Frigidaire Undercounter Dishwasher, Custom Imperial Model DW-CIUK.

FRIGIDAIRE MEETS THE CHALLENGE

Today's home buyers are on the lookout for sound-conditioned homes. *Quiet* homes. Frigidaire recognized this trend in modern living by creating undercounter dishwashers and room air conditioners specifically engineered to keep sound way down.

The Frigidaire Custom Imperial Undercounter Dishwasher, for instance, operates with amazing quietness because of its special sound-deadening features. A homemaker can arrange a club meeting on the kitchen phone while her Frigidaire Undercounter Dishwasher is running full force.

New Frigidaire Prestige Room Air Conditioners with Pin-Drop Quietness provide cool comfort without a lot of clatter in a bedroom, a rec room, the kitchen, or anywhere. The family works, plays and sleeps better. *This* is added value with a meaning.

Before you settle for just any appliances, look into appliances by the people who know and build for *today's* kitchen buyers. Frigidaire.

Want to tune in on the thoughts of today's buyers? Get the complete story of "The Home Buying Affluentials." Wire, phone, or write your Frigidaire District Office today.

Cater to the taste of the "Affluentials" with the plus of

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1. Date of filing: October 1, 1965 2. Title of Publication: HOUSE & HOME
3. Frequency of Issue: Monthly
4. Location of Known Office of Publication: 330 West 42nd St., City, County and State of New York 10036
5. Location of the headquarters or general business offices of the Publishers: 330 West 42nd St., City, County and State of New York 10036
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B.	Paid Circulation		
	1. Sales through dealers and carriers, Street vendors and counter sales	—	—
	2. Mail subscriptions	123,598	112,500
C.	Total paid circulation	123,598	112,500
D.	Free distribution (including samples) by mail, carrier or other means	6,652	6,200
E.	Total distribution (sum of C and D)	130,250	118,700
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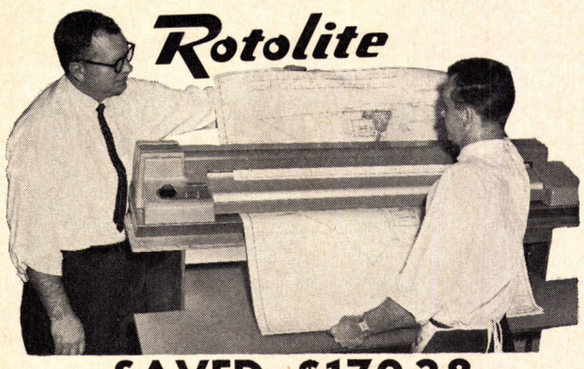

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Gerald Heulitt, architect in Pompton Lakes, N. J. required 750 prints for a set of plans. Sheets were 24″ x 36″. Using the Rotolite Diazo-Jet, his direct costs were as follows:

3 packs paper	$62.16
12 hrs. labor @ $2.63	31.56
Ammonia	1.00
Electricity	1.00
Total cost	$99.72

If sent outside at 6¢ per sq. ft. the job would cost $270.

Summary: Cost if done by an outside shop	$270.00
Cost in his own shop	99.72
Savings on this one job	$170.28

Three jobs like this and he has almost saved the cost of his Diazo-Jet.

He also uses the Rotolite for all his office forms such as job sheets, applications, time sheets, certificates, etc.

Four years ago he started with an Economy Model Rotolite. During that time he tried other machines but they did not meet his standards for speed or ruggedness.

Prices start at $129.50.

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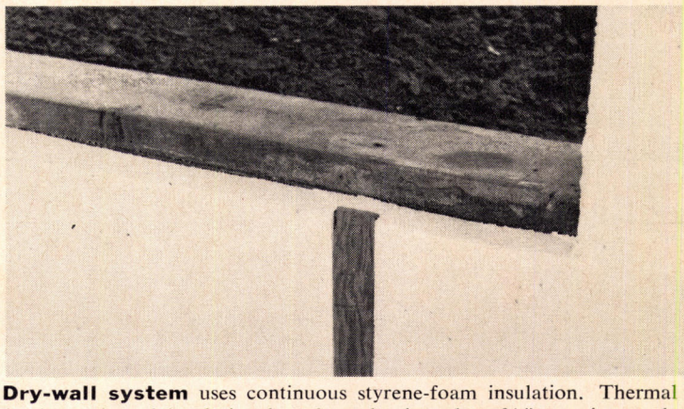
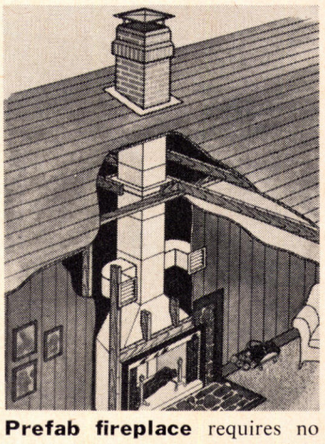
NEW PRODUCTS

start on p. 141

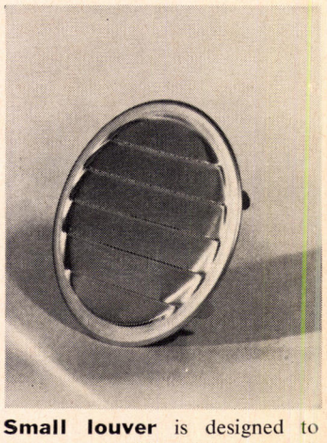
Closet valet is said to double the capacity of any closet. Included are oak wall brackets, Styro-Hang hangers and skirt and slack hangers. The unit is easy to install, says the maker. Smith-Lerner Industries, Phoenix, Ariz. *Circle 238 on Reader Service card.*



Dry-wall system uses continuous styrene-foam insulation. Thermal furring strips of insulation board are laminated to ⅜″ exterior grade plywood. Both mechanical fastenings and adhesives are used. Holland Plastics, Gilman, Iowa. *Circle 239 on Reader Service card.*



Prefab fireplace requires no foundation or masonry. Unit comes complete for floor to roof installation including chimney, flue, ducts and grilles. Screen, gas fire starters and trim accessories are available. Savannah Chimney Mfg., Savannah, Ga. *Circle 240 on Reader Service card*

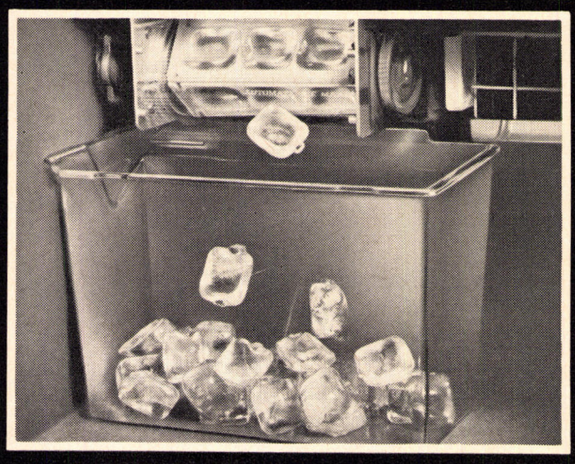


Small louver is designed to combat paint blistering and peeling, rotting and warping of wood and corrosion of metal. Units are available in six sizes from 1″ to 4″ in aluminum, copper and chrome. Midget Louver Co., Norwalk, Conn. *Circle 241 on Reader Service card*

New literature starts on p. 154

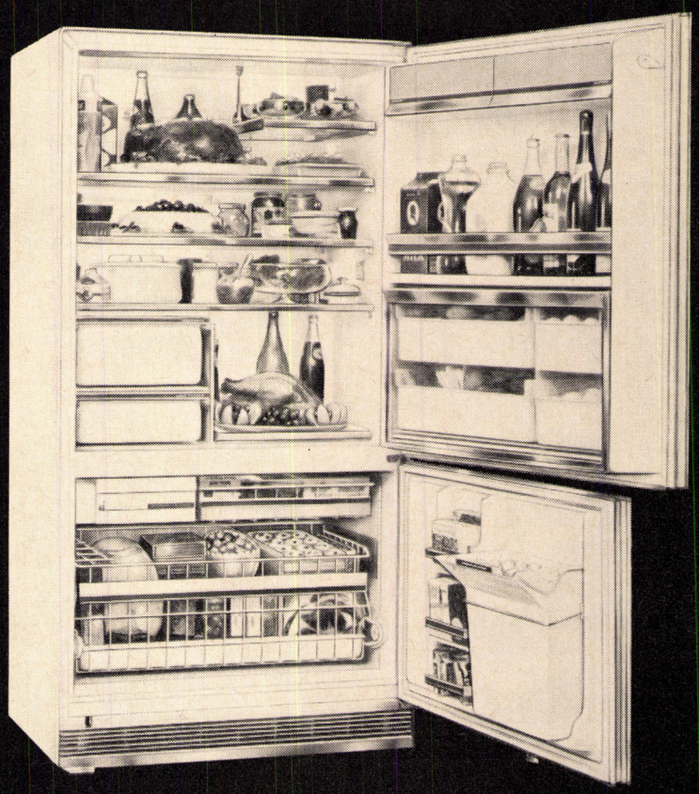
TODAY'S AFFLUENT HOME BUYERS WON'T SETTLE FOR JUST ANY APPLIANCE

THEY WANT MORE LEISURE



New Ice Maker fills . . . freezes . . . releases . . . stores cubes on door *automatically*.

Automatic Ice Maker now on Frigidaire Custom Imperial Nineteen *Frost-Proof* Refrigerator-Freezer, Model FPCI-19BK. Other *Frost-Proof* models in 12, 14, 16 cu. ft. sizes with famous Frigidaire Ice Ejectors.



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Today's home buyers, more affluent and sophisticated than any generation before them, go a lot and do a lot. In a new home, they want leisure making features. One place they look is the most saleable room in your house—the kitchen.

There, a Frigidaire Frost-Proof Refrigerator-Freezer with Automatic Ice Maker gives you a real edge. It literally creates more leisure by ending two kinds of messy, time-consuming refrigerator work: making ice cubes and defrosting.

With the advanced Frost-Proof System, there's never frost, even in the freezer. No defrosting, either. This frees a homemaker for more pleasant things. Like planning a party.

When it's party time, the Frigidaire Automatic Ice Maker helps out by continuously filling, freezing, releasing, and storing cubes on the door. All automatically. This is added value with a meaning.

Before you settle for just any appliances, look into appliances by the people who know and build for *today's* kitchen buyers. Frigidaire.

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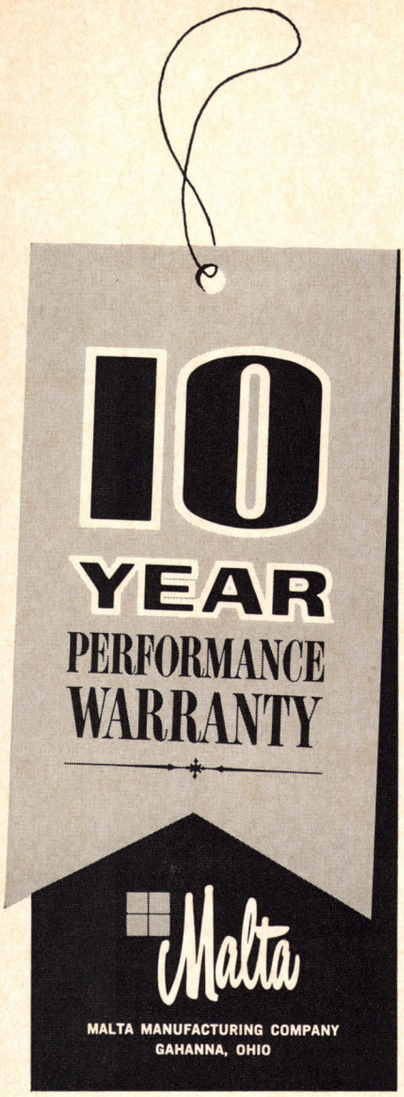

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NEW LITERATURE

For copies of free literature, circle the indicated number on the Reader Service card, page 139.

PICKUP TRUCK COMPARTMENTS. 7-page catalog shows and describes compartments for fenderside and closed-side pickups. Pierce Auto Body Works, Appleton, Wis. (*Circle 301 on Reader Service card*)

RESILIENT FLOORING. 16-page catalog has color illustrations of full line of vinyl asbestos tile, asphalt tile, feature strips and cove bases. Specifications are listed. Azrock, San Antonio. (*Circle 302 on Reader Service card*)

GRID CEILINGS. 20-page brochure shows typical installations of two grid ceiling systems and ceiling panels. Insulite, Minneapolis. (*Circle 303 on Reader Service card*)

INSULATING MATERIALS. 12-page booklet shows and describes vermiculite attic insulation, vermiculite masonry fill insulation, glass-fiber blankets and Dyfoam polystyrene Super-Board. Zonolite, Chicago. (*Circle 304 on Reader Service card*)

MINIATURE TERMINAL BLOCK. 4-page brochure lists engineering data, dimensional drawings, product features and accessory pieces of 300V. Buchanan Electrical Products Corp., Union, N.J. (*Circle 305 on Reader Service card*)

MARBLE. 4-page folder has four-color photographs of marble and slate tiles, slabs and shapes. General information and sizes included. Marble Decor, North Hollywood, Calif. (*Circle 306 on Reader Service card*)

TERRAZZO FLOORING. 8-page bulletin decribes recommended process for installing thin-set portland cement terrazzo floors. Thiokol, Trenton, N.J. (*Circle 307 on Reader Service card*)

SUSPENDED CEILING GRID AND PANELS. 8-page bulletin shows and describes products available. Installation procedures illustrated. Leigh Products, Coopersville, Mich. (*Circle 308 on Reader Service card*)

LOADERS. 22-page catalog discusses diesel engine, power shift transmission, planetary power steering, loader components and bucket options of 175 Series B loaders. International Harvester, Chicago. (*Circle 309 on Reader Service card*)

HEATING CONTROLS. 4-page folder describes and lists specifications for two-stage gas heating controls. Maxitrol, Southfield, Mich. (*Circle 310 on Reader Service card*)

DUCT-SYSTEM MATERIALS. 12-page booklet includes illustrations, tabular specifications and sizes of round preformed fiber glass ducts and Micro-Aire duct board. Johns-Manville, New York City. (*Circle 311 on Reader Service card*)

SILICONE SEALANTS. 4-page folder shows colors of sealants available for architectural effects. Properties of the material also discussed. General Electric, Waterford, N.Y. (*Circle 312 on Reader Service card*)

KITCHEN PLANNING. Book entitled "Kitchen Planning Guide" contains 517 plans for homes with 1,000 sq. ft., 1,000-1,400 sq. ft. and 1,400 sq. ft. of space. For copy: send $4 to Small Homes Council-Building Research Council, University of Illinois, Urbana, Ill.

PUSH-BUTTON LOCK. 2-page folder shows and lists features of door lock that operates with a numerical combination. Simplex Lock Corp., New York City. (*Circle 313 on Reader Service card*)

MATS AND RUNNERS. 20-page selector manual describes eight types of solid vinyl and nylon-on-vinyl mats. Typical installations, sizes available and prices are listed. Crown Rubber Co., Fremont, Ohio. (*Circle 315 on Reader Service card*)

WEATHERSTRIPPING. 8-page booklet shows and describes complete line of door and window weatherstripping. Dorbin Metal Strip, Chicago. (*Circle 314 on Reader Service card*)

LIGHTING FIXTURES. 64-page catalog pictures and discusses full line including ceiling lights, pulldowns, pendants and wall brackets. Federal Lighting Corp., Cleveland, Ohio. (*Circle 316 on Reader Service card*)

PREFINISHED DOORS. 4-page product bulletin shows cross-sectional views of hollow-core and solid-core flush doors. Mohawk Flush Doors, South Bend, Ind. (*Circle 317 on Reader Service card*)

PATTERNED ACRYLIC PLASTIC. Brochure shows range of colors available in Flair patterned Plexiglas and illustrates typical installations. Rohm & Haas Co., Philadelphia. (*Circle 318 on Reader Service card*)

ADJUSTABLE WROUGHT-IRON RAILINGS. Folder shows designs available and lists parts and specifications. Locke Mfg., Lodi, Ohio. (*Circle 319 on Reader Service card*)

DOOR CHIMES. 8-page catalog illustrates nonelectric chimes, push buttons, bells, buzzers and transformers. Sizes and colors available discussed. Philip Carey Mfg., Cincinnati, Ohio. (*Circle 320 on Reader Service card*)

CONCRETING. Placard lists do's and don'ts for cold weather concreting. Information on use of accelerators, preparation of forms and subgrade for placing concrete, protection and curing also given. Master Builders, Cleveland, Ohio. (*Circle 321 on Reader Service card*)

HARDWARE. 4-page product bulletin describes and shows lock and knob designs. Technical specifications and lock-finish descriptions are included. Weslock Co., Los Angeles. (*Circle 322 on Reader Service card*)

SPACE-SAVING IDEAS. Booklet contains 16 ideas for saving space including converting dead space to storage and using workshop areas. Door and shelf hardware described. Grant Pulley & Hardware Corp., West Nyack, N.Y. (*Circle 323 on Reader Service card*)

CEILING LIGHTING. 8-page booklet shows typical installations of lighting in kitchens and baths. Technical data is included. Wilson Research Corp., Erie, Pa. (*Circle 324 on Reader Service card*)

BASEBOARD RATINGS. Publication lists I-B-R baseboard ratings of 147 different units manufactured by 59 different companies. For copy: send $1 to The Institute of Boiler and Radiator Manufacturers, 393 Seventh Ave., New York, N.Y. 10001.

TERMITE CONTROL. 16-page booklet discusses termite damage. A section on treating new construction is included. Shell Chemical Co., New York City. (*Circle 325 on Reader Service card*)

LIGHTING. 4-page brochure gives guidelines for improved home lighting. Recommendations and minimum standards are discussed. For copy: send 10¢ to American Home Lighting Institute, 360 North Michigan Ave., Chicago, Ill. 60601.

PLASTIC-FRAMED WINDOWS. 4-page product bulletin shows windows and describes installation and assembly. Plyco, Elkhart Lake, Wis. (*Circle 326 on Reader Service card*)

COOLING GUIDE. "Cooling Load Calculation Guide for Residences" includes recent tables. A calculation sheet is included. For copy: send $1.50 to Institute of Boiler and Radiator Manufacturers, 393 Seventh Ave., New York, N.Y. 10001.

CIRCULAR SHOWER. 4-page brochure shows and describes unit and installation. Swan Corp., St. Louis. (*Circle 327 on Reader Service card*)

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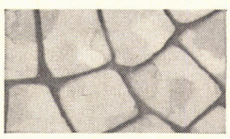
Tracino Corlon gives you the luxury appeal of a sheet vinyl floor at about the cost of embossed linoleum

and the best-known name in building materials, too!

It costs very little extra to give your homes the luxury of a sheet vinyl floor. And it's the most wanted resilient flooring in America today. Tracino Corlon costs only a little more than vinyl-asbestos tile, but it adds much more in sales appeal. And, if you're using embossed linoleum, you'll find the cost is about the same.

Tracino Mosaic
actual size

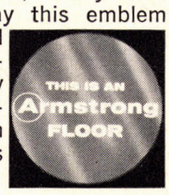


Tracino Tuscan
actual size

Three popular design effects Tracino Vinyl Corlon gives you, and your prospects, a choice of three striking design effects: Marble (shown opposite), Mosaic, and Tuscan (above). All are available in several different colorings, all are subtly textured. And because Tracino comes in long rolls, 6′ wide, you get a floor with a minimum of seams — the kind of resilient floor new home prospects know is easiest to keep clean.

Use anywhere Tracino Corlon has Armstrong's exclusive Hydrocord Back. This means you can safely install it over any concrete subfloor above, on, or below grade — except where excessive alkali or hydrostatic pressure makes using any resilient floor unwise.

Show this emblem When you use Tracino Vinyl Corlon, or any Armstrong floor, display this emblem in your model homes. It calls attention to quality and puts the best-known name in building materials to work for you.



Advertising support Armstrong floors are promoted by the heaviest advertising campaign of any building materials manufacturer. This season, an estimated 25 million viewers are seeing color commercials for Armstrong floors every Wednesday evening on two new ABC-TV color shows . . . **Gidget** and **The Big Valley.** And full-color pages in 26 top magazines promote Armstrong floors to the best prospects for the homes you sell — month after month throughout the year.

Watch **Gidget** and **The Big Valley** in color Wednesday evenings on ABC-TV

To help sell your homes Your Armstrong Architect-Builder-Contractor Representative can help you get the most sales value out of Armstrong floors — and the Armstrong name. For information, write Armstrong, 310 Sixth St., Lancaster, Penna.

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