es a house a best seller?

Six case histories, first in a new series analyzing America's fastest-selling houses (p. 119)

Low-cost prize winner

For the narrow lot: an AIA award winner at $10.50 a sq. ft. (p. 110 and below)

The economics of trees

What they cost and how they improve property values (p. 130)

$11,250 house

Stock materials, dimensional lumber and modular plan produce a sell-out (p. 102)

Architect-builder team

What builders want from their architects and what architects want from their builder clients (p. 142)

conditioning at half price

In many parts of the country well water can do the job if builders follow specific ground rules (p. 150)
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April, 1953

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Cover: House by George T. Rockrise; photo by Ernest Braun
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TODAY, Ludman is in a position to meet world-wide demand.
Guy Hollyday, former mortgage banker president, to head FHA

President Eisenhower's choice for FHA commissioner, Guy T. O. Hollyday of Baltimore, is a longtime Democrat. Hollyday, however, chairman of his city's Voters for Housing committee, which came into being last September, was not even a murmur in the industry news. The hope of a FHA nominee was that it would come from a Republican or at least a non-Democrat. But now a Democrat is coming over the threshold with a selection to head FHA

Would-be doctor. Hollyday was born Dec. 27, 1892 in Baltimore, son of a doctor (John Guy), who practiced in the suburbs for 50 years. He was baptized simply Guy Tilghman Hollyday, but added Ornè to his name when he was 12 in deference to his mother's wish to have some of her family represented, too. Seeking to follow his father's career, Hollyday studied medicine at Johns Hopkins (class of '14) but his father's death led him into the real estate business as soon as he had his A.B. (he worked his way through college the last two years as business manager of the college paper). By 1921, after an interlude as an Army second lieutenant during World War I, Hollyday was sales manager of Baltimore's Mortgage Guarantee Co. From 1926 to 1932, Hollyday was sales manager of the Roland Park Co. For three depression years, he was vice president of Key Realty Co., which had charge of liquidating real estate foreclosed by the Baltimore Trust Co. In 1935, he became Baltimore agent (he is still vice president) of Randall H. Hagner Co., Washington mortgage correspondents for New York Life Insurance Co. Since 1944, he has been president of the Title Guarantee Co., whose business he has broadened from purely local to a national concern with 50 issuing agencies in ten states.

The price of service. Before taking office as FHA Commissioner, Hollyday will give up not only the presidency of his title firm (and his stock in it), but also directorates and titles in half a dozen commercial and civic enterprises, including the Hagner Co. Some others: vice president and director, Perman Abstract Co., Midland, Tex.; director, Loyola Federal Savings & Loan Assn.; director, The Savings Bank of Baltimore; president of Fight Blight, Inc.

For the last five years, Hollyday has given over half his time to civic activities. For a man who is by no means wealthy, such selflessness naturally evokes from friends an admiration somewhat rare in an industry that has its share of men who respond largely to the profit motive. Says Mortgage Banker James W. Rouse: "Guy Hollyday is a deeply motivated Christian man. As a result, he is a very inspiring person. His friendliness, kindliness and courage lifted them high above many other people. His looks for the best in people and he generally finds it. That's what he is going to bring to his FHA work."

New blood for old? Hollyday will also bring to FHA a broad understanding of both its achievements and its problems. Says he: "I think FHA is deservedly fortunate in having had friendly relations with all the different trades in the industry." But he is under no illusion that FHA is as young as it was at its birth 20 years ago, thinks perhaps it "can stand a little new blood." He expects to name an industry advisory committee to tell him "where FHA is falling behind" and to "make recommendations we can study and analyze." He hopes FHA can do more to aid urban rehabilitation, and in the process give a boost to a big untapped market. In Baltimore, he notes, "we spent a million dollars a year just moving outside toilets in." Hollyday hopes Commissioner Greene will stay on as FHA director to succeed Leo Kirk April 13. Kelley is a former chairman of the city zoning committee. At Grand Rapids, Daniel H. Treleven, an insurance man, replaced Eugene Beatty, acting FHA director since Feb. who returned to Washington as assistant director of FHA's region 5.

New district directors. Even before an Eisenhower appointee was designated, FHA last month began to show the effects of the new administration. In Philadelphia, Lum­berman William A. Kelley, former partner of GOP Sheriff Austin Meehan, was named FHA director to succeed Leo Kirk April 13. Kelley is a former chairman of the city zoning committee. At Grand Rapids, Daniel H. Treleven, an insurance man, replaced Eugene Beatty, acting FHA director since Feb. 1 who returned to Washington as assistant director of FHA's region 5. Changes were in the wind. More could be expected in the months ahead.

**NEWS ON THE INSIDE:**

- Housing heads for a 1.2 million year, despite harder selling.
- Urban rehabilitation suffers setbacks in Baltimore and Miami.

(pp. 126-129)
Albert M. Cole (I) took the oath of office as HHFA Administrator from Frank K. Sanderson, White House executive clerk, while President Eisenhower looked on. Cole became the second man ever to head the big agency created in 1947. But his first month in office found him so busy he did not even bother to hang up the blue-ribboned certificate of appointment which the President handed him at the end of the ceremony.

Cole becomes HHFA chief, plans parley to update FHA architects

On March 11, Albert MacDonald Cole was sworn in as HHFA administrator after the Senate confirmed his nomination, 64-18. By month’s end, neither he nor the agency appeared much altered.

The most visible change: the medium-sized ex-Congressman from Kansas had the high-backed, leather chair that served his bulky predecessor, Ray Foley, shipped down the hall to a conference room. There, cracked Cole, “people can enjoy sleeping in it.” With scant regard for the symbols of bureaucracy, Cole replaced the massive chair with a smaller-sized model (the big one was originally built for Herbert Hoover when he headed the government reorganization commission). Foley, departing for a rest in Detroit, took Harry Truman’s autographed picture with him. Unostentatiously, Cole had not yet got around to covering the faded spot on the wall with President Eisenhower’s smile.

Slow approach. If changes were superficial the air tingled with expectancy. Cole faced enough urgent problems to keep him busy some months. Topmost was personnel. Cole told his staff he would make “no drastic changes until I know what I’m about.” Fundamentally, he thought “people in civil service jobs should be protected.” But like other Ikemen, Al Cole questioned the Democratic practice of blanket- ing virtually all jobs under civil service. The higher-ranking grades (Schedule A) had been put in civil service by presidential order. Eisenhower last month took them out. Inside HHFA, the effect of that fell chiefly on the Public Housing Administration, which had tried to protect practically all of its top men. By month’s end, Cole was free to fire any he chose.

For FHA, Cole said he was planning—after listening to House & Home’s roundtable (see cut)—to call a conference of his own to bring FHA chief architects together with private builders and architects. The meeting would be welcome news indeed to many a long-suffering designer who thinks FHA ideas need renovation.

For public housing: 35,000. Cole’s first policy problem was also one of the most ticklish: how many federal public housing units should he recommend be built next fiscal year? Opposition to his appointment had centered around his congressional record against public housing. Cole had promised to carry out the law faithfully. His recommendation handled a delicate situation gracefully. With White House concurrence, Cole suggested to Congress that public housing be kept at this year’s 35,000 starts level, which Congress itself set. This was, he told a House appropriations subcommittee, the “fair and consistent thing to do... until we have completed our review [of government housing programs] and make further recommendations.”

Accordingly, he suggested trimming FHA’s budget $600,000 below what it had sought—to $13,900,000. Public housers kept a discreet silence but confessed privately that 35,000 units was more than they had expected. Said the pro-public housing National Housing Conference: “The Administration and Mr. Cole have it that they are not out to break wind-

The Independent Offices appropriations bill, which puts the ceiling on pub-

ic service, was not due to come out of Congress until the latter part of April. If perform ance was a guide, the committee might whittle the 35,000 units down some it did not, there would be an effort on the floor of the House. Public private housers girded for the annual for HHFA: few reductions. W rest of Cole’s recommendations on Truman’s HHFA budget were kept in deference to Congressions ic, the new administrator did rev the cut in PHA’s funds was the ma-

tic in his far-flung agency. O thought FHA would come out relat-

ouched. But there was serious whether the Federal National Mort-

society (Fanny May) and defen-

ing would get more than a token ap-

ation. Cole feels defense housing: washed up. He had not committed on Fanny May, but its own official could squeeze through the next if without more funds. Last month, had $900 million—$731 million for disaster mortgages and $236 for over-the-counter purchases in defense areas.

Cole was still wrestling with the burning problem: interest rates on ment backed mortgages. He had the Senate banking committee an soon after Easter. Because Cole r
best bet seemed to be that Ikemen were convinced VA and probably FHA rates should go up, but were holding back until veterans’ groups saw the light, too.

... its current practice (which roughly corresponds to FHA rules)? Are guaranty provisions still valid on nonconforming loans made since 1949 by supervised lenders under “automatic” approval regulations?

Scarcity amidst plenty. While officials still stalled on an interest rate increase, claimed there were adequate funds available for GI’s at 4%, the US Savings & Loan League released a revealing set of figures. Its data, based on VA and Home Loan Bank Board reports:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount Under $20,000</th>
<th>Amount 4% Loans</th>
<th>Ratio of VA to Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>2,497,122</td>
<td>412,037</td>
<td>16.5%</td>
</tr>
<tr>
<td>1947</td>
<td>2,566,632</td>
<td>542,932</td>
<td>21.1%</td>
</tr>
<tr>
<td>1948</td>
<td>2,534,703</td>
<td>349,554</td>
<td>13.5%</td>
</tr>
<tr>
<td>1949</td>
<td>2,487,321</td>
<td>276,793</td>
<td>11.1%</td>
</tr>
<tr>
<td>1950</td>
<td>3,032,452</td>
<td>479,096</td>
<td>15.8%</td>
</tr>
<tr>
<td>1951</td>
<td>2,877,560</td>
<td>447,373</td>
<td>15.5%</td>
</tr>
<tr>
<td>1952</td>
<td>3,028,157</td>
<td>306,466</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

... commenting on the sharp drop in GI loans last year Loan League Executive Vice President Norman Strunk pointed out direct government loans to veterans totaled 34,000 last year, thus those from private lenders were only 272,000.

Legion action soon. At month’s end, the American Legion committee to study the GI rate headed by Tom Moses of Pittsburgh was almost ready to submit recommendations to the Legion executive committee. Informed opinion was it would either recommend a higher rate so more veterans could benefit from the guaranty program, or else some form of flexibility without setting a specific rate. If so, it might well be the nudge Congress and the administration need to act.

Eventually the new administration must come to grips with the vanishing GI loan, which was dipping under par even in New York this month. One possible course of action was offered last month by tireless planner Tom Coogan, armed forces housing chief.

“IT should be thoroughly understood that nothing can be done to reproduce the happy money market that existed from 1946 to 1950,” Coogan explained. “No rate will bring California mortgages to par without developing excessive premiums in New York and New England. No rate will produce the necessary price for mortgages on minority group housing without the same results.”

Coogan’s solution: Equalize VA and FHA interest rates at 4½%. Allow fair and reasonable brokerage fees. Permit mortgages to sell in a free market for the price they will bring. Have the closing statement based on the price of the mortgage instead of its face amount, with all other disbursements calculated accordingly.

Administration asks rent control extension to September 30 but Congress may balk

Prices and wages. The administration does not want a standby controls law, but if Congress wants to pass Sen. Homer Capehart’s bill to give President Eisenhower power to slap a 90-day freeze on wages and prices in an emergency, it would be “acceptable.”

Only 100 areas. In suggesting that industrial impact areas be weeded out of the critical areas list, Fleming had a logical argument: “We are now relinquishing most of our material controls. It follows that most of these industrial plants will be producing for the civilian economy [more] than for defense.” After Oct. 1, he told the senators, critical areas can be cut from the present 209 to about 100.

Fleming proposed that the Office of Rent Stabilization “be closed out” Sept. 30 when he thought federal rent controls ought to expire in the communities where...
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What is left of rent control, said Mr. Davis, is "just laugh in our face," testified Mrs. Violet Costa, wife of a city fireman. "We have about $2,000 to put down. We asked one lending agency representative and he said: 'GI loans make me sick to my stomach. If the government wants you to have a loan, they should make one.'"

AMVETS' Davis and other witnesses agreed they might go along with an interest rate increase to 4%/2% "under protest" so long as down payments were kept low.

In Cleveland, the subcommittee heard Bernard B. Dierenfeld, president of the joint veterans commission of Cuyahoga County testify that veterans wanting homes "don't care whether the rate is 4% or 4%/2%. What they want is homes," Vice President H. H. Jurgens of Central National Bank testified he requires 25% down payments plus a 1% service fee to discourage VA loans.

 Builders say they will absorb 5% cost increase

Price, wage and materials decontrol had little effect on homebuilding.

Copper was stabilizing at 30¢ a lb., 51¢ above its frozen price. Cement and some gypsum products edged up slightly in scattered localities. But steelmakers made no major price boosts by month's end. Lumber continued its gentle decline.

Wage decontrol freed unions to bargain for whatever they could get as contracts expire this spring. The target would usually be 2½¢ an hour more in wages or welfare payments, the typical compromise about 10¢ to 15¢ an hour in one form or another.

Most observers expected overall material prices might drop a little as the year advanced, but this would be more than offset by continued wage increases. In city after city across the nation, homebuilders said they expected higher labor pay to drive their costs up about 5%. But most of them thought they would have to absorb the increase: the market would not stand higher home prices.

Miller Nichols and most other Kansas City builders expected costs there to rise 5-6% under new wage rates. In San Fran-

Vets themselves urge House committee to hike VA rate

Do the veterans' group leaders who insist 4% VA interest be retained really speak for their members? A House veterans affairs subcommittee heard four days of testimony in Ohio last month that suggested a 4% rate was far less of a political untouchable than many a legislator thinks.

In Cincinnati, the committee chaired by Rep. William Ayres (R, Ohio) heard these complaints:

> Most Ohio veterans "simply cannot get anything else but a conventional loan unless they engage in underhanded dealings," testified Richard H. Davis, AMVETS national service officer.

> "At least 40 men in my post alone have tried to get loans and couldn't," related VFW's Clarence H. Baerthlein, of Bellevue, Ky.

1. **Uncounted numbers rose as states ponder own rents**
2. **Rent control losing popular support?**
3. **AMVETS' Davis and other witnesses agreed they might go along with an interest rate increase to 4%/2% "under protest" so long as down payments were kept low.**
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**Buildings prices climbed.** Many a sign, both stark and colorful, pointed to a significant increase in vacancies across the nation.

> In San Francisco, bankers and insurance men reported 10% to 15% more rental vacancies than a year ago.

> Since 1950 (including estimates for this year), builders have put up some five million nonfarm homes and houses and conversions have added something between one and two million more. But household formation amounts to less than four million. While some of the resulting vacancy has been taken up by the vast migration of minority groups (largely Negroes) from farms to cities, the number of vacant dwellings has grown. Some experts think it now may be as much as 3.5 million units nationally, double the 1950 rate and higher than 1940, which is considered a normal year.

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urban housing, said: "There is too much vacant space left from World War II (see below). What is left of rent control, said Mr. Davis, is "just laugh in our face," testified Mrs. Violet Costa, wife of a fireman. "We have about $2,000 to put down. We asked one lending agency representative and he said: 'GI loans make me sick to my stomach. If the government wants you to have a loan, they should make one.'"

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News

Prefab Institute marks 10th birthday; new president sees 10% rise in output this year

The Prefabricated Home Manufacturers' Institute celebrated its 10th birthday last month in Chicago. The annual convention, held in the Bismarck Hotel, drew some 60 top prefab executives. PHMI Manager Harry Steidle offered some facts to nourish the optimism felt by most producers:

Since 1946, the prefabrication industry has supplied one out of every 25 new nonfarm houses built. More than one million Americans now live in postwar prefabs. Still expanding, the industry produced a record 57,000 units last year, 21% more than in 1951 and 6% of total US housing output. Steidle forecast prefabs soon will swell to 10% of new US homes. Incoming President William B. F. Hall forecast at least another 10% gain for the industry this year. Other convention news:

- Prices for prefabs are not likely to rise in the near future. In fact, many producers suggested that buyers may soon be getting "more prefab house for their money" through larger kitchens and other improvements at no increase in prices.
- Most mortgage lending and servicing procedures are geared to local operations, but prefabricators need national or sectional service, said retiring President John C. Taylor Jr. Some prefabricators already have organized their own finance companies, and Taylor predicted that the established mortgage industry does not adjust soon to serve the prefab market, it may lose it entirely.
- A recommendation by Richard B. Pollman of Thyer Manufacturing Corp. for establishing industry test procedures and design standards, reviewing new products and techniques, conducting technical industry research, was approved in principle. Driving from Toledo to Fort Wayne after the convention to discuss it with President Hall, Pollman was seriously injured in an automobile accident, will probably be hospitalized about three months.

President Hall, 47, Yale, '34, was mortgaged loan manager for Lincoln National Life Insurance Co. in Fort Wayne for ten years before his World War II service as a Navy flyer in the Pacific. Under Guam palm trees he developed preliminary designs for a prefab house, after his discharge established General Industries, Inc.

CONGRATULATIONS are offered William B. F. Hall (c) on his election as PHMI president by retiring President John C. Taylor (r) and Gen. John J. O'Brien (l), new vice president.

California manufacturer unveils fully portable, 520 sq. ft. defense house for $3,500

A month ago, HOUSE & HOME speculated that housing's need for really mobile but not refrigerator, stove, heater and furniture. Although the house is smaller than officials like, it is so much cheaper than other relocatable housing offered for defense areas where no permanent need is foreseen that one HHFA man said "it knocks the tar out of PHA's temporaries as well as the prefabricators' institute test house." Next step, HHFA's Ralph Kaul hoped, would be a test project of 100 to 200 at Camp Pendleton.

Builders and prefabricators would do well to ponder, too, the mushroom growth of the trailer coach industry. While prefab shipments climbed from 50,000 in 1951 to 57,000 last year, trailer dealers' sales shot up 23% to 83,054 units. One Los Angeles building publication declared the popularity of permanent trailer living (250,000 people in California alone dwell in trailers) constitutes "a threat that frankly dwarfs all the ruckus over public housing." Now, 25% of trailers are bought by the military services. Mobile workers take about 68%. Their industry is growing for the retired persons' market, which it thinks is even bigger—potentially.
NON WHITE HOUSING: in the postwar housing boom, most builders split
away from Negro housing; now with homes harder to sell, the big untapped market begins

To many a thoughtful builder, one of the shameful facts of the postwar housing boom has been private industry's comparative lack of building for nonwhite citizens. Nobody disputes that their need is the greatest. But building minority housing involves extra problems ranging from tedious to awesome. In the years when the white market clamored to buy almost anything with four walls and a roof, only a handful of homebuilders produced for nonwhites.

This spring, as farsighted builders eye the coming drop in family formation and ponder how they can keep selling the million homes a year that mean prosperity, interest is turning to the untapped market for minority housing.

One sign was a rush of oratorical eloquence. Perhaps Philip M. Klutznick, the former FHA chief who is now president of Chicago's American Community Builders, posed the problem most forcefully. Said he: "There was a time when a person who discussed this problem was considered a 'do-gooder' or 'leftist' or even worse. Now it is no longer a matter of political ideology. Our treatment of this aspect of our housing concern may well determine our ability to save many of our cities from central deterioration and decay physically. . . . Honesty compels the admission that we have failed miserably. . . . We need to recognize the fact and move forward."

**New crop of customers?** Most of the basic moving forward has already been done by the nation's preponderant nonwhite minority, the Negro. In the words of Gunnar Myrdahl, world-famed Swedish economist, the last ten years have seen "a dramatic movement upward in the entire plane of living of the Negro people in America." In less scholarly terms, that means thousands of prospective customers with better jobs, higher incomes, and more education clamoring for housing to replace the hovels they now call home.

The emergence of the nation's newest middle class is spelled out in census figures:

- Between 1940 and 1950, annual earnings of nonwhite workers trebled, while earnings of white workers rose only 158%.
- While the median Negro income now is only $1,295 a year — about half of the median white income of $2,481 — the middle income group of Negroes has expanded so enormously (see graphs, p. 47) that it has created a whole new market for private housing where none existed before. In 1939, a negligible 0.1% of Negro families earned over $5,000 a year. In 1950, that important able-to-buy group had grown to 5.4%. Still more significant, the median 1950 income of nonwhite families whose chief source of cash was nonfarm salary was $2,047.

- Not only were more Negroes employed, but they were working at better jobs, which made them better mortgage risks. From 1940 to 1950, the number of nonwhite clerical workers tripled. Nonwhite salesmen and craftsmen doubled.
- The past decade saw both a higher rate of housing improvement and a larger increase in home ownership for nonwhites than for whites. In 1940, only 717,771 Negro homes were owner-occupied. By 1950 their ranks increased 66.2% until Negroes owned 1,196,000 of the 3,508,000 homes in which they lived.
- Disparities between market values of white and nonwhite homes narrowed. Relatively more mortgages were assumed by nonfarm Negro's 1953 housing problem sprang away from Negro housing; now with homes harder to sell, the big untapped market begins

**TRADE SECRETS FOR NEGRO MARKET:**

From builders who have built successful projects for the Negro market, here are some pointers on sensitive items to watch and follow:

- Build the same quality house you would build for the white market, particularly in northern cities.
- Before you commence, be sure your site will not involve you in a civic hassle. Go quietly to the planning commission; check with important industrial groups in your area.
- Try to get to know Negro families — not the leaders of militant organized groups, but the kind of people you will be doing business with.
- Smooth the way with wide publicity — even before ground-breaking. Have a big dedication ceremony. Advertise nonsegregation if this is the case.
- Choose a management or sales staff (if you can) which is racially integrated (if you are in the North) from top to bottom.
- Form a tenant council to take unnecessary worries off your hands.

**Urban migrants.** The rise of the Negro was in great part caused by military spurring first by war and then by mobilization. Negroes moved from the South to better-paid jobs in cities, both industrial centers, particularly in the Northeast and Southwest. Southern states, from 1940 to 1950, showed a 17% population increase for nonwhites, but only a 3% gain for non-Negroes. By contrast, the eight major states, which had experienced a 1.5 jump in nonwhite population, their nonwhite population rose from 1940 to 6.4% ten years later. In Texas, Arizona, California, and New Mexico, the nonwhite population doubled.

Except for the deplorable farm cities which neither the building industry nor the government is now prepared to enter, Negro's 1953 housing problem springs from his vast migration.

The simple truth is that the urban whites have resisted giving new Negro populations as much space as they would have liked. Census Bureau figures that any Negro occupied by 1.01 to 1.50 persons per room is considered crowded (that allows five persons in one room). It considers one room over 1.51 persons per room "overcrowded." Only 5.5% of the nation's rural nonfarm dwellers live in overcrowded conditions. But 18.2% of Negroes do.

For all races, only 9.2% of US homes were classified as "dilapidated" by the Bureau. But 31.3% of Negro homes were. Among Negro homes, 58.4% have tub or shower, against a national average of 27%. Outdoor privies are the order of the day for 47.8% of all Negro homes, with a national average of 22.5%.

**A dual market.** Over-all statistics on population shifts and overgrowth give only a partial picture of the housing market. For if the average home life is even lower than that by his pay level, it is also true that the active fringe of Negroes has been living in between its own and the white status, living, while the lower levels of N remain relatively untouched. So the housing market is two markets: low-rent (under $30 a month) which there is still little evidence enterprise can reach; the other

HOUSE
rent homes among the growing middle income groups.

Of the first to capitalize on the new market was Atlanta Attorney Morris 1, a crew-cut ex-Rhodes scholar. Says three years ago, I suddenly woke up fact that Negroes' incomes had rad-

Outskirts. Not every project built with Negro occupancy in mind has been an unqualified success, even in some cities where overcrowding in central city

Yet about 20% of Highpoint's (schoolteachers, doctors and nurses, clerks and carriers, and some labor-

"Flat Top" Smith erected a 425-home 

"This is a home community for all Amer-

"We had no idea whether integration (of white and nonwhite) or not." He wound up with a 100%

"No greater" many of Houston's Negro slums. Says he:

ONE OF THE HANDSOMEST of the FHA Sec. 608 projects for Negro occupancy is Washington's 152-

MEMPHIS BUILDERS have one of the nation's leading records at serving the Negro housing market,

MIAMI'S Bunche Park homes, built by the Gaines Construction Co., were sold with the aid of down payments as low as $25 and monthly payments of $37.

NONSEGREGATED homes like this one are being planned under FHA 203 6 2 (D) in Portland, Ore.

In one eastern seaboard city, for instance, a 260-unit development renting for $62.50 a month had 40 vacan-

The Miami Herald recently reported: "There
relax in comfort...anywhere

with DUNHAM baseboard heating

You can sit anywhere...in front of windows, in any corner, even on the floor...and be comfortable when you heat through Dunham Baseboard. You don't dodge chilling drafts because Dunham Baseboard eliminates them.

Since heat comes from all along outside walls, where you need it—not from one or two "spots"—you keep warm without huddling around space-grabbing radiators or hot air grilles.

Rooms Are Roomier...Better Looking. Dunham's handsome baseboard doesn't take up floor space...or "break up" walls. Cleaning is simpler, too, because of Dunham's unique, smooth-surfaced enclosure which fits flush with the floor. And fuel bills are often lower because Dunham's better heat distribution eliminates need for "thermostat jockeying" on unusually cold days.

For further information, heating contractor or write copy of this new, fully illustrated brochure, "Inside Facts About Heating" to C. A. Dunham 400 W. Madison St., Chicago.
vacant houses for sale in Richmond [and] Buche Park, Eleanor Village and [Negro subdivisions], but a lot of Cadillac families seem to prefer to live in Miami's downtown slums." In Chicago, reality seems to say Negroes generally move to near-in slums as soon as they can afford them. In the outskirts. Outlying communities near Long Island and in Savannah, Negroes have suffered vacancy problems, too.

One of the men who knows the market and its problems best, Frank Horne, HHFA expert on minority housing, says lagging occupancy in suburban Negro communities "nearly always is the result of not something quite right." Usually, the trouble is faulty construction, or bad transportation, or a bad neighborhood, or a bad transportation set-up. Most often, he notes, "the Negro who has never had the same know-how as to it has that has been applied to other communities." 

And financing. One reason for discussion in Negro housing, Horne admits, is a lack of knowledge of the market. October ranks that as the No. 3 problem of Negro housing. The first two, land and housing, loom far bigger.

Put simply, the land problem is segregation, says Chicago's Builder Klutznick: "often bigger than anything else [the Negro problem], is the search for space outside all-white urban centers on which to build houses. We cannot pretend to mean anything about abolishing slums and Negroes have never had the same know-how as to it has that has been applied to other communities." 

The biggest problem, Horne says, is "the lack of knowledge of the market." October, land and housing, loom far bigger.

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Against segregation: law. In housing as with other aspects of Negro life, the principal blows being struck against segregation are in the realms of law and legislation. The biggest one, probably, was 1950's Supreme Court ruling that race restrictive covenants are not enforceable in court. But in many a less spectacular way (in the North where nonsegregation is a political possibility), Negroes have been gaining ground. Samples:

- San Francisco's supervisors adopted a nonsegregation policy for urban redevelopment in 1949. If present plans are carried through, this will enable Negroes to compete for housing in some of the city's finest residential areas.
- The nonsegregation line for public housing is moving South. Last March, Washington's National Capital Housing Authority voted for nonsegregation in all projects built in the future.
- HHFA, disturbed by complaints that many an urban redevelopment project was shrinking the already restricted residential areas available to Negro families, forbade displacement of minority groups unless other homes are made available to them "either through new construction or in existing housing that heretofore was not available to Negroes."

Slum clearance crisis? As HHFA's Horne sees it, "the problem of ethnic ghettos is being brought to a head by the slum clearance program." It is possible, he thinks, that race problems may slow it down. Often half the residents in an area marked for redevelopment prove eligible for public housing, but if public housing is cut back by Congress more or less permanently there may be nowhere else for them to go.

The problem is all the more acute in northern states because the movers and shakers among Negroes are strenuously resisting segregation. In the South, the basic acceptance of segregation at least limits the problem of rehousing Negroes. "In many northern towns," says Horne, "you can't talk of a Negro FHA community. Negroes object."

The biggest practical result of the struggle for land has been the expansion of ethnic ghettos into adjacent white areas. This trend has brought bombings of Negro homes in both the North and South—Atlanta, Miami, Kansas City, Los Angeles. In the most celebrated instance, it led to the riot in Cicero, Ill., which was finally quelled by state militia. In Chicago, property owners' leagues of five years ago, which worked passionately against Negro move-ins, are virtually dead. In their stead have risen community councils dedicated to harmony. But Kansas City had another bombing March 31—its third in a year.

Even the efforts of such groups as Chicago's commendable Hyde Park-Kenwood 

Community Council do not prevent white people from moving away. And it is still true that the Negro buying into a white neighborhood must often pay exorbitantly for his property. Frequently, the white seller will use his profit to move to the pleasant environment of the suburbs, in effect subsidized by his nonwhite purchaser. An arresting but still insufficiently known fact is that Negroes who buy homes in transition neighborhoods do not depress their value. The first few sales to Negroes often depress market values temporarily. But after the wave of scare-selling subsides...
Here are some cold figures to help you save cold cash on your next job. Choose Color-Grained Asbestos-Cement Siding instead of wood. These comparative construction costs reveal savings up to $657 for an average home with 15 squares of siding. Here's a typical example:

**Cedar Siding**
(3/4" x 10") @ $325 per M
(including waste) x 15 sqs. $487.50*
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Painting 15 sqs. 350.00
Total cost of lumber construction... $852.50

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Total cost of lumber construction... $852.50 - $195.00 = $657.50 SAVINGS

For a real luxury siding on soft sheathing compare this perfect combination — Color-Grained Siding plus ShadoWedge Double Coursing Strips and Twist Nails. ShadoWedge (described at right) adds a new dimension to color and texture... deep shadowlines. And Twist Nails are the perfect fasteners (see panel at right). This deluxe combination still saves you $545* compared to wood siding!

Not only does Color-Grained Siding save you money. Color-Grained is new and different with proven sales appeal. It's decorator-designed and color-styled in step with the latest developments in home planning... it never needs painting. And, to top all these great features, Ruberoid has added a new plus... Duroc, a protective finish that enriches the color, resists dirt, stains and weather.

Color-Grained Siding is the best buy on the siding market today... style-wise for your customers and economy-wise for you. See it soon at your Ruberoid dealer, or write for full-color folder. The Ruberoid Co., 500 Fifth Ave., New York 36, N. Y.

*Figures are based on prices in upstate New York in June 1952. Ask your Ruberoid dealer for price comparison based on your local rates.
In 18 metropolitan areas, it has compiled valuable statistical data on Negro incomes, jobs and housing conditions which shed the kind of detailed light on market conditions that builders need. Four more studies are underway. Unfortunately, fear of becoming involved in racial controversy leads FHA to keep its conclusions secret. But the factual data (which will be the subject of a forthcoming article) it gladly makes available to interested builders.

Sec. 207 amendments. On a policy level, FHA has taken two recent steps to boost construction of Negro housing. By taking a $6.40 service charge onto Title I, Sec. 8 loans (H&H, Jan. '53, News), it perhaps anticipated suggestions like John Scully's. Prefabber Peter Knox Jr. thinks there is a big market in Georgia and South Carolina for a stripped-down prefab under Title I. Already, he has two 25-house projects underway at Thomson and Waynesboro, Ga.

By administrative adjustments in Sec. 207, FHA may have paved the way for a sizable volume of Negro rental construction. Builder Wallace Johnson of Memphis says FHA, by permitting him to figure on a 5% vacancy rate instead of the normal 7%, and by allowing a 61/2% capitalization rate, unblocked a 400 unit project which can rent at about $46 a month, tapping a market so big Memphis builders have not even bothered to map it.

In the broad picture, HHFA's Frank Horne may be right in saying the most promising way in sight for attacking the Negro housing problem is with a "little of everything." That means some public housing, some redevelopment and some scattered private developments both in big cities and their environs. As Builder Ted Kimbrough said recently in urging more builders to serve the Negro market: "We've got to have some altruism. It's a profit spread over a long period of years."

Lumbermen worry over rise in Canadian imports

Not only were lumber prices drifting down, but US producers were worried by soaring imports from Canada. Cried H. V. Simpson, executive vice president of the West Coast Lumbermen's Assn.: "A flood of Canadian lumber poses a serious threat to our Atlantic coast market ... and the effects will be felt by lumbermen in other softwood producing areas. In the six months ended March 1, 1952, British Columbia coastal mills shipped only 2.6 mbf by water to our Atlantic coast, but in the six mos. ended Mar. 1 this year shipped 245 mbf. Drying up of United Kingdom demand for Canadian lumber is the main reason they have turned to US market."

Three things helped the Canadians: 1) they can charter ships of any nationality, gain a $5 to $10 water differential, 2) wage scales in Canada's woods and mills are 20% to 30% below US levels, 3) their stumpage and supply costs are less.

Planned town of 30,000 near Toronto to 'insist' on modern design, Canada-style

Six years ago Toronto Industrialist E. Plunket Taylor and his general assistant, Karl C. Fraser, decided that the rolling countryside between the forks of the Don River eight miles northeast of downtown Toronto would be perfect for a planned residential and light industry community. Quietly, they acquired control of 3,000 acres, engaged town planners, architects, engineers. Last month, they confirmed the news (H&H, Mar. '52, News) that their $200 million Don Mills development would be launched this year with construction of about 525 single-family $10-$12,000 houses, plus 350 garden apartments offered for rent or sale under $10,000.

The complete town will be built in stages over five to eight years, eventually have 30-35,000 population, houses costing up to $100,000, a $7.2 million shopping center. For automobile safety, all intersections but one will be T-shaped.

Controlled contemporary. Staff Planner Macklin L. Hancock explained how the developers will control architecture, setbacks, land use and general design by deed restrictions requiring their approval for all structures. "If builders don't conform ... [or] don't build in a certain time the land reverts to us," said Hancock.

Considering local marketability, said Fraser, "we will veer as far as we can to

Albert A. Milne
Plan your kitchens for a woman's approval

The right combination of good looks and practical features in the kitchen is usually a big factor in the sale of a house. For nine times out of ten, the final decision depends upon the approval of the housewife, and her standard of measure is her feeling for charm and her eye for efficiency.

In this kitchen, there are several good ideas that you can put to use in adding to the sales appeal of the homes you sell. The movable work counter, for example, which doubles as a lunch bar, will impress any woman with its convenience. So will its Lazy Susan cabinet for utensils which are in constant use.

But no one feature in this kitchen has wider appeal than the floor of Armstrong's Spatter Linoleum. In addition to hearing the Armstrong trade-mark—the best known name in linoleum—Spatter is today's most popular style in the Armstrong Line. Its cheerful beauty, offered in a range of thirteen colors, can be adapted to any style of decoration. The Spatter design helps to conceal tracked-in dirt until it can be swept up from the floor.

Perhaps the main reason why the housewife prefers Armstrong's Linoleum, whether it's Spatter or one of the many other Armstrong designs, is its ability to lighten her work load. The smooth, virtually seamless surface is extremely easy to keep clean. It's also a floor that's completely greaseproof. Armstrong's Linoleum has a reputation for long wear, and it is quiet and comfortable underfoot.

It's economical to offer the added attraction of an Armstrong's Linoleum Floor in the kitchen, bathroom—in fact, in any room. As a means of promoting sales through appealing to women, you'll find Armstrong's Linoleum a wise investment.

SEND FOR FREE ROOM PLAN. For a sketch plan of this kitchen, with color scheme description and a complete list of furnishings, write today to Armstrong Cork Company, Floor Division, 4604 State Street, Lancaster, Pennsylvania.
Inexpensive shelter withstands atom blast, not radiation

In the two test houses for the atomic explosion in Nevada March 17, civil defense officials erected basement lean-to shelters that could be constructed by a home handyman for about $40. The closest house, 3,500' from "ground zero" was knocked off its foundations, crushed into charred, radioactive kindling. But its lean-to protected a mannequin from loosened members (r), although not from radiation. The second house, 7,500' from the blast, was struck by a shock wave of about 2 psi. Result: 75% of the

PEOPLE: Los Angeles builders form young men's council; ex Lustron vice president convicted of perjury

Los Angeles' Home Builders Institute sponsored formation of a Young Builders Council of California, aimed at developing young men in the industry. Temporary officers for the first chapter in Los Angeles and Orange counties, elected by about 120 initial members, were Perk H. White, R. Reese Myers, William A. Wilson, Eugene D. Cole and Rarrell A. Wright, junior executives with building, lending and utility firms. They scheduled a meeting April 7 to study sponsoring a San Francisco chapter, predicted the group would become a national organization.

Eighty executive officers of the 750 members (see cut). The Levitts considered substituting a fixed glass partition separating living room and dining rooms has been discarded. The source of customer complaints (it came off the warped) the partition will be replaced by a solid plasterboard wall or no partition, depending on the homebuyer's choice. The scheme be the overwhelming choice, one of three schemes will be the overarching choice, probably the standard. At first, the Levitts considered substituting a fixed glass curtain for privacy provided by home or the sliding room divider. But a single glass is difficult and therefore expensive, with a poor acoustical barrier.

Three-way fireplace is now only two directions, the Levitts discarded sliding sections. The reason: "works better in production," said lone assistant to Designer Levitt.

The 36') range with a stainless steel top surface of a 20' range and 15' stainless steel cabinet. The increased size of the range unless steel surface yields a more impressive package than the smaller, porcelain- top stove.

a. ft. refrigerator replaces an 8 cu. ft. The switch stems from redesign by manufacturer, now offering the newer, larger model at a more price as the older smaller unit. Circuits are now handled basic planning.

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As the San Diego VA home loan scandal drew to a close, officials made one more arrest: Builder Elmer J. Hubner, who was charged with participating in bribes totaling $7,000 to former VA loan guaranty officer Francis C. Paige, is serving a 3½-year sentence on other charges (H&H, Jan. '52 et seq.). Hubner pleaded nolo contendere. If convicted, he could be fined $6,000, given six years in jail.

Appointments by newly-elected Mayor Fred L. Peterson were giving the Portland (Ore.) Housing Authority a free enterprise look. Ted R. Asbah, 1952 Portland Home Builders Assn. president, was made a commissioner in February. Last month, the mayor picked Robert B. Hurd, vice president and director of the Portland Trust & Savings Bank. Hurd said he was not "flatly opposed" to public housing, but against it as now constituted. He believed in a referendum before any public housing or redevelopment project is undertaken.

"For rare and outstanding contributions in the development of model building codes ... reconciling conflicting points of view ... bringing to the nation higher standards of housing, safety and uncounted savings by the elimination of unnecessary restrictions," So read the citation with the Department of Commerce gold medal awarded last month to George N. Thompson, 61, assistant chief FHA administrator, March 25 in Washington; James P. Murrin, 61, FHA administrator for development, plans and specifications supervisor for the original Security Administration "green" building operation, later became FHA director, March 10 in Washington; Frank H. Hurd, 62, New York office manager of Nat'l Lumber Manufacturers' Assn., March 25 in Washington; William A. Moister, assistant to NAHB Executive Director J. Reilly Stanton, 65, former FHA administrator, March 29 in Philadelphia; and Charles E. Fry of Los Angeles, March 29 in Philadelphia.
You know how prospects go for the extra little touches—like the panels of patterned glass in these bathrooms. This glass provides privacy, but passes light through. Just a few feet of inexpensive glass mark houses as different, attractive, appealing.

Many builders have used Blue Ridge Patterned Glass to give homes extra—and quicker—saleability. They’ve used panels alongside the entrance door—as a partial or full partition between rooms—as exterior glazing where they want both daylight and privacy.

Blue Ridge Patterned Glass does double duty for you—for it decorates on both sides—and needs no decorating. It comes in a wide range of patterns—linear, checkered and over-all patterns—in plain, Satinol® and textured finishes. Your L·O·F Distributor or Dealer can show you samples. Call him. And mail the coupon for our book of decorating ideas.

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Truly Satin-like, Arkansas Soft Pine's soft texture works easily to close detail, contours matching exactly at miters. Free from pitch and supplied at specified moisture content, the wood doesn't shrink or swell. Thus stabilized, it absorbs primers evenly, holding finish coats uniformly smooth, permanently free from raised grain.

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CROSSETT, ARKANSAS

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Events

New England Home Show combined with Living Exposition, Apr. 18-26, at the Building, Boston. Participating are builders, mortgage interests, realtors, suppliers and others. Home Show at Boylston St., Boston 10, Mass.


National Association of Housing Officials conferences: Middle Atlantic, Apr. 23 McAlpin, New York; New England, not set); North Central, May 18-19, Seattle, Detroit; Southeastern, May 2 Phoenix, Phoenix Beach; Southwestern, June 3-5 Hotel, San Antonio; Pacific Southwest Hotel Claremont, Berkeley; Pacific Portland, Sept. (date not set).

Royal Architectural Institute of Canada's seminary, Apr. 23-25, Royal York Hotel Competition. Ponderosa Pine Panel D Competition to obtain designs for indoors suitable for mass-production mon consistent with current standards of design. Prizes total $7,600 including student and school prizes, AIA approx Apr. 27. For program write: Pond Woodwork Competition Headquarters Pico Blvd., Los Angeles 6, Calif.

New garden for the Museum of Modern Art, New York City, will open Apr. 29. D. Philip C. Johnson, a 175' x 100' 'wanker' provides a variety of areas and backdrops suited to the outdoor display of kinds of sculpture.

National Savings & Loan League's convention May 10-14, Chase and 1 Hotels, St. Louis, Mo.

National Housing Conference's 22nd annual May 11-12, Statler Hotel, Washington National Association of Building Owners' 46th annual convention June 7-17, Pittsburgh, Pa.

National Store Modernization, Building nance Show, Madison Square Garden, City, June 9-12. Included will be on designing in nation-wide community shopping centers, stores, spec etc.

Forest Products Research Society's 7th annual June 15-17, Memphis, Tenn.

AIA Board of Directors annual meeting, Olympic Hotel, Seattle, Wash.

The American Institute of Architects' convention, June 16-19, Olympic Hotel, Wash.

National Home Week dates set by Sept. 20-27. Prominent among them will be the Trade Secrets house (see '53) developed by a committee of leading builders. Also forecast is a big upswing in conditioned homes.

National Association of Real Estate Board convention Nov. 8-14, Statler and Hotels, Los Angeles, Calif.

Mortgage Bankers Association of America convention Nov. 13-19 at Miami Beach, a home show conducted by offering services of manufactured planning to homebuilding.
A big talking point for the homes you sell

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Uskon eliminates radiators, ducts, dirt. Architects and decorators get new freedom of design.

U.S. Rubber's USKON electrical radiant heating ceiling panels

No prospective homeowner can resist these facts about USKON:

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2. Nothing to break down or wear out—no ashes to haul, no soot or smoke.
3. No furnace to clean or repair.
4. Eliminates unsightly radiators and ducts. Blends with any decorative scheme. Panels can be painted over with any ordinary flat paint. Panels can be installed in one room or all rooms, new homes or old.

No prospective builder can afford to overlook USKON. You will find that Uskon electrical radiant heating will help you sell the homes you erect. It will add to your reputation for installing the newest, proven developments in the field! Uskon is a development and product of United States Rubber Company. It has had a tremendous success for several years in homes, apartments, offices, commercial and industrial buildings, bathrooms, sun porches, game rooms, garages, basements, motels, summer cottages. Approved by Underwriters' Laboratories, Inc.

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For complete technical data and costs information, write to Mechanical Goods Division, United States Rubber Company, Rockefeller Center, New York 20, N. Y.

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LETTERS

BATHROOMS

Sirs:

What was surprising in your article on bathrooms (H&H, Feb. '53) was the lack of information about showers. In California, a stall shower is a must in master baths and where a second bathroom is planned it is usually the only facility. Over the years we have developed what we think is an ideal stall shower, 6'-6" high, 7 to 8 sq. ft. The ceiling is furred and covered with waterproof cement plaster. Electric light and a vent with masonry screening 6" x 12" are installed in the stall (if there is a second floor). A glass block stall shower is put on an eyebrow vent on the outside (if there is a second floor) to take care of the steam. We try to locate the stall in an outside wall so we can install about 3 sq. ft. of glass or glass brick, making it nice to look at.

Across the end opposite the showertop we rough-in a bench the width of the shower, one corner to sit on and wash your face. We put your foot on while washing. Wood and bench are completely tiled when glass door is installed. Without radiant heat it is run under the adequate composition pan covers the bench and extends up the wall 8" above the ceiling. Also, a sub-drain is installed. To avoid air mixing with the stall, sprays are used frequently with the installers. Without the last two items the stall will only cost about $25 over the normal tiled shower 8'-3" high, with savings on tile by dropping the ceiling and extending the stall to 8'. We try to locate both the stall and the shower in the bathroom that has the view on an outside wall.

Other bath items we use for the master bathroom are 5½' tubs, colored fixtures, Pull-up toilets with the old-fashioned oval seat, two full walls of corner glass in glass set in metal frame. Radiant heat under tub. Wallpaper (do-it-yourself) in white, walls above wainscot, vertical tubular brushed nickel frame glass door is installed. When radiant heat is run under the adequate composition pan covers the bench and extends up the wall 8" above the ceiling. Also, a sub-drain is installed. To avoid air mixing with the stall, sprays are used frequently with the installers. Without the last two items the stall will only cost about $25 over the normal tiled shower 8'-3" high, with savings on tile by dropping the ceiling and extending the stall to 8'. We try to locate both the stall and the shower in the bathroom that has the view on an outside wall.

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Elder
Shepard
San Mo

Sirs:

I cannot agree that the five ways room costs will save up to $150. That's a large amount of money. I think it is more likely that the wall is nonbearing and that the carpentry costs will be increased. The use of a precast plumbing tree will indeed increase the costs, but, according to our plumbing costs, it could save nothing like $85.

Home buyers would, of course, for larger baths, larger wash basin full-length mirrors, etc. provided they had the space.
Notice how the plaster flows through the bead providing a generous bond of plaster to lath. The steel wire mesh is roughly embedded producing strong reinforcement.
Gas or electric range. Electric refrigerator. Counter, range-top and sink in one seamless piece. Cupboard and undersink storage. All in units 39" to 69" wide.

VITREOUS PORCELAIN FRONTS AND WORK TOPS

Dwyer Kitchens

For New Apartments
Typical are the Essex Apartments in Indianapolis where 390 Dwyer Kitchens save room for more spacious living areas. Dwyer Kitchens enjoy 26-year record for durability and trouble-free operation in rental properties.

For Vacation Properties
Motel and resort cabins encourage longer stays and better rents with Dwyer Kitchens. Mother gets more vacation too...enjoys full kitchen convenience with minimum work.

For Business and Special Uses
Convenient for coffee, for simple or sumptuous food. Thousands used in offices, stores, banks, television and radio stations, fire stations, schools, churches...used for night shifts...and wherever close-at-hand kitchen facilities are needed.

For Remodeling
Change old residences to profit-makers. Dwyer Kitchens are the key to remodeling into quickly rented apartments.

SEND FOR FREE BULLETINS ON DWYER KITCHENS

MAIL COUPON OR WRITE FOR COMPLETE BULLETINS

Dwyer Products Corporation
Dept. H453
Michigan City, Indiana

afford them. Whether or not these items pay for themselves in added sales appeal included in the financing is the question that always must be answered. Improvements adding to the cost of installation of additions to the place for an automatic washing machine in the bathroom. This would save trips from the clothes to the washing machine, it will not from the washing machine to the of course, no one else could occupy the bathroom while the laundress is at work. The idea is as valid as placing dining facilities in the bathroom.

Sirs:

We believe a very nice and attractive room will pay for itself in added sales appeal. Most people prefer a larger open plan bath. A place for an automatic washing machine does not contain a laundry room, they prefer the automatic washing machine in the kitchen.

Sirs:

I think more of this type of arrangement should be written, as most architects, especially for homes below $20,000, seem to have a conception of the size of a bathroomeven for a family of four, and up, as the average family of four, and up, requires, the place for an automatic washing machine.

Sirs:

Although we are in complete agreement with your objective of attaining a room for the American public, we feel that you have overlooked some strong trends which has evident in the past few years. That rapidly growing preference of people for cabinet-showers or stall-showers. Furthermore, the trend has been more toward prefabricated, packaged showers and away from the other type of built-up stall show. It is a unit designed to give more and longer service for less cost. The cabinet shower, as you may be aware, with the need for lead parproofing membranes of any kind, is...
Prefabrication is the answer to increased profits for the builder of large projects. Richmond Homes will prefabricate your entire project, using your own successful plans to create a variety of exterior elevations. You can build faster, at lower cost, with fewer headaches, when you use Richmond Homes. Sections are shipped with BOTH interior and exterior finish applied. Richmond Homes are regarded by competent builders as the shining example of the finest in prefabricated homes because of conventional construction features and custom-built appearance. Investigate the tremendous profit possibilities... today!

Our program, naturally, has certain requirements relative to the financial status and experience of the builder. If you feel that you can qualify, we would like to hear from you. Write, wire, or phone for complete information. New 1953 brochure now available.
it is independent of the building structure and not affected by the building's shrinkage with the consequent ground-floor ceilings in the event that is on the second floor.

R. S. Shook, sales manager
Henry Wels Manufacturing
Elkhart, Ind.

Sirs:
The article is very good and very interesting. I believe some home buyers will want larger bathrooms in certain types of houses where the location warrants the extra space in the house. For example, it would not be logical to put in a large expensive bath in a small room where the people who could afford to pay more would not want to live on account of the adjoining neighbors. In other words, a large bathroom should have more other rooms keeping. One thing I have in mind is the size and value of the lot.

WALTER S. JOHNSON
Walter S. Johnson Bld
Niagara Falls, N. Y.

Sirs:
You say on page 101, "Handsome for large bathrooms in certai...ing the adjoining neighbors.

SIMON MEYER
Property Development
Charleston, W. Va.

See article, "Adhesives pave way for "my," p. 162, March H&H. We have that tile is being set at $2.75 starting walls in your area. Through use of dry adhesives, tile can be set (and is being set) in many areas for $1.25 per sq. ft. Cost calculation did not refer to cost from stud walls.

Sirs:
We were very pleased and proud to undertake the article on bathrooms. We want to congratulate you on it.

ROBERT F. ANGUS
Briggs Manufacturing
Detroit, Mich.

Sirs:
As you know, we have been using the "five ways to cut bathroom costs" for many years.

ROBERT F. ANGUS
Briggs Manufacturing
Detroit, Mich.
of builder Hendy’s Price Hill development. These moderately priced homes are all equipped with General Electric Kitchens.

†h G-E Kitchens in 60 days—before even one single foundation was completed!

about this a minute. Mr. William F. Hendy, owner of Arcose Company Houses in Price Hill, Cincinnati, Ohio, took a tip from the pages of other successful builders—and sold his houses in record time. We say YOU can, too... when you install G-E Kitchen-Laundry.

reasons why: First of all, women prefer General Electric appliances to any other brand. A survey shows that 55.7% of the people interviewed believe that G.E. makes the best appliances for the home.

Second: A G-E Kitchen-Laundry can be built right into houses in the $10,000 or $12,000 price range—and the monthly cost to the homeowner may be no more than that for a typical telephone bill, because under modern home-financing the cost of these dependable appliances can usually be included right in the regular mortgage.

Start selling your houses faster, just as many other builders are doing from coast to coast. See your local G-E distributor or write to the Home Bureau, General Electric Company, Louisville 2, Kentucky.

GENERAL ELECTRIC
Added Baths

You can put the added sales appeal of extra baths into homes of every size and price range with guaranteed Weisway Cabinet Showers. These self-contained leakproof baths are engineered and precision-built for quick, easy installation. No special treatment of building walls or floor required. One man easily places vitreous porcelain enamel receptor. Quality-built Weisways are in complete harmony with latest building techniques and materials.

**Guaranteed Weisway**

Leakproof, rustproof receptor for use with walls other than metal. Foot-Grip, No-Slip floor of vitreous porcelain, safe, sanitary, non-absorbent. corners are especially adaptable to space-saving bathroom planning.

**Weisway Cabinet Showers**

Mail Coupon for full color catalog with detailed information on complete Weisway line.

---

dow areas in a bathroom create a special problem due to body radiation to cold walls and the generally necessary evaporation of water and steam from a window over the tub, which tends to draw cold air to spill down onto the bare skin of the bather.

Practically all the ways mentioned to improve the small bathroom add something to the cost. Those which don't, such as warming the air and using a bathrub such as Briggs with vertical steel flanges on three sides, we will consider.

The article is stimulating and constructive.

**Irwin G. Jaffe**

Levitt & Sons

Levittown, Pa.

Sirs:

I have done considerable research on bathroom design and in my opinion the most direct way to provide bathrooms of standards without increased cost is prefabration.

Because a conventional bathroom was not precisely the situation in the bathroom industry and the public is paying the price for these wasteful practices.

**Guy G. Rothenstein**

Forest Hills, N. Y.

Sirs:

I believe your policy of reporting trends in various items and equipment done in the 39 Ways to Build a Better Room is going to help the builders and the manufacturers. You know of our difficulties in securing designed products from manufacturers. You know, too, that one of the reasons...
CRANE'S
ARCHITECTURAL COMPETITION
brings out dozens of room ideas that help sell houses

Crane wants to help builders sell more houses... easier. That's why we like to pass along ideas that put more sales-appeal in bathrooms, kitchens, and utility rooms.

Many such ideas have been developed for you. And to get more of them, Crane has just concluded a nation-wide architectural competition offering generous cash awards.

Out of this competition has come the best thinking of almost 500 architects and draftsmen—dozens of original, prize-winning ideas like the two shown here.

The best of these ideas are being built into actual rooms, full details of which will soon be available. In the meantime, don't forget that the big Crane Sketchbook of Ideas is filled with usable ideas like these. And it's yours for the asking. Get your copy from your Crane Branch or Crane Wholesaler.

COME TO
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FOR IDEAS

CRANE CO.
GENERAL OFFICES: 836 SOUTH MICHIGAN AVE., CHICAGO 5
VALVES • FITTINGS • PIPE
PLUMBING AND HEATING
get FAST, RESPONSIVE HOT WATER HEAT for

with this popular TACO CIRCULATOR

EVEN LOW BUDGET HOMES CAN NOW HAVE THESE LUXURY ADVANTAGES

RADIANT WARMTH · DRAFTLESS WARMTH · CONTROLLED WARMTH

MORE HOT WATER FOR KITCHEN, BATH AND LAUNDRY

Yes, forced hot water heat with a TACO circulator gives all this plus economical warmth. No need for a separately fired water heater. TACO TANKLESS, hooked up to a heating boiler, supplies year-round low cost hot water.

The TACO circulator delivers heat where it will give the greatest comfort... whether you use radiant panels, convectors, radiators or baseboards.

Better Heating-Better with Taco

TRADE SECRETS HOUSE

Sirs:

I feel that the NAHB has made a decision in the right direction with the Trade Secrets House (H&H, Jan. and Feb. '53). It may not be the perfect answer to the problem at hand, but it could be incorporated into the NAHB's 1953 model program. The use of this program must be followed through by NAHB, and I believe that the construction industry can place itself in a healthier business condition with the 1954 model house.

FLOYD L. COWTON
Burns Construction
Denver, Col.

better products have not been designed and built, and as a demand for better products has been proved to the manufacturers. Natural law is not going to put out a new program each year as the automobile manufacturer does. Pressure is applied where it will do the most good.

I believe your article... and I feel that it is part of a series... will do much to heighten that pressure, particularly through home builders who have not realized that the possibilities of their houses may be improved by a better utilization of the trends shown.

It is evident to me in my travels that the best homebuilding practices are fast becoming the standard in the trade. Articles presented in periodicals are more widely quoted than ever before, and in my experience more quoted than ever in the periodical's. Thus far, you have illustrated too deeply to the trade people. However, I'm sure that that effort is part of a series... will do much good.

Sir:

The "39 Ways to Build a Better Home" is simply sensational. Our design department is now working on many of these projects, and we have found your article to be one of the most interesting that we have read in some time.

We doubt that it is possible actually to save $150, while we do believe that considerable savings can be had by following your program. I do agree that home buyers are looking for a larger bath, bigger washer, more mirrors, built-ins, etc., and we are making use of them, but I believe that the washing machine should be in the kitchen or in a utility room which is adjacent to the kitchen.

Your article has been most helpful. Congratulations on the fine work the NAHB is doing for the homebuilding industry.

FLOYD E. KIMBROUGH
Kimbrough Investment
Jackson, Miss.
BUILDERS—
WHY EXPERIMENT?

When Scholz Designed "California Contemporary" units enable you to take advantage of the terrific pent-up demand for contemporary design by giving you—

1. SURE COST and PROFIT FIGURES BEFORE YOU START
2. UNPRECEDENTED SALES APPEAL
3. AT A COST WHICH IMMEDIATELY PLACES YOU AT AN ADVANTAGE OVER COMPETITION

See feature article in this issue which gives complete details on the Scholz Designed "California Contemporary" homes which sold out original project of 43 homes in 9 days and an additional 60 homes in 60 days in Toledo. These homes are being built for $9 a sq. ft., an unmatched figure today in the Mid-West and are complete, including tile baths, woodburning fireplaces, thermopane, complete insulation, vent fans, hot water-radiant heat. This record is in the process of being duplicated in other cities. Midwest Millwork and Supply Corp. is now shipping these same units along with complete cost estimates, engineered procedures, and cost-cutting techniques, to builders throughout the middle-west. Progressive builders can not afford to fail to investigate this combination of rock bottom controlled costs, building know-how and sales appeal.

Write today on your letterhead for complete information to

Scholz Designed CALIFORNIA CONTEMPORARY HOMES
BY MIDWEST MILLWORK & SUPPLY CORPORATION
3662 KENWOOD BLVD. • TOLEDO, OHIO
Glazing the Air-Conditioned Home

WHY AIR CONDITIONING CALLS FOR SPECIAL CONSIDERATION OF WINDOWS

Windows are possible sources of heat gain in summer, just as they may waste heat in winter. That’s why, in air-conditioned homes more than ever, windows must be thoughtfully planned to give home buyers the comfort they want, and to assure efficient and economical operation of the air-conditioning system.

YOU HAVE THESE CHOICES FOR BETTER HEATING AND COOLING:

1. Resort to old-style, small windows to reduce heat loss and heat gain.
2. Use insulated windows. There are two ways to do this:
   a. Storm sash on all windows the year ’round.
   b. Sealed insulating glass in all windows.

SMALLER WINDOWS

Smaller windows have steadily lost favor with architects, builders and buyers. Home buyers have shown a tremendous and continued desire for picture windows and window walls. To give them smaller windows would be a backward step that is sure to run into sales resistance—resistance which would be felt by builders, architects, real estate people and air-conditioning people, too.

INSULATED WINDOWS

Insulated windows, the other possibility, are a more logical and saleable answer to glazing for air-conditioning and heating economy. With insulated windows you reduce heat loss in winter and heat gain in summer. They save fuel in winter and power in summer, and help make the house more comfortable the year ’round. Consider the two ways of insulating windows:

1. **Storm Sash** is one means of window insulation. They can be left in all year to provide summer as well as winter insulation. But they must be taken down periodically for washing, since dirt and moisture will infiltrate between them. And storm sash in sizes required for today’s larger windows are unwieldy.

2. **Sealed double glazing** allows the use of large windows for daylight and view without the bother of storm sash. More and more builders have been putting *Thermopane*® insulating glass in medium and low-price homes just for its winter benefits. Now, in the air-conditioned home, these become year-round benefits and the extra cost of double glazing is doubly justified. The extra cost is minimal use of standard size units, standard sash and simplification methods.

The table below shows *Thermopane’s* effectiveness in down heat transfer by conduction and convection from the cold side. *Thermopane* saves, roughly, half of the heat would be wasted through single glass by these four transfers.

<table>
<thead>
<tr>
<th>Kind of Glass</th>
<th>Thickness</th>
<th>Winter U. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single pane (plate or sheet)</td>
<td>¼”</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>½”</td>
<td>1.15</td>
</tr>
<tr>
<td>Thermopane (double-pane units)</td>
<td>½” (¼” air space)</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>1” (½” air space)</td>
<td>.58</td>
</tr>
</tbody>
</table>

NOTE: Heat transmission coefficients (U. values) vary with ranges of Winter U. values above are based on 10° outside temperature, 70° indoors. Summer U. values are based on 95° outside temperature or temperature. Wind velocity of 15 mph outdoors and normal free turbulence are assumed in both cases.

HOW TO PLACE WINDOWS IN AIR-CONDITIONED

Insulation, alone, is not enough. Location and exterior of windows are vitally important if heating and air conditioning are to work with maximum effectiveness and economy from the sun and sky place by far the biggest load conditioning systems in homes. The house should be made maximum use of the sun for winter warmth, but provision for shading certain windows in summer.
SOUTH WINDOWS

maximum use of solar heating in winter, the house laid out along an east-west axis, with large windows. This brings in the low winter sun for fuel savings. South windows are easily protected from high sun by a roof extension (so designed that the low winter sun is under it). The diagrams below show how this works. For design information for this overhang, see an architect. Most of them are equipped with the necessary guides for your latitude.

WEST WINDOWS

ows must be more carefully considered than those on other elevations. Due to the buildup of heat through a hot sun, the fact that the west elevation is exposed to the low sun, heat transmission through west windows can create a load on the air-conditioning system. There are possible ways to handle the west elevation problem:

1. Some architects and builders solve this problem by placing the porch, garage, carport or utility room on this side of the house.

2. If there are large trees on the site (or if they can be added) to shade west windows, the problem is solved by nature. The leaves provide summer shade—the bare branches let the welcome winter sun come through.

Thermopane glass is an effective means of decreasing solar heat gain. This blue-green glass is made with a special chemical composition which enables it to absorb solar energy. Much of this heat is dissipated back outdoors, so that less load is thrown on cooling equipment. For best results in west windows, therefore, Thermopane should have heat absorbing glass as the outer pane. This heat absorbing Thermopane reduces the heat gain through west windows approximately 50% as compared to single-pane, clear glass windows. This has been determined by calculations made for west windows at 4:00 P.M. in summer, when the sun is considered to be at its worst angle. By reducing the cooling load, heat absorbing Thermopane may even reduce the size of the air-conditioning equipment required for the home.

EAST AND NORTH WINDOWS

North windows rarely present a problem of radiant heat gain. Windows in the eastern elevation, if exposed to the morning sun, may require shading as suggested for western windows. An engineer’s or architect’s recommendations should be obtained on this.

TYPES OF SASH TO USE

itects and builders employ fixed sash in air-conditioned homes for psychological reasons and because they may want to use natural ventilation in the more moderate seasons of the year. Their preferences can be satisfied with ventilating sash which take standard Thermopane units. These sash, of wood or metal, are available in all common types. Your L-O-F Glass Distributor or Dealer can furnish information about them and about standard Thermopane units for them. Or, write us if you wish more complete information on Thermopane, its standard sizes and types of sash for it.

These two pages are a condensation of a brochure that covers the entire subject more fully with additional technical supporting data.

We shall be pleased to have you write for a copy of "Glazing the Air-Conditioned Home".

Libbey-Owens-Ford Glass Company, 943 Nicholas Building, Toledo 3, Ohio

LIBBEY·OWENS·FORD a Great Name in GLASS
More and More of America’s New Homes are PREFABRICATED!

Responsibility for the spectacular gains of Prefabrication is the fact that Prefabrication delivers the utmost for the building dollar. New sales records continue to be set in the Prefabricated field because Prefabrication provides permanent, attractive homes geared to comfortable living and meets housing needs quickly and economically. Furthermore, Prefabrication’s modern methods result in greater savings, from economy model to luxury home. In 1953, as it celebrates its 10th Anniversary, the Prefabrication Industry is ready for its greatest year. Join this big swing to Prefabrication.

Today, write for FREE booklet, “Build Better, Build Sooner.”

FLUSH DOORS MADE IN USA

Sirs:
We take exception to the statement made by the Housing Research Foundation (H&H, Nov. ’52): “Builders throughout the country that domestic slab doors warp, particularly when exposed to the weather. To get factory slab doors, many have importations from Finland and other foreign countries.” Surely this is an opportunity for scientific manufacturer.

As one of several manufacturers of factory flush doors, we claim this statement is untrue and cannot be supported by facts. In the last 20 years we have manufactured six million flush doors in thicknesses as thin as 3/4”, widths 11” to 9'-6”, and heights 13” to 26'-3”.

These doors, made in domestic woods, have been shipped into all the continental US and its possessions. They have proved 99.8% satisfactory.

D. C. McCray, Paine Lumber Co., Oshkosh, Wis.

The statement, made by C. W. Smith, West Research’s book, New Frontier Builders, was based on his own survey. H&H believes that most builders, architects, specification writers have found domestic doors entirely satisfactory.—Ed.

ORIENTATION

Sirs:
All the houses you print show windows facing south. Haven’t you noticed that there are some lots in America where north is a better choice? In your Trade Secrets (H&H, Jan. ’53), you rave about building anywhere. Suppose our reference is to the busy traffic street, north exposure is to the mountain woods, or a lake, or a brook. Do you think the freezing north wind? All of your brilliant ideas have been of architectural masters. The view was to the south and that is the reason.

IRVING MARIASH, Columbus, Ohio

ERRATUM

Sirs:
In your February issue of H&H, our name was incorrectly given as American Homes, Inc.”

We understand how easy it is for the public to confuse our name with the magazine American Home, a daily to try to counteract the confusion.

M. E. TRUMBLE
American Homes, Inc.

- Our apologies to American Home
one look and you know a FIAT shower door means more

MORE QUALITY built-in means MORE SATISFACTION. Inspect a FIAT door and you'll see why you get more. The quality is evident—the styling unsurpassed.

FIAT Doors fit standard 24" door openings. Easy to install on new or old stall showers of any type—steel, tile, marble or glass.

Look to FIAT DOORS for added beauty—more years of satisfactory service. When you specify a shower stall, include the vital finishing feature... a FIAT DOOR.

Simple design and attractive appearance at low cost—here's the fine quality and sound construction you would expect to find only at a much higher price. The Neptune measures 24 by 64 inches and is reversible for right, or left-hand hanging; one-piece satin-finished heavy aluminum frame with mitered corners and glass set in rubber channel. Extruded aluminum jambs, top and bottom suspension hinges. Bullet catch, offset handles and water deflector.

Here's unrivaled quality, finest construction! Standard 24 by 72-inch size—a full height door with grille; one-piece chrome plated frame of extruded brass with mitered corners; glass set in rubber channel. Chromium plated brass jambs and continuous piano hinge riveted to frame. (FIAT'S moderately priced Zephyr has the same appearance and features as the Dolphin but is made with satin-finished extruded aluminum frame).

FIAT METAL MANUFACTURING COMPANY
THREE COMPLETE PLANTS—ECONOMY • CONVENIENCE • SERVICE

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Franklin Park, Ill. (Chicago Suburb)
Los Angeles 63 California

In Canada: Porcelain and Metal Products, Ltd., Orillia, Ontario

BEHIND THE BLUEPRINTS

Born in the nation's capital, Washington Builder EDWARD R. CARR, 54, served in World War I, made his business debut in Washington real estate in 1920. In 1925 he branched out into building, put up 2,000 houses and apartments in the ensuing years. Carr has been an industry spokesman as president of the NAHB and of the Washington Real Estate Board, is currently board secretary. Extracurricular activities included the chairmanship of the 1951 and 1952 Cherry Blossom Festivals and President's Cup Regattas and the 1953 Inaugural Parade. Distilled from his 27 years of building experience is Carr's conviction of the importance (p. 130) of tree preservation in developments.

Atlanta Architects JAMES HARRISON FINCH, 37, and MILLER DAVIS BARNES, 43, have been partners since 1949 in a residential-commercial practice. Both men were born in Atlanta, were graduated from Georgia Tech, were former employees of Burge & Stevens, Atlanta architectural firm now known as Stevens & Wilkinson. Barnes had his own private practice from 1934 to 1939. Finch is a Princeton alumnus and a 1937 winner of the Princeton Prize. A Marine Infantry officer in World War II, he was recalled to active duty in January, 1952, is now a lieutenant colonel in Korea. The Golf View Development of medium-priced contemporary houses (p. 144) has the colorful touch of Finch and Barnes, was designed before Finch's departure.

Architect MICHAEL M. KANE, 31, studied at Western Reserve University and Case Institute of Technology, received bachelor degrees in interior design and architecture from the University of Michigan. A native Clevelander, Kane worked for local architects from 1939 to 1942 before becoming a naval officer in World War II. Separated from the Navy in 1946, Kane returned to Cleveland, took a post with Architects Walker & Weeks, subsequently left to design schools in the Chicago office of Perkins & Will. He returned to his home town in 1950, now has a six-man office designing apartments (p. 148), builder developments, shopping centers and, increasingly, schools.

continued on p. 86
ideal control of light air temperature privacy

with all-FLEXALUM

Flexalum® venetian blind

Make your homes completely functional—with a complete functional window treatment. FLEXALUM blinds give light without glare, fresh air without drafts, comfortable room temperatures and privacy without that shut-in feeling. And this most efficient all window-coverings is also the most attractive, the most durable, and the easiest to care

The all-FLEXALUM blind gives you durability and lasting beauty:

Wipe-Clean Plastic Tapes and Cords
A damp cloth wipes away the stubbornest stains. Tape won't shrink, stretch, fray or fade.

Snap-Back Aluminum Slats
Spring-tempered to snap back ruler-straight even when bent to 90° angle. Won't rust, chip, crack, peel or change color.

Insist on this Mark. Look for the Flex "visible-invisible" trademark. It's your assurance of the quality venetian

Write for local sources and free file of venetian blind information—AIA File #35-P-3
The Model 450 Remington Stud Driver is the most efficient fastening method in use today. Its exclusive advantages are unequalled by any other powder-actuated tool.

You get consistently straight driving on every type of fastening job with the long heel cap on all Remington cartridges. It acts as a perfect gas seal and provides extra power. These colored heel caps clearly mark the six different 32-caliber power loads that are available. You can select the right cartridge for each job quickly and easily.

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GEORGE ROCKIS
earned his architectural degrees at Syracuse and Columbia universities (M.S. in Architecture). During World War II, he designed barracks for the Army and Navy in South Dakota. His first postwar job was with H. B. Stone in New York, planning the first Pan American Hotel (Apr. issue, '51). Rockis joined the UN Headquarters Planning Mission as architectural designer. In the design stages of El Panama, he was project's landscape architect in San Thomas Church, eventually becoming its associate. Since 1950, Rockis has carried out his own San Francisco practice, largely residential (e.g., the flying-butterscotch house).

Architect EDWARD S. WRIGHT, 40, studied at NYU for two years, then went to Taliesin in Wisconsin and spent seven years there. During the last four of his apprenticeship, he supervised the construction for Frank Lloyd Wright's world-famous "Falling Water" house and Job 5. Tafel's experience included three years in the Chicago office of Holman & Drexler, a two-year sojourn in the engineering department of the Jerome Utley Co. in Flagstaff, Arizona, a 2½-year tour of duty with the Army Signal Corps in Calcutta, India. Since 1941, he has had his own architectural practice in New York, a diversified one encompassing houses (p. 116) ranging in price from $125,000 to $1,000,000, stores and factories.

Architects RALPH S. TWITCHELL and RUDOLPH were partners when they designed the Siegrist House, p. 96. Twitchell, architectural and engineering director of the Rollins College, McGill and Columbia universities. After World War I, he shuttled between the Berkshires in the summer and the winter, selecting Sarasota, Florida, a year-round locale several years ago. Twitchell says he is "still in love with the sun and sunbathing." Rudolph graduated from Polytech and Harvard, became associated with Twitchell in 1946. Since March 1st, the two men have had separate Sarasota offices. Rudolph is currently guest critic at the University of Pennsylvania.
MODERN MORTGAGES

Monthly report on important developments in the modernization of mortgage credit. Particular emphasis on the expanding potential of the package mortgage, the open-mortgage and the expandable mortgage.

Open-end: boon to modernization market

The National Retail Lumber Dealers Association's retail lumber and building materials dealers are preparing to the most of the open-end mortgage to stimulate the home-repair and modernization market, thus helping to preserve the country's structurally sound housing. To assist them, their national association has given the 18,000 members of the organization a folder explaining in detail how the idea works and ged them to acquaint their local mortgage lenders with the plan. Already the LDA office in Washington has been deluged with requests for more copies of the folder to distribute to all mortgage bankers in all communities.

National Retail Lumber Dealers Association will also join with other lumber dealers in urging FHA to abandon its opposition to the open end (since there is no basis for FHA's position, it can be assumed that—like VA—it will be more willing to assure mortgages with open-end provisions).

Case study

Several lenders who have seen the NRLDA folder write of experiences they have already had with the open end. Sample: a savings and loan association in Bloomfield, Ind. stated it had granted additional advances under open-end mortgages up to $500 without a title search (a not uncommon practice) and was planning to grant advances up to $1,000 under the same circumstances if a mortgage did not exceed a fair appraisal. J. Albert Jackson, secretary of this association (Farmers & Mechanics Federal Savings & Loan) says flatly: "We find this type of loan beneficial to both borrower and ourselves: it certainly saves a lot of time and work when only a modest amount of money is required."

Clinics over the country

Regional building materials association secretaries are holding one-day clinics in many areas of the country to stimulate even more interest in the open end. Says Robert A. Jones, executive director of the 2,500-member Middle Atlantic Lumbermen's Association, "There is a huge number of houses in our territory (10% of the housing in the country) that need repair or modernization; the key to opening up this untapped reservoir is the open-end mortgage. It could easily be the springboard for a tremendous program to maintain the nation's housing inventory. Banks will find more security in the open end."

How open end works

The folder which NRLDA placed in the hands of its members reads in part as follows: "Take a homeowner whose unpaid principal has been reduced from $10,000 to $7,500 and who wants to spend $2,000 modernizing a kitchen and adding a garage. With an FHA Title 1 or similar loan, the monthly payments would come to $63.80 per month and the interest rate would be 9.6%.

But if the mortgage still has 10 years to run, the $2,000 can be repaid at the rate of only $21.22 per month, assuming the rate of interest on the mortgage to be 5%, provided the funds are obtained by adding the cost of the modernization job to the unpaid principal amount of the mortgage. Thus the unpaid balance would be increased to $9,600 and the monthly payments over the remaining 10 years would be increased by only one-third as much as with a Title I loan."

Benefits to the retailer

"He can get customers who want or need to spend a substantial sum to modernize but are in no position to pay cash or pay for the job in three years with an FHA Title 1 or similar loan."

Lower monthly payments allow the dealer to clinch a sale to a customer who otherwise would not modernize."

"A customer may decide to go ahead with an even bigger and better modernization job because the payments are moderate."

Low-cost title insurance

Action by title companies in New York, Chicago and Los Angeles in making title insurance costs low enough to make the open-end mortgage attractive permits lenders to accommodate home owners for whom they have written mortgages with full title protection. Mortgage advances by banks, savings and loan associations, and mortgage companies reached an estimated $500 million last year. That could be only the beginning in conserving the trillion-dollar value of housing which represents one-quarter of our national wealth.
Mr. Stanley Praver. They line up to buy his Ruskin Heights Homes in Kansas City! These low-priced houses—selling for about $10,000—feature "luxury" items like Crosley Kitchen equipment.

Here's the salesroom in the Ruskin Heights Homes. The Crosley Sink and Wall Cabinets supply more than ample working space and convenient finger-tip storage in this sales-winning kitchen.

KANSAS CITY BUILDER MAKES THE "CROSLEY ROOM" HIS SALESROCK!

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In a buyers’ market
what kind of houses can you sell?

Just plain selling will soon be the biggest problem for the homebuilding industry and every individual homebuilder.

Now that the war-born shortage has been filled and new family formation has dipped under 700,000, how can industry keep its sales above 1,000,000 new houses a year?

How can you keep your own sales booming? And if homebuilding volume sags, what will happen to national prosperity and all the other industries dependent on homebuilding?

To help homebuilding—and every homebuilder—meet this challenge we are dedicating the whole next issue of HOUSE & HOME to this one question of How to sell more homes in a buyers’ market.

Because selling is homebuilding’s next big problem, all the big trade associations in the industry agreed to help us help you with your selling problems. And so this issue will feature the recommendations of a special round table attended by:

1—Top officers of the National Association of Homebuilders—President Manny Spiegel, Vice President Dick Hughes, Executive Director John Dickerman, Chairman of the Mortgage Finance Committee Nate Manilow, Research Director Len Haeger, Technical Chairman Earl Smith.

2—Six of the most famous and successful builders’ house architects and designers, Morgan Yost from Chicago, Bob Anshen from San Francisco, Cliff May from Los Angeles, Charles Goodman and Nicholas Satterlee from Washington, Herman York from Long Island.

3—Spokesman for all the big mortgage lending groups which have such a stake in the house you sell—savings and loan groups, savings banks, mortgage brokers.

4—Spokesmen for the material suppliers who must produce the better products you include in your homes and the retail dealers who distribute them to you.

The Round Table was made doubly important by the presence of the new Housing and Home Finance Administrator Albert M. Cole and Eisenhower’s choice for the new Federal Housing Commissioner Guy T. O. Hollyday.

Second only to better financing all these industry leaders agreed that the one best way to sell more houses is to build in more sales appeal and more sales value. To that end they recommended various ways to increase your sales by making your houses look bigger, by adopting the open-kitchen plan, by providing much more built-in furniture, by widening your overhangs, by better use of color, by intelligent use of more fences, and by many other new ideas you will surely wish to study and use in the houses you design, finance or sell.

These are only a few of the selling ideas you will find in this issue, which will report the best thinking of hundreds of successful architects, builders and real estate salesmen from coast to coast on pretty much everything from how much furniture to use in a model house to how to turn lookers into buyers.
quality house

Though it is the opposite of a builder's "production" house, efficient plan and structure have ideas that can be used anywhere.

Although the house is one of the 19 postwar houses in America by The Museum of Modern Art for "quality and significance," we have tried to analyze below. The significance now is that some of these qualities may influence the popular house of the future. This house was also picked by the school children of Miami, Fla. as something of significance: the whole fifth grade asked to be taken through it the week after they visited the municipal power plant. This honor delighted the designer, who think it is a wonderful place to live in—much better than the Colonial house they used to live in up North. A few people won't like the looks of this house. At first, there seems to be very little to it—just enough roof and walls to keep out the weather. Actually, what the house lacks is considerable. It takes a simple boxcar plan and big "mill construction" and makes them perform a number of highly useful things:

kets the view. The long (71' x 24'), in-line plan gives rooms the main (and only) view to the south by placing them on the south side, lining up service-work areas—kitchen, study, dressing—along the less-desirable north side.

Es the breeze. Oppressive heat and destructive dampness is kept out by through-ventilation in every room (see sketch).

Leases the outdoors. Without elaborate expense, it divides a one-story house into four functions: outside dining, reflecting grid, sun porch, bedroom-sitting porch. From the interior, low water next to the house yields a cooling effect and a rippling pattern of reflected light on the ceiling.

Entrances on the inside. Most "ranch" plans are picturesque on the outside, but when you live in them you find the rooms are a series of little square boxes. This house, on the other hand, looks like a big, plain box from the outside, but the more economical rectangle is full of variations of alls that stop short of the ceiling to make space seem less g—irregular features that make it not only more livable inside, for its occupants rather than passersby. The difference is one of approach: the "ranch" is designed outside in, this house from the inside out.

--

square footage: 2,189 (1,704 + screen porch + carport figured Total cost (excl. 150' x 180' lot but incl. terraces and pool): an economical $11 per sq. ft.

LOCATION: Venice, Fla.
ALBERT SIEGRIEST, owner
TITCHELL & RUDOLPH, architects
ASSOCIATED BUILDERS, INC., contractors

Approach side (west): carport is linked to front door at right by spur wall of lime block that hides kitchen yard.

Breezy plan is oriented to catch every stir of the prevailing southerlies, filter it through four large windward openings, east north side.

Garden side (south): rhythmically spaced structural bents are tied laterally by a horizontal sliding-door track.
It standardizes the framing. The 7'-4" x 24' modular bays—just under the 8' limit that 2" roof decking will span without snow load—economize by making lumber lengths and sizes the same throughout.

It plays up the structure. This house rejoices in the art of carpentry. Structurally, it is as revealing as an X-ray: its bony skeleton of heavy members, exposed inside and out, is a permanent show of strength and good form for the occupants. The framing is made to look simple and understandable to anybody, though this has required complex hidden joinery. (See p. 100.) The elevations are rhythmic, underscoring a ”beat” at regular intervals, and proportioned properly, something that would be noticed more if it were absent. “We have tried,” say the architects, “to capture that beauty which almost all structures have in their half-finished state.”

It "floats" the roof. Designed for a mild climate that does not demand a great sense of overhead shelter, the roof was conceived as one large, thin sheet hovering above the frame. The apparent lightness comes from: a) a thin section of 2" deck and built-up roofing edged with the gravel stop instead of a wide fascia; b) partition walls that stop short of the ceiling, giving a play of light, as well as air, across the tops of rooms; and c) a band of glass under the ceiling all the way around the exterior walls of the house (except the master bedroom’s east wall, where the owners wanted to exclude early morning sunlight).

It interprets the materials. Twitchell and Rudolph gain a regional flavor with their familiar Ocala lime block and native cypress. And they express the nature and the possibilities of the materials they use: the sturdy bearing quality of cypress, a strong Southern hardwood; the great transparency of glass uninterrupted by trim, stops, mullions. The exposed common gray lime block, its vertical joints aligned to give it a new character, emphasizes the most natural use of masonry; it occurs always under openings, never above, where it would require a steel lintel. Terrazzo, moistureproof and easily cleaned, is a logical choice for floors in an informal hot-country house near the sea.

It controls the climate. All that glass in a house could be a mistake, in some situations. But here the “fishbowl” south side is protected from summer sun by an accurately designed 4'-8" overhang. The owner notes that the sun does not strike the glass at all during the warm months from Mar. 21 to Sept. 21; it reaches into the living room a distance of 9' by Dec. 21 to help warm the house, recedes again to the sill line by Mar. 21. Four electric unit heaters, spotted through the house, team with the fireplace to insulate against cold waves. (The house is ready for hurricanes, too. At the time of a storm warning, the owners can actually tie down the south side: wire ropes with turnbuckles are hooked to eyelets in every third beam and secured to the foundations. Plywood panels are put up over all glass areas.)

Some will consider this house too skinny, too wide open and unprotective. But the architects believe that man, in the last 20 years, has undergone a change: he is no longer afraid of his natural surroundings, and a house like this one will help him live in nature easily and efficiently.
Sculpture and thin roof line give through-views, a feeling of airy coolness.

Lace wall separates kitchen from living-dining. Note reflecting pool, right.
Precision joinery makes a clean juncture of posts, beams and glass on south side (detail, right). Thick horizontal element gives structure lateral stability, incorporates tracks for curtains, sliding glass and screen doors.

4" x 10" wood beam

4" x 8" wood post

4" x 4" posts

4" x 10" beam

3" x 4" wood frame

Heat absorbent glass

Insect screen

4" x 4" sheathing

3/8" rigid insulation

1" rigid insulation

4" x 10" lumber

Gravel stop

Sliding door hardware

Drapery track

1/2" plate glass

1/4" terrazzo

Concrete slab

Grade beams

Concrete piles

Section through screened porch (photos opposite). Detail above shows how tapering beam ends, or "lookouts," for south facade are cut two at a time from 4 x 10 lumber, fitted to beams.
Son's bedroom has walls of striated plywood, beds built in head-to-head. Sliding glass door opens room to screened porch.

Square aperture in roof casts light on hall area through blue, sun-absorbent glass in roof. Breeze sweeps through son's bedroom and out glass jalousies, background. Note cabinets under windows, storage wall at right separating bedrooms.
A better-than-ever I

4' is the divisor of this house; low cost, fresh design its dividend

Now that the “California” or Western house is a market-test seller (the Trade Secrets house and similar designs in Kansas, Missouri, and Ohio top best-seller lists), these Palo Alto houses are particularly significant for merchant builders who must satisfy the growing demand for better, more livable homes.

Add to the growing list of crack architect-builder teams Kump Associates and Barrett & Hilp. They prove again that architect-builder collaboration can pay off in sure-fire sales.

Builder Harry Hilp of Barrett & Hilp was frankly skeptical when School Architect Ernest Kump said he could design a house at lower cost for B&H’s University Village tract in Palo Alto, Calif. Kump told Hilp he could rearrange the same stock material and dimensional lumber B&H were using and come up with a house that had all the facilities of other B&H University Village houses, much or more buyer appeal and good architectural quality.

That was a big order: B&H were already using many of the techniques for low-cost building (precutting, preassembly, volume production economies) and these big builders knew which side of their lumber the production economies were nailed to. But what they needed was a design. So they took Kump’s bet.

The result was this 900 sq. ft. house that sold for $11,250. Conventional models in the project 1,010 sq. ft. (three bedrooms, two-car attached garage) were for $11,750. B&H spotted the Kump design in their 600-home tract as an experiment (about two dozen Kump-designed models) and builders found they could take a higher markup on Kump’s houses because of their superior design. They were quick sellers.

Living-dining area of first B&H house (above)

occupied considerably smaller portion of total floor space.

Note indoor-outdoor transition in Kump model (below).
Entire wall of living-dining room is glass. Large panes and transom glass under gable ends are fixed. Half of lower portion of glass is movable for ventilation. Glass doors are between 4" x 4" posts. Wide expanse of glass opens up the living room to the outdoors, Note vertically sided fence to afford patio privacy.
Savings within savings

To use or not to use a module is never a question for Kump Associates. Architect James Fessenden says: "In our office we use a modular basis so automatically that we would be at sea without it."

The builders had felt that a modular grid was of doubtful value. They pointed out that on an individual house such a grid might save materials and time in layout, but on a production house it would not especially matter whether the dimensions were modular or not because: patterns and jigs could be set for any easily worked dimension; volume buying allowed them to get materials to fit their needs; getting the relationships in the house exactly right was more important than modular distances.

Kump agreed that the economies of standardization were already being used to good advantage (window sections were being mass produced with assembly-line techniques in B&H's own yard) even though not all dimensions were modularly coordinated.

But he pointed out that:

- Use of a 4' module which already meets the dimensions of many standard materials and B&H's lumber list—and many of B&H's own stock sizes—could still bring added economy to the building by saving lumber, sheathing and gypsum board.

- Inefficient space dimensions could be avoided by careful use of a module that fits the known materials best. Thus, the plans were completed with no forced compromise between plan efficiency and an "ideal dimension."

Kump believed that the small 4" module often proposed was too refined and delicate a unit (though better than none at all) to express dimensional order in a small building. He believed the economy and efficiency of modular discipline required a large unit like 4'. In projects like schools, Kump has used a whole series of integrated modules ranging from 4" to 144', all related to the fineness or coarseness of the unit they apply to.

Thus by adding to the existing principle of standardization that of modular coordination, Kump was able to give the builder a house with a double dividend. For, as he promised Harry Hilp, he gave the builder good architectural quality to boot.

Material, labor savings

Use of the 4' module produced a double saving, one in materials, the other in labor. On materials:

- Going counter to B&H's belief that post-and-beam construction would save nothing over stud framing, the architect used posts and beams on 4' centers and saved an estimated 8% in total rough carpentry lumber, about 600 bd. ft. over the larger but more conventionally built B&H house. With their mass-produced window sash, the builders were able to increase the depth of the windows under the same headers at no additional cost. The full-glass wall in the living room with its added appeal cost no more than half as much glass under headers.

- Use of gypsum board on the 4' module minimized vertical cutting. Even where 4" x 6" posts were more than 4' apart, intermediate studs on 16" centers permitted the 4' x 8' wide dry-wall sheets to be used uncut. The problem of making dry wall reach varying ceiling heights (from 7' on the low side of the sloped ceiling to a height over 8' on the high side) was solved simply by using cutoffs from the low side as fillers on the high side.

- Use of 4' wide sheathing beneath stucco or vertical redwood panels allowed economical use of these modular widths between 4' o.c. posts or 16" o.c. studs.
Plan is a model of step-saving economy.

Strategic placement of door to patio keeps living room from being a runway. Brick fireplace offers nice texture, a warm friendly focal point for the room. Beamed ceilings above living area help give room a look of spaciousness beyond its dimensions. Storage wall (right) has bookshelves in lower half, within easy reach of chair set in front of them. Top portion of storage wall opens into bedroom to provide shelf space. Living-room floor seems to continue outdoors because paved patio repeats its width precisely.
Even on the roof the modular discipline achieved savings: B&H, using white pine for beamed ceilings, could buy cheapest by accepting these proportions: 60% in 16' lengths; 40% in 14' lengths; 20% in 12' lengths; 10% in 10' lengths; the remainder, odds. With rafters spaced at 4' and verge rafters 2' out beyond the walls, the widths of various house elements were made such that roof decking could be cut without waste from this lumber list (see roof framing plan).

Since interior partitions are held to a bare minimum by open planning, there was an additional material saving.

On labor

Men knew what to expect from the 4' module once they had built the first house, which Kump Associates closely supervised. The repetition of similar details every 4' made things simple, thus easy and fast.

Wall construction was preassembled in a central yard and carried to the job on two-wheel trailers, a standard B&H construction procedure. Preassembly of parts at a point where units of the design could be assembled in the field with a minimum of head scratching, little measuring and marking, hardly any cutting and fitting, and less general milling around, was a big cost cutter.

Good looking, big looking

The builders agree that the house has wonderful eye appeal and looks much bigger than its slightly less than 900 sq. ft. John Sparolini, manager of the Barrett & Hilp Peninsula (housing) Division, says, "In the Kump house we got better design while holding the cost down. Sometimes you put an intangible like good looks into a house and that, too, is worth money."

But architects, builders and home buyers would agree that the house doesn't just rest on its looks. It has excellent circulation, and looks much bigger than it actually is—inside because of the glass filler strips at partition heads topping the beams, outside because of the more than 70' of fencing included in the sales price, wide expanses of concrete patio and driveway.

What the buyers liked

Basic appearance of the house. They sensed what Architect James Fessenden describes as an organicness, a certain orderly calmness of the house. When the house was first shown, the sales force noted that young people were the ones who liked it most. "Many people," says Sparolini, "fell in love with it at first sight."

The semiopen kitchen that allows a housewife to see out into the dining area, living room and the carport-play yard. The kitchen is also strategically located so bathroom and bedrooms can be reached without trekking through the living room.

A small garden enclosed by a fence (landscaping included in price).

The treatment of carport to include play space for children, though this might be considered questionable since it attracts them to an area where vehicles move in and out.

Indoor spaciousness through open planning and glass filler strips.

Plans for the future: University Village's own shopping center to cover 6 acres, a 4 1/2-acre park, a 10-acre school site.

Architect-builder wedding

For the Kump and Barrett & Hilp's team this is only the warm-up. Already Kump is working on several more B&H projects. Fittingly, their collaboration resulted in a model aptly named "The Honey-mooner."
Glass filler strips atop wall and beam allows eye to follow roof pitch to living room.

Plenty of storage space is provided by closets. Detail (above) shows that top shelf is within easy reach of housewife. Closet pole is at sensible height. B&H buyers, like those everywhere, liked the double closet. Says Kump, "A small house doesn't work unless you increase storage space."
For Detroiters, an idea house

Builders Association's Home Show house
is as newsworthy as the latest Detroit car
... and the public loves it

LOCATION: West Eleven Mile Road, Detroit
RICHARD DONKEROVET, designer
HENRY F. FETT, builder (for the Association)

Detroit homebuilders are stirring up a great deal of future business for themselves with their "1953 Ideal Home" now open to the public. It is so full of ideas new to Detroiters that it may make every other home owner in town want a new house.

For the first time thousands of families (like visitors, elsewhere, to the Trade Secrets house) have seen the differences between a 1953 house and an obsolete design. People either liked the house wholeheartedly or were very cold toward it. Fortunately for the sponsors, some 70% loved every one of its 1,576 sq. ft. This enthusiasm will probably be felt first by builders of semi-custom houses in the over $25,000 price class, as this house probably cost $35,000-$40,000. Other builders, watching the crowd's reactions, may be influenced in their next year's models.

A house of contemporary ideas

The open plan was new to many visitors and they liked the way the living room, multipurpose area, dining room and kitchen flowed together to form a large living area.

Floor-to-ceiling windows and window walls were an action, plus the glass jalousied doors to the terrace and b.

Three lavatories and a full bath were an unusual
The house has one bathroom, a powder room next to tl door, a half-bath and dressing room between the study bedroom, and one of Carl Boester's famous sewerless toilet: Mar. and Apr. '52) in the garage. The Boester toilet brought derisive comments, then scores of men decided i be just the deal for hunting lodges, summer cottages or without sewer connections. Most were disappointed wh learned it is not as yet on the market.

Auxiliary heat was popular too, as each bath, the br and even the garage ceiling (to melt snow and ice on t had electric heat. Low-voltage wiring, master control and a well-designed set of lighting fixtures were also likc

Air conditioning, the corrosive-resistant steel roof, ample space and a breezeway that is also an enclosed room we eye openers to Detroiters.
Iw idea was the enclosed breezeway house and garage, adding 12' x 15' of ace. Flat garage roof is carried over. Six baseboard radiant glass panels he heat. Rear doors open to garden.

**Kitchen** was filled with merchandising features: built-in range and oven with two exhaust outlets and washable filters, separate room for laundry machine, ironer, drier and freezer.

**Main bath** has two basins, long tiled counter, with toilet and tub in private recess. Extra-long fluorescent fixtures flood room with light. Mirror is a freestanding folding screen.

**Only half of living room-study area** is shown in photo, left. High ceiling and great length combine to make an impressive room. Planks, beams and paneling are redwood, floor red quarry tile and cork. Nearly one entire wall is glass. This big, light room brought favorable comments. The house will be given away free as a Home Show prize.

**Master bedroom** has large sliding windows, door to front patio, a large closet with built-in chest, plus master control switch for lights all over the house. Furnishings are by the J. L. Hudson Co.
What makes this house so good?

A nice balance of thoughtful, practical details and reasonable costs earned it a

Here is a small (two-bedroom) house to which a jury of distinguished architects (Belluschi, Neutra, Stone) gave a top honor award in the 1953 awards program conducted jointly by three AIA Chapters in California. Is it significant that this well-deserved distinction comes to a house that is extraordinarily adaptable to the requirements of many small homebuilders?

For example, among other qualifications:

- **It is economical**: cost $10.50 per sq. ft. to build.
- **It is versatile**: adaptable to a hillside or a narrow, flat lot.
- **It is practical**: simply constructed of simple materials.
- **It is appealing**: a carefully studied collection of attractive features throughout.

Fitted on a very narrow shelf gouged out of a hillside, the house is designed to take advantage of impressive views to the south and east. Complete seclusion from the road on the north and a maximum area for gardening were required. (If the site had been a flat, narrow lot, this house, set lengthwise on it with the entrance close to one lot line, would pay comparable dividends.)

The structure shows a single combination bearing w beam, off center, running the length of the nearly rectang line plan. Exposed 4" x 8" wood rafters bear from the outside walls. Concrete slab on grade provides a unifo for plastic cork tile and wall-to-wall carpeting. (In bedroom laid only around borders; cement slab gives better grip carpet, cuts difference in height.)

Over the ceiling's 2" x 6" exposed T&G planking, 3/ insulation is surfaced with four-ply tar and gravel. Only ceiling is furred for warm-air ducts with outlets to headro bath; a false beam carries duct past entrance and along partition to outlet at dining room.

Extensive glass areas on two sides capitalize on the views and give a feeling of spaciousness to the rather dimensions of the living-dining area. Continuation of over the paved terrace extends the apparent length of t while affording shade from summer sun.

Sun control required generally broad overhangs, but light is reintroduced at strategic points via skylights over place, kitchen and bathroom, and a trellis which is part of porch, over the dining terrace.
Terrace looks east to San Francisco Bay, south to Mt. Tamalpais. Photograph opposite shows detail of the trellis and service-area screen.

Cutback overhang and skylight brighten fireplace; light from kitchen skylight comes through opening above the partition.
The kitchen is planned for direct access to the front entrance, as well as to indoor and outdoor dining areas. Extension of the counter along the wall of the dining area increases work and serving space and allows the hostess to keep in touch with guests while the “works” of the kitchen remain hidden from view. Other features include an ingenious refuse chute (see detail on opposite page), a full-length cooler vented to outdoors, and deep broom and larder cabinets.

Less successful, the architect points out, is the quarry-tile kitchen counter, designed for tight joints but executed with wide ones which will accumulate grease. This, he claims, is a perennial problem with tile setters, as is also their fondness for diagonally set tile and for borders, either of which detract from the appearance of a tiled surface.

The fireplace location, in the window wall, helps maintain a single focal point of interest, facilitates furniture arrangement and creates a useful diversion where an uninterrupted expanse of glass might be monotonous. Ceiling and fireplace are daylighted, avoiding harsh contrasts of light and dark.

Storage facilities include generous bedroom closets; 5’ wide mirrored bathroom cabinet; wood box, record player and radio built into living-room window seat (speaker outlets provided in furred space over hall and at south terrace); tool and general storage near carport. Two access doors to heater room save space.
Typical Gutter

3 lengths 12" x 6" flue
- obscure glass
- roof cricket

Metal skylight

Concrete block

Kitchen counter extends across dining area; cabinets are painted to match carpet. Garbage-chute door is at right (detail below).

Garbage Chute

3-4"

Flashing collar

Sliding top

Standard can

Battresslike flying beams are not structural but serve to relate house more securely to narrow site and afford a sense of enclosure to walk from carport to entrance.

Roof Framing Plan

Wood skids

Frame skids

Handrail

4" x 4"" stud

6" x 6"" stud

Buttresslike flying beams are not structural but serve to relate house more securely to narrow site and afford a sense of enclosure to walk from carport to entrance.
For a northern climate: shelter
For a good site: selected views
For informal living: an open plan

This house has a hearty yard—167 acres of rolling Westchester Cour
woods and farmland—and looks pleasantly at it through wide areas
But two wise considerations denied the temptation to glaze the entire
and thus incorporate the landscape into the living room:

Because the site is near the top of a hill, it is exposed to the rough:
the elements, as well as to their bland moods, so building a sheer gl
even of double glass might have been asking for trouble.

Also, the people who live here, and their architect, think that a hou
imply a strong sense of shelter, even if perched before the world's
view. The house deliberately attains shelter, saving its vistas for
aspects from within the rooms. Says Architect Tafel: “It's better
someone to go over to a section of glass to see the view, than to for
sit in the middle of it constantly, with the bathroom his only refuge.

This decision was only the beginning of the architectural realism w
into creating the sense of shelter, permitting real repose. Materials w
in an interesting textural way, neither ostentatiously not oversimply.
vertical boards and battens which compose most of the exterior are used
ately to create contrasting vertical stripes, with the boards rough-fini
the alternating battens varnished. A bright sun does a lot with this
shadowing and sparkling these walls.
Central living-dining space is winged by bedrooms, left, and garage and storage, right.

As court, backing the peak-roofed center of this board-and-batten wall is colored more vividly here. Wide random boards are stained barn red; the rest of the siding is a natural creosote stain.
Shapes too were deliberately sculptured away from right-angled planes; the main living section of the house has a six-surface pitched roof, and, inside, a ceiling that follows the slants.

In plan the core of the house is a large masonry section jutting up as a central column in the living-dining area. This pile of handsome stone holds two fireplaces and also embraces the mechanical heating room for the house—a nice bit of architectural allegory. Because the clients are a couple whose family has grown up and moved on, interior privacy is unimportant, so this central living core is a truly open plan. And because of the extent of the plot, exterior privacy is not important either—although this house has turned out to be one of those which sometimes draw trespassing Sunday sight-seers.

Tafel's technique of composing his materials with frank intricacy is carried consistently into the interiors; the ceilings are batten boarded in the same way the siding is applied, and these interiors repeat a statement worth repeating: complexity in form and surface frequently has its own rewards in creating an environment of warm and continuing interest. To appreciate the technical nicety of this rich detailing, examine the drawing on p. 118.

Additional bedrooms originally were planned to extend the guest wing farther north, and fill out the entering view of the house, but the owner had set his budget at $30,000, and there Tafel stopped. Square-foot figure for this house (built pre-Korea) was about $12.50.

Looking around the masonry core you see into dining area and informal kitchen. In plan below, note how various masses of building are deliberately offset to direct, or limit, certain vistas, adding surprising subtlety to this relatively small building. For instance, when you enter the house, you are not presented immediately with all the view; it is blocked at first by the heater core, is seen only when you move farther into the living room.

Additional bedroom
Board-and-batten construction is used outside for siding, and inside for the ceiling (detail left). Built-in cabinetwork also picks up the same construction. Boards are natural, or creosoted; battens are varnished.
Says Tafel: "In wood construction you've got to give the workmen and materials play. Materials come and go with the weather; and measurements on the job sometimes do the same thing. By separating the finish carpentry from the structure, you can: 1) get higher quality finish; 2) allow for this realistic, necessary play." House sits on a slab over a rock base, but is built up over the slab for two reasons: 1) underfloor is used as return plenum for warm-air heating system; 2) resilient wood floor is thus kept warm in winter despite decision not to have radiant heating or crawl space.
The fastest selling houses
in the USA

Inaugurating a new series, House & Home takes you on what may be your most important business trip of the year, to visit best-selling houses in key cities

 Builders everywhere have to know what it takes to sell houses. In the midst of tougher competition, in a growing buyers' market, sales are harder to make this year. Next year may be even tougher.

What makes a best seller?

Design? price? favorable financing? low down payments? location? smart salesmanship? the most house for the money? the best floor plan? Is a house that sells like hot cakes in one city sure to sell in another city?

There are many lessons to be learned from the answers in the grass-roots' survey on the next six pages. Some are familiar to builders: generous terms, lower-priced houses, down payments within reach of even low-income families. Some are familiar to readers of this magazine: a product as up-to-date as this year's car, architect services, a bigger-looking house, cost-cutting techniques, more space. Some are recent developments: increasing demand for three-bedroom houses, additional work, play and storage space to compensate for the disappearance of basements. Specifically:

In Dallas a luxury-house feature installed in low-cost houses sold out a 240-house development.

In Cincinnati a new way to get a taker for VA mortgages and a tie-up with the national advertising of a prefabricated-house manufacturer yielded an average 20 sales a week.

In Greater Boston more house for the money—three bedrooms and an attached garage, $13,990—averaged better than a sale a day.

In Omaha cost-cutting know-how, learned in the toughest homebuilding market in the country (Phoenix), netted a 90-house sellout.

In St. Louis cost cutting by precutting plus contemporary thinking—physically and financially—sold 50 houses ahead of starts.

In Minneapolis collaboration between builder and an architect who fits houses to people and furniture, sold a house a week.

Here then are point-of-sales examples of why prospects buy houses and how homebuilders makes sales.
This Omaha best seller demonstrates one good way to sell more houses faster: give a lot more house for the money. Says Omaha’s best-informed housing evaluator: “These houses would be great bargains even at $1,500 more. The builder is a production-line operator, willing to take a smaller profit than the competition, but even so I think he must have underestimated his costs. I don’t think he will offer any more at $10,195.”

Lower still. But Builder Don Decker who learned his business in Phoenix, toughest homebuilding market in the US (see H&H, Apr. ‘52, p. 114), says “we’ve made a substantial profit,” will soon offer a slightly smaller house with a still lower price tag, not only in Omaha but in Sydney, Neb. and Council Bluffs, Iowa.”

This Omaha best seller is a three-bedroom model with 1,000 sq. ft. of living space plus carport and 70 sq. ft. of outside storage on a 62’ x 115’ $1,500 lot, priced from $10,195 to $10,495. Sixty were sold from the model house within two weeks, 30 more before Decker stopped taking orders.

First in Omaha. The house is the first volume-produced, concrete-block model on slab in Omaha. Only other houses that come close to selling as fast are prefabs, one a Gunnison built by T. H. Maenner, former NAREB president, the other a P&H prefab built by Earl Wilson. Both models are built on slabs. Prospects at first were skeptical about the concrete block exterior until it was given three coats of oil-based paint. One reason the block was accepted so well was that it was shaped like a brick instead of the awkward conventional block shape.

Eye appeal. The block is half the size of an ordinary concrete block (complete with the slot in the center), measures 4” x 8” x 16” and is scored at joints to make block look like brick.

The block is half the size of an ordinary concrete block (complete with the slot in the center), measures 4” x 8” x 16” and is scored at joints to enhance the brick-appearing facade it presents to the eye.

To get his block economically, Decker furnished dies to a local company which at first thought the block was not feasible to manufacture.

This is the same house that Decker sold in Omaha for from $7,750 to $8,950, except that for the colder climate he had to sink deeper footings, put in more insulation and a bigger heating unit.

In the bargain. “There is nothing cheap about this house,” says Len Bourke, of Omaha, who handled sales. Here is what Decker offered: forced air perimeter heating, colored bath fixtures with some ceramic tile, aluminum windows with self-storing storm sash and screen, double kitchen sink, hard-top kitchen work surfaces, pineapple mahogany flush doors.

Because he had trouble getting mortgage lenders to handle financing (concrete block was new to Omaha) Decker had New York Life to take the mortgage and National of Council Bluffs handled the financing.

Houses rose at two-a-day rate when built into production. Decker offered nine elevations. Exteriors of houses were given three coats of paint, scored to make block look like brick.
Louis builders have no sales blues

Fischer & Frichtel do no advertising but have quietly sold over 50 houses so far this year because they offer contemporary design at low cost.

St. Louis best seller proves the advances of cost-cutting techniques and contemporary design. Fischer & Frichtel use almost all their material to eliminate measuring and marking, cutting and on the job, are able to build at a lower selling price, including land, build the lowest-priced contemporary in the St. Louis area.

Progressive team. The two Fischers and brother-in-law Frichtel are (average age: 32) and progressive. They have experimented with almost every cost-cutting method, hit upon probably as the biggest, most important way for home buyers a livable, low-cost house on low cost.

The builders have been interested in low-priced houses, though their dollar volume on $20,000-$25,000 houses is as great as their best building (approximately 100 a year). The builders give their force much of the credit for keeping costs down. They keep a large crew most of the year, do not have to time and money breaking in new who are unfamiliar with contemporary design.

Minimum house. In their latest development, Frostwood, F&F offer radiant heat (the Fischers' father is in the heating contracting business), redwood siding, kitchen cabinets. Their 7,500 sq. ft. completely sodded. Concrete, streets and storm sewers are bought for by the builder.

Popular model. Fastest selling in Frostwood is the model shown. Price: $12,400. Next most popular is a house that sells for $8.25 per sq. ft. including land. The builders are work on a brick model that will sell 90 per sq. ft. ($11.50 with land). John Fischer says quietly, "Sales are going very well and acceptance is excellent for our houses even though St. Louis is an awfully conservative community. It has always been our policy never to do a great deal of advertising (they have done no media advertising yet this year, produced only one small sales brochure). And we do not like to encourage sales too far ahead of production."

Yet they are 50 sales ahead of production right now, had firm contracts for eight brick houses three weeks ago, although they had not yet arranged FHA financing. They do not furnish their model house, keep it open only on week ends, rely on word-of-mouth advertising.

Up-to-the-minute. Contemporary styling is not new to Fischer & Frichtel. In 1948-49 they built 160 shed-roof houses in the Champlain tract, got wonderful reception for houses that sold as low as $6,950. Their next venture was also contemporary, 100 houses selling between $9,400 and $11,000 in Engler Acres.

What the customer wants. Demand in Frostwood is about 4:1 in favor of three-bedroom houses. Says John Fischer: "Even people with no need for a third bedroom want the extra room." In the basic-plan house, buyers like particularly the big combination work or play space and utility room (space for washer, drier, ironing, sewing machine) that keeps a housewife out front and with a feeling that she's in the swim of things.
There are two good reasons why these prefabricated houses make best sellers: 1) an intelligent financial man found a way to get VA mortgage money; 2) the builder rode the national advertising bandwagon that National Homes Corp. is driving around the country.

Paper work. When its GI mortgage commitments were running out with Prudential, Dick Sandberg of Ohio Homes searched around for a means of getting another taker for VA-insured loans, found one in a Cincinnati insurance company. This is how they worked it out: Sandberg made a point of borrowing construction money from the insurance company at 4½%, allowed it to take the 1% that could be charged the veteran for the loan, and did all the paper work (CRVs, credit report, eligibility certificate, etc.) before turning over the completed deal to the lender.

Two of a kind. The selling record—now a fast 20-per-month—is all the more remarkable because the National prefabs sell for more around Cincinnati, where land development costs (improvements are about $50 per running ft.) and labor are higher than almost anywhere else in the country. Next best seller in Cincinnati is another National prefab built by Runck & McClure.

Ohio Homes' President Harold D. Corney attributes much of his sales success to National Homes' advertising and promotion. Last October Ohio Homes participated in the nation-wide promotion that saw 300 houses, identically furnished and decorated, opened the same day all over the country. When Ohio Homes opened its Dillonvale subdivision in February, it took advantage of another such promotional scheme and had 15,000 visitors trail through its model.

Because of the ease with which the prefabs could be bought on VA terms, over 90% were sold GI in Ohio Homes' newest subdivision in Mason Meadows.

Current best seller is the Coronet model (pictured here) for $12,500. Price includes a minimum 54' lot. The Cornell, next best seller, is $1,000 less.

Buyer appeal. What buyers like when they get one of the prefabs are the appliances and extras that come with the house. Included in the $12,500 sales price of the Coronet is the new combination washer-drier, steel cabinets and hard-top work counters in the kitchen, sliding mirrored doors in an oversized medicine cabinet and full-width vanity shelf in bathroom.

All houses are built on slabs. Garages or carports are extras for $900 to $1,050.

What mortgage lenders think of prefabs? Says Claude C. Fletcher, regional manager for Prudential which still handles Ohio Homes mortgages: "These houses are popular because of their price range. They meet a larger segment of the population than higher-priced houses."

Corney, in the prefabricated-homes over 15 years, is in an excellent position to judge prefab acceptance, says "Even in a conservative community like Cincinnati the resistance is now so small that it's hardly worth mentioning."
Dallas best seller demonstrates another way to sell more houses faster: offer the basics at low cost something it has seen only rarely—price $450 down and sell it fast. Centex Construction Co.'s Centex Solution offered a house with a low-pitched built-up roof topped with marble chips and everything else they saw and bought. Prices: $7,750 for a two-bedroom, $8,650 for a three-bedroom, $9,700 for a four-bedroom.

Promotion. Centex, with a backlog of experience in low-cost houses in Texas and California, does things in a big way. $30 per house for three-color full-page newspaper ads, opened five model homes, offered 18 elevation variations and funny wood fonts to make up the basic cost of $7,750. This practice of lumping costs together to make up the $250 closing costs was in the $9,000 bracket in Dallas usual practice. Nonveterans got them for $50 to $100 a house, but all houses were sold at the VA on nonveterans got them for $50 to $100 a house, $250 closing costs, or a total of $10,000. The builder planned to build only if his basementless frame houses with low-pitched roofs, quickly changed his mind because the trade winds were blowing. The score when the 240 were finished: 61% with three bedrooms, 56% with two bedrooms, 5% with one bedroom, 2% with no bedrooms.

Sales. Sales Manager Walter Spickard flatly, "The houses sold just as fast as we could finish them. Many people saw a marble roof for the first time." Other builders witnessed the sales promotion. Centex, pitched marble-chip roofs became more usual around Dallas. Are other features that were unique a house in the area: an all-steel frame and more brick veneer on front porches of some houses.

Many Dallas builders agree Centex builds a good house, are envios of the fine financing arrangements the builder can make because of volume and building reputation. Says Spickard flatly, "Lenders give us a better program because of our background since they don't expect to have as high servicing costs or as much trouble on such big volume."

A big Dallas builder says: "They sell because they are at least $500 under the local market."

The houses are on 60' x 125' lots, which with all improvements are worth over $1,000. The tract has city utilities, concrete streets, curbs and gutters.

Currently Centex is building 300 houses in the Gaston Park section of Dallas, another 276 in the San Antonio area. The San Antonio houses, because of location, have about $1,500 higher valuation. Two-bedroom models will sell for $8,900; three bedrooms for $10,200, but will have garages instead of carports, sliding doors. Centerx is also active in defense housing: 1,300 in San Diego, 250 in Hawaii.
Here is another builder who has found that he can sell more houses faster by offering the consumer more for his home-buying dollar. Martin Cerel is able to offer more house (1,104 sq. ft.) because he builds in volume. He is able to build in volume because he finds it pays to advertise.

“The houses are the best value in Greater Boston,” says a mortgage lender. Cerel probably is able to sell several hundred dollars below the market because he builds so much and sells so fast. His volume building allows him to do volume buying, and tight scheduling of subcontractors and material men—working regularly with him—accounts for big savings.

Sellout. His most recently completed development, Wethersfield-at-Natick (304 houses), was a complete sellout. Price: $13,990 for a three-bedroom model with attached carport. He has averaged better than a sale a day since the first of the year.

In his latest tract he is over 50% sold out. His sales staff reported 36 sales in 18 days a few weeks ago.

Unlike builders who start with their own likes and dislikes, Cerel keeps the home buyer uppermost in mind. “We have to,” says A. L. Cochrane. “Buyers in our area shop around for good value. We have to offer them more for their money.” To get more livability in his subdivisions and in his houses, Cerel uses the services of a land planner and architect, R. I. Williams of Wollaston, Mass.

Prospects who look at Cerel’s houses are always suprised by their wide, expansive look. When they get inside the house they are pleased by the three bedrooms he offers. Although Cape Cods are still popular in Massachusetts, young and old alike find advantages in the one-floor plan in Natick: older people do not like stairs to climb; young couples like to feel they are always at ground level where they can keep an eye on the children.

Some of the other values in Wethersfield: electric range, automatic washing machine, steel kitchen cabinets, electric exhaust fan, ceramic-tile worktops in the kitchen, tile around and above combination tub-shower, sliding-door closets, an oversized garage that can be used as a workshop and makes up for no basement. Lots vary from 10,000 to 14,000 sq. ft., are landscaped.

Merchandising-minded. Admitting that he is in a homebuilder’s paradise (“Natick is a bedroom for Boston”), Cerel nevertheless leaves nothing to chance. “As far as advertising is concerned,” says an employee, “he jumps in with both feet.” He uses newspaper and radio advertising, works up attractive sales brochures, uses furnished models and has built himself a reputation for honest value and conscientious servicing (“I stand behind all the houses I build and folks who buy them know it and tell others”).

Mortgage money. One big fact Cerel’s selling favor is that he is at market his VA loans at par. There are two reasons why he is able to get GI locally. One: the local lenders do not have to pay out ½ of 1% servicing charge they can service the mortgage themselves (they service other mortgages, any other: for in-state mortgages they have to pay the 1/2 of 1% state tax relief for out-of-state mortgages.

“There is plenty of money in New land,” says Norman Barrett, treasurer the Charlestown Savings Bank. “And we are not hungry for 4% mortgages and cannot afford to take them from other states—we are perfectly willing to market our territory.”
The best seller in Minneapolis

place Bruce gets site planning, architectural service, needs a good house, then merchandises it well

Minneapolis best seller demonstrates good way to sell more houses faster: architects' services. Says Builder Bruce: "Many builders find it hard to sell their houses because they won't pay for architectural services. The builder and the architect should get together. That's basic in selling houses." Bruce is one of the only merchant builders who work closely with architects in the Minneapolis area. Though other builders in his area sell houses in a lower-priced bracket, in match his selling record percentage. On his Cedarcrest subdivision in St. Louis Park (124 houses in 2-acre tract) Bruce sells his houses for $18,000. His fastest seller: for $16,000. Even in this price range he sells most of his houses before they are finished, has averaged better than a week for the past four months.

Project-builder collaboration. Worked close cooperation with his architects, Armstrong & Schlicting of Minneapolis. Bruce gets site planning, design, control and furnishing advice. Says Armstrong: "We work furniture into the design stage. Many spec builders make the mistake of building rooms that won't take beds or rooms so poorly planned that they are impossible to furnish practically. Common errors are making poor use of materials, placing them incorrectly or in unattractive shapes." A 2' overhang in the Cedarcrest houses make them even bigger than their 1,000 to 1,200 sq. ft.

Floors for one. Bruce, who had ar- tural training himself, is completely making the most of his building of more than 50 houses already in St. Louis Park, 40 sold first because they have walk-out basements. By advantage of his rolling site Bruce is able to put full-sized windows and in the basement. Says one of his men: "The basement rooms at ground level are just as desirable to the buyers as the upper rooms in his house." Prices on the walkout-basement feature are 300 higher than others because of the deeper footings required and additional millwork. Breezeway between house and garage is an important expansion feature. Several buyers have had it completely closed in for winter living.

Nice neighborhoods. "People want nice neighborhoods; they, too, sell houses," says Bruce. He offers four basic models and various front elevations, insists upon maintaining exterior color control, and will not put just any house next door to another. "That way," he says, "we keep our homes from looking like so many sitting ducks.

The selling pitch. A building official says of Bruce: "He succeeds where many builders fail down: after building a good house he merchandises it well." Here are some of the things he does:

- Furnishes a model completely and in good taste ("We keep it the way a house should look-lived-in; we don't scatter many signs around.
- Displays a spotlighted model of the subdivision with the type of houses that go into it ("We landscape the model so folks can get an idea of what kind of a neighborhood they'll live in.
- Puts display signs in the basement. These include the names of the architects, Armstrong & Schlicting, a complete listing of the building materials, and a certification of adequate wiring.

During National Home Week last year Bruce had his architects produce renderings of the houses for display in his model, says: "I forget how many houses we sold on just the basis of the pictures."
Despite harder selling, housing heads for 1.2 million unit year

For the third straight year, housing was confounding the prophets by booming more than most of them thought it was going to.

In 1951 when HHFA expected credit controls to keep housing starts down to 850,000 units and some builders feared a plunge to 600,000, the industry actually began 1,092,000 houses. Last year, most experts looked for about a million homes. Instead, starts rose to 1,130,000. This winter, Commissioner Ewan Clague of the Bureau of Labor Statistics has been predicting a 1.1 million housing year for 1953; other seers have put the figure lower.

Last month, when BLS counted up February starts (see graph), it found a surprising 8% gain over January, despite heavy storms in the last half of the month in the Midwest and Great Lakes regions, which might have been expected to offset the effect of a generally mild winter elsewhere. February's 77,000 starts meant a seasonally adjusted annual rate of 1,227,000 units (compared to a projected annual rate of only 1,157,000 computed on January starts). And BLS added: "A fairly substantial rise during February in building permit issuance foreshadows continued gains in housing starts for March."

Confirming forecast. Would the surprising pace continue? The month's most authoritative answer was "yes." It came from HOUSE & HOME'S sister magazine, FORTUNE, which decided after hearing the plans of 400 builders in 22 cities that 1953 will bring 1.2 million new homes. In the past two years, FORTUNE's April prediction of housing volume has been accurate within 2%.

The Federal Reserve Board's 1953 survey of consumer finances added more weight to predictions of good business. On the basis of a survey conducted during January and February, the Fed reported: "Plans to purchase new and used houses in 1953 appear to be slightly more numerous than they were a year ago." Moreover, "substantially more" consumers expected to buy major household goods like TV sets and furniture than a year ago. One big reason, it appeared, was that Mr. and Mrs. America thought their income would be more secure and prices steadier or lower this year than in either 1951 or 1952.

The consumer survey is not the most accurate forecast of housing. In 1951 and 1952, it reported consumers planned no increase in home buying. But the studies have spotted big trends in consumer thinking just the same.

Buyers' market. The strangest aspect of the 1953 housing boom was that builders generally tempered their optimism with the qualification that a buyers' market arrived. Said Denver's S. G. Russell: "The rush for homes is over, and the buyers are becoming increasingly critical. He who wants a home will take the first house he sees."

Despite harder selling, many a builder was planning to expand his output. For instance, Indianapolis' L & L Built Corp. planned to hike its output from 700 or 800 homes this year, although its spokesman said "the market is softer this year than last year, expected to boost his output 150 although he admitted homes "tend to take a little longer to move."

On the average, builders were finding it took about a month longer to sell a house than it did a year ago. But complaints about increasing competition were rarer.

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On the average, builders were finding it took about a month longer to sell a house than it did a year ago. But complaints about increasing competition were rarer. Most builders thought it was a healthy thing. Besides, their buyers' market was a relative thing. Housester Sterling Hogan, recalling that he was not able to sell houses as fast as loans were approved, explained: "Now you've got to show the customer what he's got, like inside."

Bearish lenders. If builders were optimistic, many a lender was not. And their warnings were based on economic rather than hard-to-measure government influence. In New York City, Vice President Joseph R. Jones of the big Security...
Connecticut court upholds town which bans subdivision because it can't afford schools

Can a city bar a small development on the ground it would strain the town budget to provide accompanying schools, services and utilities?

The common pleas court of New Haven, Conn., ruled last month that the town of Milford does have such powers. Judge John Clark Fitzgerald upheld Milford's planning and zoning commission in rejecting Property Owner Ralph Beach's application to subdivide 60 acres of farmland into 145 lots for houses in the $12,000 bracket.

New precedent. The decision held serious implications for builders everywhere. Although many a swank suburban community has restricted construction of small homes with stiff site development, zoning and planning rules, the Milford case was one of the first, (if not the first) which barred new housing so bluntly.

For New England, Milford has been growing at an explosive rate. Its population—mostly overflow from Bridgeport and New Haven—has shot up from 16,439 in 1940 to 30,000 last year. In rejecting Beach's subdividing application last Oct. 28, Milford's zoning commission held that the town's finances, already strained by school building and other expansion, could not stand more homes until some of the current debt is cut back. Town sentiment strongly backed the commission.

Legal arguments. Bringing suit, Beach argued: "Provision of fire and police service [and] schools is a natural function of towns...a taxing and not a zoning problem. The act of the commission amounts to setting up a barrier in the local interest of the town in conflict with the general interest of the public." Replied Town Counsel Richard J. Lynch: "The sole issue [is] whether the commission has the power to disapprove a subdivision plan when, in the opinion of the members, the approval would seriously injure the general welfare of the entire community. If it has such discretionary power its action must be sustained."

Upholding the town, Judge FitzGerald ruled the zoning board had power to regulate "the density of population and the location and use of buildings, structures and land." He argued it had power to make discretionary rulings beyond its formal regulations if it had sound reasons for doing so. To make sure, he ordered a later hearing on whether the rejection of Beach's subdivision was "supported by fact and not by whim and caprice."
SETBACKS FOR REHABILITATION: leaders of Baltimore slum plan as mayor blocks scheme to make it work better; Miami jettisons its slum clearance departmen

There was plenty of cheerful talk last month about rehabilitating the nation’s urban slums. But in actions that counted, the housing industry’s newest campaign suffered two setbacks that showed rehabilitation needs far broader community support and understanding if it is to succeed.

In Baltimore, cradle of the slum renovation plan that has spread across the nation, a quarter of the 16 members of the housing bureau’s advisory council resigned in protest against politicians’ refusal to give the fight against blight administrative powers equal to the task.

In Miami, the nation’s first city slum clearance department was scuttled by the city commission after its political enemies found a legal mixup in the ordinance that created it only last September. Miami realtors and builders let the promising department be voted out of existence without raising a peep of protest.

They Wanted a Change...

For all its pioneering and national attention, the Baltimore Plan in 10 years has made only small inroads on Baltimore’s 2,100 blocks of slums. By the widest stretch of statistics, the plan has touched only 300 blocks. And in many of these, there was neglect of the re-education of slum dwellers that so few people even in the building industry realize is an indispensable part of fighting urban decay. As a result, some of the 300 blocks are again slipping back into slums.

One of the chief reasons why progress is so slow, Baltimore’s slum fighters think, is the clumsy tools they have to do the job. Like Topsy, Baltimore’s slum-attacking housing bureau just grew. It grew where it was born, inside the city health department. As a result, the housing bureau found itself stifled in layers of bureaucratic red tape. Its inspectors not only lacked complete power to act against slum housing on their own authority, but could only wheedle aid from police, firemen, the bureau of buildings, zoning enforcement office, the bureau of highways, bureau of sanitation, park, education and public welfare departments.

‘Ineffective, slow.’ A year ago, Chairman James W. Rouse of the housing advisory council warned Mayor Thomas D’Alesandro the Baltimore Plan “needs prompt and vigorous assistance if it is to survive.” He explained: “When a problem arises which blocks progress in the improvement of a slum neighborhood it is studied by the housing bureau and its advisory council, neither of which has authority to take action or to negotiate with such other departments as may be involved. The housing bureau must proceed through the commissioner of health, who is free to accept or disregard its advice, whether or not its recommendations relate to a health matter. As a result, the machinery created [by the 1951 ordinance establishing the housing bureau] not only moves slowly; it also moves ineffectively. It takes an inordinate length of time and an extravagant quantity of letters, memos, and conferences to produce simple, worthwhile results which should be accomplished quickly, easily and directly.

Mortgage Banker Rouse offered the solution: set up a non-paid commission (akin to a redevelopment commission) which would take over the department’s functions and powers in doing the job, with direct access to the mayor and exclusive power to enforce the removal of blight (akin to a redevelopment commission). The solicitor had merely taken the usual course of siding with the stronger figures of the city hall. Solicitor Tom Biddison got his advice. Dr. Huntington Williams, long-time health commissioner who is trying to let the housing bureau get on its feet, Williams, in turn, was backed by his advisory board of his own which included the powerful figures as Dr. Abel W. Small, professor of sanitary engineering at Johns Hopkins University and widely known industrial consultant; and Dr. Ernest B. Hines of Johns Hopkins medical school.

There was also the possibility that the seldom-seen hand of slum-owning landlords was at work. Baltimore has heard a full explanation of why Governor McKelion did not reappoint Harry Sanders to a vacant term expired in 1951.

Protest resignations. On March 20, the disheartened advisory council met, most of its members agreed to resign on their fight for a separate blight mission, the city auditor, who must pass an enabling act, or the city can create it.

... They opposed it
housing bureau's director, G. Yates perhaps sensing the rejection to had already quit to head a new housing rehabilitation department Mar '53, News), Resigning with were Council Members Guy T. O. day, former president of the MortBankers Assn. who was scheduled to become Mayor's new commissioner; Mrs. John B. Ramsay, president of the Baltimore League men Voters; and Thomas J. Healy, AFL teamster boss. Others who had to quit wavered later as the row into a full-fledged civic war.

on wrong ball. Rouse wrote the : "It is time we recognize that the ore Plan cannot grow and develop the kind of a program the city des­needs under its present structure of government." In rejecting the plan blight commission, he said, Solicitor on "has his eye focused on the problem. He is preoccupied with what may disturb the traditional process of city government to set up the machinery to fight blight effectively," charged that Baltimore's machinery to "ineffective, and inefficient" that in the 27-block pilot area where the ore Plan had been brought to its flower, some violations remained uncorrected after two years. Reason: the housing bureau cannot get the five or more men from separate departments to muster and with a slight change in the trim, modern dwellings shown below. It re-

Fenton Place lies almost within the shadow of Washington's Capitol. It is—or was—a narrow, unkempt street of small, dilapidated brick row houses 75 years old, peopled mostly by Negroes on relief or close to it. In this forbidding setting, a group of Wash­ington homebuilders led by Herman Schmidt last month were completing a rehabilitation pilot project they hope will demonstrate what builders elsewhere can do to help save US cities from rot. Forming a limited dividend corporation, the builders bought eight Fenton Place homes like the ones pictured above, converted them into the trim, modern dwellings shown below. It re-

quired a complete renovation job: rotted joists and front doorsteps were replaced; inside toilets and electricity were installed; floors were covered with plywood and asphalt tile; kitchen equipment, hot water and automatic gas heaters replaced cold water sinks and pot-bellied stoves. The renovation cost ranged from $3,000 to $4,500 per house, so the sale price tag is $9,450 for six room homes and $8,950 for five room units. But the builders expect to find a ready market among Negroes in government jobs, still like this one. Schmidt says the profit secret lies in complete renovation of several units at once.
This is the exact spot near Washington, D. C. where Builder Ed Carr so angry he asked House & Home to publish an article about saving trees. Once this entire area was covered by trees like those at left. But all the trees were ruthlessly bulldozed off, left houses unattractive. Trees would greatly increase their
If most builders agree with the answers, left, our new small-house communities are about to sprout trees by the groveful. And high time, too! Home buyers will be grateful. So, too, will architects, town planners, civic associations and mortgage companies.

For, to date, most builders have unenviable records when it comes to preserving wooded sites, or planting trees on their customary bare sites. Their neglect is inexcusable. Inexcusable because it stamps them as bad builders (unfamiliar with the value of trees for shade and shelter), as bad planners (with little sense of the importance of trees to the maintenance of values in a community), and as bad businessmen (because trees can make money for any smart builder (earn more, relatively, says one builder, than his actual building operation).

But the chief reason why builders from now on should dedicate themselves to the study of tree values is because it is time they graduated from the status of housebuilders to that of community builders. If they are to mastermind the creation of entire new communities, they will have to restyle their thinking. The simple objective—“My project must make money for me”—must be qualified by: “And be as comfortable, as healthy, and as attractive as it is possible to build.”

Builders agree . . . There can be no arguing about the value of trees to the over-all beauty, comfort and economy of a residential community. Their ability to air condition an entire area, prop up property values, quiet the noise of traffic, and screen objectionable views is well-known by all builders. Most builders believe in trees with the same fervor that they believe in virtue and motherhood. They never fail, when advertising their houses, to show them—in drawings, at least—surrounded by fine trees.

. . . but fail to act. Study their building habits, however, and these two shocking facts stand clear: 1) Too many builders take handsomely wooded land and bulldoze it down to the raw earth, destroying for decades the advantages that such a stand of trees might have given the buyers of their houses. 2) When they build on meadow and farmland, they make little or no effort to supply the trees that every well-planned community desperately needs. The trees they do plant—if any—are invariably huggy-whip saplings that will take years to achieve effective size.

When asked why, they give these stock answers:

. . . We rip down the trees because it’s much cheaper to build on cleared land than on wooded property. Trees get in the way of trenches; crew traffic from house to house, and the storage of materials.

. . . It’s impossible to spare trees when you’re using power excavating and grading equipment. Workers and truckmen have no respect for trees, and we can’t stand over them with a club.

. . . We’d have more trees around our houses if someone would pay for them. Neither the FHA nor the VA will increase commitments to cover the cost of saving or planting trees. And the buyer won’t make a larger down payment to cover their cost.

These answers are partially true, but builders are beginning to discover: it is possible to build economically on wooded land. The FHA, VA and private bankers are finding ways to enlarge commitments to cover the cost of trees. Building labor is more than cooperative, once it is made aware of the value of trees. As a result, even the low-cost house can have the beauty and comfort of good-size trees.

Edward R. Carr, past president of the NAHB and an advocate of tree salvage, maintains that in most cases it is cheaper to save than to clear trees. As proof, he cites the brutal stripping of a 640-acre wooded site near Washington, D. C. (opposite). The builder started by bulldozing every tree and shrub on the property, at a cost of $2,000 per four-acre block.

Says Carr, “If he had left a rectangular panel of trees in the middle of each block, he would have cut his clearing costs by $1,000 a block—and had a highly attractive sales feature: a private forest and picnic grove for each family, and a good view for all rear windows. The cleared front of the property would have permitted free construction access.
Value of the Luria property is greatly enhanced by fine trees. These houses are selling as fast as any in their class and trees are definitely a sales factor. Air photo above, made before streets were installed, shows careful thinning of trees.

The most beautiful parts of the new Levittown are areas like the one at the right where old trees were saved.
“This green-belt idea could have been carried a step further. If the builder had scalloped the sides of the panel so that thin spurs of tree growth extended down the lot lines, they would have produced perfect screening from garden to garden.

“Such tree belts make fine ‘nurseries’. We can scoop-lift 2”-2½” trees out of them to place in front of our houses when landscaping. Cost per tree—moving and planting—is only a few dollars.

“On the other hand, under some conditions it is uneconomic to save trees, and certain trees may be undesirable:

“If grading makes much filling over the roots necessary, a tree expert should appraise the cost of saving the tree as against its value. Even 2” or 3” of fine loam or clay fill may kill a tree by suffocation.

“If the terrain is rough, with great differences in grade, it may be only sensible to clear all the trees, especially in small lot developments where it is usually impossible to take advantage of land contours.

“If much fill is required, it may be cheaper and easier to scoop it off the high land, in which case many trees are sacrificed.

“If a really fine view is blocked, or if there are so many trees close to the house that grass won’t grow and the house is continually damp, some clearing is obviously called for.”

Spare the tree and save the sale. Ned Cole of Austin, Tex., believes in sparing the tree to save the sale. On wooded land (which he prefers, even for lowest-cost homes) he first clears a strip between lines 30’ and 60’ from the street and preserves trees for both front and rear yards. “And in pine areas,” he says, “the cut timber more than pays for clearing the strip.”

The J. C. Nichols Co. of Kansas City prefers wooded sites and often develops them. Chairman of the Board John C. Taylor reports that his company has planted over 150,000 trees, and maintains its own nurseries.

“On bare land which we purchase for future development,” Taylor says, “we make a practice of doing a large amount of tree planting, based on a preliminary street and house layout. This growth is usually several years older before we get into actual construction. We know that it contributes materially to the desirability of the property.”

How to protect trees. It is possible to educate building crews to save trees, says John Matthews of Little Rock. “Choose your trees before you build; save the best and clear out the undesirables.” Easiest way to mark a tree for saving is to tie a white rag around it. If it’s near a truck dump, protect it with a box. Establish well-marked rights of way for bulldozers and other equipment, instead of letting them break their own trails into the property.

A landscape plan will help to avoid the best trees in locating streets, houses and driveways. Many of the existing stands of trees in Bucks County Levittown have been saved this way, and thousands of new trees added. “Good-sized trees have this virtue,” claims William Levitt. “As buildings deteriorate, growing trees enhance their value.”

Buyers will pay. The consensus of a number of leading builders is that average buyers prefer wooded property, and are willing to pay for it.

Ed Carr saved a magnificent beech at a cost of $500 for drainage tiles and fill, and collected $2,000 more for the house it shaded. Ervin Peterson, Lincoln, Neb.: “Our buyers will pay an extra $200 and more for a house with trees.” C. J. Goucher, Madison, Wis.: “Trees add from $100 to $800 to the value of a house.” Martin Bartling Jr., Knoxville, Tenn.: “Trees are worth at least $500 per house.” Virgil Place, of Place & Co., South Bend, Ind: “Buyers of our $10,000 to $12,000 homes will pay $500 to $750 more for houses with trees.”

But if your buyers won’t pay the cost of trees (and some won’t, some builders insist), you may be able to charge trees off as a selling expense. Manny Spiegel, president of NAHB, says, from his experience, “People will actually pay no more for a house with trees than for one without, but sites with trees will be selected first.”
LARGE TREES ARE NOT EXPENSIVE

For guidance, use this table of approximate tree prices in various areas, prepared in cooperation with American Association of Nurserymen.

Planting around each of Levitt’s $17,500 Country Clubbers, being started this spring, will include two-and-one-half street trees, one shade, three fruit trees, 12 white pines or Norway spruces plus 67 shrubs. The Levitts are shrewd merchandisers and they believe tree planting is good merchandising because it helps to make a better community.

<table>
<thead>
<tr>
<th>Area</th>
<th>Tree Type</th>
<th>Size</th>
<th>Price</th>
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<tr>
<td>Middle Atlantic</td>
<td>Sycamore</td>
<td>2½-3&quot;</td>
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<td></td>
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<tr>
<td></td>
<td>Locust</td>
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<tr>
<td></td>
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<td>New England Boston</td>
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<td></td>
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<tr>
<td></td>
<td>Moraine lacust</td>
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<td>South Atlantic</td>
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<td></td>
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<td></td>
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<td></td>
<td>Liquidambor</td>
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</tr>
<tr>
<td></td>
<td>Crinodendron</td>
<td>5 gal.</td>
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*Custom is to pack and sell trees in reused 5-gal. cans
**Usually not available in larger sizes
I. IF YOU HAVE NO TREES—PLANT THEM

Though buggy-whip saplings may conform to FHA requirements, they can hardly be seen by the naked eye. The buyer cannot be blamed for not wanting to pay extra for this type of planting—and not rushing to buy the house that has it.

There is a long-term place for the saplings, although older people, reports Jesse R. Schroeder of the Underwood Title Co. of Omaha, feel they can't afford to wait for saplings to grow. But builders would be wise to consider planting larger (4"-6") trees. There are several ways they can cut cost. The first is to spread the larger trees through the development, allowing one big tree for every two, three or more houses. One 20' high tree for $25 is not only a better bargain than six bean-pole saplings at $5 each, but has many times more selling power.

Other possible economies: ask your local park department if it provides free, or subsidized, trees along the curb. (Many do.) Buy bare-root instead of balled-and-burlaped stock. (Costs half as much, lasts just as long if handled carefully.) Transplant trees from wooded parts of the property, for little or no cost. Select native trees; they are cheaper and hardier.

**Brand new.** An experiment now being field tested by Builders Klein and Teicholtz in their East Meadow, Long Island, development, suggests another way to get large trees at no added cost to the builder. As described by Kal Klein: "It's to the advantage of both builder and buyer to plant trees around a house. We can't expect every buyer, however, to pay for 4"-6" trees. But if one buyer in every two or three will pay extra for big trees, we'll produce an over-all wooded effect that will enhance the value and appearance of the whole community."

They now offer their five standard house models (ranging in price from about $15,000 to $18,000) with and without trees. If the buyer elects, he may pay $100 to $300 additional for trees from a cooperating nursery. According to Klein a proportional share of the cost can be contained in the mortgage loan. He forecasts that his flat and once treeless potato farm will shortly have dozens of good-size maples, oaks and sycamores.

**Mortgageable trees?** Can the cost of big trees be reflected in higher FHA or VA commitments? If government and private lenders will modify their stands that trees are not mortgageable, trees will come in profusion. Fortunately, there is a strong likelihood that money will be lent for trees, if the pressure of builders for mortgageable trees continues.

Kurt Mack, assistant FHA Administrator for Underwriting, says that trees, specifically, are not mortgageable. If they were, the borrower would be in a difficult position if one fell victim to disease or storm. However, trees influence the value placed on the property. "Competent appraisals should reflect the benefits of existing landscaping," says Mack.

However, FHA will not say how much more it will allow for tree landscaping. Best advice seems to be to try and find out. Procedure: Prepare a detailed landscaping plan, showing position, type and size of every important tree you plan to save or add. Submit this to the appraiser.

T. B. King, director of the VA's Loan Guarantee Division, doubts that the VA can boost appraisals very much, even if the builder should add trees. Trees, however, are considered a part of the landscaping; hence, are reflected in the over-all appraisal.

Here, again, the improvement will be judged on an individual case basis. The VA maintains that if it is going to guarantee a high-percentage loan, it has to be careful the loan does not reflect any amenities out of balance with the property. In other words, when planting trees, be reasonable.

Some banks and savings and loan institutions are more generous. County Federal Savings & Loan, a leading lender on housewise Long Island, will pick up its share of the tree tab, provided that the cost is not out of line with the value of the house. Attitude of the huge Dime Savings Bank of Brooklyn is similar. Apparently a basic improvement in property design is in the making. Its recognition by lenders—and builders, too—may take time. But this much seems certain: if enough builders and buyers want trees, mortgage commitments will be made generous enough to cover reasonable cost.
Mature trees were saved, even at the trouble of relocating apartment units. When future buildings are added, entire mall will be a protected enclosure, available to all families. Separators between individual balconies were discarded because friendly small-town families felt them unnecessary.
Why are these apartments a success?

Because the owner gave tenants
"house-sized" rooms . . .

Because he used the site to give them views . . .

Because he gambled on a small town's accepting
clean, contemporary design. . . .

Old rental units in small US towns generally wear the framework of the Victorian mansions they once were. Newer ones, built under FHA's 608 program, are overwhelmingly "adapted" Georgian or pseudo-Colonial. Usually built on land near the center of town they rarely provide the openness considered standard for single houses, and rarely have handsome sites. But this small (21-unit) project, in a small (pop. 14,432) town, can serve as a model for other towns where there is a limited but stable market for medium-priced rental apartments.

What might have happened

The Walban apartments might have been just another stereotyped project if the realtor-owner had accepted the advice of FHA on design and orientation of the buildings. In preliminary talks, the agency insisted that the majority of units should face the street, in spite of the fact that the four-acre site was on a bluff overlooking the Grand River valley, with a five-mile view up and down the river. FHA also suggested U-shaped buildings with parking in the hollow center rather than the simple rectangles provided by Architect Michael Kane. This was a natural outgrowth of FHA's preference for courts, which provide some view and a measure of landscaping for projects in heavily built-up areas or on flat land. The objections to Kane's plan for Walban seemed to be based on a philosophy that amenities for the occupants should be sacrificed to a facade that would impress neighbors.

What did happen

Owner Milton J. Ludwig was so sure that contemporary buildings and an imaginative site plan would be successful in Painesville that he dropped the idea of FHA financing, provided his own construction money, then placed a conventional mortgage after the buildings were completed. This gave Architect Kane freedom to achieve:

1. Best use of his "viewful" site. Only two of the four acres were used for the first three buildings, with the remaining half for four future buildings, which will have 30 additional units. All apartments will be oriented to an easterly and southerly
exposure, perfect for Ohio, with its cold winters and hot summers. The 20' drop in terrain from Bank St. to the edge of the bluff was utilized to put extra apartments in the most desired spot, with three-story walk-ups nearest the precipice. The land was disturbed as little as possible (total excavating, fill and grading costs were held to $2,100), and buildings were sited to save every possible tree, some as big as 30" in diameter. Buildings are arranged in a sawtooth pattern around a central mall, so that every apartment can look past any other building to the valley. A complete landscaping job is complementing the existing mature trees that were saved, and the grassy mall is unmarred by concrete walks or driveways.

2. Spaciousness without pyramiding square foot costs. Apartments are large: 900 sq. ft. in the two-bedroom units, 653 sq. ft. in the one-bedroom, and they seem even larger since glass walls in living room and front bedroom make the entire river valley a part of the rooms. In addition, each apartment has its own balcony, which also faces the view. Ground-floor suites have terraces. Even the smaller bedroom has a full-length window facing the street, relieving the starkness of the rear elevation. These windows do not extend the width of the room, so their off-center location, cater-cornered to the bed, allows a measure of privacy. Apartments set back from the bluff do not look at the other buildings, but across several hundred feet of open land to the valley below. With these visual "room expanders," one was able to satisfy the demands of the suburbanites for space and still hold costs to a respectable $11.80 per sq. ft. in the low-cost Cleveland area.

3. Cracking of the hard shell of prejudice against contrary design. Most important to the acceptance of Walban
ing. The clean, functional lines, so successful here, might have seemed stark and glaring on a crowded urban site. Large areas, a drawback when they stare at another "picture view" next door, are a renting advantage when they provide an "view-decorated" wall. The flat roof is welcome when it forms a covering overhang for stairwells, porches and 4'-6" balconies. Three-story buildings without elevators, usually unpopular with Clevelanders, are made palatable here where siting permits occupants to enter the second floor from the rear grade, and for first-floor occupants to climb only one flight of stairs. Balconies are kept light by simple iron railings, a flavor of New Orleans that softens the geometric lines of the facade.
Second-floor apartments are practically at grade in rear, so top-floor tenants have to walk only one flight. Translucent glass shields stairs.

Kitchen window at eye level looks out on common mall, would be invaluable for watching children at play. First-floor center units are only one-bedroom apartments. Laundry room on this floor is shared by the entire building.
Perimeter heat in first-floor slab was substituted for radiant system in face of materials shortages and rising prices. Upper floors have conventional short duct forced-air heat.

Traverse rods were provided for large window areas, as well as shades for extra privacy. Five color combinations were offered; the architect served as color consultant.

Terraces and balconies, left, will get heavy use during the summer, adding equivalent of a small room to each apartment, eliminate window-washing chore for management.

End units have separate dining areas. Center apartments have eating space. Traverse rods would put down carpeting, no provision against noise transmission.
The rental scale for Walban is approximately $30 lower than metropolitan Cleveland's, it is high for Painesville which has little other apartment house, built in 1928 and still under OPS control. Walban's one-bedroom units rent for $85, two-bedroom units are $100 and $115. Tenants for the first three buildings are mostly Painesville families because Owner Ludwig feels local residents make more permanent renters. This created the strongest pressures for the niceties included in the rents, for the owner realized that local people would pay more-than-normal rents only for better-than-normal apartments. He feels that, at present, Painesville itself could not support the additional units planned for Walban. When these are built, niceness and modernity may attract the young executives of the growing industries on Cleveland's East Side, in the long view the most logical customers for the project's expansion.

Historical drawings

As it's inception, Walban has been a harried operation and serves as a good illustration of an architect's ability to change the plans to cope with rapidly changing conditions. Kane got the design just four days before the post-Korea restrictions went into effect on Oct. 1, 1951. In those four days, architect and builder 1) signed a contract with the builder; 2) ordered, and delivered, all critical materials; 3) dug foundations; 4) put improvements; and 5) poured all foundations and footings. The site had been divided into two parts for mortgaging purposes, so the 21-unit portion just came within NPA limitations.

Living room (12' x 19') was important selling point to small-town folks used to the generous dimensions of the houses they came from.

Originally, precast concrete panels were planned for floors in the upper stories, the hollow core to be used for hot-air panel heat. But the cost of precast units rose after the Korean outbreak, and, as the architect explains, "caught with our foundations down, we changed the structural system to masonry and wood joints." At the same time, Kane eliminated radiant hot-water heat from the ground-floor slab and substituted a warm-air perimeter system. Short ducts were used in the upper apartments. All units were to be oil-fired.

After the excavation had been dug for the first oil tank, Painesville applied to the FPC for the extension of a natural gas line. Though the CMP program made any steel pipe allocation doubtful, Ludwig and Kane gambled on approval, filled in the tank excavation, changed drawings and specifications, and asked for bids on a gas heating installation. P.S.: The pipeline came through in September, just before the cold weather.

New balcony scene

In the first drawings, Kane had provided individual balconies about 12' long and 7' deep for each apartment, but the Ohio state building code insists on two separate means of egress from every suite, so the front balcony was made continuous, with a stairway down one side of the building. Dividers between apartments were not designed, but were found objectionable by friendly Midwesterners, who dislike the isolation from their neighbors that eastern city dwellers prefer.

All window units were shop constructed and glazed, but the contractor chose to site-build the balcony door units in the first three buildings. When the rest of the project is built, all exterior wall sections will be prefabricated.
What payments for architect's services on merchant-built houses?

How much can an architect earn from a merchant builder? Case studies opposite, compiled by the AIA Committee on the Home-building Industry, reveal that architects who have successfully collaborated with builders are finding it a wide-open and fertile field. Facts and figures from the studies shed light on:

- What the architect expects from the builder.
- What the builder expects from the architect.
- Fee schedules of architects all over the US.

More and more architects are finding that working with the merchant builder can be profitable and stimulating, although it calls for a different approach.

"The architect must forget a few of his normal attitudes toward a client and recognize that the builder's problem is different from the usual custom-house problem," says one architect.

"He may at first be shocked at having to discard some of his concepts of what must be incorporated in a house to make it acceptable, but after recovering from the shock, he can get real satisfaction from the knowledge that his efforts produced a far better project than if he left the builder to do his own designing."

And the architect can make money as the records of such architects as Ed Fickett (H&H, Mar. '53, p. 132), Al Parker (H&H, Feb. '53, p. 134), Keys, Smith, Satterlee & Lethbridge (H&H, Nov. '52, p. 140) and Anshen & Allen (H&H, Oct. '52, p. 82) indicate.

The builder, for his part, is usually finding the architect well worth his fee. Builders who briddled at an architect's fee a year ago are now ready to pay for the services that they need to sell their houses, for builders find that good architects provide more than just a plan and elevation variations. Architects will provide such services as site planning, landscaping, color schemes, interior decoration, professional supervision and merchandising advice. The truism "you get what you pay for" is nowhere more accurate than in regard to architects' fees on merchant-built houses. Builders who have availed themselves of more than just an architect's plans and elevations have found all additional services pay for themselves in fast-moving houses. And architects who insist on delivering a variety of services soon get the builder to expect and want them.

Although architects who work successfully with builders are paid for their services in many different ways, the predominant pattern that the AIA case histories reveals is that they: 1. charge a basic design fee plus a royalty charge each time the design is repeated ("It is only good business to get a profit on all work performed"), or 2. charge no basic fee at all but charge a royalty fee based on the cost or selling price and the number of houses to be built ("The architect has more incentive to do a good job; the more successful the job, the greater his profit").

The table opposite shows that architect services in all parts of the US are in direct ratio to the fee; "plant factory" service is bought at plant factory rates.

What the architect expects from the builder

- A retaining fee. When an architect knows little about a builder or meets him for the first time, he wants a retainer as a pledge of good faith. Says one, "This retainer separates the goats from the sheep."
- An analysis of how much and what quality work the builder expects. "Research," says one architect, "costs money. The architect expects a builder to have some idea of design production costs inherent in the type of house he wants."

- Periodic payments. Many architects want a payment at the time preliminary drawings are submitted, subsequent payments after the drawings are returned, either weekly or monthly. Some architects require 50% of the fee at delivery of the drawings, 40% after FHA, VA or lender approval.
- Royalty or repeat fee. Most architects believe they have the right to expect a professional fee for their designs no matter how often these are repeated. Builders sometimes find the royalty for designs on low-cost houses a burden because they feel the architect had to work harder for them than for an individual, particularly if he developed a new approach to the structure.
- Treatment as a professional. The architect gives objective analysis of how much and what quality work the builder expects from the architect.
- How much can an architect earn from a merchant builder? Case studies opposite, compiled by the AIA Committee on the Home-building Industry, reveal that architects who have successfully collaborated with builders are finding it a wide-open and fertile field. Facts and figures from the studies shed light on:

What the builder expects from the architect

- Use of stock parts and ready-made assemblies. On a home, which is a production house, a design fitted to stock parts and assemblies is vastly more important than on the architect's job for individual clients.
- Economy of materials and space. Designs fitted to standard conditions both in framing materials and finish materials, avoiding waste and waste, are again doubly important. Many architects - and builders insisting rigidly on a rectangular plan as the simplest, cheapest to build. In this field architects cannot pretend to themselves that "a small variation would make no difference."
- Design variation. Builders are absolutely certain that basic parts must be varied in details such as roof lines, garage placement, entrance placement, and other features. Any architect who convinces a builder that variation can be achieved simply in the same house on the lot or in variations of plant may have a uphill fight and must have overwhelming proof of his payment. He usually will be well on his first job if he persuades the builder to abandon false gables, shutters that do not shut, and seric-a-brac—all of which the public has been accustomed to as the symbols of variation.
- Knowledge of quantity construction problems. Even an architect who has been a shining expert in individual construction must relearn a great deal in view of the mass production technique that has only sprung up in the last couple of years or sometimes last couple of months. Many of these techniques are pointed out for the use of unskilled labor and the use of tools not available to individual jobs. Details that are commonplace on quality jobs, window walls or clerestories, may have to be taught from ground up and the architect must understand the level of skilled labor in the area.
<table>
<thead>
<tr>
<th>DESIGN</th>
<th>ROYALTY OR REPEAT CHARGE</th>
<th>FEE PER HOUSE</th>
<th>SERVICES RENDERED</th>
<th>AREA</th>
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<tr>
<td></td>
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<td></td>
<td>Preliminary plans, plot plans, site planning, perspective sketches, working drawings, FHA outline specifications, routine supervision</td>
<td>West Coast</td>
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<tr>
<td>$1,000</td>
<td>$100 for 1-25 houses</td>
<td>$77.75</td>
<td>Site plan to FHA standards, plot plans, conferences with engineers and utility company</td>
<td>West Coast</td>
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<tr>
<td></td>
<td>75 for 25-50 houses</td>
<td></td>
<td>Preliminary plans, site plans, working drawings, exterior color sketches</td>
<td>West Coast</td>
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<tr>
<td></td>
<td>50 for 50-100 houses</td>
<td></td>
<td>Plot plan, working drawings, limited supervision</td>
<td>Southeast</td>
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<tr>
<td></td>
<td>35 for 100-200 houses</td>
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<td>Working drawings, plot plan for each house</td>
<td>West Coast</td>
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<td></td>
<td>25 for over 200 houses</td>
<td></td>
<td>Site planning, color integration, detailing to speed construction time, mechanical design</td>
<td>Northeast</td>
</tr>
<tr>
<td></td>
<td>$75 each for 100</td>
<td>$81</td>
<td>Working drawings, limited supervision</td>
<td>Southwest</td>
</tr>
<tr>
<td></td>
<td>$100 each for 50</td>
<td>$105</td>
<td>Future building planning, site plans, discussions with planning officials, design of houses to character of community</td>
<td>East Coast</td>
</tr>
<tr>
<td></td>
<td>$45 for each house</td>
<td>$17.50</td>
<td>House plans for three basic designs with three elevation variations, specifications. Supervision extra</td>
<td>New England</td>
</tr>
<tr>
<td></td>
<td>$100 each for seven variations; no other royalty charge</td>
<td>$17.50 approx.</td>
<td>Working drawings, land and market analysis, color guidance, limited supervision</td>
<td>Northeast</td>
</tr>
<tr>
<td></td>
<td>$100 for each house</td>
<td>$100 approx.</td>
<td>Working drawings, limited supervision</td>
<td>West Coast</td>
</tr>
<tr>
<td></td>
<td>(Architect revised this later to flat $165 per house for 25 houses, plus his costs, because $100 was too low)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$300 for each of 10 houses only</td>
<td>$85 approx.</td>
<td>Up to $75</td>
<td>East Coast</td>
</tr>
<tr>
<td></td>
<td>$500 varying with size</td>
<td>$75</td>
<td>Three or four standard designs with variations, master specifications</td>
<td>East Coast</td>
</tr>
<tr>
<td></td>
<td>350 and quality of the house</td>
<td></td>
<td>$100 for 40</td>
<td>East</td>
</tr>
<tr>
<td></td>
<td>250</td>
<td>$100</td>
<td>Basic plans for three houses with 12 variations, no specifications. Supervision extra</td>
<td>East</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>$150 for 100</td>
<td>Four basic floor plans, working drawings</td>
<td>East</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$150</td>
<td>Four basic plans and variations, FHA description of materials</td>
<td>Northwest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$25-$40</td>
<td>Basic plans plus elevation variations, plot plan work on existing street layouts, all sketches, working drawings, detail drawings</td>
<td>Northeast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$100 for 50</td>
<td>Basic plans, plot plan, alternate elevations, detail drawings, seven sets of prints for each house, FHA specifications</td>
<td>Gulf Coast</td>
</tr>
<tr>
<td></td>
<td>$50 for all over 50</td>
<td>$50</td>
<td>In 5 years only four basic plans were used</td>
<td>North Central</td>
</tr>
<tr>
<td></td>
<td>$25 each for 100-150 houses</td>
<td>$25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Atlanta goes modern
—without going overboard. Architects Finch & Barnes gave their builders clean design, efficient techniques and just a hint of trad

Result: a "new" market in the old South

This 16-house project has gone a long way toward selling Atlanta’s merchant builders on the value of architects’ services and up-to-date design. One of the area’s first contemporary subdivisions—and one of the few local projects in the 10- to 20-house bracket that has made money—it drew a record-breaking crowd of 10,000 visitors on opening day and sold itself with a minimum of advertising and sales effort. Builders Northcutt and Sanders feel the architects added “immeasurably” more than their fee of $250 per house to the value of the finished product, are using architects on new projects of 20 contemporary houses in the $12,500 class and 107 at $16,000.

In the case of Golf View, professional design contributed many things not always found in traditional houses, among them:

1. Better sitting for privacy and view: houses placed for the best views, screened from each other by fences, brick walls, planting.

2. Better floor planning: enclosed terraces, service yard living rooms, good circulation and room arrangement (see

3. More variety. The three basic plans were turned different houses by reversing plans, turning houses around alternating brick siding with boards and battens.

4. Orderly, unified facades. Four types of wall section used in big panels adjacent to one another around the exteriors the houses: a standard stud wall with board-and-batten plaster interior; a 4" brick veneer on studs, plaster int 10" brick cavity wall wherever the texture of used brick was exposed inside; and a window wall panel. By keeping the different wall areas big, simple and clearly defined from each other, the architects achieved a visual variety of materials with a minimum of confusion.
Reference "principle", grouping in large ground-to-roof unifies rear bedroom elevation-wall units are fitted with asbestos board under brick veneer between extends to grade in front of concrete block foundation wall.

\[ \text{BEDROOM} = 10'2" \times 14'-0" \\
\text{BEDROOM} = 9'9" \times 10'-0" \\
\text{BEDROOM} = 12'-6" \times 14'-0" \\
\text{LIVING} = 12'-6" \times 18'-6" \\
\text{DINING} = 8'-6" \times 11'-0" \\
\text{KITCHEN} = 8'-0" \times 10'-6" \\
\text{STOR} = 9'-0" \times 15'-6" \\
\text{CARPORT} = 9'-0" \times 15'-6"
\]

L-shaped kitchen has painted wood cabinets, pass-through to dining area at right. H-plan, left, relatively new in builder houses, is most popular plan in development. With all utilities in it, the "link" separates noisy areas from sleeping, creates private courts outside living, dining areas. House: 1,480 sq. ft.

Freestanding fireplace and attached coat closet (see plan above) are located to give an entry hall and to separate living and dining areas. Note: both are entirely traffic-free.
5. **Wall-window sections.** The parts of the wall containing windows (see photos and elevation sketches) are not of the usual stud construction with cripples, jack studs and headers around the openings. Instead they are wide-spaced post-and-beam frames extending from sill to top plate—whole walls that can be preassembled at moderate expense. In these big frames are set aluminum casements and fixed glass, with colored panels of cement asbestos board above and below wherever glass is undesirable. In all cases windows go up to the top plate, giving a cleaner, simpler exterior. Brick never occurs above windows, thus eliminating the need for expensive steel lintels and allowing wider spans of glass.

6. **Truss roof.** Trussed rafters 2' o.c. (2 x 6's, 2 x 4's and metal connectors) did away with most bearing partitions inside each house and grade beams under the 4" floor slab, which permitted greater freedom of interior planning.

7. **Perimeter heat.** Inside the concrete block foundations fiber ducts were imbedded in the slab for combined radiant-forced-air perimeter heat.

Plan No. 2 was faced both in wood, below, and in brick, right. Basic plan has minimum windows on end walls for neighbor privacy, a "through" living-dining room. Variation, below left, has window wall on side terrace, larger living room instead of separate dining alcove, better circulation, a service yard between kitchen and carport.
Plan No. 3 has narrow end facing street, with living and bedrooms opening on flagstone terrace shielded from street by brick privacy wall.

Typical cost breakdown

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations and slabs</td>
<td>$1,100</td>
</tr>
<tr>
<td>Masonry</td>
<td>900</td>
</tr>
<tr>
<td>Lumber and millwork</td>
<td>5,000</td>
</tr>
<tr>
<td>Roofing</td>
<td>475</td>
</tr>
<tr>
<td>Cabinet work</td>
<td>500</td>
</tr>
<tr>
<td>Aluminum windows</td>
<td>400</td>
</tr>
<tr>
<td>Glazing</td>
<td>395</td>
</tr>
<tr>
<td>Plumbing</td>
<td>1,150</td>
</tr>
<tr>
<td>Heating</td>
<td>750</td>
</tr>
<tr>
<td>Electrical</td>
<td>400</td>
</tr>
<tr>
<td>Flooring</td>
<td>800</td>
</tr>
<tr>
<td>Tile</td>
<td>550</td>
</tr>
<tr>
<td>Plastering</td>
<td>400</td>
</tr>
<tr>
<td>Hardware</td>
<td>150</td>
</tr>
<tr>
<td>Painting</td>
<td>550</td>
</tr>
<tr>
<td>Labor</td>
<td>3,000</td>
</tr>
<tr>
<td>Landscaping, terraces, walls, driveway</td>
<td>900</td>
</tr>
<tr>
<td>Lot cost (unimproved)</td>
<td>1,800</td>
</tr>
<tr>
<td>Lot improvements</td>
<td>1,000</td>
</tr>
<tr>
<td>Overhead (incl. loan costs)</td>
<td>990</td>
</tr>
<tr>
<td>Profit (incl. sales commision)</td>
<td>2,530</td>
</tr>
<tr>
<td>Hardware</td>
<td>150</td>
</tr>
<tr>
<td>Painting</td>
<td>530</td>
</tr>
<tr>
<td>Labor</td>
<td>3,000</td>
</tr>
<tr>
<td>Landscaping, terraces, walls, driveway</td>
<td>900</td>
</tr>
<tr>
<td>Lot cost (unimproved)</td>
<td>1,800</td>
</tr>
<tr>
<td>Lot improvements</td>
<td>1,000</td>
</tr>
<tr>
<td>Overhead (incl. loan costs)</td>
<td>990</td>
</tr>
<tr>
<td>Profit (incl. sales commision)</td>
<td>2,530</td>
</tr>
<tr>
<td>Architect's fee</td>
<td>250</td>
</tr>
<tr>
<td>Sales price</td>
<td>$23,900</td>
</tr>
</tbody>
</table>

Adaptable to flat or sloping sites. Single, roof line of house at right gives it better unified appearance.

Roof framing of end windows, withored asbestos board above and below i, dresses up street view of end-on plans.
Can commercial land be developed profitably as a part of a medium-sized (308-unit) rental development? The answer is “Yes,” if you will adopt the principles that architect and developer built into this 11-store Freedom shopping center, which have kept it 100% rented since it opened in 1951. These principles brought the shops both local and a surprisingly large share of drive-in customers:

The principles
1. Protection from competition. Residential land, a huge municipal park, and an industrial zone enclose a “captive” market of 17,000 persons.
2. Use of front parking to milk maximum extra business from a facing highway. With a front of only 500', shops were set back 72' to make it easy for cars to pull into the parking area. Result: 50% of the customers are drive-ins, an outsize percentage for a neighborhood center without library, bank, restaurant, etc.
3. Willingness to plan the center for a static market, rather than as the nucleus for expansion. A survey showed that the local population could increase only 4,000, therefore the potential of the stores could be estimated closely, overbuilding avoided.
4. Owner-merchant cooperation to build up both center and its small merchants. Large weekly new ads, featuring merchandise of various stores as usual institutional copy for the center. Half of the cost borne by Knott, half prorated to merchants according to square footage. Janitorial service, provided by the center, is billed the same way. Cost of exterior soft floodlighting is paid by the landlord. Every store furnished air-conditioning equipment, though each pays service and maintenance.

No big chains
On a basis of population count, national chains were uninterested in Freedom. Today they would like in; the variety store is doing 400% more business than was estimated, the supermarket expects a $1 million

Parking means plus business
Emphasis placed on parking facilities draws business areas outside the primary shopping zone. Space for cars means one space for every 93 sq. ft. of store. Ratio of parking to store area is generous, between seven to one. This accounts for the high percentage of customers arriving in cars.
Variety stores are only ones with basements. This all in rear court, naturally formed by retaining wall between stores and apartment site. Management will all janitorial services at a fee, to insure orderliness.

Deep 12' overhang provides welcome shelter during bad weather and encourages window shopping. Floodlights and soffit lighting are the owner’s responsibility.

Illusion of tapering fascia masks steep drop in gives strong horizontal line. Color-dipped redwood deck and cement asbestos board panels on soffit will minimum maintenance. Management forbids pro-signs, but does not attempt to dictate form or flat signs. Only desired facility not in center was forbidden by Maryland’s state banking commission.
Air conditioning at half price?

Well-water air conditioning can drastically cut cooling costs but not all builders are in locations to use it.

How abundant is ground water for home cooling?

US ground-water resources are enormous. The gushing of almost 30 billion gal. a day from all the wells in the country represents only a fraction of our over-all ground-water reservoir (and less than 15% of our peak daily use) according to the US Geological Survey. Most of the widely publicized shortages stem from outgrown surface facilities such as not enough reservoirs, in New York City. About 5% of the country, including such areas as Chicago and Los Angeles, suffers from severe ground-water shortages as a result of too many wells. Water is pumped from the ground faster than the hydrologic cycle gets rain water back to the ground. On the whole, however, there is a lot of cold ground water in the North for low-cost home cooling provided builders and architects use it wisely. Builders can usually get water from relatively inexpensive wells in coastal areas and near rivers. The maps on page 152 show where ground water is generally available for home cooling, either for single houses or in the bigger quantities needed for projects.

If you are an architect or a builder in the North in an area where cold water is plentiful, a well-water cooling system can cut your first cost for summer air conditioning in half, operating expense to less than half. But local ground-conditions are the key to the entire problem. For instance, in the South, where ground water is warm, this system won’t work at all. In other areas, well-water cooling raises certain technical problems for project builders.

However, for builders in those areas of the North where there is plenty of cheap, cold water unrestricted by local ordinance here are the results of a great deal of up-to-date research on an efficient, inexpensive system. And here are the answers builders and architects who, having learned that well-water air conditioning in commercial installations is both cheap and efficient, have been asking why they could not use it for their individual houses.

How it works. Cost is low because a mechanical refrigerating unit is not needed. To cool a house, cold water at least 55° is simply piped to the metal tubes of a finned coil (suitable for an automobile radiator). Air blown over the cold tubes chilled and dehumidified just as if the coil were Freon or another refrigerant. Proof that it works: without costly apparatus—compensating condenser, etc.—cold well water is used to air condition some thousand restaurants, theaters and industrial plants in the North.

For cooling houses you insert the water coil in the supply duct of the forced-air heating system and hook up water coils as shown in the diagram below. In summer the furnace heat is turned on to circulate cool air. However, well-water cooling depends on these three basic points:

* Examples: Long Island’s Republic Aircraft, part of Du Pont Wilmington, Del., and Sunshine Biscuit’s Kansas City plant where 90° wells supply 3,000 gal. a minute of 53° water.
efficient cooling the inlet water temperature should not
be over 55°C. In the US this limits well-water cooling to roughly
the 38th parallel. See maps on next page. (In the South
water gets progressively warmer.)

quantity of water needed is proportional to water
ature. At 55°C about 3 gal. per min. are needed per ton of
This means you need about 6 gal. per min. for a 1,000
(2-ton) house, 9 gal. per min. for up to 1,800 sq. ft. Less
needed when the temperature is lower than 55°C.

forced-air heating and ductwork system must be de­
propriate for both heating and cooling. Above all, the
water coil must be selected by an expert; its size depends
cooling load of the house and on water temperature.

it work for housing projects?

pending on your area. There are two chief methods:
itted wells. Take any project built where cold ground
so abundant wells for cooling single houses have been
hand, as occurs on Long Island. In such projects,
be spotted around a tract at points convenient to
houses. From each well pipes fan out underground to
uses around it. Such wells are similar to those used in
for regular water systems only. They are generally
conspicuously next to houses or under streets. Their
pumping gear also goes underground and requires a
of service; only a manhole cover marks the spot.
mitation: adjoining wells must be properly spaced so
to encroach on one another's ground water; space re­
ranges from 300' to more than 1,000', depending on
cal conditions. (The same system can sometimes be used
regular water supply.)

gh plenty of water is obtainable close to the surface in
reas, wells should go down 50'-75'. In summer water
the surface often gets warmer than 55°C. Including
up, a 75' well for delivering enough water to cool 25
houses on Long Island will cost about $3,000, or $120 a
Pipes to houses will cost an estimated $125 a house and,
olume purchase, the cooling installations inside each
ill cost about $200 more.

last item to consider is disposing of the used cooling
This water cannot be recirculated with water towers be­
water gets too hot. However, used water can be re­
to the ground via lawn sprinklers (which use about 2
min. each). Or used water can be sprayed over a hot
uch less heat then enters the house, so less water is
for cooling in the first place. For true conservation,
charge wells are dug to diffuse the outlet water
the ground, and some states require these recharge wells.
Island such wells have cost $50 to $75 a house (where one has had to dig them just to dispose of cooling water mechanical air conditioners).

The total cost for the water-coil installation and supplying from spotted wells is estimated at $500 per house. This can be compared to at least $1,000 first cost (over heating) or a mechanical air conditioner that comes with a motor, controller and complete refrigerating apparatus. And it appears the price of mechanical units will not drop appreciably in the near future.

Combination drinking-cooling wells. This is a second choice for those merchant builders who can use where new projects lie beyond the range of city water mains. Normally a drilled to supply domestic water to all the houses in projects, and another waterworks is born. Thousands of such water systems have sprung up this way.*

These wells yield water colder than 55° in the North, the heating system can be enlarged for new projects and can supply enough cold water for low-cost air conditioning. Out going into technical details, it is estimated that a waterworks will cost about $200 a house more than a well system. The builder adds only a water-coil for drinking and one for making up to an all-purpose storage tank. Sometimes the builder also has to bring in a water system that can be returned to the ground via lawn sprinklers or sprayed over a hot roof.

Total cost for the cooling coil installation varies with the size of the house—from about $250 up to $500 (in addition to heating), only a little more for even the biggest houses. These costs compare with prices of $1,000 to over $2,000 for mechanical cooling. And people have actually dug wells and added cooling for less than $500 all told.

Compared with mechanical conditioning another cost advantage of well-water cooling is low upkeep: $10-15 a summer. Based on actual pumping costs of 2¢ a thousand gal. and electricity at 3¢ a kw. hour, operating cost is small compared with the operating cost of mechanical units. However, in parts of the Midwest where water is hard and corrosive, the cooling coil may require periodic cleaning and flushing.

In the last analysis well-water cooling is like the stock market: the rewards are big but watch out for booby traps. Where ground water is abundant, the well is often the smallest problem. However, if cold ground water is a problem, don’t fool around with well-water cooling. Use mechanical units.

How to plan for well-water cooling

1. Consult your local state or US Geological Survey office, which often has detailed ground-water data for your area. Some states like Illinois, West Virginia and Pennsylvania have exceptionally competent and fully staffed bureaus.

2. Get a good well contractor. Many already have air-conditioning experience.

3. Use a capable warm-air heating contractor, preferably one familiar with cooling ductwork. He can also install the cooling coil. A plumber can put in the water piping.

* Examples: a single well for 30 Mt. Kisco, N.Y. houses now building; a 117' well for a 200-unit Exton, Pa. project; and 28 big wells spotted throughout Lakewood Park’s 25,000 houses in Long Beach, Calif.
Concrete for Carpenters

A mineral compound, the multipurpose material can be drilled...

Sawed...

Waterproof and verminproof, Zeprex has no babying on the job. Thick wall (above) are going up for house on the Arctic Circle. Effective insulator and fire barrier, Zeprex is a complete outside wall.

Chopped with an ax like wood

Nailed...

The shelter below was a quick-assembly job for the Olympics. Even in permanent construction, Zeprex may be left as is—or, if wanted, stucco applied on the exterior and one coat of finish plaster on the interior.

When US Plywood proxy Lawrence announced last month the purchase of business and the rights to manufacture Zeprex, Sweden-born mineral building material was not straying far from the forest. The lightweight, precast concrete US will produce late this year, has nature. Nailable, drill sawable, the load-bearing fireproof should draw accolades from the US industry. (Zeprex already has a reputation for favor abroad. Europe annually buys a million cu. ft. in roof, floor and wall sections.)

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Processed in an autoclave, Zeprex is a chemical bond of siliceous material, cement, and water, plus “x.” Its basic component is calcium silicate, has a compressive strength five times that of concrete, so that even the compound is expanded to increase density value, Zeprex can more than hold structurally. Practical contractors will build on its build-ability as warmly as purists who will laud its monolithicness. Coastal shell white, the unicellular mass inside wall, and insulating material in one.


Press-Cooked Concrete handles ii
Take sound design, careful engineering, top quality materials, superb construction . . . and you have the ingredients that make Ro-Way America's most wanted doors for residential garages or commercial buildings.

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And every Ro-Way door is built to satisfy. Mitrise and tenon joints both glued and steel doweled. Muntins, rails and stiles squared up with precision. Sections rabatted to assure weather-tight joints. Millwork both drum and hand sanded for finer finish. Heavy gauge steel hardware Parkerized and Painted after fabrication for maximum rust resistance.

So—for every garage or commercial building—specify Ro-Way and be sure of complete satisfaction.
Every square foot of floor space you save means a lower-cost home, an easier-to-sell project. And with FoLDOOR, you can design a new home with less total floor space and still get as much usable space as a larger house with conventional doors.

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- Attractive cornice conceals track, at no extra cost
- Exclusive Multi-V design—with centerline support—requires less stack space
- Easy, low-cost installations
- Nationally advertised to your clients and prospects
- Backed by 56 years of engineering and manufacturing experience


Don't let the name deceive you: Mortgage Banking is as much a book for the bookshelf as it is for the mortgage banker. Its 19 chapters were written by top executives from all sections of the field, large and small institutions. They are written in the eyes of the mortgage banker every builder can learn much about his business. Example: Robert H. Pease's chapter on "Analysis of Shopping Centers." (Mr. Pease is President of the Detroit Mortgage & Real Estate Co., co-editor of the book.) The builder of a sizable subdivision will find these observations excellent working pointers.

"It is essential that the term 'shopping center' be broken down into two distinct types—convenience centers and regional centers. Convenience centers serve relatively small areas, and the customers are both walk-in and drive-in residents who are buying for immediate needs. There are one or two supermarkets, a bakery, a hardware store, and a few stores. The largest store (supermarket) may be about 8,000 to 12,000 sq. ft., and the store area will average 50,000 to 70,000 sq. ft. Many of these units are and will be very successful. They serve a real community and have become good investments for the owners.

"Is the center needed in the area?" In shopping centers are successful not because of their type, but rather because the problem of providing parking is one that is adjacent to shopping and fulfill the increased retail units in expanding communities. Providing parking is not the panacea of all shopping problems. The success of a shopping center is a combination of factors, and important among them is the need for additional shopping space. The number of families in the area, related to the number of retail stores per family, is determined in whether or not the need for the proposed center.

"Is the site satisfactory in size, topography?" The acceptability of a site is not a matter of total area. A long, narrow strip of land along a street or highway is as good as a square piece of land of equal total area. Few successful centers are on less than 15 to 20 acres. . . . Evaluate the conveniences of a drive-in shopping center; people are loath to walk more than 500' for their shopping, and certainly it is important that the site enables for..."
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BH&G BUYological Briefs

- A BUILDING PRODUCTS manufacturer reports a total of 9,903 booklet requests from 4 magazines—with 8,095 of these requests from BH&G!

- MORE DOLLARS OF ADVERTISING, more lines of advertising & more pages of advertising were placed in BH&G in 1952 than in any other major monthly magazine.

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“How will long-run traffic and supply plans of the city affect the project? Cities are seeking to alleviate their congestion through long-range traffic and control. These plans will bring changes in the flow of traffic within itself. Since the success of the shopping center is dependent upon its ability to lure shoppers to come to it by car, all changes in the highway pattern are extremely important to a proper evaluation of the long-term success of any center.

"... The first step is to estimate population within the trading area. This is done by taking the latest census data, but adding to it the increased population of finished and vacated units. The increased population above the existing census can also be checked with statistics obtained from electric-light and water-meter installations. In order to estimate the actual retail income, it is necessary to coordinate the figures with the income levels to obtain total family income and distribution of income in the trading area. These figures can be, in some cases, obtained from local surveys or can be correlated on a basis of rentals paid and value of homes. Income-tax figures and sales-tax figures are valuable in checking these estimates. If the project is large enough, original estimates of total retail sales of the center, for more than a single shopping center, for more than a single shopping center, are not possible, even with an attempt to estimate the total business in the area. The downtown shopper will continue to exert strong pressure on the downtown shopper's money, and many families will continue to trade at their neighborhood store. This estimate of the amount of business will be done by each store in the know that every store is determined the gross income of the store and sequentially it must be as accurate as possible.

"Determine the attractiveness of the individual stores in the project. It is advisable on both population and income and the level of income, then, the long-term success of the project would be low. Shopping centers in single-industry cities are dangerous because of the complete dependence of the retail volume in that area on the fortunes of one type of business. The direction of the general growth of the retail stores, as well as the trend of income and population characteristics, should be analyzed.

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Progress in the field of home building is of prime importance to Hotpoint. Modern Electric Kitchens and Home Laundries are among the first points of interest to prospective home buyers. Homes so equipped are more salable, and permit many families to own the most modern conveniences for an increase in their monthly payments. Hotpoint addition homes strengthen the builder's reputation, enhance and broaden his market. We believe that the home industry and Hotpoint can mutually profit through the aim at better value for our customers.

Join the builders who stand out above the rest—homes offer more... with complete Hotpoint Kitchens and Home Laundries.
The kitchen in this Cicci-built Hotpoint House of the 50's is the last word in luxury-living. No convenience has been omitted. Equipped with Hotpoint Electric Range, Refrigerator, Dishwasher and garbage Disposal®, this kitchen would delight any homemaker.

Here is an example of efficient Home Laundry arrangement that provides maximum benefits of allotted floor space. Equipped with Hotpoint's Automatic Washer and Dryer, Rotary Ironer, and handy cabinets, this compact work-center makes laundry a joy instead of a job. The Hotpoint Food Freezer is within a few feet of the kitchen.

Joseph A. Cicci, Fayetteville, N. Y., the Builder

Joseph A. Cicci says this about his Hotpoint House of the 50's: "I have long known that Hotpoint Appliances are the finest in terms of styling, efficiency, and durability—that's the reason I chose Hotpoint All-Electric Kitchens and Home Laundries for my house. I feel that the thousands of visitors who specifically admired the unique, attractive, and efficient kitchen and laundry proved the wisdom of my decision."

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50,000 homes built in the past year had this mark of a better home

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HOW TO STOP CONDENSATION

Important new booklet reports the latest findings on the moisture problem

The causes, effects, and prevention of condensation in houses is covered in a new 72-page booklet published by the National Mineral Wool Association, entitled How to Control Moisture in Houses. The booklet summarizes much of the pooled information that came out of last year's conference in Washington sponsored by the Building Research Advisory Board (BRAB) of the National Research Council. At the same time this booklet updates practically all available data on condensation.

According to the NMWA, the entire moisture problem in houses can be controlled by the following major methods:

1. Elimination of moisture at its source. In newly built houses, where most troubles occur, excess water vapor is generated in the kitchen, laundry, and bathroom. This vapor should be removed by means of exhaust fans or vents. Of equal importance to builders and architects is to stop out moisture before it can enter the house. For instance, the building site should be well drained, and exposed earth under a crawl-space house should be covered with waterproofed concrete or by houseroll roofing paper. Other sources of moisture should be similarly eliminated.

2. Isolation is necessary because it is often practical or impossible to eliminate all water vapor at its source. Vapor barriers isolate or trap moisture before costly damage is caused (such as blister or rot). Even if insulation is not used, vapor barriers are mandatory in new construction. If they are used, they must be carefully installed or they are useless. For instance, all barriers should be applied free of holes or rips to form a continuous seal around the house. Otherwise vapor may push through openings. Various types of barriers are illustrated in the booklet.

3. Ventilation. This third method of controlling moisture assumes that a certain amount of water vapor inside houses is inevitable and can build up and create dangerously high humidity. However, the exchange of humid indoor air with drier, outside air by ventilation in winter should be whether or not the two above methods are employed. Here again, an exhaust fan is effective provided it is supplemented with suitable intake openings. When warm-air heat is used, an efficient ventilation method is to connect a small outside air duct to the furnace. Dry outside air is pulled into the house by the furnace fan; the constant interchange of air will maintain safe humidity limits inside the house.

* Obtainable for 25¢ mailed to the NMWA, 2906 R. I. Building, New York City 20, N. Y.
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A new kind of cooling unit debuts in Island houses, promises to extend the use of air conditioning into areas out-of-bounds for electrical and gas systems

Builders are using oil-operated air-conditioning units for the first time. The new units use the oil burner to cool in summer that heats in winter. Unlike conventional units there is no motor or compressor and fuel costs for cooling are surprisingly mild—less than $40 a summer in the North (excluding the cost of water). Heating costs are the same as for any oil-fired furnace.

These oil units, pioneered by Long Island builders Albini & Raddock, will have a major impact on cooling because:

• Air conditioning is now much easier to install in thousands of houses where architects and builders would be confronted with costly electrical changes if standard cooling units were used. In fact, most utility companies tell the builders they should special three-phase electrical power in houses where cooling units are installed. (Normally a single-phase circuit is ample for houses.) However, three-phase power is sometimes completely not available, or else the builder may have to foot the bill for bringing in a special three-phase line from the house to each house. Three-phase power is not needed for oil-operated units.

• Though builders can avoid electrical problems with the use of year-round gas-operated units, air conditioning is also now here for houses where gas is restricted or unavailable, and electricity is a parallel problem for builders.

How they work

The new oil air conditioners were only recently put into production by Servel, Inc. of Evansville, Ind., the only firm, to date, that makes them. The units work on the absorption principle like a small gas refrigerator. But instead of burning gas, they burn No. 2 grade oil—the same oil used for house heating.

Since oil consumption varies from .53 gallon per hour for cooling up to 3.0 gal. for peak demands, the unit needs a special low-pressure type oil burner. This type of burner is highly efficient and the home owner need only move a simple switch to change over from summer to winter operation.

One of the new units has a cooling capacity of 3.3 tons (40,000 Btu's). The second model produces 5.4 tons (65,000 Btu's). For heating both are rated at 96,000 Btu's.

House details

Builders Albini & Raddock are putting the oil units in 35 houses with garages, full basements and half-acre plot, priced at $38,000 to $55,000. Floor
From 2,100 to 2,370 sq. ft. Because of air conditioning the builders are insulating all outside walls by laying 4" of insulation over the attic floor. Thus the houses contain no special design features required just for cooling.

of air is circulated

In each house the builders are putting the air conditioning system in the basement and ductwork is designed as for conventional systems. The main duct rises vertically through the floor and up inside an interior partition. At the ceiling, feeders fan out overhead to registers high inside walls of each room. Return air is back to the furnace through baseboard registers outside walls.

approximately 16,000 cu. ft. of house volume, p blower will push 1,600 cu. ft. of warm or cool air through the ducts every minute. Therefore, in the house is "changed" every 10 min., or within an hour. (Regardless of the type of unit, engineers say that all home air-conditioning systems should be similarly designed for at least six changes an hour.)

operation cost

According to the builders, the year-round air-conditioning system costs 8% of house price—$3,000 for a 3.3 ton oil unit installed in the houses. Heating would cost $1,500 in the same houses.

included in the air-conditioning cost is $250 for a 200 gal. oil tank buried in the ground outside the house. About 300 gal. of oil will normally be used for summer cooling in the North, so the size of the oil tank is determined by heating demands. But the bigger the tank the less the oil cost in the case of bulk purchases.

Operation costs

Engineers estimate that a 3.3 ton unit will cool 1 Albin & Raddock houses for $105 a summer. This figure is based on past experiences in the New York City area where home-cooling units average an expenditure of 500 hrs. of operation. The operating cost is as follows:

1. of 13.3¢ oil.................. $35
2. gal. of (60°) water*............. 60
3. phase electricity for the fan motor... 10

Total $105

Edition, an estimated 1,500 gal. of heating oil will be consumed, based on New York City's 5,000 degree days in winter. Total operating cost for year-round air conditioning: $315.

where in the country, operating costs will vary according to local oil and water rates, number of degree days for heating. This is available from your weather bureau office.

A heating tower is not used and this figure is based on the local water rate of 40¢ per 1,000 gal.
When they eye it... they buy it.

BUYERS LIKE THESE ARE ALREADY CASHING IN ON THE DISTINCTIVE RICHNESS THAT WEDGEWOOD ADDS TO DECOR.

A motel in Massachusetts used 14,000 feet of WedgeWood to create interiors of beauty. Customers who see it want to know where they can buy it!

An appliance showroom used WedgeWood for a dramatic background to set off their merchandise. Customers who see it want to know where they can buy it!

A business organization used WedgeWood for a brilliantly executed reception room. Customers who see it want to know where they can buy it!

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Wood puts buy appeal in or dining lounge or room . . .

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PLYWOOD COMPANY


Lennox All Season Aire-Flo, less the cooling mechanism, which can be added later whenever desired. Completely serviceable from the front—only simple adjustments required. Home builders find that homes equipped in this way for air conditioning are easier to sell.

Home builders and architects find the outstanding features of Lennox Aire-Flo Air Conditioning a great asset in planning and installing air conditioning to satisfy customers.

As a strong selling feature for your homes, you can install the complete Lennox All Season Aire-Flo, providing continuous humidity control, equipment that is economical to operate and so quickly and easily serviced that owners enjoy uninterrupted service.

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Home builders and architects find the outstanding features of Lennox Aire-Flo Air Conditioning a great asset in planning and installing air conditioning to satisfy customers.

The experience gained from 58 years as home specialists in residential comfort has gone into the designing and manufacture of All Season Lennox Air Conditioning. The result is equipment that is amazingly silent...equipment that provides continuous humidity control...equipment that is economical to operate and so quickly and easily serviced that owners enjoy uninterrupted service.

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Home builders and architects find the outstanding features of Lennox Aire-Flo Air Conditioning a great asset in planning and installing air conditioning to satisfy customers.
The family in this illustration is enjoying four comfort advantages of B & G Hydro-Flo Forced Hot Water Heating.

First, radiant sunny warmth! Second, the area around the low picture window is comfortably heated. Third, room air temperature from floor to ceiling and wall to wall is virtually uniform. And finally, the floor is warm.

Now add this! Regardless of how the weather changes, the temperature in this home will remain constantly at the comfort level. The variable water temperature of B & G Hydro-Flo Heating permits close matching of the heat input with the heat loss... assuring more comfort on less fuel!

For the complete story, send for booklet "Capture the Sun with B & G Hydro-Flo Heating."

Another extra advantage—snow melting!

The home or building with B & G Hydro-Flo Heating can be equipped with an auxiliary snow melting installation. Hot water from a heat exchanger connected to the boiler is pumped through pipe coils under the sidewalks, melting snow as fast as it falls. Another back-breaking job eliminated!

Plus year 'round hot water

The heavy domestic hot water load imposed by modern automatic clothes and dish washers is easily handled by a B & G Hydro-Flo Heating System. The Water Heater unit, heated by the same boiler that heats the house, provides ample quantities at low cost—24 hours a day—winter and summer.
Experience homemakers expect to find new homes and apartments equipped with electric garbage disposers. They LOOK for this modern convenience that saves time, saves steps, saves work. Be prepared, show them WASTE KING Pulverator—the most modern VISIBLE FEATURE you can put into your homes or apartments. The lowest budget, highest quality feature that upgrades the value of the new home or apartment, bringing quicker sales and rentals. Ideal for modernizing existing dwellings.

SUPERIOR WASTE KING FEATURES!

"HUSH-CUSHIONS"—give 50% quieter, smoother operation. Absorb noise and vibration. WASTE KING is the only really quiet garbage disposer.

LIFETIME GRIND CONTROL—controls the size of waste particles and length of fibrous materials for more years of dependable operation. Prevents jamming, clogging!

UNBEATABLE SERVICE RECORD—less than 1% service callbacks. Relieves builder of complaints. Customer satisfaction assured!

Buy from your Plumbing Contractor now!


KNOCK-DOWN GARAGE DOOR

Storing and handling cumbersome metal garage doors often present problems to the mass contractor as well as to the supply dealer. So, K-D Garage Door (divided an 8' x 7' door into three hardware) that can be assembled on-site. Moderately priced at $36.75, the Taylor-Made K-D panel can be bolted together in about 15 minutes. The unit's framing members are 16 g. steel; face is 25 g. galvannealed, rust-free. No primer is required, the manufacturer says, just one coat of regular house paint.

Manufacturer: K-D Garage Door; 2130 West Taylor, Detroit 28, Mich.

ALUMINUM GABLE LOUVERS

The tighter a house and the better insulated it is, the more important it is to avoid condensation. Leslie Adjustable Aluminum Gable Louvers provide a simple means of assuring good air flow along gable peaks. Made of steel, the louver blades telescope to fit from 4 to 12 up through 12 on 1:30 roof pitches. No primer is required, just one coat of regular house paint.
Tips on Selling Homes...
remember—Men Are Lazy!

Show him comfort—and the man is yours. Show him the automatic Rheem Gas Furnace and Rheem Water Heater—and you can prove he'll have all the comfort he wants—with none of the work.

He'll be convinced when you tell him how Rheem Furnaces are Fire-Tested at the factory—how Rheem Water Heaters are Pressure-Proved—how this scientific pre-testing assures him of the best, most trouble-free service possible.

Let Rheem help you keep the lazy male in your homes. See your Rheem contractors today. They can prove to you that Rheem is the best buy for builders.

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Manufacturing Plants in 22 Cities Around the World
Key to Low Cost

Bundyweld is the only tubing double-walled from a single strip, copper-brazed through 360° of wall contact. It's leak-proof, thinner-walled, yet stronger. It transmits heat quickly, has high bursting strength. It saves on material costs and installation time.

Standard 20' lengths of Bundyweld are easily formed into coils in shop or on job site. Expanded ends (furnished when specified) are quickly soldered into leakproof union. Joined, lightweight coils are easily mounted onto ceiling, quickly plastered over.

Beat the bandwagon...Offer Bundyweld Ceiling Radiant Heating NOW

Remember yesterday...when sleek, modern kitchens and colorful bathrooms sold houses for you? Everybody got on that bandwagon. So today you need a new clincher.

And here's the answer...Bundyweld Ceiling Radiant Heating. It's the bandwagon of tomorrow, and you can get the jump on it today!

Now you can offer a house where every room has the clean, refreshing, all-over warmth of a day in May. You can promise a tested, trouble-free heating system that practically brings the sun indoors, yet costs less to run. That's sales appeal!

You won't have to sell your prospects on this wonderful new system. Bundy ads have already done that. Millions of people have read them in Better Homes and Gardens, American Home, Small Homes Guide, and House Beautiful. Requests for literature are pouring in. Buyers everywhere are writing for the names of architects and builders who handle Bundyweld Ceiling Radiant Heating in their areas. Start now to cash in on this terrific public interest. Send for your Bundy literature today.

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BUNNY TUBING COMPANY
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Bundyweld Ceiling Radiant Heating

Radiant Heating Division, Dept. HH-453
Bundy Tubing Company, Detroit 14, Mich.

Send free 20-page nontechnical brochure explaining Bundyweld Ceiling Radiant Heating.

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Helping the Architect design new, low-cost masonry structures of enduring beauty

DUR-O-WAL
WITH TRUSSED DESIGN

NOW, Block, Brick or Tile Walls are being Reinforced with Steel
STRONGER - FASTER - AT LESS COST

LERT builders throughout the nation are turning to patented, custom-designed Dur-O-Wal to give masonry walls a backbone of steel. Dur-O-Wal's trussed design provides both vertical and horizontal reinforcing to protect the beauty of the building you design.

There's double economy in time-tested Dur-O-Wal... low first cost and ease of handling cuts construction time. The trend toward greater wall expanse and exposed masonry demands the finest in steel reinforcing. Find out now why

More and More Architects Now Specify Dur-O-Wal
The backbone of steel for EVERY masonry wall!
BRIGHT IDEAS
to make homes LIGHTER and BRIGHTER
... with DRAMATIC WINDOWS TO THE SKY!

For more practical use of inside rooms, more pleasant use of any rooms — put Wascolite Skydomes overhead. Genuine Wascolite Skydomes, with “the dome that floats in its frame”, are weather-proof, shatter-resistant, maintenance-free ... come in 17 economically-priced stock sizes ... square, rectangular or circular shapes ... with clear colorless or white translucent acrylic domes. For new construction or modernization, on flat or pitched roofs, wherever cheerful daylight is desired, easily-installed pre-assembled Wascolite Skydomes are the natural daylighting choice. See Sweets' 19a or write for new residential folder.

EXCLUSIVE!
frames of EXTRUDED ALUMINUM
... a big advance in appearance and performance ... at no advance in price!

Never a “dull” moment in this kitchen—a Skydome sends floods of cheery daylight to every corner.

Plenty of bright daylight for shaving or make-up in this inside bathroom—there’s a Wascolite overhead.

Sunlight an indoor garden with Wascolite Skydomes. Bright idea for sunporch, too.

Two Wascolites sunflood inside rooms here, make windowless spaces bright as all outdoors.

By day or night the light is right — fluorescent fixtures can be built into the Skydome “well”.

WASCOLITE SKYDOMES
U.S. PAT. 2610593

WASCO FLASHING COMPANY, 88 FAWCETT ST., CAMBRIDGE 38, MASS.

NEW PRODUCTS continued

width they will not sag or rattle, also adjustable, is furnished for beneath the bottom vane. The louvres with aluminium screen in five, six, vane units. Prices run from $5.80 to $7.00.

Manufacturer: Leslie Welding Co., Carroll Ave., Chicago, III.

CEDAR SHAKE AND BACKER bonded put on side wall in single step
Shingle fore and insulation board Shakertown Glumac should save no carpentry on the job. This prebuilding material consists of an 11 cedar shake electronically glued waterproofed backer board. A wo-

plying the Glumac units actual two operations in one as he nails finished side wall and undercourse sheathing (or nailing strip) ar paper. Even if his craftmanship is man foaming, the carpenter can fi

because he cuts and saws through simultaneously. Packaged 11 units (enough to cover 50 sq. ft. with 1 Shakertown Glumacs cost about per sq. ft., in place. The shingle grooved, and are tapered to proc shadowline in single-course applic are available in nine factory-stained

Manufacturer: The Perma Product Co., Inc., Broadway, Cleveland 27, Ohio.

SEEING-EYE RANGE watches over cookery
“Just-marrieds” make up a good new home prospects, and what better bait can a house offer than a range to fuse to burn foods? Even experi-

makers will recognize the attri-
Attractive appearance... freedom from upkeep... durability—these are some of the many reasons why Gold Bond Asbestone roofing and siding materials are so much in demand and so widely used.

When you specify Gold Bond Asbestone, you get lifetime protection and lifetime beauty. Asbestos-cement products will not rust, rot, corrode or burn. They are weatherproof, termite-proof and rodent-proof. Requiring no painting or maintenance, they are economical, too—actually cost less over the years than other types of exterior finishes.

You will find Gold Bond Asbestone products adaptable to many construction needs—residential, farm, commercial and industrial. They are easy to install. Your clients will like the distinctive designs and modern colors.

Gold Bond Asbestone is the newest group of products backed by Gold Bond’s “undivided responsibility” guarantee. This assures you that the responsibility for performance, durability and firesafe qualities rests with one reputable manufacturer—National Gypsum Company.

Write today for full information. We’ll be glad to send it to you.

An asbestos product for every building need

**Chroma-Tex Siding Shingles**
America’s most beautiful home exterior. Rich texture rivals costly wood shakes.

**Wood-Grain Siding Shingles**
(Light Edge). Beauty of natural wood-grain finish, permanence of asbestos-cement.

**Wood-Grain Siding Shingles**
(Wavy Edge). Same as the shingle shown at the left, except that bottom edge is wavy.

**Dutch-Lap Roofing Shingles**
Square-cut, wood-grain textured shingle for traditional straight line roof treatment.

**Hexagonal Roofing Shingles**
A smooth-faced asbestos-cement shingle, applied in a diamond pattern.

**Standard “400” Corrugated**
An ideal material for heavy industry. Used for both roofing and siding.

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For light steel or wood framed industrial, commercial and farm buildings.

**Wallboard.** Flat sheets of asbestos-cement for interior and exterior use in buildings of all kinds. Flexible and utility types.

NATIONAL GYPSUM COMPANY • BUFFALO 2, N.Y.
Fireproof Wallboards • Decorative Insulation Boards • Lath • Plaster • Lime • Sheathing • Roofing • Siding
Wall Paints • Masonry Paints • Textures • Rock Wool Insulation • Metal Lath • Sound Control Products

You’ll build or remodel better with Gold Bond
"Something is rotten in the state of design... After watching it for several years, after meeting it with silence, House Beautiful has decided to speak out.

"Two ways of life stretch before us. One leads to the richness of variety, to comfort and beauty. The other, the one we want fully to expose to you, retreats to poverty and unlivability."

So begins our Editor's challenging article in the April issue (on newstands March 18). It tells how a small but influential clique would lead a Cult of Austerity with the slogan of "Less is more." It shows how this clique is foreign to native design and hostile to the reasonable desire for comfort and convenience in the American home. It proves the real and present danger of this threat to the rich promise of our expanding industry.

The April issue is important to you, because your business is providing comfort and convenience, because you design and produce the objects that enrich our lives.

The clique that HOUSE BEAUTIFUL openly opposes is aimed directly at you, as damaging to you as it is harmful to people you are trying to serve.

HOUSE BEAUTIFUL believes that a high standard of living is our greatest contribution to the history of man. It recognizes that American industry has made this possible. It is dedicated to raising the standard of American life even higher, not cutting back to the bare wall and empty floor.

The April issue of HOUSE BEAUTIFUL is the most important in our 57 years of publishing. We urge you to read it.

---

Treat your clientele to the glamour of color and translucence... the economy of permanent finish... the safety of shatterproof, crackproof glazing.

For decorative or utility partitioning in homes, offices or showrooms, Resolite's wide variety of beautiful colors makes it the perfect paneling material. Unusual lighting effects are easy to achieve because of its translucency. Its corrugations are designed to produce special effects of height or breadth.

Patio canopies of colorful translucent Resolite afford protection from sun and rain yet avoid the gloom of solid coverings.

Resolite is made of polyester resins, reinforced for strength and rigidity with an interwoven mat of glass fibers. It is unaffected by weather extremes of heat, cold or moisture. Resolite needs no surface treatment or refinishing; its full glossy surface easily wipes clean.
SMALL OR SUMPTUOUS—they're alike in one respect...

THEY HAVE ELECTRIC RANGES!

One house shown here sold for under $10,000. The other was in the upper-income class. But both had what all types of home buyers want—Electric Ranges in the kitchen. They've learned that cooking electrically is both economical and easy, and assures a clean, cool kitchen. No matter what the size or cost of your houses, one item of equipment that will really help you make them sell is the Electric Range!

According to Mr. Joseph P. Lenny, who built this small home in Runnemed, N. J. (he sold 25 the day he opened his model house)—"In my experience, most home buyers can't resist an all-electric kitchen. And the kitchen can't be all-electric without an Electric Range. Although my homes are moderately priced, I offer this plus item and it helps me stay ahead of the field."

Mr. Harry LeVelle, builder of this large home in Chevy Chase, Md., says, "90% of my home sales are to women who love the all-electric kitchen. They want to work in such a kitchen, although you might think that homemakers in such families would not be doing their own work."

Among the appliances that help the homemaker to achieve gracious living in the Chevy Chase home is the modern, automatic range, and—of course, it's ELECTRIC! Mr. LeVelle, the builder, is convinced that the electric kitchen is his greatest sales factor.

More Builders Every Day are Installing ELECTRIC RANGES

ELECTRIC RANGE SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • COOLERATOR • CROSLEY • DEEPFREEZE
FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
KELVINATOR • MONARCH • NORGE • PHILCO
WESTINGHOUSE
Joints Stay Tight!

ORANGEBURG®
ROOT-PROOF PIPE

 Builders, engineers and architects rely more and more on Orangeburg Root-Proof Pipe and Fittings for trouble-free pipelines.

Time has established the quality of Orangeburg Pipe. Installations of 50 years or more prove that Orangeburg Pipe—installed with Taperweld® Joints—remains root-proof and trouble-free indefinitely underground. More than a million installations prove its dependability. Use Orangeburg Pipe and Fittings for House-to-Sewer (or Septic Tank) Connections, Down-Spout and Storm Drain Lines—other non-pressure outside uses.

Reasons for Orangeburg's Time-Defying Quality

The Plumbing Industry has sponsored Orangeburg for years because of its many modern features and advantages. It is non-metallic—strong, tough, resilient. It resists the acids, alkalies, salts and oils found in soils and sewage waste. It withstands freezing and thawing without cracking or breaking. The Taperweld® Joints are self-sealing. No cement or compound required. Joints stay tight, sanitary. Very low friction losses.

Orangeburg—The Leader

Orangeburg has pioneered this modern type of pipe. Specify it for trouble-free pipelines always. Look for the name—Orangeburg—on the pipe and fittings. The Orangeburg trademark is your guarantee that they are genuine Orangeburg products.

Send to Dept. HH-43 for catalog 306

ORANGEBURG MANUFACTURING CO., INC., ORANGEBURG, N. Y.

Use the Perforated Pipe for These Installations

It is especially designed for septic tank beds; foundation footing drains; draining wet spots in lawns, drive-in theatres, athletic fields, parking lots, airports. Joints are made with snap couplings that keep pipe in line and prevent silting.
IT IS POSSIBLE TO BUILD BETTER and SAVE MONEY at the same time

- Nova-Vita Horizontal-Sliding Windows are revolutionary—offer new advantages for every room.

- Homasote Big Sheets (up to 6' x 14') save time and labor in the sheathing of roofs and exterior walls.

- Nova Wall and Furniture Units—of many types—give more usable space in less total space.

- Homasote Underlayment is nailed directly to the rough flooring. No felt or pad is needed.

- Nova Roller Doors—for closets and passageways—are installed in less than 30 minutes.

- Sheathe and shingle in one operation with Nova Sidewalls and Roofs. Top quality; maximum economy.

- Architect, Designer or Builder . . . we invite the opportunity to prove to you that the products and materials here shown—and others in addition—are among the soundest purchases you can specify or make.

Our claim to your attention is based upon three factors . . .

1. We have been selling building materials for the past 43 years—in all parts of the United States—serving, and in continuous contact with, thousands of architects, designers and builders. We know something about your problems.

2. In one period of our history, we spent more than half a million dollars on pure research—covering a good many problems the average builder or architect has never had the time to explore.

3. At another period, we were responsible for the construction of thousands of houses—in the fastest time ever accomplished, at the most economical cost.

As a result, each product here offered has been specifically designed and manufactured to be (at least) competitive in installed cost; to be unusually economical in maintenance costs; to outlast and outservice competitive products; to increase the investment value of the house—for mortgage or resale purposes; to add materially to the appearance of the house.

Through our representatives—soundly trained—you draw upon tested methods for exterior and interior design, for the scheduling of all construction operations, for setting up either site or factory fabrication, for the coordination of any or all operations. Equally important, you profit further by buying many products and materials from one dependable source.

Currently in American Builder there is appearing a series of articles by Griffith S. Clark of our firm—dealing with many of the most difficult problems currently encountered in the field of home construction. The principles there presented are applicable to residences in every price group.

The coupon below will bring you illustrated, specification material on all Homasote and Nova Products. You entertain no obligation by sending in the coupon.
For that "custom-built" Sales Appeal that sells homes!

L&H Electric Range Components make it easy to incorporate the potent advantages of an appealing, custom-designed and decorated kitchen in your homes. A good sales feature in any price class is usually worth more than it costs — and the big news, the big swing in home-building today is to the custom installation of appliances. Write today for the facts on L&H Ranges and Oven Components — made by one of America's pioneer electric range manufacturers. Learn how they can help you build extra "sell" into every new or remodeled home.

A. J. Lindemann & Hoverson Co.
605 W. Cleveland Ave.
Milwaukee 15, Wisconsin

Manufacturers: Frigidaire Div., General Motors Co., Dayton 1, Ohio

PRETTY PLASTIC-FACED HARDBOARD rugged duty on walls and ceilings

Developed as a protective finish for battleship decks, melamine has played a role in establishing a good name. Soon after the hard-as-nails-peared-on-the-commercial-market topping, consumers brought it home to the kitchen sink. Its price, in whole pieces, kept it from climbing up too high. Now Barclay Mfg. Co. is making paneling with a laminated veneer of melamine and selling it for $2 retail. The panels are manufactured up to 4' and lengths up to 12'. For waterproof installations, metal moldings (aluminum or matching colors) are used to cover the beveled edges. Colors available in the new paneling are exceptionally good.


TRIPLE-DUTY THERMOSTAT engineered round air conditioning

Home heating and cooling needs can now be controlled with the new M-H combination instrument — eliminates the separate-control switch plates, thus simplifying installation for the contractor.

Electric Ranges • Water Heaters • Refrigerators • Home Freezers
This is the home millions of people are reading and talking about...

Gunnison's great new Talisman

Supported by a tremendous national advertising program reaching millions of people, Gunnison Dealers throughout the country are displaying demonstration "Talisman" homes beginning April 12—when the spring home-buying season is at its peak.

Advertising appearing in full-color April 1 and 15 Saturday Evening Post and April issues of Better Homes & Gardens, Household and Living for Young People — tells readers about the new "Talisman" and the features that make this home in a class by itself. Features that include Carrier air conditioning, Hotpoint electric kitchen and laundry equipment, perimeter heating and many more.

Just as it caught the eye of more than 10,000 people at the Chicago convention of the National Association of Home Builders, the Gunnison "Talisman" will soon be the home millions are talking about.

If you'd like information on this successful enterprise, write on your business letterhead. We'll send you complete information on the "Talisman" and the other fine homes in the Gunnison line—72 elevations in all.

Gunnison Homes
Manufactured by Gunnison Homes, Inc., New Albany, Indiana

Gunnison dealers receive
- Advisory financial service
- Interim financing
- Home planning service
- Technical assistance
- Elimination of architectural and material problems
- Full-page national advertising
- Sales promotion catalogs
- Local participation advertising
- Rail or truck shipments
- Prompt delivery

"Gunnison" and "Talisman" trademarks of Gunnison Homes, Inc.
alsynite is the ideal translucent architectural material. It is shatterproof and feather-light. It can be sawed and nailed, and installs like corrugated metal with 30% to 80% savings. Design with Alsynite for brilliant new effects. Seven colors, corrugated or flat. See our brochure in Sweet's Catalogue.

in the brilliant design above, Raphael Soriano has utilized Alsynite to provide complete privacy without sacrificing daylight. Because of its light weight, Alsynite requires minimum supports. The photo below indicates the unlimited possibilities of Alsynite as a roof or ceiling material.

NEW PRODUCTS continued

also presents a neat control package to set before potential home purchasers. Three slide-type selector switches operate the air-conditioning system; one turns it on and off; the second selects heating or cooling; and the third chooses continuous or intermittent fan operation. Alas, the switches are not attuned to metaphysical impulses; one still has to exert fingertip pressure. The new stat will cost around $30.

Manufacturer: Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.

GRACIOUS DOOR CHIME boxed for flush or surface mounting on wall or ceiling

For a home-selling pitch, door chimes might strike just the right note of welcome to impressionable house-browsers. Set in a simple, shallow box, Nutone's K-15 is one door-chime unit that is both tasteful and unpretentious.

in the brilliant design above, Raphael Soriano has utilized Alsynite to provide complete privacy without sacrificing daylight. Because of its light weight, Alsynite requires minimum supports. The photo below indicates the unlimited possibilities of Alsynite as a roof or ceiling material.

homes ... for skylights, window walls, patio roofs, awnings, shower stalls ...
commercial ... for store fronts, office partitions, luminous ceilings, signs ...
industrial ... for unlimited daylighting ...
shy skylights, side walls, etc. No framing needed.

No gilded clefs nor birdies adorn its perforated metal face. And, as further token of its modest purpose, the K-15 can be set with its 7" square grille flush-to-wall or ceiling surface, and then painted over to merge with the room-scape. Its 2"-deep box may be nailed directly to a wall stud or suspended between studs or ceiling rafters with hangers; no plaster ring is needed. Its power unit is completely enclosed to protect the mechanism from soot and dust. The chimes bong-bong for front door, bong for rear, and retail for $9.95.


CORROSIONPROOF WATER HEATER has copper core encased in steel shell

Trageres has exhibited its 103 years of craftsmanship in diverse products—from sacristy continued on p. 194
Many architects, designers and builders are combining the beauty and protective properties of Rez—clear and color-toned—to add distinction and sales appeal to their contemporary homes. Here are some suggested areas of application—interior and exterior:

**Typical contemporary home, designed for functional living. See copy below for key to numbered references.**

1. Exposed wood and panels take on a soft beauty as birch are treated with clear Rez down with very fine sandpaper, followed by a coating of "hand-rubbed" Rez.

2. Wood walls in guest rooms can be very dramatic if they are of redwood and finished with a coat of redwood Rez to give them the rugged, reddish color of the California redwoods.

3. Door or wall sections of knotty pine boards or wall sections of knotty pine can have a soft glow if sanded thoroughly, one coat of clear Rez (brushed on), one coat of clear Rez (brushed on and then with soft cloth to desired depth), one finish.

4. Bookcases and similar small-area inbuilt construction can present a pleasing contrast of decorative color if finished in either Driftwood or Sage Rez. Color values can be regulated by controlling penetration depth.

5. Exterior areas, finished in color-toned Rez, take on the rich colors and tones of the Northwest forests, the desert, the seashore, the prairie. These beautiful tones have lasting values because Rez becomes part of the wood itself—penetrates and seals the pores. This affords protection against sun, rain, snow, ice, discoloration, fading and streaking.

**THE REZ LINE:** Clear Rez sealer and primer has a penetrating and sealing effect. White Rez for one-coat bleached effects. Redwood Rez—the rugged, reddish color of the California redwoods. Sage Rez—a soft, dry green that captures the color of desert sagebrush. Driftwood Rez—smokey gray, with the color of bleached driftwood. Cedar Rez—warm cedar brown, colored like sherry aged in the cask. Mahogany Rez—a rich wine red, with the deep tone of saddle leather. These color tones are not to be confused with ordinary stains.

Get literature and color samples from paint, hardware or lumber dealers. Or, write MONSANTO CHEMICAL COMPANY, Merchandising Division, 1700 South Second Street, St. Louis 4, Missouri. In Canada, Monsanto Canada Limited, Montreal, Toronto, Vancouver.
Builders from Maine to California are finding that installing a NATIONAL Food Waste DISPOSER in the kitchen sink is a mark of quality-construction that the buyer instantly connects with the entire value of the house. For the NATIONAL is nationally known—nationally preferred.

Compare disposers side by side. No others can approach National's package of time-proven features. Only the National has the "split-ring" construction and the exclusive simple sink attachment that makes installation so quick, easy and inexpensive. Only the NATIONAL has the patented one-piece safety LOK-TOP cover. The NATIONAL is extra powerful—extra rugged. Its \( \frac{3}{4} \) h.p. motor grinds all food wastes; its special alloy lifetime grinding elements never need sharpening. No wonder the NATIONAL is proud to call itself "the lifetime disposer". It's built that way—to stay that way.

The NATIONAL costs no more to buy—less to install.

On that next home project specify NATIONAL—insist on NATIONAL. Send the coupon below for quick up-to-the-minute data on the NATIONAL DISPOSER.

**NATIONAL DISPOSERS**

A Product of NATIONAL RUBBER MACHINERY CO.

AKRON 8, OHIO

Send me more detailed information on the Model NATIONAL DISPOSER checked below:

Dept.  [ ] Model 35CS—Safety LOK-TOP Cover  [ ] Model NC-45—"Continuous Feed"

Address: ________________________________

**NEW PRODUCTS continued**

basins and four-story-high brewery kettles to Maxim silencers for army tanks. Now the company is turning its talents to a quality item for the construction industry—a rust-proof water heater with unalloyed copper innards in a heavy-gauge steel casing. Tagged Copper Core, the heater can withstand pressure up to 350 psi. Its gas control is fully automatic and its working parts are concealed. Prices run from $200 for the 30 gal. size up to $550 for the 80 gal., not installed. Manufacturer: Trageser Copper Works, Inc., Maspeth, N. Y.

**WATER HEATER** supplies water at two temperatures from single tank

Water heated to the right temperature for clothes and dishwashing machines is down-right dangerous if tapped undiluted for handwashing or shower. The Duo-Temp Laundry-master offers a sensible solution to varying hot-water needs for general home use by providing water at two temperatures. It channels water heated to 180° F. to an automatic clothes washer. Continued on p. 196

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**WEATHERSTRIP DOUBLE-HUNG WOOD WINDOW SHOWS INFRINGEMENT**

...than non-weatherstripped windows by actual test of weatherstrips manufactured by members of the Weatherstrip Research Institute. (University of Minnesota Institute of Technology I ng Laboratory). Effectiveness is greater than 6 for average or poorly fitted windows.

Reduction in Air Infiltration Through Windows Due to Weatherstripping (Unlocked—no storm sash)

<table>
<thead>
<tr>
<th>Type of Fit</th>
<th>Weather-stripped</th>
<th>Non-Weather-stripped</th>
<th>Weather-stripped Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well</td>
<td>14.2</td>
<td>61</td>
<td>4.30</td>
</tr>
<tr>
<td>Average</td>
<td>16.7</td>
<td>104</td>
<td>6.24</td>
</tr>
<tr>
<td>Poorly</td>
<td>23.8</td>
<td>163</td>
<td>6.85</td>
</tr>
</tbody>
</table>

*Ratio of non-weatherstripped to weatherstripped per-infiltration.**

The above facts, plus the complete story on weatherstripping is presented in Bulletin No. 35—"Air Infiltration Through Weatherstripped and Non-Weatherstripped Windows," published by the University of Minnesota Institute of Technology. The figures showing the economic value of weatherstrips are based on over-all research of climatic conditions in 12 select cities in the U.S. covering a full range of weather conditions.

**WEATHERSTRIP RESEARCH INSTITUTE**

OFFICE OF THE SECRETARY

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These precision-built units are very simple to install. easy to adjust. Made of the flattest paneling ever produced - beautiful 1/4" thick Novoply - they are guaranteed not to warp more than 1/8", if properly installed.

They come pre-packaged, with pre-cut jambs and header as well as all necessary hardware, including self-bearing top guide rollers and overhead track. Ideal for closets and non-loading bearing partitions between rooms. Novoply Sliding Doors are wanted in new and remodeled homes...office buildings...apartment houses...hospitals, schools, motels and hotels. A tremendously profitable market you can't afford to miss!

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Mueller Climatrol

Type 910 Recessed Summer Conditioner

Low Cost - Built into the Wall - Fits between Standard Studdings - Air-Cooled - No Plumbing.

Any house you build with an integral cooling system sells faster than one without. That's why the new Mueller Climatrol Type 910 is made to order for small-home builders. Inexpensive - neat, attractive, efficient. Home buyers find the built-in cooling element attractive - they like the way it's included in the mortgage. This unit is also ideal for motels, garden apartments, offices, etc.

No plumbing required, no drain or water connections - the new Mueller Type 910 is air-cooled and simply slides in between standard studdings. You build extra comfort, extra saleability into every home you put up when you include Mueller Climatrol Type 910 Recessed Summer Conditioners.

For descriptive folder, write the L. J. MUELLER FURNACE CO., 20200 W. Oklahoma Ave., Milwaukee 15, Wisconsin.

STACKED BRICK precast into wall panels

A prefabricated masonry wall section - the Silbrico panel can cut hours of costly brick laying. The sections, made of concrete in a stacked bond, are 2 1/2" thick and available in sizes up to 4'6" wide by 8'2" high. Steel reinforcement runs through the vertical and horizontal joints, making the panel strong enough to be used as a load-bearing wall in two-story construction. The back surface has a textured cement finish. On order, bolts, ties and wood blocks will be cast into the panels wherever necessary to facilitate attachment to other materials. Six colors of face brick are available. Price of Silbrico is 65¢ per sq. ft., F.O.B. plant. Complete line of heating and air-conditioning equipment.

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Kling green lawn helps make any house a place of beauty. With today's emphasis on outdoor living, large areas, etc., thick, velvety Scott Lawns provide a perfect setting. Their outstanding beauty is a mark of perfection recognized everywhere. Best your homes can have the distinction of Scott Lawns for very little, if any more, than ordinary lawns.

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Keep up to date on lawn building developments along with practical tips on soil conditioning, grading, seeding, sprinkling, etc. Life-time subscription to Lawn Care and digest of 100 back issues is yours for the asking.

THE NEW BURKS IHV SERIES PUMPS FOR AIR CONDITIONING APPLICATIONS
Here they are—the great new Burks IHV Series Centrifugal pumps! Designed especially for air conditioning use—and engineered for highest possible efficiency.

- Can be used either horizontally or vertically—without any mechanical changes.
- Patented "Kam-Action" impeller-volute combinations.
- Full length solid stainless steel shaft. Assures perfect alignment of motor, shaft and impeller.
- Balanced bronze impeller means smooth, quiet operation.
- Available in sizes from 1/4 hp. through 5 hp.—single and 3-phase.
- Heads to 195 feet—capacities to 110 gallons per minute.
- Equipped with supply and discharge pressure gauges, and control valve for adjusting to the most efficient pressure for each installation.

NEW LAUNDRY AIDS give Kitchen Maid Kitchens
Greater Buy Appeal

Ironette (above). Now, for the first time, an ironing board that stores neatly out of the way yet doesn't have to be folded, hung up or moved. It slides easily into firm working position on hardwood guides and slides. Can be used from either standing or sitting position. Requires very little space. No legs or other obstructions to hamper and annoy. Cabinet accommodates conventional wall units and provides large storage area underneath. Electric outlet is located in cabinet, within easy reach of ironing board.

Hide-a-rack

The handy drying rack folds neatly within standard wall units, out of sight, no obstruction. Will not interfere with dishes or other contents of cabinet. When pulled out, it provides head-high rack for drying personal laundry or for hanging freshly ironed clothing such as blouses, skirts, etc. Rack is aluminum, fits four standard cabinets.

Laundry Cart

This multi-purpose Laundry Cart with built-in hamper simplifies handling of soiled clothes and linens. Is also valuable as a portable unit for serving food, beverages, etc., or for entertaining when extra counter or cabinet space is needed. Unit has storage area at back for starch, laundry-soap and accessories. Mounted on ball bearing, rubber-tired casters, cart can be moved easily. Cart slides into opening under permanent countertop, or may be placed at end of counter.

NEVER before have accessories like these been offered in standard, factory-built kitchen cabinets. They give greater buy appeal to Kitchen Maid Kitchens and in combination with other well known Kitchen Maid features—Flo-Line styling, fine hardwood construction, solid safety shelves, aluminum drawers, guaranteed warp-proof doors, six colors, white, or Natural Finish—they mean faster home sales to builders featuring Kitchen Maid Kitchens. Write for literature.

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TECHNICAL PUBLICATIONS

GLASS. Mississippi Glass Catalogue No. 53, Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo. 16 pp. 8½" x 11"

Prepared to help architects, contractors, and decorators select the right kind of patterned glass for particular applications, the catalogue gives valuable technical data on Coolite, Mississippi’s heat-absorbing and glare-reducing glass, and describes the essential features of the firm’s other rolled, figured, and wired glass products. Close-up photos illustrate the various patterns, and tables give information on sizes available, and light-transmission characteristics.

MERCHANDISING. House Selling Hints. Mullins Mfg. Corp., Warren, Ohio. 4 pp. 8½" x 11"

Based on tried-and-true merchandising practice, the booklet suggests a guided-tour approach to selling a house. It points out that the builder-salesman’s job is to make prospects aware of the home’s construction features and the products and materials used.


F & W’s complete line of pumps and water systems, including several new shallow and deep well models, are described in detail and illustrated in this new three-color catalogue. Pump-construction details, sectional views, selection tables, water-requirement charts, and pipe-friction tables are included.

MORTAR. Lone Star Masonry Cement. Lone Star Cement Corp., 100 Park Ave., New York 17, N. Y. 16 pp. 8½" x 11"

Following an outline of advantages for the company’s masonry cement, such as uniformity, low absorption, and high water retention, the booklet goes on to explain in easy-to-read graphs the effects of mix proportions and mixing time on the mortar’s water retention, strength, and absorption.

SIDING. Colorbestos Siding Sheets. Johns-Manville, 22 E. 40th St., New York 16, N. Y. 8 pp. 8½" x 11"

Illustrated with striking full-color photos, the brochure presents information on J-M’s ribbed and colored asbestos-siding sheets.

continued on p. 204

Ask the man behind the
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Model 3000, $185.00*, complete with

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And there's more!

White Universal Level-Transits also give you internal focusing, guarded arc and ball bearing race which ensure smooth operation, even in sub-zero temperatures. Check one out on your next trip. You'll soon be convinced a White can make your work faster, easier, and more accurate ... Write for Bulletin 01.

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wood doors in flush type only.
16. Fan-made for all heights—no short or long strips.
17. Hundreds of thousands in constant daily use.
18. IMMEDIATE DELIVERY.
19. Meets all building codes.

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The lasting beauty of the Morrison Roly-Doors harmonizes with the modern trend to make the garage a part of the architectural design. It makes garages a very practical selling feature of the home. Roly-Doors can give added value to the homes you build and make your selling easier. Take advantage of their practical Selling Power. Their installed cost is low - their value high.

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- Will not rot, warp or absorb moisture.
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- Rugged, welded steel construction.
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PROTECTIVE COATING. Monsanto F
Paint Preservation, Bulletin 11652 I
Chemical Co., Organic Chemicals I
Louis 4, Mo. 4 pp., 8 1/2" x 11"

Chemicals for protecting paint surfaces against mildew and mildew. Ways are suggested for utilizing Monsanto to preserving water-base paints, late emulsion paints, and oil paints on exteriors and interiors.

WOOD PANELING. WedgeWood W
Georgia-Pacific Plywood Co., 270 Pat
York 17, N. Y. 16 pp., 9" x 12"

Five photos of attractive rooms show applications of WedgeWood, a grained plywood. The paneling is describ-easy to apply and finish. It is a

to be inexpensive. The reader is a comparative cost-sheet page, to stalled costs of various decorative materials.

SWIMMING POOLS. Landon, Inc. —
Equippment — Service — Supplies. L
5920 Sepulveda Blvd., Van Nuys,
8 1/2" x 11"

Two booklets, How to Build A
Pool and Public Pool Bulletin
cluded in this portfolio compile
tects and builders. The kit a typical plans for poured-in-for
crete, and concrete-block pools.
A Landen equipment catalog and cost-estimating forms.

LUMBER. Where to Buy Douglas Fir
Hemlock, Sitka Spruce, Western
West Coast Lumbermen's Assn.
Morrison St., Portland 5, Ore. 46 pp.

The latest edition of Where to Buy
toDate personnel and addresses o produce the major portion of the
West Coast area. The listing in
ills, fabricators, glue-laminating
wood-preservation plants. Details
given on plant facilities, equipmen
cial services, species and lumber
factured. Also noted are max-
rough and surfaced timber collu
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Armco Steel Corporation
2193 Curtis Street, Middletown, Ohio
Export: The Armco International Corporation

TECHNICAL PUBLICATIONS cont’d.

WINDOWS. The New Outlook—A Book of New Ponderosa Pine Window Ideas. Ponderosa Pine Woodwork, 38 S. Dearborn St., Chicago 3, Ill. 20 pp. 8½” x 11”

Fourteen architectural renderings show imaginative yet practical applications of stock wood window units. Available through lumber dealers, the simple wood windows can be arranged, this booklet convincingly illustrates, to produce attractive, modern interiors.

PREFABRICATED HOUSES. New 1953 Admiral Dream Homes. Admiral Homes, Inc., 149 Water St., West Newton, Pa. 8 pp. 8½” x 11”

The booklet contains five renderings of two- and three-bedroom homes designed by Architect Joseph Hoover for Admiral. Floor plans are shown, and over-all dimensions, livable floor area in square feet, and cubage are noted next to each sketch.

HEATING. Kritzer Baseboard Heating, Form B752. Radiant Coils, Inc., 2901 Lawrence Ave., Chicago 25, Ill. 16 pp. 8½” x 11”

Five types of baseboard heating assemblies and accessories comprising the newly redesigned Kritzer line are pictured and described in this catalogue. The information presented includes coil selection data, installation instructions, and specifications.


The folder describes a fast way to do columnar tabulations for billing and statistical work with Remington’s electric 10-key tabulator typewriter. According to the publication, a typist can tabulate accurately from one column to another without removing her hands from the keyboard.

COPYING PROCESS. Hundreds of Uses for Ozalid. Ozalid, Div. of General Aniline & Film Corp., Johnson City, N. Y. 48 pp. 5” x 8½”

A process for duplicating working drawings and records from originals prepared on translucent paper is described in this booklet. Specific advantages for small as well as large firms are cited for the Ozalid process.