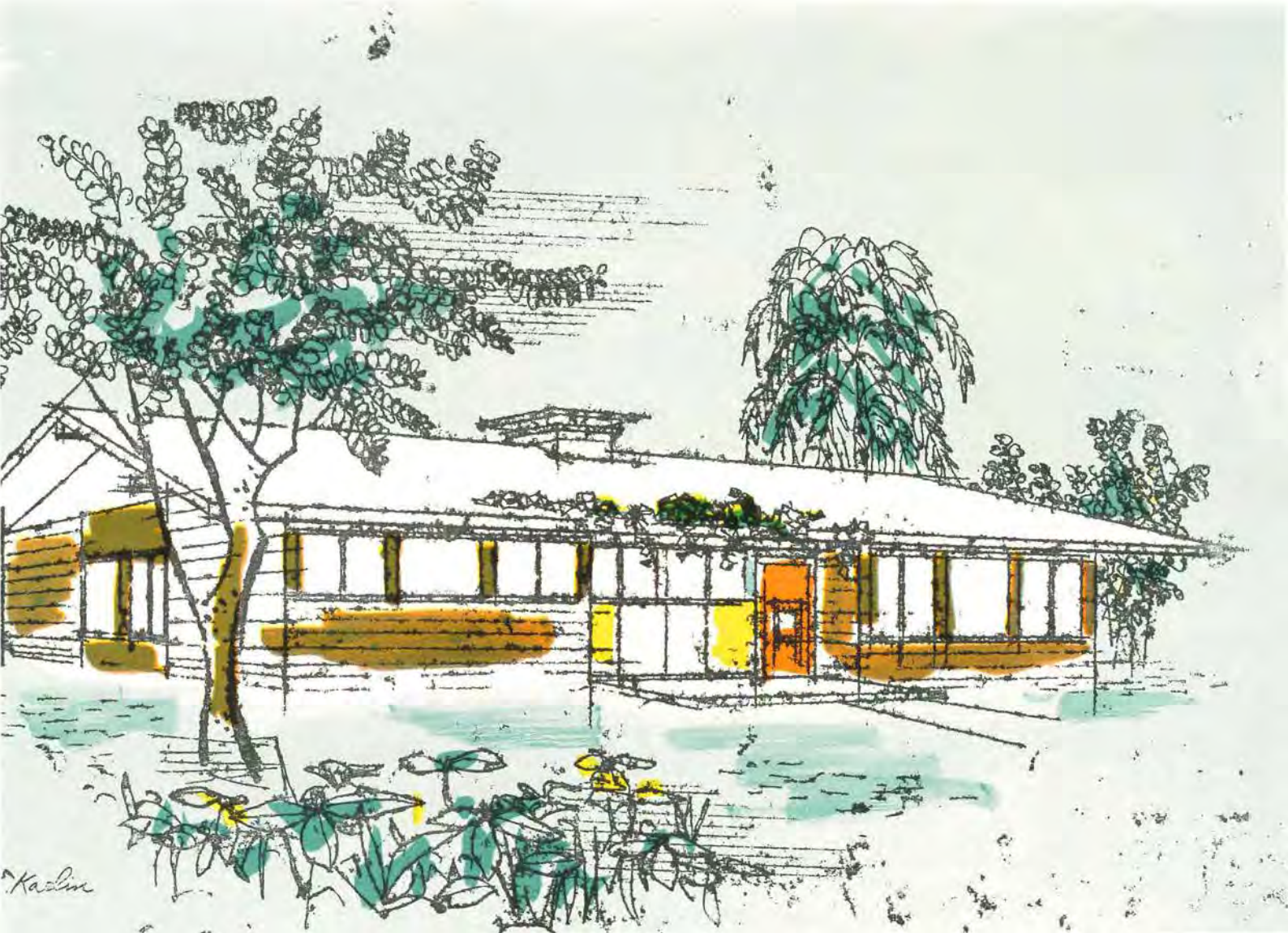
November 1952

house + home



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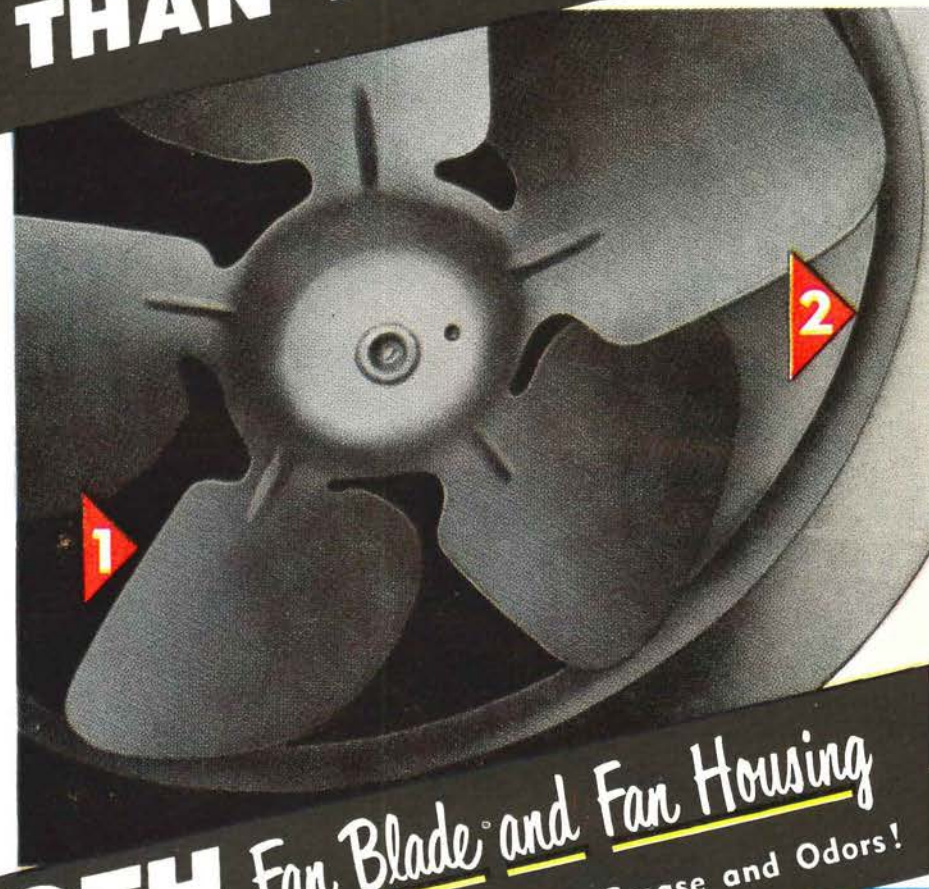

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November, 1952

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the 1952 House Beautiful

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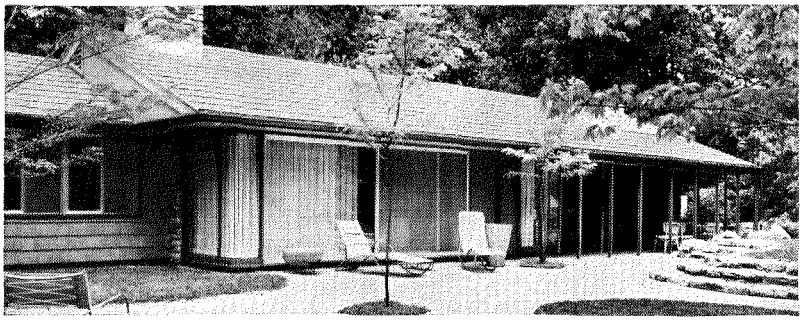
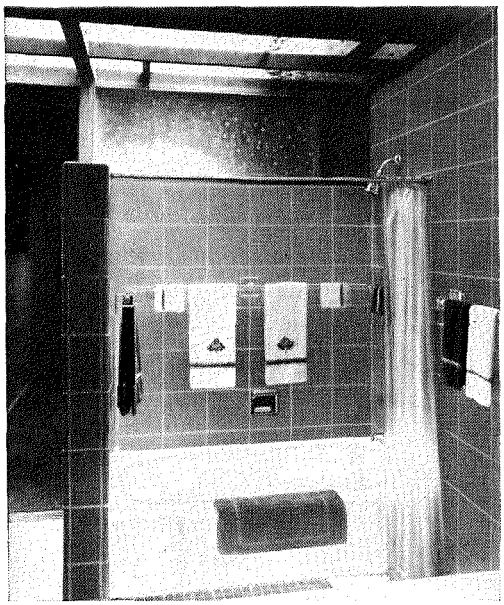
Plumbing Contractor: John R. Philip, Inc., Scarsdale, New York





Kohler Cosmopolitan Bench Bath in bathroom off study

In three bathrooms and a laundry, Kohler plumbing fixtures and fittings contribute to the modern comfort, beauty and convenience of the Pace Setter house featured in the November issues of House Beautiful and American Builder. Fixtures used are the Cosmopolitan Bench Bath, Arrowhead built-in lavatory, Trylon and Placid closets and Elswick laundry tray.

Kohler Co., Kohler, Wisconsin. Established 1873

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PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS • AIR COOLED ENGINES • PRECISION CONTROLS

eg. X death no help to sales; 00,000 houses forecast for '53

ı fuse to spark lagging home sales, sus- sion of Reg. X last month proved a . Manager T. E. Clutterbuck of the eland Trust Co.'s real estate loan de- ment typified the comment heard across nation: "The end of Reg. X won't do hing unless something happens to the ey market to throw lots of money back real estate at 4%."

he plain truth was that a buyer's mar- had arrived in nearly every major met- olitan area. Most builders were making 3 plans with extreme caution. Groused der Roy D. Warren of Atlanta: "The er is in the driver's seat and be damned here is anything we can do to stir him ' As ex-FHA Chief Franklin D. Rich- s saw it, the industry was headed for rbuilding "unless builders shift more low-price brackets."

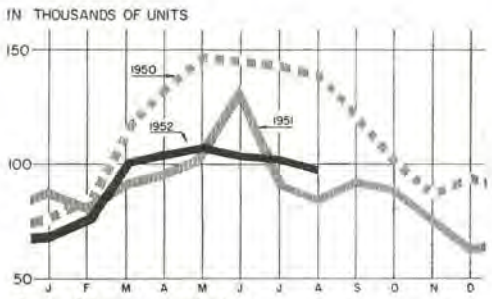
What effect Reg. X's Sept. 15 death seemed to be concentrated in the ,000-$20,000 bracket. For instance, lder Jerry Miller of Bethpage, L.I., who selling one or two $11,500 to $14,790 es a week, said his sales shot up to "ten 15 a week" when X ended. In Dallas, lder Cecil E. Gaulding Jr. ($15,000- ,000 homes) reported a "pretty good ge," planned to up production next year.

stal ball. With the first snow flurries, fall forecasting season for construction ved. Big question for homebuilders: much of a drop below this year's prob- 1.1 million housing units would 1953 ag? Mighty Prudential Insurance Co. cast its vote for "a return to a rate of activity somewhat like . . . 1948 (931,600)." Said Prudential: "Some reduction in builders' profit margins could occur, not only because of less intense demand for homes but because of some shift from speculative building to the customer's order."

Huge potential. Chief cause of the dip in sight was the well-heralded "trough" in US family formation chief wellspring of housing demand. From 1948 through 1950, family formation averaged 1.4 million a year. But by next year, it will shrink to between 600,000 and 800,000. (NAHB's Leonard Haeger puts the figure at 730,000, after allowing for such influences as the shift away from farms, undoubling and urban migration. To that, he adds a sure market for 60,000 homes to replace those lost in fires and disasters. Total: 790,000).

Only pessimists figure 1953 housing production will sag that low, however. Some 600,000 war-time temporaries are still in use, though most of them cry for demolition. Family size is on the rise. And most economists expect 1953 and following years to bring measurable progress toward a normal (say 3%) vacancy rate, compared to 1950's unhealthy 1.7%.

To Haeger, these prospects create a "demand that is sufficient to make *possible* production of 1 million houses a year for an almost indefinite period." HHFAdministrator Foley forecast last month that 1 million house years can be reached *only* if the industry shifts its geographical distribution,



Source: Bureau of Labor Statistics

HOUSING STARTS totaled 98,000 in September, bringing the year's tally to 866,800, or 800 units ahead of 1951. Estimated private starts for the month were 97,100; for the year to date 818,800, or 2.4% more than last year, reflecting surprising demand in the face of high interest rates (conventionals) and tight money supply. Public housing construction was 28% behind 1951.

moves into lower price brackets.

On balance, it looked as though 1953 housing starts (public and private) would not fall far below 900,000.

Bridgeport public housers approve TV for tenants

In most public housing projects, tenants rich enough to afford a television set must use it on a bootleg basis, hang out antennae under cloak of night and yank it back before dawn. Housing authorities insist TV uses more electricity than contemplated by rents, hence is illegal.

Last month, the Bridgeport (Conn.) Housing Authority accepted TV as inevitable. It arranged with a private firm to install master antennae systems in its 3,500 units (25% of Bridgeport's total rental housing). Tenants will pay the private firm $60 a year antenna rent. The firm will pay the housing authority $18 per year per customer for electricity presumably used.

ities fight maneuver thwarting end of rent controls

en the presidential race reached homestretch, vote-conscious Washington d to reimpose federal rent control in communities (total population 1.9 mil-) where city councils favored letting it The method: designate backsliding com- nities as critical defense housing areas rent control only. This automatically ified local decisions to accept the Sept. decontrol in non-defense areas author- l by Congress, or reimposed control if community had previously voted for nination.

kron, Ohio (pop. 275,000) rebelled, mptly voted controls off again. At nth's end Denver (pop. 415,000) was fol- ing suit. Evansville, Ind. (pop. 128,000) Cedar Rapids (pop. 72,000) were expected to do so after the election.

During August and September, the Office of Rent Stabilization recommended that 43 cities be designated critical areas to keep rent control. As required by law, the recommendations went to the Defense Areas Advisory Committee, which in the full year from its inception (Sept. '51) had certified only 124 areas for critical area rent control. To forestall protests by citizens or local officials, the recommendations were kept secret.

Unconvincing data. The advisory committee formally rejected 15 of the 43 ORS recommendations, mainly because ORS failed to convince the committee that there were substantial shortages of housing or substantial in-migrations of defense workers, two of the four criteria required for establishing critical area rent control. The other two: marked expansion of defense or military facilities, and a threat of excessive rent increases.

It approved 22, waited until the eve of rent control's expiration to announce them, then put out the information in such driblets that almost the entire daily press missed the story altogether. But the number, and the unexpectedness of the designation in cities that had just voted for decontrol was too remarkable for coincidence. Denunciation came fast:

▶ "To keep a lot of people in jobs and keep their noses in other people's business, a bureau in Washington has overruled Congress," cried city

councilman Walter R. Scott in Kansas City, Mo. Mayor William E. Kemp, who favored continuation, concurred: "It would have been better to have controls imposed by the council than this new federal move."

▶ Said NAREB's Herb Nelson: "Power-mad bureaucrats in Washington can't be stopped by a mere law. . . . They find sly ways of twisting words [to circumvent local desires] . . . Apparently the drive will be to impose rent control through the back door."

In a week, the complaints grew so insistent, economic stabilizer Roger L. Putnam felt impelled to call a special press conference in Washington Oct. 7 to "clarify" what had happened. He confessed the maneuver was indeed no coincidence. The defense areas committee, of which he is chairman, "had stepped up its activity in recent weeks" to beat the Sept. 30 lapse date with its small flood of certifications, Putnam said.

Putnam insisted the designations were all based on conscientious studies of local defense conditions, were not excuses to keep rent ceilings despite local opposition. Then he let the cat out of the bag: except for the advisory committee's action federal rent control would have remained in only six of the 26 areas designated as critical since July 25 *(see table)*.

Secrecy reversed. Why hadn't local officials been advised or consulted? Replied Putnam: "Just to avoid stirring up the community." If the defense areas committee failed to approve an ORS recommendation a community might go through a "needless" period of protests, debate or heated controversy. And besides, local officials don't always know as much as federal officials, or know of all federal defense contract plans for an area. Nor would local people necessarily be consulted in the future.

On secrecy, official attitudes flip flopped three days later. Henderson told HOUSE & HOME that he'd had a talk with his boss, Putnam—"and from now on we'll go to the mayor or council and say 'we're in here gathering data to see whether rent control should be imposed under the critical area program'." (And a spokesman said the defense areas advisory committee would give a straightforward answer to any inquiry whether there was an ORS recommendation for any particular city before the committee at any time.)

Around the nation. As Sept. 30 passed, ORS estimated that only 30% of the nation's major cities gave up federal rent control, plus about 950 of the 2,400 affected smaller communities. About 7.5 million of the nation's 19 million rental units remained under controls, including all of New York State and the District of Columbia, which have their own rent laws.

Big cities that decided to continue under the federal rent rule until April 30: Boston, Providence, Jersey City and Newark, N. J.; Philadelphia, Pittsburgh, Chicago, Minneapolis, St. Paul, St. Louis, Cleveland, Cincinnati, Memphis and San Francisco. Among those that voted for freedom: Denver, Kansas City and Harrisburg (all promptly made "critical areas"), Detroit Atlanta, Toledo, Nashville, Des Moines and New Orleans.

Chicago, Cincinnati and Cleveland city council resolutions for control included recommendations for limited rent increases. Chicago and Cincinnati rent advisory boards promptly approved boosts of about 10% above existing levels. In Cleveland, approval came after a slight delay.

How to end rent lids. To gain freedom from critical area rent control, a city council can give ten-day notice of a public hearing on whether there is a shortage of rental housing. If it finds there is not, and sends a resolution asking that rent lids be lifted to the President, the controls end. Legally, rent controllers can move in again, reimpose rent control after another public hearing. So far, ORS has not invoked this power. Explained Putnam: "No one here has a desire to get into a running fight with any municipality."

Developments in the cities with the most rebellious reactions:

▶ Akron—The city council, which voted 10 to 3 for decontrol on Sept. 23, declared after a public hearing Oct. 20 that there was no serious housing shortage, voted 10 to 3 to reject the critical area controls. City law director Roy Browne said the ORS recommendation had been based on inaccurate and unsubstantial information gleaned in a one-man, half-day survey by an HHFA employee from Chicago.

▶ Denver—On Sept. 15 the city council voted 5 to 4 to let controls die; discovered later that Washington had decided six days earlier on a crit area designation but held up its announcem until Sept. 29. Mayor Quigg Newton had adva word of the Washington decision from Hender himself, an old personal friend, but let the cou vote for decontrol without telling it so.

On Oct. 6 the redfaced council heard an protests over the federal tactics, but put off action until Oct. 20. Then it passed on first re ing a resolution declaring there is no hous shortage, set Nov. 6 (after election day) fo public hearing. Observers believed the resolut would get final approval Nov. 10 or 17.

▶ Cedar Rapids—The surprise designation based partly on a local employment survey, Wa inton informed mayor Milo Sedlacek, a De crat. The Chamber of Commerce director, h ever, said none of eight of the city's largest dustries that he checked, nor the chamber, been contacted in any survey. Countering an O regional representative's statement that the gained 1,900 in-migrant workers since 1950, chamber's monthly survey of 27 largest firms, ering 80% of city's employment, found the la force shrank steadily from 15,977 in January 14,724 in July, although there was an upturn 15,236 in August. A recent Community Ch survey of every firm employing five or more sons showed 506 fewer prospects now than a y ago. ORS scheduled a public hearing for N 25, said it might decertify the area then if dence warrants.

▶ Evansville, Ind.—The city council, which Sept. 29 voted 5 to 3 for decontrol, appointe committee to consider its next step, proba a public hearing after election day. Neu observers figured ORS might well be right calling the city rental vacancy rate a slim 0.4 Moreover, defense work was definitely expa ing. But the council, incensed at federal tact will probably vote for decontrol, they predict

Had Washington won any votes with rent control circus? Only time might t But ORS' backdown in Cedar Rapids port gave a clue to the next developme solicitous acquiescence to local objecti by agreeing to some "decertifications" *af Election Day.*

RENT CONTROL RUCKUS

In August and September the Office of Rent Stabilization recommended that the Defens Areas Advisory Committee, now part of the Office of Defense Mobilization, classify 4 cities as critical areas to continue or reimpose rent control under the Defense Productio Act. City-by-city results:

RECOMMENDATION ACCEPTED

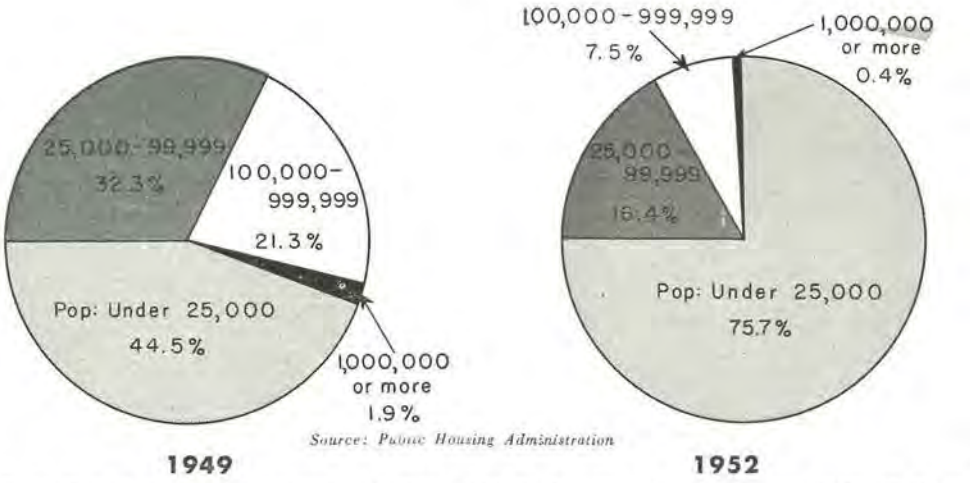
*Akron
*Allentown-†Bethlehem
*Bay City, Mich.
*Canton-Massillon
*Casper, Wyo.
*Cedar Rapids
†Columbus
*Denver
*Evansville, Ind.
*Great Lakes-North Chicago-Waukegan
*Harrisburg
*Kansas City, Mo.
Milwaukee
Monmouth County, N. J.
*New Castle, Pa.
†Portsmouth-†Chillicothe, Ohio
*Pueblo, Colo.
†Sandusky, Ohio
*Seward, Alaska
*Sioux City
†Youngstown, Ohio

RECOMMENDATION FAILED

REJECTED BY DAAC
*Boulder, Colo.
*Cheyenne, Wyo.
†Cincinnati
*Des Moines
†Durham, N. C.
*Goldsboro, N. C.
*Lexington, Ky.
†Mansfield, Ohio
†Montgomery-*Prince Georges County, Md.
†Raleigh, N. C.
*Seattle, Wash.
†Sidney, Ohio
*Toledo, Ohio
†Wilmington, N. C.
Wright-Patterson AFB Area (†Dayton Springfield, Ohio)

WITHDRAWN BY ORS
†Albuquerque
†Altoona
†Baltimore
DeKalb, Ill.
*Huntington, W. Va.
*Lorain, Ohio
†Wilmington, Del.

** Rent control was to lapse, or was continued or reimposed against the wishes of city for Sept. 30 decontrol.*
† City voted for continued federal control beyond Sept. 30.



Source: Public Housing Administration

T OF PUBLIC HOUSING SHOWN BY PERCENTAGE OF PROGRAMS IN CITIES OF VARYING SIZES

nall towns get 75% of US public housing rojects; Texas 608's lose tenants to gov't

NAHO's annual convention last month, Fresno County (Calif.) Housing Au- rity was singled out for a special cita- . Its achievement: selling creation of lic housing authorities to eight small n towns and three rural areas in its and nearby counties in the midst of of the richest agricultural regions in nation. The method: "getting support local governments and local American ion posts."

The accolade given Fresno's public sers by their fellow workers pointed some astonishing facts about US public sing:

though most taxpayers think fuzzily of lic housing as a program geared to cities where slums are most notorious, truth is that since 1949 the small town the small (under 200 units) program e risen to dominate federal public hous- (*see charts*).

1949, towns with less than 25,000 ulation were host to 44½% of US lic housing projects. By March 31 this r, that proportion had soared to 75.7%.

dding up its own figures last May, the lic Housing Administration found that % of the nation's local housing author- s (excluding rural authorities) adminis- less than 200 units—even counting units rved, under construction, and occupied. ty per cent involved less than 100 units.

tancies cited. Because miniature pub- housing programs grow thickest in the th and Southwest, so does controversy their effect on the economy of the ll towns they serve. The Texas Assn. Home Builders, which tries to keep tab such things, recently reported seven ns in which it said public housing proj- were experiencing vacancies from 15 7%. The list:

Town	*Population*	*Units*	*Vacancy Rate*
Bonham	7,043	90	30%
Cisco	5,216	52	15%
Cooper	2,349	30	15%
Henrietta	2,820	40	22%
McKinney	10,525	80	20%
Quanah	4,594	50	20%
Taylor	9,083	70	27%

Such cases, say builders, bolster their argument that public housing has spread into a lot of places where it is not needed. For dramatic illustration, they point to the oil and chemical town of Beaumont (pop. 100,000). There, the opening of a 150-unit public housing project for Negroes helped put two privately run 608 apartments for Negroes on the financial rocks. FHA District Director B. D. Tucker of Houston considered the threat serious enough to beg Washington HHFA officials a few weeks ago to stop construction of more proposed public housing in Beaumont. PHA's answer to this, says Executive Director Kelly Smith of the Beaumont Housing Authority, has been to speed up efforts to get 150 more Negro units under construction by Dec. 31, by which time US public housers expect to start all of the 35,000 units Congress has permitted this fiscal year.

88 tenants lost. The Beaumont case—probably the first of its kind in the nation but a likely harbinger of more to come—involved a 150-unit 608 project called Hollywood Village, run by attorney-realtor M. L. Lefler Jr., and a 150-unit project called Lincoln Terrace, run by Willis Thames. Both rent two-bedroom units that cost $5,000 to build for $39 a month excluding utilities. The public housing project, Neches Park Homes, cost $11,260 per unit. It rents its one to four-bedroom units for an average of $21.20 monthly including utilities. Says FHA's Tucker: "If you provide nicer and and cheaper housing in an area, you know which people are going to choose." Adds Lefler: "Rumors spread that (our tenants) would not be eligible for public housing unless they lived in shanties." Result: in a ten-day period three months ago, Hollywood Village lost 51 tenants. Lincoln Terrace lost 22. Plunged into the red, Hollywood Village last month was near the point of foreclosure: Institutional Securities Corp. of New York, which held a $700,000 mortgage, gave the mortgage back to FHA for debentures. Lincoln Terrace has been granted two six-month deferments on principal payments. For a time, its vacancies held below the 7% on which 608's are calculated, but recently it has recovered.

It is small consolation to Lefler and Thames that the Beaumont Housing Authority cooperated to prevent their ex-tenants from actually moving into Neches Park as planned. Many of the former 608 tenants were eligible under PHA's income rules, ineligible only because they had had adequate housing. Thames, for instance, found his tenants averaged $38 a week income—$1,976 a year. The income ceiling for Beaumont public housing was $2,400. Thames figured 70% of his tenants were eligible for it.

Besides the 150 Negro housing units soon to be started, Beaumont has 200 white public housing units well under way. When they are finished, Lefler is convinced his 240-unit 608 for whites (rentals: $50 for one-bedroom, $55 for two, $60 for three) will suffer the same fate as Hollywood Village.

Outstrips private housing. In Hearne, Tex. (pop. 4,778), the 60 public housing units finished last February represented

Rondal Partridge

RACIAL SEGREGATION in public housing was ruled unconstitutional by a state judge in San Francisco last month in a suit brought by three Negroes denied admission to the new North Beach public housing project (above), designed by architect Ernest Born. Local housing authority had been conforming to existing neighborhood racial complexion.

nearly as much housing as private operators had built in two years. The result, says Tom Hill of Hill Lumber Co., is that "private building has come to a complete standstill and there is great fear of investment." Chairman O. H. McCollum of the Hearne Housing Authority, however, notes that it was the town's chamber of commerce which supplied the first push for public housing. McCollum also insists the town could use 150 more rental units now, although a third of the public housing tenants come from Bryan Air Force Base, 20 miles away.

Even where private realty has been undamaged by public housing in small towns (usually because of booming defense industry), its emotional impact remains high. Samples:

▶ In Washington's Grant County, where the Bureau of Reclamation's Columbia basin projects dominate a burgeoning economy, public opposition has been so violent the county housing authority has been able to persuade only one of the six basin towns to build any public housing at all since the war. Oddly, the 12 unit public housing project that is abuilding lies in a resort town, Soap Lake (pop. 1,000), whose principal industry is sanatariums and tourists. Resort owners fought the project bitterly on the ground it would bring in undesirables. City fathers retorted that people could not spend winter in summer cabins. Now, thinks Executive Director Harvey Fitts of the county housing authority, "opposition is dying down. . . Maybe we can try again next year."

▶ In Turlock, Calif. (pop. 6,700), a turkey-raising and farming town not far north of Fresno in the rich San Joaquin Valley, a 30-unit public housing project was finished a year ago in September. Because the cooperation agreement was signed before local indignation caught fire, nothing came of protest meetings except a change of site. Even realtors agree the project has not hurt private sales or rentals. Even the housing authority itself admits: "there wouldn't be much support in the town for another development." Principal objection: ideological. Says city councilman Arthur Croll, a building and loan executive: "Things like public housing do away with incentive and hard work. Take those fellows in there now: they just sit around smokin' cigars with their feet up. Hell, I didn't have a bathtub until after I was married eight years. Didn't hurt me any, either. Why, if you were to try to take care of all the worthless, lazy ones in this town, it'd take 1,000 units, not 30."

US supreme court refuses to act in LA housing row

The year-old battle over public housing in Los Angeles neared its finale. The US Supreme Court refused to review the California Supreme Court's writ ordering the unwilling LA city council to go ahead with a 1949 contract calling for 10,000 public housing units, despite an overwhelming vote by the city this year against the $110 million project. The state court ordered the council to show cause Nov. 6 why it should not be cited for contempt.

NEW PRESIDENT of NAHO is affable, unpretentious Brown Nicholson (third from l), executive director of the Columbus, Ga. Housing Authority. Formerly general manager of a Columbus real estate firm, Nicholson helped organize the authority 14 years ago, served one year as an unsalaried commissioner. Other 1953 NAHO lea include (l to r): first vice-president, Rar Findlater, director of the Cincinnati Metro tan HA; Albert N. LeFevre, director of Benicia, Calif. authority, re-elected to the b of governors, second vice-president J. G. Sch

Public housers hear recommendation for peace conference with private enterprise

Are public housing and private homebuilding irreconcilable? The 1953 convention of the National Assn. of Housing Officials in Buffalo last month listened attentively to two suggestions for establishing some unity between the two camps, which differ bitterly over methods but do have a common objective—more and better housing. If the NAHO meeting did not extend any positive peace feelers to NAHB, NAREB and MBA, at least it developed no new programs to make relations worse.

HOUSERS HONOR REALTOR: Ferd Kramer (r), Chicago mortgage banker and realty management specialist, won NAHO's highest award for "distinguished achievement" in urban redevelopment and both private and public housing. Former NAHO president Ernest J. Bohn made the presentation (above). Kramer explained he "worked for public housing in Illinois" because there cannot be a solution to housing problems without the services of both private and public housers. He hoped there would be more co-operation between these two groups.

▶ Philip Klutznick, former FPHA commissi who is now co-builder of Chicago's Park Fo declared the "diabolical division between pu and private housing is sheer nonsense that never achieved anything, and never will." S "high priests" of both factions appear to be quiring "some recognition that all is not well their running feud, he added, and may be wi to get together to settle their grievances. He gested that public housers make the first mo

▶ B. T. Fitzpatrick, general counsel and de HHFAdministrator, reminded the conven "[Public housing has] no exclusive monopol either desire or ability to clear our slums. mitting that all they [operative builders] c not perfect, any fair appraisal also admits that have done a tremendous job. Moreover, by as well as by practical fact, we will. . .loo them and the rest of the private homebuil enterprise as the *principal instrument*. . .to pro the great bulk of housing required to meet needs. . .Does anyone believe. . . .that oper homebuilders will ignore the opportunity cleared slum areas can be made available housing development at a fair and reason profit]. . .that the directors of banks and c financial institutions do not have a similar terest?"

Code of ethics. Convention speal made no reference to their absent l president, Erwin W. Blum, who was f as director of the Houston (Tex.) Hous Authority last summer and later indi on charges that he tried to shake dow subcontractor for $2,300. But the busi meeting adopted without discussion a r lution to appoint a committee to draf code of ethics.

As of Sept. 1, NAHO had 2,947 i vidual members, 468 agency memb operated on a budget of $136,000 a y

n Diego: biggest defense housing program nong the slowest; now overbuilding feared

r a year and a half of muddle and ble, the nation's biggest defense hous- program—San Diego, 9,000 units— finally beginning to produce homes olume last month. Although only 136 es were actually completed, another 0 were in the hammer and saw stage, prospects were that 2,000 more would ıbuilding by year's end.

o a city that had experienced a 30% p in population in the last two years 4,387 to 443,924 according to a spe- census survey), this development was erally considered as welcome as the of a drought. Said Dick C. Wilkins, ıstrial relations director of Consoli- d Vultee Aircraft Corp: "Lack of sing has been our greatest single source urnover. Since June 1950, we've had hire 40,000 people to add 16,000 to payroll."

t market ahead? Yet more than a builders wondered if the belated ievement now in sight would turn out be a blessing or a curse. Said T. J. ds: "I think the town will be badly rbuilt if this program goes through. If n half of (the 9,000 units) are built, I ık we'll be overbuilt." Said Nels erin, regional NAHB vice president: e're going on a lot of faith that the raft plants and the Navy will provide upants for the houses that are being lt."

aith in the future is something most Diegans have aplenty. Blessed with of the nation's mildest climates, San go since World War II has seen a vast nigration of people who want to make heir home because they like its year nd warmth, its lack of rain, its pleas- pace. There is no reason to suppose the migration will cease, even if Navy people and the aircraft workers today mean the difference between sperity and depression for San Diego, uld vanish as they did after World War Even pessimists agree that time—per- s as little as a year or two—would take any forthcoming slack in the city's sing market.

gest, slowest. So far the spotlight ıttention has been beamed in the other ction: so many official and unofficial uiries have been launched into why the on's largest defense housing program also been one of its slowest that FHA trict Director Edward A. Walsh cracked ently that it was all he could do to find time for his work between demands for information and explanations.

There was no single scapegoat. In fact, defense building in San Diego—like most defense housing construction across the nation—was saddled with so much red tape, so many major and minor hurdles that Walsh insists: "We're getting along every bit as well as I thought we could."

Much of the blame rested on last year's acute dearth of mortgage money. Part of the blame belonged to HHFA. In its original (long since abandoned) program for San Diego defense housing, it had sale and rental ceilings so low ($8,500 for sale, $65 a month rent on two-bedroom units; $9,500 sale, $75 rent for three-bedroom units) that builders found they simply could not build at a profit. In ten months, only six units were built. Last November HHFA raised its price ceilings $10 on rentals, $700 on sale units, and in January—with Fanny May prior commitments for their shortages—builders finally were in a position to go ahead. Part of the blame also rested on the fact that San Diego has some of the stiffest site development requirements of any big city in the country, and makes private builders foot 100% of the cost.

Site costs huge. Inside San Diego, no large areas of flat land suitable for homes are left. Even outside the city, the flat, arid mesa is interlaced by ravines that mean finger plan site layouts. The city is willing enough to extend its borders to new projects, but builders often find they must first build a mile of sewer and water mains to the nearest city lines. Before a builder can put in a septic tank, the city and county health officers demand soil percolation tests on every lot. As for street improvements, says T. J. Lords: "I've never seen anything like it—they used to demand 4″ of hot asphalt; now they'll accept 2″ but only if 6″ of rock is under it." Lords found that his defense housing project (San Diego Associates, 552 rental units) involved a site preparation cost of $1,600 per lot.

NAHB Vice President Severin points out: "Most of us had to buy land after the defense housing program began. Then we had to find utilities, engage engineers to study drainage, lay out street plots. There are only about eight principal engineering firms in San Diego. Yet a builder can't use anything but a local engineer when he is starting a new subdivision. There is too much work with local officials. After an engineer has spent 60 days working by himself, he has to go to the FHA, then to the city or county planning commission for plan approval. They study the proposals —in my case it took two months, about par. Then you go to the governing body and try to get accepted into the city limits, which may take 60 days or may take five months. Only after you've gone all that route are you ready to let a contract."

BIGGEST DEFENSE HOUSING development is Clairemont, where Burgener-Tavares and four other combines plan to erect 4,322 units. The steep gullies lacing the 3,000 acre site are typical of the treeless mesa land at the north edge of San Diego where much defense housing is located. For their project, Burgener-Tavares had to build a mile of sewer main to connect with city lines.

...these builders did, *with P & H Homes*

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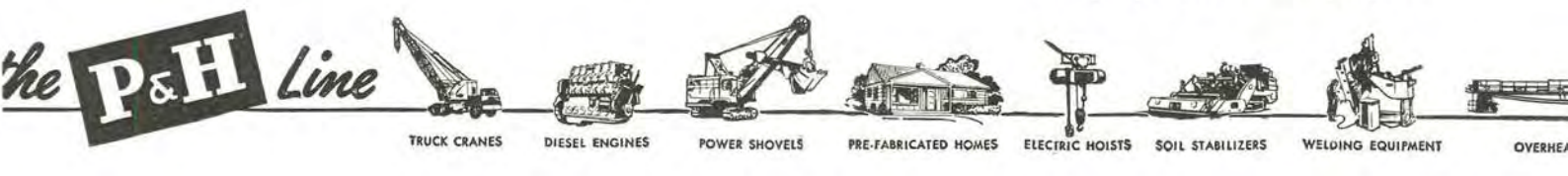

ıse history. How does the routine work t for a typical San Diego builder?

Take the case of Clifford O. Boren who as presiıt of the San Diego Home Builders Association ght be expected to have less trouble than most. is building 189 Title IX sale houses, all but of them two bedroomers (802 sq. ft.) priced at 200. For the three-bedroom homes (963 sq. ft.) may charge $10,200. They lie in three different cts. Says Boren: "FHA threw me a left-handed rve. In one tract where I had 42 lots, they ocated me only 22 defense houses. In another ace where I had 140 lots, they allowed me 71. here I had 183 lots they gave me 96. But I n't afford to build at those prices unless I build whole tract. I'm building the balance under A."

When the trimmed-down allocations came rough last Dec. 27—upsetting his mortgage arngements for 335 homes, Boren had to take a ance. Fanny May's prior commitment authority is fast running dry (it ran out the next day. ren grabbed a plane for Los Angeles, plunked wn $25,000 as the required 2% deposit on a nny May take-out for his defense housing alcations, gambling that he could find a lender d get under way within 45 days or lose his oney. He got loans from the Bank of America, lley National and San Diego Federal Savings Loan Association (paying 2½ points).

Fortunately the two month deluge of rain that evented any construction at all in San Diego st December and January did not effect Boren. was March 18th before he was ready to take t building permits and nearly a month later fore construction actually got under way. "Then lot of tracts began all at once," Boren recalls, d so there was a labor shortage." By midptember, about half of his 189 homes were comete. But Boren was beginning to experience nger signals of a soft market. Twenty-five homes d been finished a week, were still vacant beuse, although he had "sold the whole tract at ast three times," the buyers had been rejected cause of credit rating or because they did not eet HHFA's strict rules of eligibility.

peedup. One result of the long delay that HHFA has been under mounting ressure to put more public housing into n Diego. So far the agency has resisted ccessfully, with the blessing of the city uncil which would like to get rid of any of the 13,500 public housing units ft over from World War II. Although defense housing has been slow, nondefense housing has boomed.

There are 2,353 Wherry Act units built, under way or on the drawing boards for the San Diego area. Moreover, since January 1st private builders have received commitments from FHA for 2,423 homes under FHA's regular Sec. 203 program. Says real estate analyst James Downs of Chicago: "San Diego is building homes at twice the per capita rate of any other city in the US."

It is doing so with practically no help from VA. Since the bribery scandal in San Diego's VA office, a new regime has leaned over backwards so far to enforce not only the spirit, but every letter of every law that many a San Diego builder insists that "it's almost impossible to do business with VA any more." Biggest irritant: VA will accept no FHA inspections, insists on slightly different specifications. Prophesies one big builder: "They're not wrong—only super technical, but they may kill the program in the San Diego area."

The permanent 'temporary.' If San Diego shows signs of temporary over-building, says assistant HHFAdministrator Neal Hardy, "the logical thing to do would be to tear down some of the temporary public housing units left from World War II."

HHFA has tried to get this done before. but as HHFA area economist Robert Filley points out: "When we try to evict overincome families, we get the complaint from the Navy, or Ryan or Consolidated Vultee: 'You're knocking out our best people'." Recently, community pressure for demolition has grown. In a report for the San Diego Chamber of Commerce, Rear Adm. Ray Tarbuck, who retired after a tour as inspector general of the 11th Naval district at San Diego, characterized the 1,532 Lanham temporaries still scattered around San Diego as "a disgrace to the community" with "poor management, non-cooperative tenants, gutters littered with trash and garbage, jerry-built fences." Concluded the admiral: "They . . . add to the slums rather than to slum clearance . . ."

As analyst Downs observes, the trouble with planning how much defense housing should be built, is that even housing officials who ought to know better "always forget that the lag between scheduling and occupancy is so long that people solve their own housing problems in the meantime." Aircraft employment in San Diego reached a peak this summer. The peak in housing output will not be reached until next summer.

Photos: Young & Richardson

FIRST WHERRY ACT project, 895 unit Cabrillo Heights, opened Sept. 2. Architect C. J. Paderewski, cousin of the late pianist, said a close-packed layout was "the only thing that worked within price limits ($6,100 per unit)." Buildings are wired for TV reception.

400 VACANCIES exist in permanent public housing duplexes like these controlled by Navy, because sailors prefer to scrounge for private quarters rather than lose rental allowance. A report by Rear Adm. Ray Tarbuck, USN ret., called these units "perfectly adequate quarters" for some brackets.

TYPICAL DEFENSE HOMES like these $9,200 sale units (above) are unimaginative but solidly built of frame and stucco. Says FHA's E. A. Walsh: "Defense housing is minimum housing, but good, comfortable housing."

LANHAM ACT TEMPORARIES (left) managed by public housers were branded "disgrace to the community" by Tarbuck report. San Diego has 1,532 of these ten-year-old remnants of the last war.

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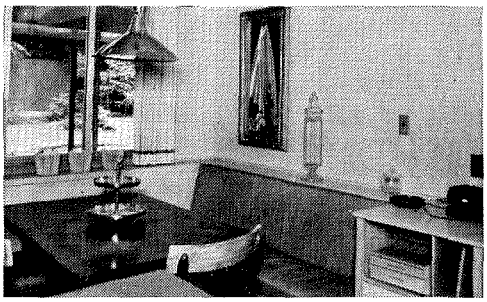
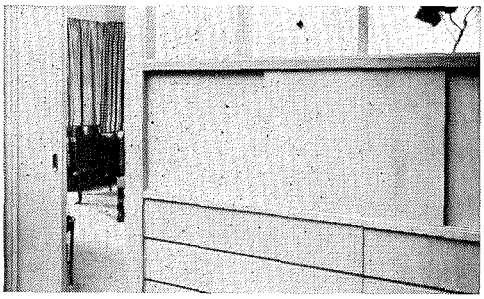


2 The dining nook carries out the interior theme with beautiful Roddiscraft Birch paneling. Foreground shows part of work surface in G-E Textolite's exclusive Green Mansions.



3 Dressing room has built-ins of Blonde Limba. Finger pull drawers eliminate knobs and preserve smooth flush appearance and horizontal lines.

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MORTGAGE BANKERS, meeting in Chicago, hear Foley announce Fanny May 'one for one' plan, push study of mortgage stabilization

os: Arthur Siegel

RTGAGE ROUND TABLE produced convention's only fireworks as lenders bombarded s Bert King (second from left, studying a paper) with angry denunciations of 's refusal to raise 4% interest on GI home loans, applauded a suggestion to merge with FHA program which would have the effect of putting VA out of business.

DEFENDING 4% RATE, King rehashed old argument that private sources still buy a sizeable volume of GI loans (from the floor came cries of "no, no, no"). Showing of hands indicated most VA loans move at 97, some at 96. Suggested NAHB President Alan Brockbank (r): "I think we ought to quit building VA houses . . . to get action."

vn L. (for Lee) Whatley (l), new MBA president, receives congratulations outgoing president Aubrey Costa (r) and new vice president Will Clarke. itley, 52, balding, bifocaled, and boom-voiced, is president of Stockton, tley, Davin & Co. of Jacksonville, Fla. which he ranks as the nation's third est mortgage correspondent and servicing firm (last year it serviced loans ing $162½ million).

onetime newspaper reporter (Atlanta JOURNAL and CONSTITUTION), ama-born Whatley launched a weekly in Miami Beach in 1923, sold it to nto advertising and promotion which in turn led him into realty as adver- g manager of Jacksonville's Telfair Stockton & Co. He quit as executive president in 1937 to organize his own mortgage firm, but merged again his ex-boss, Jim Stockton, in 1946 to form the present combine. Whatley's ies: fishing in his 42′ cruiser, painting landscapes.

HHFAdministrator Raymond M. Foley picked the Mortgage Bankers' Assn. convention at Chicago's Conrad Hilton hotel to announce the government's No. 1 housing move of the month: starting that day (Oct. 1), Federal National Mortgage Association would give a three month trial to the "one for one" reciprocal mortgage purchase plan long urged on it by homebuilders.

Fanny May would simply give companies that bought nondefense, nondisaster mortgages out of its $3.1 billion portfolio a nontransferable receipt entitling them to sell an equal dollar amount of VA or FHA mortgages (except defense, military and disaster) back to Fanny May any time within the next 12 months. To make certain it would have over-the-counter money to keep its end of the plan, Fanny May would earmark and set aside funds each month equal to the amount of mortgages it sells. That was not quite a contract to buy future loans. Fanny May lacks Congressional authority to make one for ordinary mortgages. It was, as Foley pointed out, as close to a contract as the law allowed. As added bait, Fanny May would waive the usual 60-day waiting period in buying loans covered by purchase receipts.

Good loans for bad? It did not take canny mortgage bankers—even those who do not like Fanny May, would rather see it liquidated—long to scent bonanza in the new scheme. As announced by Foley, the plan permitted purchasers of FHA loans to sell VA loans (and vice versa). Because FNMA will buy and sell only at par and

MORTGAGE STABILIZATION committee, said Chairman Aksel Nielsen (second from l), "expects to consult with anybody and everybody on why past plans didn't work and what might make a new setup function properly." Others (l to r): Will A. Clarke, Aubrey Costa, Brown Whatley, and (seated) Franklin D. Richards, James W. Rouse (standing), Ferd Kramer, John F. Austin, Jr., Sam Neel.

requires certification that the loans it gets have moved at par all the way, no quick fortunes were in sight for discount manipulators. But two profitable types of deals mushroomed immediately:

▸ To reduce the total discount that a lender, builder or homebuyer (indirectly) might otherwise pay, a lender sells new loans to FNMA at par. He buys an equal amount of seasoned loans from FNMA at par, sells these to a private institution. But the seasoned loans bring a higher price than the new ones would have.

▸ A lender buys seasoned FHA loans from FNMA at par. These can be disposed of at little or no discount to the private market. Thus the lender has a receipt which enables him to sell VA loans to FNMA at par. Because the VA loans would otherwise bring only 96 to 97½, the lender can make a deal that would not be possible without the FNMA federal crutch. He picks up, say, a 2½ point originating fee on the new loans, and, say, $25,000 worth of servicing profit a year on the old HFA loans.

However the plan works, it looked mostly like a political device for creating a false impression that 4% or 4¼% loans are readily marketable.

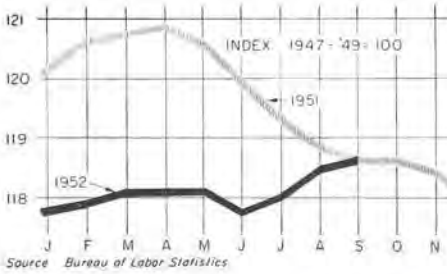
Central bank study. The four-day convention drew a record 2,360 registrants, produced these other developments:

▸ MBA voted an initial fund of $15,000 to hire a staff of experts to make a complete study of how a private central mortgage bank might be created. Objective: cushion the ups and downs of the private secondary mortgage market without FNMA abuses.

▸ Both VA's Bert King and FHA's Walter Greene said no increase in VA or FHA interest rates was in prospect "this year." Despite such public denials, top government officials were already discussing a boost in the VA rate. Indications were the VA itself was the principal holdout. Action might come any time after the election. With public housing bonds up to 2.54% (AF, Nov. '52, News), and private utility loans reaching 3½%, pressure for a boost was growing.

▸ FHA's Greene admitted mortgage bankers have made out a good case for an increase in interest on FHA debentures, given when property is foreclosed. He took a dim view of suggestions the term ought to be 10 years instead of 30, however. (Insurance man G. D. Brooks suggested a 20-year, 2¾% debenture.)

▸ President Laurence F. Lee of the US Chamber of Commerce, also an insurance executive, warned that the private housing and mortgage industry is not telling its story in terms the public understands. Illustrated Lee: "If someone tells you that governmental insistence upon an inflexible and unrealistic rate for FHA and GI mortgages has deprived many people of the opportunity to purchase homes, you know at once what it means. But if the same statement is used in a radio broadcast—and it has been many times—it is utterly outside the experience and knowledge of the multi-million listeners."



MATERIALS PRICES advanced minutely, from index of 118.6 in August, to 118.7 in Septem The scant rise resulted from small but nume increases in metals prices.

Rent boss urges tax aid for apartment builders

When Congress voted the Office of E Stabilization $11 million for operating penses this fiscal year, it impounded million of it on the theory that ORS' w would drop after the Sept. 30 deadline cities to decide whether they wanted keep rent control. Last month, Washing figured ORS director James McL. Hen son had doped out a way to justify gett the $2 million. Before the rental hous federation of the Boston Real Estate Bo he broached two plans he said might h end the housing shortage and thus the n for rent control:

▸ Extend fast amortization benefits to rental u This would, said Henderson, "tend to bring l private investors into the rental market."

▸ An "incentive measure" to prod private ca into slum rehabilitation. Although ORS alr allows percentage rent raises for "major ca improvements" on an item by item basis, Hen son said he envisaged a "super-major capital provement" increase for landlords who repair t slum properties.

New Jersey builders ado statewide bonding plan

Disturbed by the slurs of Congressional vestigations and anxious to forestall s licensing, eight NAHB chapters constitut the New Jersey Home Builders Associa began a statewide "Certified and Bon Builder" program to reassure the pul All 1,200 members, who account for al 80% of the homebuilding in the state, n obtain association certification and reap for it annually, or forfeit HBA members Henceforth, predicted state president I mond E. Hanley, "the builder who is certified and bonded will be looked askance by the public."

Jersey's was the biggest builder bond program to date. It provides $100,000 surance on each certified builder-mem against "*wrongful* misapplication of ear money." Not insured: deposits lost by o nary business failures.

Defense housing loses glamor for builders as end of Reg. X removes main benefits

With Reg. X eclipsed, the defense housing program was beginning to lose its appeal even to the homebuilders who had championed it most. While credit curbs lasted, defense housing offered much lower down payments which made sales easier. With the regulation in limbo, the difference between the down payments required under FHA Title II and Title IX was shaved roughly in half.

Moreover, Title IX remained surrounded by extra red tape. While still determined to live up to their promise to build all the defense housing anyone would finance, builders felt HHFA and FHA had fallen considably short of making good *their* promises. Items:

▸ Despite promises to switch to an amenity approach, FHA generally was still clinging to the "debt service formula" for Title IX homes built for two years of rent before they are sold. The result: endless bickering over valuations on many a project.

▸ To squawks of overprogramming in some cities (H&H, Oct. '52, News), HHFA offered only bland explanations: "non programmed housing exceeded expectations"; the defense stretch-out delayed the arrival of expected in-migrant workers. Since normal business judgment cannot compensate for government errors in planning, NAHB felt some relief should be provided for builders who had done their part but now cannot find tenants.

One piece of red tape was eliminated: prior allocation of housing units. Now, mortgage papers will suffice. The Oct. 15 defense housing box score:

Programmed	94,531 units
Applications	346,834 units
Started	35,796 units
Completed	17,948 units

A REAL CADILLAC HOUSE

Dallas builder Howdy Howard opened a "holiday house" complete with all furnishings, a well-stocked deep freeze and a Cadillac sedan in the garage. Price: $69,000. First day brought seven buyers.

Prefabricated houses –

Should the builder fight 'em or join 'em?

A new high of 60,000 houses was reached in 1952 by the prefabrication industry. With new designs and services to offer, prefabricators may do even better in 1953. For readers who want to make an up-to-date appraisal of prefabrication, HOUSE & HOME presents a 29-page section on this fast-growing field.

> *There is nothing radical about a builder who buys a prefabricated house. He is only carrying on a trend that started years ago.*
>
> *Builders originally made everything for their houses. Gradually they bought more and more from outside specialists. It was faster, easier and cheaper that way.*
>
> *Around the US today some 5,000 or more builders are going several steps further in their buying process than the rest of their colleagues. They buy almost the entire house or fewer components depending on their needs.*

Prefabricated housing, after a war boom and postwar growing pains, is settling down to the role of a major industry. Many of the obstacles that dogged its early growth are fast diminishing: public prejudice, unfavorable codes, skeptical builders, lack of financing. Some prefabricators believe that builders, if and when they feel the pinch of rising costs and a lessening demand, may have to come down to a lower profit margin. One way they can meet tightening competition may be to get the benefits of quantity production which prefabricators can offer.

The industry, with 250,000 units to its credit since 1946, has been netting steady increases: from 37,200 units in 1946 to 55,000 in 1950—housebuilding's record year. Last year total US house starts slumped 22%; prefab sales dropped only 9%. This year prefabs will account for roughly 8% of total US house starts.

Prefabbers say that they are doing almost one-third of all new housing in Indiana, heart of the "prefab belt" and birthplace of the industry. And in Illinois, Pennsylvania, Wisconsin and surrounding states, prefabs are a commonly accepted commodity. This regional concentration, the natural result of manufacturers selling close to home, has spread out since the early stages to all corners of the country, with plants in 30 states and some 5,000 dealers covering 40 states.

Surprisingly, prefabbers report that instead of having the building trades against them, they have the unions on their side. The unions, they say, are playing along with the prefabricators, who are primarily union—in contrast with conventional builders who are 80% non-union.

For their long rail hauls (primarily to the far West) big prefabricators have sued and succeeded in getting 33 1/3% reductions in freight rate differentials. In order to draw the major part of their markets within trucking distance, which means less damage, less handling from factory to site, they are starting to decentralize—believing that their future lies in scattered plants.

Today 80 or more firms list themselves as prefab manufacturers; close to 50 are well-established producers, and the 38 who are members of the Prefabricated Home Manufacturers Institute account for the lion's share (50,000 out of 55,000) of total annual output.

By and large, their product is still a low-cost house, $8,000-$12,000 to the customer, including lot. But during the past year prefabricators have gone into higher-priced homes in volume, with a half dozen firms devoting anywhere from 15% to 50% of their production to houses over $12,000.

Continued on page 90

Methods vary widely among manufacturers: from precut houses (bundles of lu cut to proper dimensions) to "fold-out" houses to a factory-assembled unit that off the production line ready for occupancy. But most companies offer pane construction—4′, 8′, room-length or house-length panels with or without interio exterior finishing materials.

About half the major prefabricators are already working on plan include air conditioning in their models. Their highest estimate is $700 over the price of heating a plant alone, and at least one of the largest fir holding off on air conditioning because it thinks even this price is out of line.

Prefabrication has made solid progress, and it hasn't yet gone as far as it ca With sizable research budgets aimed at better materials, production and mark the biggest prefabricators are contributing leadership to this still-young indu revolution in housing. If the home-buying public is to get such benefits as from prefabrication, a good part of the job is up to the builder—to handle the pa as efficiently as it is made in the factory, and hold his profit to a reasonable ma

What's in it for the builder? The prefab manufacturers answer:

1. Less labor generally, less high-priced skilled labor particularly; fewer men needed to erect each house and lower average hourly wages. A builder can offer year-round employment. The prefabber's labor is lower, too. (An hourly average is $1.50 contrasted with $2 and up for carpenters.)

2. Less working capital per house and a faster turnover of the builder's investment, hence less interest charges to be paid.

3. Less supervision—A builder gets precision workmanship supervised by plant inspectors.

4. Less overhead—Smaller crews, less equipment, less paperwork.

5. Less purchasing—No shopping around for individual items; fewer worries over availability of materials; fewer delays waiting for deliveries.

6. Less inventory—The manufacturer has the inventory; hence

7. Less pilferage—No loose lumber or other items left on site to tempt passersby, and

8. Less waste—Precut, preassembled lumber eliminates cleanup.

9. Faster erection time—Under roof and doors locked in a day, occupancy in a month.

10. More houses per year with the same size crew. This means:

11. More profits per year—A builder can take a lower margin, beat competition, still make a larger year-end profit.

12. Year-round building—A builder theoretically needs only one good day to get a house under roof. Finishing can go on inside during bad weather. Some cover the ground with straw and pour foundations all winter; others lay foundations ahead in fall, cover them with straw and use one each good winter day.

13. Better construction—No. 1 lumber used almost exclusively, accurate assembly on jigs.

14. Better design—In some cases the package includes services of architects and engineers small builders usually cannot afford.

15. Cost estimating—Many prefabbers supply specific cost breakdowns compiled from experiences of local dealers. The builder gets his materials (and the labor that went into them) at a fixed price that doesn't fluctuate.

16. Financing—Large prefabricators supply interim financing, when not available locally, through their own acceptance corporations; others run interference with the builder's banks and loan companies. Some can help him place his final mortgages.

17. FHA and VA—Many supply partially completed Description of Materials forms and help complete them. Some furnish complete blueprints, specifications and plot plans, send field men and engineers to work with FHA and VA offices.

18. Land planning—Some lay out subdivisions, plan plots, locate each house with setback, supply different elevations, recommend landscaping, style colors.

19. Advertising—Direct, for the specific builder (mats, commercials, sales literature, handouts, etc., free or expenses shared) and indirect (advertising for the product, paid by the manufacturer).

20. Model homes—Advice on furnishing, signs, advertising and sales techniques. The builder knows how the house looks before it is built, can show prospective buyers photos, plans and prices without building a model.

There are also limitations...

Most prefabrication systems still leave th share of the job to the local builder: sit and driveways, grading, foundations, plu heating, wiring, masonry, roofing, finishe etc. Thus the savings of factory prefabr come mainly in the shell of the house related dealer aids.

Most old-fashioned building methods compete with prefabrication. But almo builder could cut costs by simplifying hi ing and designing for rapid erection.

Prefabrication seems to offer least

1. *The large-volume builder who can du the prefabrication processes close to h any builder who has relatively low labo for cutting and subassembly and w worked out an economical panel or f system, including trusses and interior par*

2. *The builder who gets half his fu planning his own house and working w architect.*

3. *Areas where people have a strong pr in favor of architecture or materials not in prefabs.*

4. *The builder who is convinced he ca a better-designed house than prefab have customarily offered.*

5. *Builders working in a price class $20,000, for example) where people wan thing decidedly individual.*

6. *Towns where local codes prohibit par struction or other prefab methods.*

7. *Small builders too far from a fac make small orders profitable, or in high petitive areas where competition has forced prices low.*

Last month 15 of the nation's leading prefabricated house manufacturers were guests of HOUSE & HOME at a day-long New York conference which had the earmarks of both a round table and a mass interview. With editors of H&H's sister publications TIME, LIFE and FORTUNE sitting in, the prefabbers unlimbered some trade secrets of their young-giant industry.

he prefabricators tell their story

Prefab plant locations. Dots show relative size

Prefabs fit well into old neighborhood in Dobbs Ferry, N. Y.

THE PREFABRICATED HOUSE MANUFACTURERS:

John C. Taylor, Jr.
president, American Houses, Inc.
president, Prefabricated Home Mfrs. Institute

William B. F. Hall
president, General Industries, Inc.
vice president, PHMI

Robert E. Ott
general manager, Harnischfeger Corp.
secretary-treasurer, PHMI

Harry H. Steidle
manager, PHMI

Walter H. Ahrens
president, Southern Mill and Mfg. Co.

Hart Anderson
vice president, Page & Hill Homes, Inc.

Frank A. Baldus
president, Admiral Homes, Inc.

W. G. Best
president, Best Factory-Built Homes, Inc.

Ivon R. Ford
president, Ivon R. Ford, Inc.

P. S. Knox, Jr.
president, Knox Corporation

Robert J. Lytle
partner, Lumber Eng. Co. (Modern Homes)

W. L. Mainland
general manager, Lumber Fabricators, Inc.

John J. O'Brien
president, Gunnison Homes, Inc.

James R. Price
president, National Homes Corp.

Frank Thyer
president, Thyer Mfg. Corp. (Pullman Homes)

C. H. Renner
sales manager, Thyer Mfg. Corp.

Charles F. Travers
president, Richmond Builders, Inc.

HOUSE & HOME:

PRESIDING: P. I. Prentice, *editor and publisher*

TS: *editors from* TIME, LIFE *and* FORTUNE *magazines*

Are prefabs 20% cheaper?

Prentice: My recollection is that the spread between what you sold the house to the builder for and what the public pays for the house was just about 200%.

O'Brien: That is right. But we now have started some engineering and research to take the same savings we get in the plant right out into the field. I think there is a tremendous amount of work that could and should be done there: savings in plumbing, savings in wiring, slab foundation, all of that, and possibly better buying locally by the little dealers in the field. We don't ship wiring and plumbing; that is all we leave out. We used to ship a prefabricated plumbing tree.

Price: You get into code problems doing that.

Anderson: We built a prefabricated plumbing tree right after the war when the builder in the small town could not get the material but the prefabricator could. At that time it was acceptable. But now—well, the plumbing industry is the hardest thing that we are going to have to crack in the prefabricated housing business.

Price: That is true in *all* the housing business. The problem is not cost. It is collusion among the contractors. They try to make $500 profit on a plumbing job. They try to make more than the builder.

Prentice: Do you think prefabrication can cut the price of housing 20%?

Price: Twenty per cent and more, and an even higher per cent on bigger houses. In Hinsdale, Ill., 900 sq. ft. National homes are selling for $9,385. The closest comparable conventional house we could find was $1,900 more. In Westchester, a suburb of Chicago, our dealer sells our 1,000 sq. ft. house with extra trimmings for $13,500; the closest other builders can come is $15,000. In Wheaton, Ill., it is $12,300 vs. $16,500; Steger, Ill., $10,700 vs. $13,650; Chicago Heights, $10,800 vs. $13,650; Des Plaines, $12,900 vs. $15,590; Champaign, Ill., $9,400 vs. $12,000. The ultimate sales price of our house runs 142%, not 200%, of factory cost.

Renner: We deliver to a builder in one package. That eliminates the majority of the purchasing required to build the house. *A builder can build three of our houses in the same time it would take him to build one conventionally.* In other words, if he made 10% conventionally and it took him 90 days to build that house, with our method he could build three houses in the same length of time. So, if he maintains the 10% profit, he would be making three times as much money in the same time. Right now our product is being built adjacent to Park Forest. Ours is a comparable house to theirs, but it is at least $1,500 cheaper.

Taylor: *This year's trend was toward modern: larger overhangs, lower roofs, sometimes flat roofs.*

Price: *To get our houses into Chicago, we signed an agreement with International. We have to ship with interior doors unhung.*

O'Brien: *Our steel houses will come from the most highly mechanized housing plant on earth.*

Ott: *The prefabrication package should include financing and assisting the builder.*

Ott: When we design a prefabricated house, we take into consideration heating, plumbing, wiring and all the rest. Our heating is laid out for the minimum amount of ductwork necessary. You don't have to cut any joists. Wiring is laid out in such a way that it is a very simple matter, and plumbing the same. I think prefabrication goes further than just a package. It has grown beyond the technical structural stage. *The whole package should include—and it does in our case—financing and assisting the builder in the construction.* This is the important thing that gets the lower-cost product to the consumer. The actual manufacture of the parts, the assembled sections, is only part of it. I think that when you get financing charges, service charges, interest and what-have-you on the loans and the mortgage on that house, that conventional financiers can look forward to several hundred houses at a time. Our own acceptance corporation helps considerably to bring down the price to the consumer. One of our dealers says these factors enable him to finish his house for about 15% less than conventionally.

O'Brien: Our figures show 15%.

Knox: Down south we never have enjoyed more than a 10% advantage. I would say from none to a maximum of 10%. I would say 20% is easily possible in the future, however.

Ahrens: I don't think it could be done on the over-all cost of the house, which means including the cost of plumbing, painting, wiring, foundations, etc.

Best: We are finding it just about 15% in some of the larger homes. When you get beyond the $12,000 mark, the difference rises quite rapidly.

Hall: Give us prefabricated plumbing and some breaks in the national codes s we can design for large volume and ce 20% would be only the beginning.

Anderson: The prefabricator takes a c tional builder and changes his meth doing business, or operating a busine ciently where he couldn't before, esp where he didn't know costs. We have a h unit that is installed in our factory, w the ducts in. We furnish a furnace, an installed for $550, where normally it cost the builder $750, because we buy from the plant at Wichita. We furnis furnace to the builder at no increase i

Mainland: If we are selling only 40% completed house, I don't think that we cause particular good by holding out the of excessive savings, 20% or 25%, respect to the *whole* house. The packa are furnishing is a relatively small perce to begin with. Obviously prefabrication materials alone, it is a method. Yo deliver the same package and the same ciple to one man, and he will fall flat face, and you can deliver it to anothe he will do it successfully. *Do we or do train the builder sufficiently in the step will lead to success?* I say it depends way it is used after you deliver it.

Lytle: I think we can make a 20% savi some areas. I know there are some ar this country where building is so organized there is not a prefabricator i room who can move in and save the b and consumer a dime. But there are also where we can save the consumer 20 to

Travers: I would say our saving is a 10%. In some areas it might be more, depends largely on labor unions and

How many compromises do the unions require?

Price: We are making one in Chicago. We have the AF of L Carpenters and Joiners Union in our plants. When we negotiated back in 1941, they made up a lateral deal that wherever a house was shipped, the AF of L Building Trades would install it. But when we first shipped into Chicago our houses were attacked by all the other unions. The glaziers didn't want them glazed, the carpenters didn't want the windows in or the doors hung and so forth. We finally made an agreement with them by getting the International behind us to agree that we would not hang our interior doors. We started shipping bamboo curtains with no installation, but that is the only concession we had to make. We hang our exterior doors and ship our windows.

Prentice: The only concession was interi

Price: We mortised the door. It just had screwed on. The carpenter puts the loc the holes we have already made.

Travers: We can't hang our doors.

Mainland: Neither can we. Don't you ha sign an agreement as National Homes the Chicago Council in order to work o basis, a direct agreement outside of wha have with your shop?

Price: Yes, we signed an agreement, agreed that we would ship our hous with interior doors unhung, and the would hang them. We have found th

Bill Hedrich, Hedrich-Blessing

Prefab design *continues to improve: Harnischfeger pilot model, at left, (also shown on page 96) has glass-walled living room looking out on a real garden sheltered by the bedroom wing at left and carport storage wall, right.*

Hall: *A prefab has the advantage of a trade article: over the years you can look in the bluebook and know exactly what is in it.*

Renner *(below): Three of our prefabs can be built as fast as one ordinary house.*

Thyer *(below at left): We recognized the importance of good design years ago. That fact put us a little ahead of the parade.*

tional man who covers the New York-England area is quite co-operative.

tice: Does this mean that you don't con- union opposition a serious handicap to spread of prefabrication?

: I think it is just the reverse. *The union, eneral, has only about 20% of the house-ling industry. The rest of it is nonunion. ty per cent of houses across the US are not union built. The unions decided that through prefabrication they could get a better hold on the housing field. Our agreement is that our dealers can be union or nonunion, and they are roughly 50%. We have used the unions to get into more Chicago suburbs, and without their help we could not have done it. I called the International, telling them we were meeting resistance in getting building permits, and they got union members to go down and say they wanted us in there. It means work for union men.*

there big variations from district to district in VA and FHA valuations on the same house?

: We found there were in the early days. not now. Today it is very uniform. In in the East our valuations are running er than our sales prices.

rson: VA and FHA valuations for Mil-kee and Chicago are higher on the same than they are in Des Moines or Mason Iowa. Between 10 and 15% higher in ago. There are higher costs there for ibing and all the other things.

: Plumbing is higher in Chicago because codes are tougher. Wiring is higher be-e of the type of conduits used. Our plumb-runs about $200 less in Iowa than in ago. Wiring runs about $125 less. Field r costs $1 less.

Ott: In competitive times which will come, I am convinced you will not have project builders; you probably will not have the volume. I am firmly convinced that the prefabricator dealers—through the assistance of the prefabricated manufacturers making them cost conscious, giving them know-how, actually making businessmen out of builders—those dealers of today are going to be the builders of tomorrow if and when a recession should come along. On the whole, you will find the average builder anything but a businessman or a merchandiser. The majority are little builders who don't know their costs. *If there is anything the prefabricator has done to help the builder it is to make him cost-conscious.* That is going to be beneficial when the squeeze is on and everybody has to pull in their belt.

prefabrication save on plumbing and wiring costs?

: On plumbing, $100-$300.

More than that. We are one of the few panies which prewires all our houses. We a house with all the plumbing in it out-city limits where no code prevails. In-ng installation, it is $190.

We wire our panels.

Prentice: If two of you can get away with it, why can't the rest of you?

Ford: We have an underwriter to approve our wired panels when wiring goes out with the house. We have very little trouble.

Hall: We have surprisingly little trouble. We thought there would be many areas that would

continued on page 160

What's new on the market

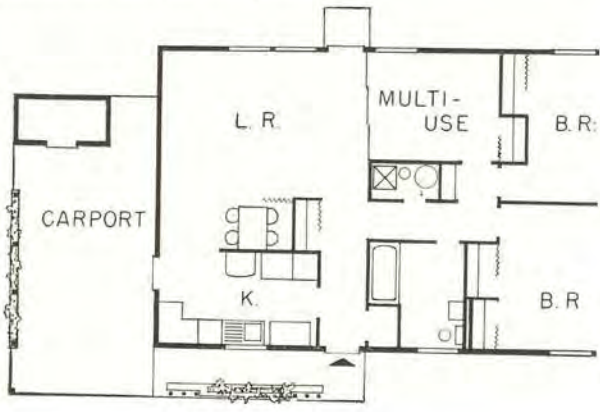
—1953 models show progress in product design

Prefabrication's critics have generally had less quarrel with the *process* than the *results*. With good cause they scorned the rows of squat little boxes many prefabbers turned out. But today, more and more manufacturers incorporate cleaner lines, color styling, open plans, lower-pitched roofs, overhangs, rear living rooms, big windows, storage walls, built-ins, pass-throughs and other custom-house amenities. Variety is available as never before: big houses, small houses, wide choices of plans and elevations, optional exterior materials. (Leading manufacturers, on these pages, are grouped roughly in order of annual output.)

Old *models followed boxy conventional lines*

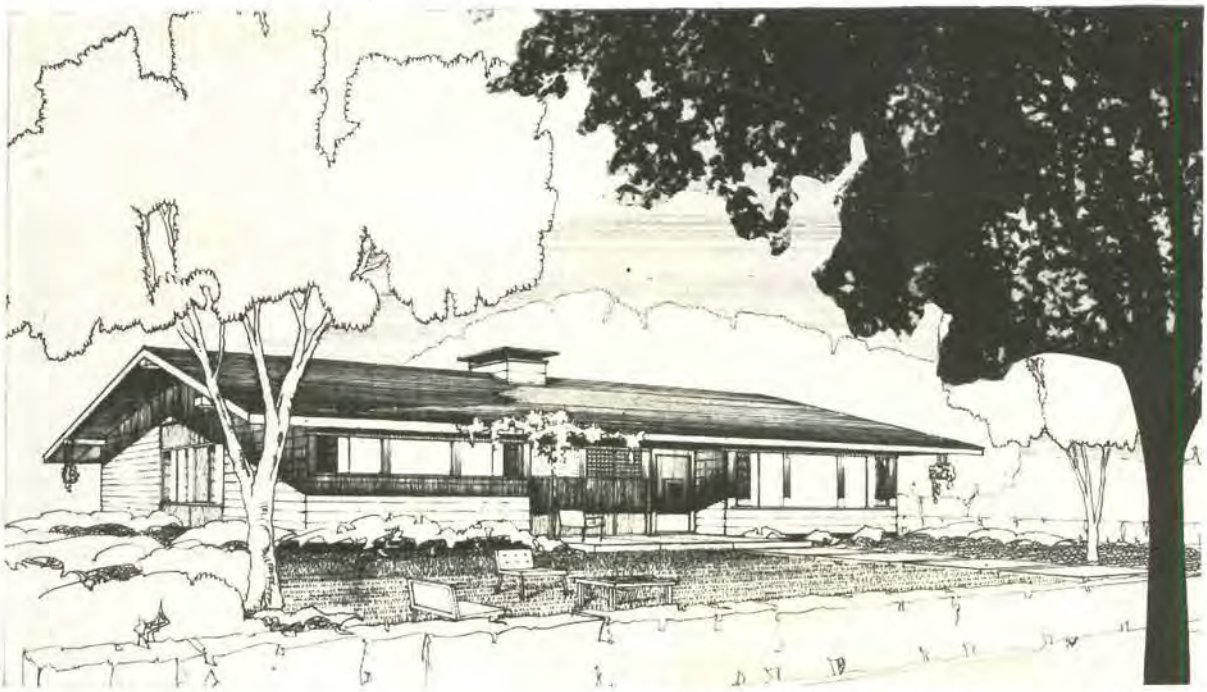
New 1953 *"Monterey" model (plan below) has rear living room*

National Homes Corp., Lafayette, Ind., the industry's biggest producer (1,311 sales in 1947; 10,016 last year; an estimated 11,500 for 1952), has plants in Lafayette and Horseheads, N. Y.. 430 dealers scattered nationally. New models, now being demonstrated by dealers, retail for $7,500-$15,000. Features: open planning, rear living rooms, multi-purpose rooms, folding doors, double-glazed floor-to-ceiling windows, high strip windows for bedroom privacy, professional color styling, insulated room-size panels of 2 x 2's and 2 x 3's, marine plywood exteriors, laminated fiber board interiors, wall furnace, packaged chimney.



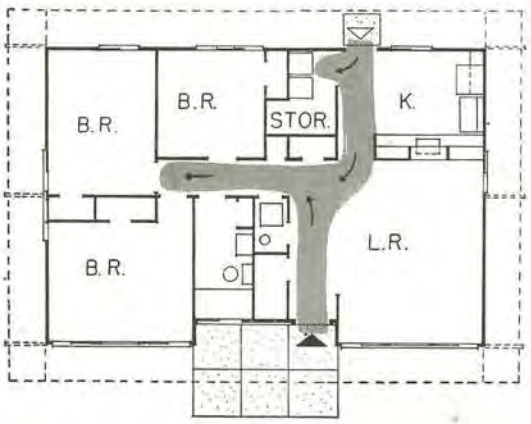
Current *"Saratoga" has vent louvers, double glazing*

New *"Coronet" is asbestos shingled, has siding, glass wall*



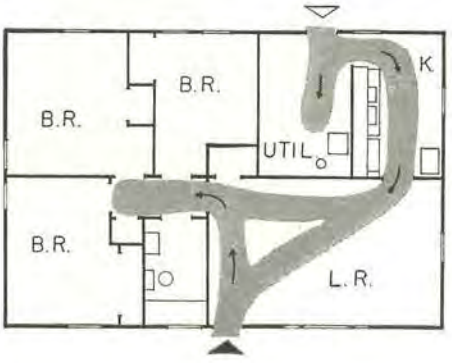
New *Hill house for Gunnison (plan below) has horizontal lines, wide 3'-2" overhangs, covered entry porch; "hall" and coat closet; small side windows to afford privacy and allow for more flexible furniture placement.*

nison Homes, Inc., US Steel subsidiary with an annual output of 7,500 es, has its plant for wooden houses in New Albany, Ind., is building an- to produce steel structures near Harrisburg, Pa. Biggest prefab design this year is Gunnison's new "Talisman" house by Henry Hill (see cover), h will go into production next year. Designer Hill developed 97 different studies within Gunnison's basic 36′ x 24′ rectangle, came up with a final (plan, right) that straightens out interior traffic, removes the living room circulation, creates more *usable* space in the same floor area.



New living room *is out of path between front door (right), kitchen and bedroom hall (left). Note versatile storage wall at the left.*

Current *models, above average in design, cannot match new plan in circulation, closet and kitchen arrangement.*



Albert Henry Hill, *top-flight San Francisco designer, is one of the first internationally known architects retained by a big prefabricator to create a quantity-produced house. A graduate of California, London and Harvard Universities and author of several books and articles on architecture, Hill has achieved wide recognition for his custom residences and commercial buildings, including prizes in several national competitions.*

A "special" *by American: $30,000 house in Princeton, N.J. by builder T. R. Potts.*

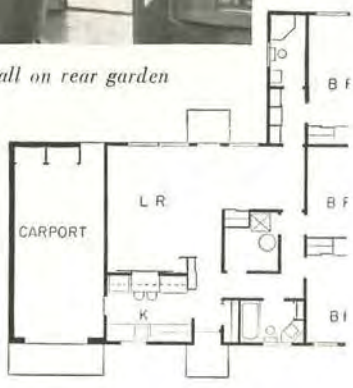
Stock models *(plan left) built by Allen & Rocks, Fo ville, Md., sold for $12,500 including lot.*

American Houses, Inc., (plants at Allentown, Pa., Lumberton, N. C., Cookeville, Tenn. shipped 1,000 units (its largest project last year) to the Loving-Weaver Co., North Carolina. One of the oldest (1932), American offers a variety of products: although 90% of output is in the under-$12,000 class, it does many $25,000-$35,000 homes, garden apartments, duplexes, barracks and special buildings. In the package are floors, insulated and plywood-sheathed walls, precut roof members or trusses and all miscellaneous materials except masonry, plumbing, heating, wiring, paint. Services include drawings, specifications, technical, advertising aid.

Two-bedroom models, *$8,950 in 1949, are reselling at $11,000. Builders: Westmore, Inc., Fairfax, Va.*

"195X" research house *at Mequon, Wis. (plan, right & photo, p. 93 by architect John Normile. It has open plan, rear living areas and rear bedroom to go on narrow lots.*

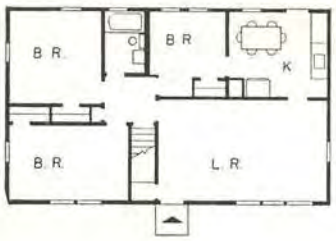
Living room *has glass wall on rear garden*



Harnischfeger Corp., Port Washington, Wis. with 175 active dealers east of the Rockies, annual production of 1,100 houses, offers four basic models, three economy models under the "P & H" trademark in the $7,000-$12,000 field. Packages, "83%-complete" priced from a low $2,750 up, include furnace, water heater, package chimney, room-size panels with insulation, doors, windows and screens in, ceiling, roof panels and trusses, box-beam floors. Erection time: 100-160 man-hours. Services include advertising and technical help, financing through firm's acceptance corporation. Two pilot models of advanced design are now under field test.

Current *best seller below is also a Normile design*

t *contemporary model (plan, below) has window wall, full basement*



odel *(26% of sales), shown has breezeway, garage.*

(For another Pease house, see p. 102.)

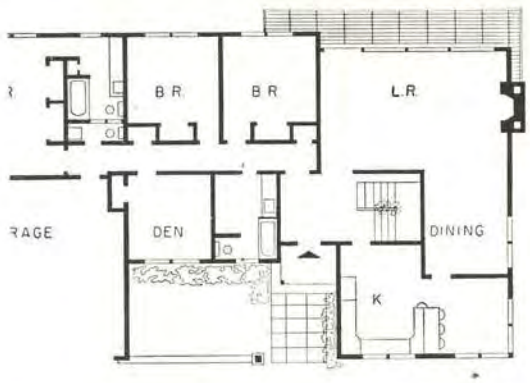
e Woodwork Co., Cincinnati, Ohio, started house pro- on in 1940, sold 1,674 last year to builders and individuals, anchise required. Variations on four basic one- and two- plans, conventionally framed, retail for $7,500-$20,000.

Right off *assembly line, a Mobilhome is trucked to site, set on foundations . . .*

. . . and utilities hooked up, ready for occupancy

Mobilhome Corp., Bakersfield, Calif., carries prefabbing to the fullest degree. This year it trucked 3,000 factory-assembled dwellings (defense housing units at $6,000-$30,000, offices and custom homes) from 8 West Coast, 2 Arizona, 3 Midwest plants.

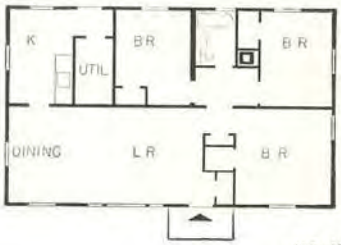
lt custom design, *this Kansas City house is one of many*



;worth Homes, Inc., Kansas City, Kans. sells some 1,300 prebuilt" houses a year at all prices to builders in 192 ·stern cities; 70% are custom orders of builders' own plans, ıtionally framed and mass produced in modular sections.

New *$19,700-$21,800 luxury models have rear-facing living and bedrooms*

Crawford Corp. prefabricates some 2,000 houses a year in its Baton Rouge, La. plant, builds many itself (see 1,400-house New Orleans subdivision Sept. '51 issue), also sells $7,500-$25,000 houses and multifamily units to dealers through the South.



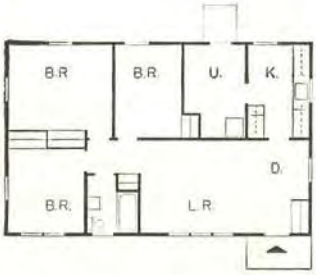
"Calhoun," *$9,350, is Knox's biggest seller*

Knox Corp. Thomson, Ga. will produce about 2,000 houses this year in the $9,750-$13,500 bracket, build some and sell some to franchised dealers, who handle house-length wall panels with cranes rented from Knox. Firm has own land-planning and legal departments, finance company, is working on a packaged kitchen-bath-heating-air-conditioning core for future houses.

"Groton," *1952 model has greate*
dow area than 1951 model below

Pagemaster Homes (Page & Hill Homes, Inc.), Shak
Minn. has been fabricating conventionally framed, arch
designed homes since 1932, ships most to ten states within a
mile "economical" trucking radius. Final prices around $9
$10,000 plus lot. Firm will extend credit until house is under

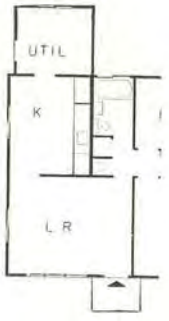
Old model *is conventional in appearance, with window boxes, shutters.*



New model *has sweeping overhang, glass wall, privacy windows*

Pollman Homes (Thyer Mfg. Corp.) has five basic floor plans, a Toledo, Ohio plant that manufactures 40 variations with double-wall construction for the North, another plant at Collins, Miss. that makes 40 single-wall types for southern climates.

"Lawrence DeLuxe," *with shingled exterior, has several two- and three-bedroom variations.*



General Industries, Inc., Fort Wayne, Ind., in its seventh manufactures about 1,000 units annually, also licenses SOD Springfield, Ohio to make its houses. Delivered prices, incl lot: $5,250-$12,000. (See relocatable house, p. 113.)

klin," *older model in sman" line, had 15' long n big enough for dining.*

tly" *model (plan above) has variety in window sizes, exterior siding*

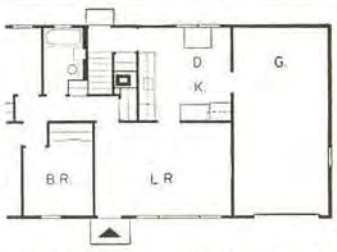
ern Homes Corp. (Lumber Engineering Co., Dearborn, .), designed by architects Morris & Svoboda, are at least 26′ to permit good interior planning. Next year plans will have span roof trusses, nonbearing interior partitions.

"House of the Year" *(plan, left), designed particularly for retired couples, sells for $5,200. It is being built in firm's 1,100-house St. Petersburg project.*

"Stylemaster's" *$3,350 dealer package retails for $7,625 in St. Petersburg, has 756 sq. ft.*

Florida Builders, Inc., St. Petersburg has grown in two years to the position of Florida's biggest low-cost builder. The firm turns out some 800 units a year, sells half to franchised dealers in the state, builds the remainder itself.

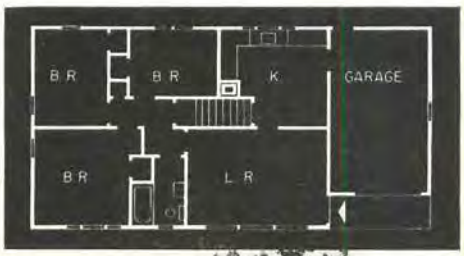
Comparison *of early Best house, left, with new model below shows great improvement in design.*



Hip-roofed *"DeVille," one of Best's stock models, is available with or without basement and attached garage.*

. Best Factory-Built Homes, Inc., Peoria, Ill. will ship ouses this year in the $8,000-$25,000 bracket, is building er plant downstate to offer more variety. Best houses, assembled, are often to-order jobs of builders' own plans.

"Rancher" *houses have three variations, designed for basements. Model shown has 864 sq. ft.*



Older model *had smaller living-room window, but was generally similar.*

Ford Factory-Built Homes (Ivon R. Ford Inc.), McDonough, N.Y. average 400-500 houses a year, offers 25 ranch-style and Cape Cod designs, a variety of siding. Dealers can buy heating, plumbing, appliances through factory at jobber's prices.

Photos: Guill Photo; H. H. Quattlebaum; Richards

New Century Homes, Inc., LaFayette, Ind. puts out an average 600 houses a year, retailing between $6,300 and $18,000. It is c rently building houses on 14 basic floor plans, distributes them Indiana and adjoining states, and as far west as Colorado.

Connett Engineered Homes, Inc., St. Joseph, Mo. will produce units this year, aims for 1,200 units in 1953. Its cheapest ho retails for $5,500; it has put out a two-story motel selling at $35,0 Connett maintains a full-time architectural department and supp its customers with individually tailored models. The company 90 dealers through the Midwest. Photo at far left shows part extensive Connett project.

Admiral Homes, Inc., Pittsburgh, Pa., averages about 500 hou annually in its West Newton plant. Its eight standard models ra from $8,500 to $13,500, but houses are also done to builders' owners' specifications. About one-half of production is in a line 1½ story Cape Cod houses; remainder largely ranch type. Compa reports that demand is for larger houses, hip roofs.

Precision Built Homes, Inc., Pikesville, Md. plans to increase p duction from 400 units in 1952 to 1,000 in 1953. Homebuyers encouraged to lay their own foundations on their own lots, contr plumbers and electricians and do most of the inside work. Dea builders erect the panelized house shells for $2,990-$3,850, or co plete all work for $7,890 and $9,550 plus lot.

Richmond Builders, Inc., Richmond, Ind. has a price range (excl ing land) of $8,000-$14,000, is building a new factory and expe to increase production from 400 units this year to 600 next ye Its 1953 model will have complete storage walls with shelvi Firm offers construction money with the package. Distribut area is primarily through the Midwest.

Yetter Homes, Inc., Savannah, Ga. has a production capacity five houses per day, can erect a house in seven hours. Photos (*le* are of houses in rental project near Atomic Energy Commissi Savannah River Project, Aiken, S. C. Price range: two-bedro models $5,800-$6,500; three-bedroom models $6,800-$7,500 (lot included). Shipments in 1952: about 500.

Farwest Homes (West Coast Mills), Chehalis, Wash. fabric four basic models and duplexes by designer W. A. Wollande the $6,500-$18,000 field, distributes to builders on the West Co in the West and Midwest. Houses have truss roofs, standard dou construction in house-length panels. Services include neighborh plot and color planning. Plans call for new models soon.

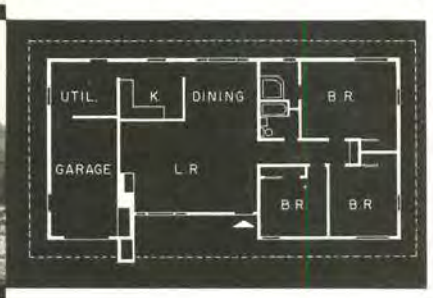
Place Homes, Inc., South Bend, Ind. shipped 260 houses in 1 estimates 400 for 1952. Selling prices (including lot) are f $8,950 to $15,500. Territory: Ind., Mich., Ohio, Ill., and Place uses double-thickness insulating glass; in the late sprin 1953 plans to introduce low-pitch roofs and exposed beams. M houses have bath-and-a-half, three or four bedrooms.

Way Homes, Inc., Walnut, Ill. produces units retailing at -$25,000. In 1951 it shipped approximately 350 one- to four- om homes and has set the same goal for 1952. Designers work round and plan to introduce a new line by next February.

o, Inc., Seney, Mich. manufactures houses, motels, town halls, l and medical clinics, taverns, churches, store buildings, small trial plants and farm utility buildings, priced from $6,000 to 00. Sales in 1951 reached $500,000; 1952 sales are estimated 00,000. Construction utilizes low-grade and short materials.

Hodgson Co., Inc., Dover, Mass., one of America's first pre- cators, does individual planning for each customer; prices from $9,000 to $35,000. Most popular style is a "Colonial house." Latest large project was a group of 30 classrooms he City of Baltimore. These structures are bolted together, be easily moved to follow shifting school population.

and Modern Housing Corp., Baltimore, during 1951 and was busy with Navy contracts, produced about 150 civilian s a year. Shortly, it will be marketing a new ranch-type . Special features include ceiling-panel radiant hot-water g remote-control wiring, electrically operated garage door, arquet floors bonded to the floor slab.



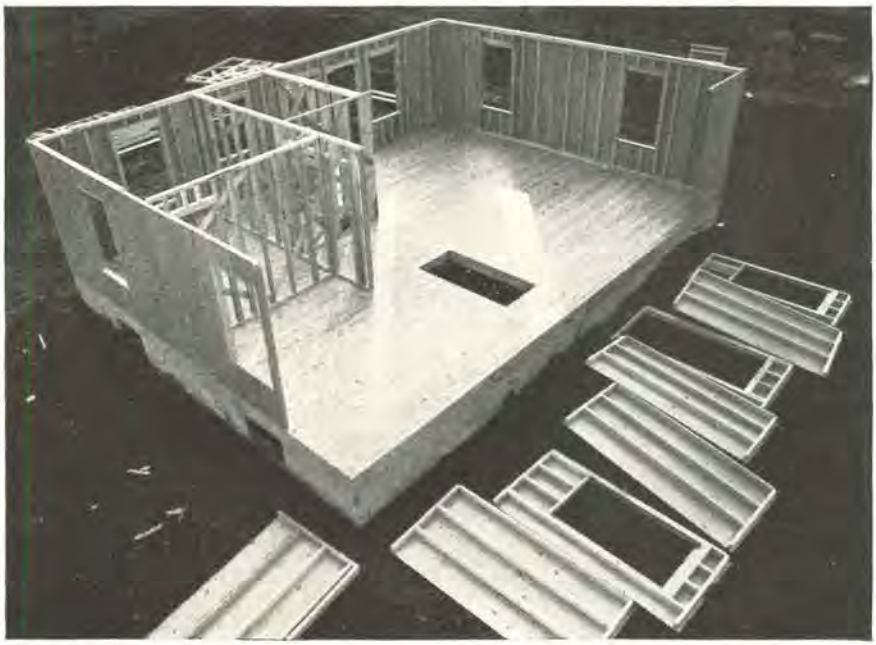
West Fabricators, Inc., Janesville, Wis. has produced over 3,000 during the last 15 years, anticipates an annual production of 00 units. Prices range from $6,800 to $25,000 and firm will to any plan customer desires. Shipments are made within 300- adius of Janesville plant and all houses are designed to fit the ular site conditions.

ny Portable Building Co., West Chicago, Ill. in addition to g specializes in corn cribs, grain bins, hog, sheep and shelters, brooder, poultry and milk houses; also small fac- and expandable motels, concession stands and garages. y-package prices on houses are from $2,365 up. Shutters, oring, oak flooring, stairways, etc. are extra.

vest American Houses, Inc., Houston, Tex. restrict prac- all sales to builders of sizable projects—e.g., 314 low-cost units for a Fort Worth builder, each 729 sq. ft. and renting per month; 140 one-family houses to the Aluminum Co. of a. Finished houses sell from $7,000 to $12,000. Last year's 750 units; expected this year: about 950.

ructures, Inc., Peshtigo, Wis. currently produces 275 to 300 er year, concentrates on ranch-style homes. Price range: to $15,000. Fourteen models are in production, others in g stage. Construction is exterior wall bearing, facilitating nt of interior panels after houses are closed in. Same set of builds any of six possible houses.

Photos: The Fellman Studios; Carl E. Kirk & Co.



Builders *like prefabs because shell of house goes up so fast. These plywood sheathed panels are most rudimentary type, give builder wide choice of exterior treatment, permit him to finish interiors conventionally.*

Photo: Pease Woodwork Co.

These builders joined 'em

They believe prefabrication lets them build more house for less mo

House & Home editors interviewed a number of builders in various parts of the country who are using prefabrication. This is a small sampling of the several thousand who have had experience in buying factory-made houses but what these particular men say should have real significance for other builders.

Well over 5,000 builders throughout the country are now buying pref cated houses. Most of them are conventional builders who once were s cious of factory-made houses but tried one or two, then a few more, decided to stay with them. Many continue to build conventional house a higher price bracket along with their prefabs. Here are the experi some builders have had which are typical of hundreds of others:

Even in Chicago. . .

Everyone knows Chicago is a tough market for new ideas in housing. rigid codes, inflexible labor restrictions and a supposedly conservative g of buyers have limited the area to masonry houses that seem overp when compared with those in other cities. Yet in the past few years se prefabrication firms have been able to introduce their houses.

Among builders who once talked against prefabrication—but are boosters—is George Nixon, a past president of NAHB. Over a period years he has built thousands of masonry houses. About two years a and his son Bob realized their houses were too high priced for the gro children of families which had bought their $17,000 to $30,000 house

White collar market

"We went to prefabrication," says Bob, "because we wanted a pa we could sell to these young white-collar workers in a good neighbor With prefabrication we can give a young couple a three-bedroom house a carport and a larger lot for a considerably lower price than they' for a two-bedroom brick house without carport in our older commu

This year the Nixons bought 160 acres surrounding a small lake (20 miles southwest of Chicago) where they will build what may b finest prefabricated community in the country.

f View Hills will consist of 300 houses
acre lots. The gently rolling land, the
nt street layout with several small
and the 34-acre lake should make it a
community. Prices will run from
0 to $13,500 for houses with three or
edrooms. A 12′ carport closed at the
but opening to the rear will make the
use seem 48′ wide. The first houses
w under way.

oofing off

e are fewer bottlenecks with this
of construction." Bob Nixon says.
e are no nail shortages, no cabinets
er millwork missing. The sequence
k is better because every man knows
hedule. The definite progression on
b reduces labor costs. There is less
e for the men to goof off or walk up
own the street looking for something.
r earlier prefabs the work was done
l our service calls were one half of
for our conventional houses."

00 cheaper than conventionals

e same suburban area of Chicago,
r Otto Kronenberg and his son Bob
uild both conventionals and prefabs.
s family the father pushes prefabs,
n builds conventionals—about 50 of
They estimate that the same size
costs them $1,800 more if built of
itional masonry (not veneer). As
ze of the house increases, there is
nore difference. A four-bedroom con-
nal house they sell for $20,000 is
$13,000 in their four-bedroom pre-
ated model. Bob says he has to build
asonry houses two feet longer than a
to give the same interior space, be-
walls and partitions are thicker.
ing for the same size houses is $100
r in the prefabs because plumbers
o the whole job in one operation.
s also save the Kronenbergs money
e they do not have to use heat in
until they are ready to varnish the
By that time the regular furnace is
ing. "Enclosing the house in one day
reat advantage," says Otto Kronen-
"There is much less stolen. We finish
ole house in 12 days. Our subs get
out faster, and they like that. We
r money in three weeks rather than
e months, so we get a fast turnover."

ects from national advertising

f the greatest dividends Otto Kron-
says they get from prefabrication is
mber of live prospects turned up by
al advertising. People who have read
ine advertisements can find him in
ssified phone book under the prefab-
name. "We also benefit by every
model home that any other dealer puts up," he says. "They all help to advertise our house. Dealers in other areas send prospects to me, just as I send them customers who want to live in their districts."

Volume increased five times

Another firm operating successfully in the Chicago area is Urban & Stephanie, who build in Des Plains, 15 miles NW of the Loop. As conventional builders they put up six or eight houses a year. Now they do 40 prefabs, aim at one a week.

They credit prefabrication with letting them build throughout the winter. Because they offer their men year-round work, they can hold good men, and are on especially good terms with the unions. They also get lower prices from their subcontractors because of steady work and standardization. Their plumbing bill is from $150 to $200 less than if they were building conventionally, they claim. A large painting contractor gave them a low price because standardization means less supervision and he keeps men working all winter.

Photo: Thyer Mfg. Corp.

Houses *that go up fastest are those with full-length panels and complete exteriors. Special equipment is often necessary to handle them.*

Save purchase time and overhead

Urban & Stephanie are unaffected by fluctuations in materials prices or labor. "Prefabrication lets a builder have more time for land procurement and to make sales," says Urban. "If we built conventionally we'd have to have more people in the office and twice as much capital."

"The greatest asset to a small builder is the public acceptance of nationally advertised products." Stephanie says. "When we advertise, people know the name of our house, even if they never heard of us.

"Being part of a big, national system also lets us put in many items we could not afford to take time to buy if we were small conventional builders. We have joined a huge co-operative for buying."

Both partners attended the accounting course given at the factory and feel they learned a lot from it. They estimate they are selling their houses at about $1,700 under the competitive market in their area.

Syracuse has 1,000 prefabs

According to the local FHA office, Syracuse, N. Y., a city of around 220,000, has about 1,000 prefabs put up by some ten builders since the war.

"Every builder in town wants to know about prefabs," says Mario Pizio, who with his brother Fred has built up to 100 houses a year. "They used to laugh at prefabs, but now they come out to see our houses and ask questions about costs and how we save time."

The Pizios' father was a conventional builder for 20 years but the sons shifted to prefabs because they could build faster. They now turn out a house in 30 days instead of 90. With the same number of field personnel they can build far more houses than they used to. They also like the fact that all the major items in the house come on one invoice, which "cuts down terrifically on bookkeeping." They feel they still offer individuality with prefabs.

Their houses sell at $7,000-$10,000. They are just starting a new 50-acre tract where expandable-attic houses will sell for $7,000.

Less woman trouble

Builder Harry G. Herrmann of Syracuse, an old-time conventional builder, likes prefabrication because it not only lets him build faster but saves him a lot of trouble with women buyers who keep changing their minds as a house is going up. "The prefab builder is off the hook because when a woman says she wants a window there instead of here, the builder can say the house comes only one way and it's too late to change it."

Herrmann builds from 10 to 25 houses a year, has an informal arrangement with two other builders who put up the same kind of house as to division of territory. Most of his houses sell for under $10,000.

Prefabs tailored to order

An opposite approach to changes is taken by builder F. P. Arnold of Syracuse who averages 25 to 30 prefabricated houses a year. He lets the customer make as many changes as he wants and charges him accordingly, adapting the factory-made panels and parts to his buyer's wishes. Arnold believes prefabrication permits him to save his buyers about 10% on the cost of the house. A valuable service he gets from the factory is that it supplies him with the FHA forms and cost breakdowns, so red tape is greatly reduced.

Arnold was the first prefabber in Syracuse, having started using such houses in 1940. He believes one of the greatest advantages in prefabs is that a builder knows

his costs and can sell to his buyers from a catalogue. This saves him the expense of building a model house.

It looks so easy. . .

One trouble with prefabrication is that it looks so easy that everyone wants to get in on the act. In Syracuse the Pizio brothers have their masonrywork done by the Celio brothers. After seeing how fast a prefab house went up, the Celios decided last spring to try it themselves and they are now builders in their own right. They built some 20 houses up to October and are planning 50 more in the $7,500 to $9,500 price range.

The truck backs up

Biggest prefab builder in Syracuse is Howard D. Clark, active in building and real estate there for 40 years. He got into the prefabrication business after the war when he was mobbed with veterans looking for houses. Since then he has built about 300 prefabs.

He now builds both conventionals and prefabs, has three different projects under way, and has finished about 120 houses this year. Prices range from $9,000 to $16,000. "Originally we got our houses by rail and there was a lot of damage. Today it's an entirely different story because the truck backs right up to our site."

Sold in an hour and a half

Typical of many small builders who have tried prefabrication is Robert Abercrombie of Cincinnati. He used to build three or four houses a year, now builds 12, with a working capital of only $7,500. He figures prefabrication lets him save about $500 a house and he takes a profit on three times as many houses as he used to.

Says Abercrombie, "I can build prefabricated homes all year round. All I need is two or three days above 20° in winter to get started. Then I roof in quickly."

Builder Clifford Knopf of Louisville, Ky. builds about 100 prefabs a year, figures he needs $200,000 working capital. In 1948 he sold out a 28-house subdivision in 1½ hours, was so encouraged with this reaction to prefabricated houses he went on to develop a larger project where he has sold 250. He has 450 more lots near a large, new factory, is optimistic about future sales. Knopf believes he is about $1,000 under the sale price of his most competitive conventional builder. He grosses 9%, nets 5% on his houses.

Also in Louisville is builder T. N. Ryan, Jr., who builds 12 to 15 houses a year on scattered lots. "Knowing all your costs in advance is valuable," Ryan says. "A conventional builder can't tell in a fluctuating market what's going to happen to costs and availability, but I can. I also like the speed of erection and ease of turning over my money. I require only $7,000 working capital." He has needed a construction loan only twice when he had two houses under way at once.

Ryan admits he cannot compete with what he calls the small "tepee" builder but claims he is from $1,000 to $2,500 under conventional builders in the $10,000 to $13,000 market (plus land). His profits run to 10 or 11%.

Full value from FHA

In Lexington, Ky., C. A. Coleman has been building prefabricated houses since 1936. He now builds from 75 to 100 a year, puts brick veneer on many. With an eight-man crew he gets a house up in one day, finishes it in three weeks. One thing he likes about his houses is that "FHA or VA appraise them at full value, or near it."

Resale values are good, too, he finds. "Two or three years ago I was doubtful of resale values, but I am no longer. Forty or 50 of my houses have been resold at a profit up to $1,500. Ten of my buyers have invested in extra houses which they rent for income.

Structurally better

Karl Moldenhauer of E. H. Moldenhauer & Sons of Cedarburg, Wis. took a year to sell himself on prefabrication. But once he switched he found he could double his production of smaller houses while he continues to build larger conventional homes and some commercial buildings. Prefabs are 20% cheaper than conventional houses, he finds.

Says Moldenhauer: "You can't get close to these houses in value received with conventional construction. They are low priced and high speed." He sells a 674 sq. ft. house with lot for $6,999. At his 50-house project in Grafton, Wis., the factory helped with construction money, also helped him place his mortgages.

"Conventional builders think of prefabs as cardboard boxes," he says. "Actually, our houses are so strong and their box-beam floor so rigid they have withstood floods and washouts far better than conventional houses." Visitors have mistaken his conventional houses for prefabs, and his prefabs for conventionals.

Mechanics and subs like them

"Our mechanics like to work on a prefab house," says builder A. S. Mizell of Yonkers, N.Y. "It's clean, it's fast and it's simple. There are no accidents on the site because there are no hazardous conditions. They also like it because layoffs are at a minimum; bad weather doesn't hold up. We run a full union operation.

"The subs like it too," Mizell contin "Everything is standardized and plumbers, heating contractors and trician don't wait for anything. They in and get out fast. In fact the plu has cut his price 10 or 15% becaus saves that much over ordinary jobs.

Photo: Precision Built

Some firms *ship panels complete with wi and doors, insulation and interior surfacing.*

"In our three-bedroom models at ar $12,000 we are about $3,000 unde competition in this area. We build a for $20,000 and there we are $5,0 $6,000 under conventional builders.

"We've built about 30 houses in a and the only thing that is holding us is finding the right land. Right now got over 40 deposits from people wh begging for houses. They'll live anyw in Westchester County."

Prefabs on a much larger scale ar ing built by Ignatius Monforte, who p nearly 300 in one area of Yonkers also has built a group of ten in Hart that range from $32,000 to $44,000 a few in Mt. Kisco at $22,000 to $27

Builders had difficulty getting the prefabricated houses introduced in Y ers because the local building depart would not approve them. This obs was overcome although one make of is still barred because neighbors obj to the exterior when a few were built.

Why builders with a rush job to do prefabrication is illustrated by the pen-Holm firm of Duluth, which ha build 100 houses for a mining compa Ishpeming, Mich. With 36 carpenters got the 100 houses roughed in durin weeks, which they thought was good considering the handicap of 41 da rain and two short strikes. The same fabrication firm supplied material f houses and six school buildings for a job in Babbit and Beaver Bay, Minn. summer and met a very tight produ schedule which they believe could not been achieved with conventional met

inancing the prefabricated house

nufacturer help shoulder the financing load

and lenders grow more optimistic

:w years back prefabs meant money oles. Many bankers turned away from as a poor risk. Due to improved de- better construction and increased ic acceptance, much of the resistance broken down.

efab loans are still tough to get in areas such as Texas and the West t (California money is also tight for entional houses today). Elsewhere, y lenders have reversed themselves and face the prefab builder with a more uraging attitude. A second factor also s financing problems: many manufac- s pave the way for loans.

ufacturers give help

ugh prefab manufacturers prefer that builder solve his own money problems, provide their dealers with many finan- aids. Typical is the help given builders Midwest firm which:

- Furnishes FHA and VA approved blueprints, complete specifications and other technical data required.
- Supplies No. 2005 forms already filled out and trains representatives to help dealers complete other loan papers.
- Has representatives help the builder figure his cost and profit breakdown for submission to FHA or VA.
- Helps the builder get local FHA evaluation on house and land and get loans from local lenders.

his financial spadework greatly lessens time and red tape of financing.

r the first hurdles

ot only do some firms run interference the builder in getting loans, they will extend a line of credit to builders. The er Manufacturing Corp. offers 50-day im financing at no charge. To get the e shipped the builder sends the manu- urer: 1) two signed copies of the r; 2) a $200 deposit per house; 3) a r from a lending institution saying ill honor the manufacturer's invoice as as the house is under roof.

milarly, the Harnischfeger Corp.'s own ptance subsidiary provides interim ncing when local banks are cool to pre- builders. The acceptance company ad- es construction money and helps place tgages for builders.

Another firm, the Knox Corp., "allows deferment of payment for the house package." If also needed, it will provide additional construction money at second and final inspections.

No waiting for mortgage shopping

Several firms have their own acceptance companies which, when necessary, will handle the entire financing deal. A case in point is the largest manufacturer in the field—National Homes. Its acceptance company can make VA and FHA approved loans and has already handled more than $90 million in mortgages on National houses. But the acceptance company is no benevolent association. Here is how it works:

First the builder must sell the house. Then he sends all sales and FHA papers straight to National. The house is usually shipped in two or three weeks and the builder can count on construction advances (at 5% interest plus 2½% service fee). Some builders turn these advances into a revolving fund for starting more houses. It frees the builder's own capital for buying and developing more land.

If the occasion warrants, the acceptance corporation also makes loans to dealers on FHA operative builder commitments. There is not to much of this type of financing: in most cases the dealer is sold ahead and the mortgage carries the owner's name.

Although the amount of financing aid varies with the manufacturer there is a trend to increased help for builder-dealers. A few companies, such as General Industries, have acceptance subsidiaries which will also finance a "limited amount of speculative building by properly qualified builders; terms are by individual negotiation." Several other companies now plan to form acceptance subsidiaries as a result of their dealers' need for a financing plan.

But what about the lenders?

Although financing plans help close the money gap, the inevitable mortgage must, in most cases, be placed outside. Today, many lenders like prefabrication because of these advantages cited by the *National Savings and Loan Journal* (Apr. '52):

▸ The lender knows in advance what the finished house will be like.

Better designed houses *such as this glass-ended model, have eased financial problems of builders. By Roll-A-Way Homes Div. of Nicoll Lumber Co., it has 880 sq. ft., two bedrooms, a convertible study, fireplace. The price: $8,750.*

▸ He can closely determine beforehand what final costs will be; there is little chance of costs getting out of hand.

▸ The lender knows approximately how long it will take to finish the houses.

"These assurances take much of the risk out of construction lending under today's uncertain market conditions," the *Journal* concludes.

The speed of construction with prefab houses is a big factor when a builder needs interim financing. Today a Syracuse, N. Y. banker says, "We don't have our money tied up very long compared to conventional houses." A Midwestern banker puts it another way. Says C. E. Kelly, vice president of the Lincoln National Bank of Fort Wayne, Ind., "The faster the rollover (of money) the lower the risk."

No guesswork on quality

W. C. Rainford, president of Mercantile Mortgage Co. of Granite City, Ill. says: "The investor is offered a product of known quality which can be identified by a typical plan, to be constructed in most cases by a builder of known experience. . . . Most large investors will purchase mortgage loans on prefabricated projects but they occasionally set up certain architectural requirements of their own depending on each project." Rainford has directed over 50% of his firm's postwar volume of new construction financing to prefabricated houses.

In the final analysis financing is no different than for conventional houses. As one banker puts it: "Some builders do a good job with prefabs, others get sloppy.

Houses in a hurry

How prefabrication works

When a prefab builder was recently asked why he no longer built conventional houses he chortled and said, "Why I'd have to go back to work."

Herein may lie the biggest appeal in prefabrication. The builder lets the factory do the work. Another builder of prefab houses said, "The factory is my biggest subcontractor."

The factory is certainly the payoff. When a prefabrication organization is trying to sign up an especially capable builder the common practice is to invite him to see the plant. To see the production lines of an efficient factory is a convincing experience.

Why factory production is cheaper than field production

1. Wage rates are low—often $1 per hour less in the plant than in the field. Hourly wages in some big plants average about $1.50.

2. Production is high. Men specialize in one job, and with the help of machinery, turn out wall assemblies so rapidly that visiting builders blink with amazement. "It costs us only a dollar to hang a door," says one prefabber. In one plant, production is so high that only 6% of the sales price of the package is for labor.

3. Mass purchasing saves money. Builders envy the Levitts their enormous purchasing power, yet one big prefabber alone buys for nearly three times as many houses per year as do the Levitts. These savings mean low package costs to the builder.

How houses are factory-produced

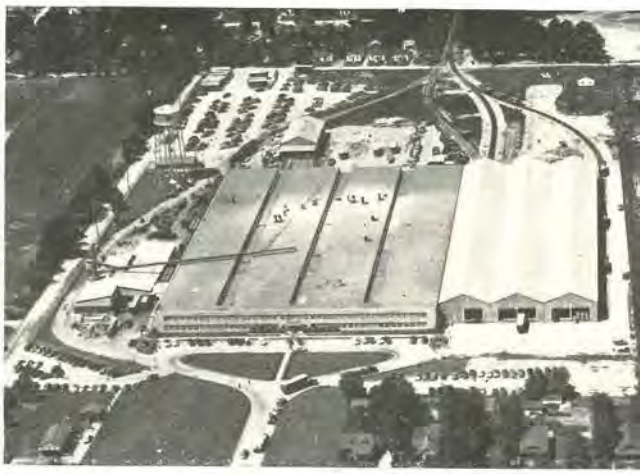
Buyers of prefabricated houses are usually less interested in details of how parts are made than in the results. But one feature that all visitors note with interest is the high quality of lumber they see. In the best plants all the lumber is No. 1—"much better than I use," most builders are forced to admit. The factories use good lumber because: 1) in fast, large-scale production they cannot bother with anything but top grades, 2) inferior grades do not line up properly in precision jigs, and 3) prefab houses have had one strike against them in many towns and manufacturers use the best of materials to overcome prejudice.

In fact, construction is done with so much care that a trip to one of the better factories is enough to convince a skeptical building inspector that prefabrication may turn out a sounder house than many he has permitted. A factory producing thousands of houses cannot take chances with anything that may kick back. Top-grade materials of all kinds may be cheaper for the factory to buy than an average builder pays for second grades.

Flexibility is the keynote

The wall panel is the most common element of prefabrication, as the photographs on these pages indicate. A builder can buy almost any kind of panel he wishes. The simplest is a 2′ x 4′ stud wall frame, 4′ wide and 8′ high with plywood sheathing on one side. The most complex is a considerably larger section (often the whole side of a house) which has doors and windows installed, is insulated, has painted wallboard on the inside and sheathing building paper and siding on the exterior.

Between these two extremes are many variations. If a builder wants to buy panels which are sheathed and to which he applies conventional plaster inside and brick veneer outside he can find plenty of factories to give him what he wants. If he wants to do his own dry-wall construction he can buy plasterboard through the factory or from his local supplier. He can buy floor and r panels and trusses from a plant or make his own. He can almost any kind of siding he wishes on or off the panels. short, the day of the "prefabricated look" is gone because fabs now look like conventional houses.



Modern plants *such as this 600,000 sq. ft factory can produce more than 40 prefabs a day.*

Automatic machines drill all bolt holes required *wall panel in one operation. Production line, see the background speeds completion of panels.*

Distribution: the dealer setup

Some firms sell only to authorized builders, some sell to any bui in quantity and some sell to individuals. The little builder always find a plant that will cater to his needs, regardless of little he wants.

Some bigger firms fix a minimum quota per dealer and seldom interested in one who orders less than 12 houses a y One firm requires a new dealer to have at least $15,000 work capital and screens prospects thoroughly beforehand.

Most firms ask the builder to visit the plant to talk things before he gets his franchise. A company field man instructs in putting up his first house and later the field man supplies when needed. Companies often help with land planning, sh advertising bills and otherwise pitch in when the builder calls miscellaneous advice. Manufacturers will even help to overc prejudices in local building restrictions.

: vs. rail

firms prefer not to ship outside of a 500-mile radius of their
, as trucking costs are high for longer hauls. The builder
shipping which runs to about a dollar per mile per house.
ough cheaper, rail delivery has two drawbacks: delivery
ules are uncertain (trucks can be depended upon to arrive
given time); damages in rail shipment are apt to be higher
by truck because of the extra handling at the destination.
firms use the railroads for long hauls. An Ohio firm for
ple uses trucks up to 300 miles, rail beyond that. It would
$520 to truck a house 631 miles to Norfolk, Va. By rail it is
plus $75 for trucking.

dy erection

scheduling by the manufacturer permits the dealer to know
xact day when the house will arrive, and in time for the
on crew to start work at 8 A.M. The truck backs right up to
oundation and panels are put up as they are unloaded. In
of rain it may have to stay over a day.
st firms figure their houses can be put up in less than a
time with six to eight men; by evening the house is under
and key. An average crew for a moderate-size operation is
laborers and three carpenters. Five or six men can complete
houses a month.
-site labor varies from 300 man-hours for an 800 sq. ft.
to 800 for a two-story, 1,600 sq. ft. model according to one
This includes finishing the interior plus grading, does not in-
plumbing, heating, wiring which is usually subbed.
nufacturers stress repeatedly that the most important pre-
site for prefab houses is an *absolutely level* foundation or
They shun hand levels and urge builders to use a transit.
the slab is off ½" panels will not line up, framing will go
, and the entire house will be distorted. Once the slab is
, "you can throw away your level," says a Syracuse builder.
rything goes up like clockwork."

Bare slab at 8:00 a. m. *Trailer parks at one corner, delivers wall panels which go up so rapidly that by late afternoon the house is completely enclosed, roofed and under lock and key.*

Walls are up at 11 a. m. *Interior wall frames, often shipped in full-length sections, are easily tilted into place.*

Roof goes on at 3 p. m. *Six to eight men can erect shell of an average house in less than a day. Most firms supply roof trusses or precut rafters.*

In most factories *precut framing members are assembled on precision jigs. Then plywood sheathing is applied to one side, insulation fastened in place and interior wallboard is glued and/or nailed in place. Doors and windows are installed with frames and hardware. Each process along this line takes four minutes.*

What does a prefab cost?

Top question with builders considering prefabs is:

Can I build cheaper than I can buy? Many answer emphatically: No!

Builders point out that the package supplied by prefabbers is only 20 to 30% of their total cost and that the cheapest part of any house is the exterior shell.

Only the builder himself knows his true costs and small profits he can make in various items, so by comparison builders can learn a lot by analyzing carefully the prefab cost figures below. They are estimated for a two-bedroom, 700 sq. ft. house and a three-bedroom, 845 sq. ft. model erected by Price & Price of Lafayette, Ind. The Price brothers of National Homes Corp. own a building subsidiary and offer their building costs to their dealers who can then make comparisons. The figures, says James Price, represent neither the maximum nor minimum in building efficiency, are just a good average.

	Two B.R. 700 sq. ft.	Three B.R. 845 sq. ft.
House package	$2,610.00	$3,019.00
Transportation	30.25	30.25
Staking out and bulldozing	35.87	35.82
Foundation materials and labor	223.47	286.23
Slab-floor materials	166.38	206.47
Slab-floor labor	56.93	72.99
Erection	379.42	452.38

Breakdown of erection for labor for two-B.R. house

		Hrs.	
	Rough labor..	13.2	$ 22.11
	Carpenter	38.0	92.15
Exterior trim	Carpenter	18.2	44.14
Shingle roof	Carpenter	15.4	37.35
Setting partitions ..	Carpenter	15.4	37.35
Interior trim	Carpenter	44.0	106.70
Install chimney	Carpenter	2.9	7.03
	Rough labor ..	1.1	1.84
Insulating attic	Carpenter	6.6	16.01
	Rough labor..	1.1	1.84
Cleaning inside ...	Rough labor..	7.7	12.90
		163.6	379.42

Chimney	50.00	50.00
Plumbing, including fixtures, H.W.H., permits, water to street	600.00	637.00
Sewer	80.00	80.00
Electrical wiring and fixtures	168.50	188.50
Heater (included in cost of package) 220 gal. tank, 100 gal. fuel tank, venting	92.00	96.00
Gutters and downspouts	56.00	65.00
Grading, walks, stoops, seeding, etc.	138.34	147.01
Painting (two exterior coats)	89.50	100.30
Miscellaneous hauling, small tools, trucks, call backs	85.00	86.50
Survey, utility deposits, building permits	30.00	30.00
Direct costs: insurance, taxes, social security	129.73	157.10
Overhead	502.14	574.06
Financing expenses	319.40	326.90
TOTAL COST (house and loan costs)	$5,842.93	$6,641.51

Prefab vs. conventional

A Michigan prefab builder sells a two-bedroom, 1,104 sq. model with attached garage for $11,054 (his costs, including la were $9,613). Compare that with the three-bedroom, 1,000 ft. house plus attached garage being built in Southwood at Syos Long Island and selling for $9,990. These are approximately same houses Levitt is building in Pennsylvania, but without ben of Levitt-size mass production.

Morton Brothers, builders on Long Island, would give pref bers a run for their money with two models they offer. One three-bedroom, 1,095 sq. ft. house with basement, two baths attached garage, sells for $11,999. Another, a three-bedroom, sq. ft. model with three bedrooms, basement and attached gara sells for $9,999.

How much to build bigger prefabs?

A builder in the Detroit area who erected a three-bedroom, 1, sq. ft. perimeter-heated slab house figured his costs at $9,747, including land. His package consisted of practically everyth but the plumbing, wiring and heating, and cost him $4,105. gest cost difference between this house and either of the sma National Homes analyzed at left was in the price of the packa But more labor on the 1,245 sq. ft. house, higher costs for exca tion, more plumbing and heating account for the higher total.

Range of prefab packages

Packages of various prefabbers range in price from un $2,500 to over $5,000. Some offer a rigid, standard packa Others permit the widest flexibility short of allowing the buil to design the house himself. Some will provide girder, floor jo and flooring if the house is to have a basement. Many m available at extra cost such items as interior trim, flooring, h ing, cabinets and screens, thus offer the builder more economy

One manufacturer can supply a two-bedroom, 721 sq. ft. ho for $2,643, another two-bedroom, 896 sq. ft. model for $3,04 three-bedroom, 978 sq. ft. house for $3,305, a two-bedroom attached garage model of 1,254 sq. ft. for $4,105.

How much does a duplex cost?

The builder who has considered building rental housing may t a second look after seeing the package prices on basem less duplex apartments. The price for a two-unit, six-bedro 72′ x 24′ model of one prefabber is $5,685. Included in package are: single hardwood floors, plywood for kitchens, ba rooms and utility room, 2″ x 8″ sill plate, 6″ x 8″ wood gir joists, exterior walls, windows installed, doors hung, gable pan vertical siding applied over building paper and prime paint shingles for roofing, window panels and shutters, exterior tr interior partitions, interior trim, sliding doors for closets, she for linen closets, poles and cleats for other closets, ceiling floor and roof insulation, interior wall and ceiling materials, framing lumber No. 2 or better yellow pine, all rough and fi nails, rough and finish hardware, a set of five blueprints.

Fort Wayne boomtown for prefabs

Builders who want to know what prefabrication does to a community can find out by taking a look at Fort Wayne, Ind.

This city of 130,000 is typical of the Midwest where prefabrication got a good start before the war and has prospered. It offers builders a cross-section of what may happen anywhere.

Since the war, prefabricated houses have taken over the biggest share of the new house market. In houses under $12,000 the prefabber has a virtual monopoly. About one family in ten now lives in a prefabricated or precut house; the proportion rises steadily.

This year about 750 prefabs will be built. About half sold for less than $11,000; most of the others are only a few thousand more.

It happened in Fort Wayne, will it happen in your town?

To a visitor driving about the pleasant residential districts of Fort Wayne a surprising sight is prefabricated houses in practically every neighborhood. These prefabs need to be pointed out by an expert because most of them fit unobtrusively among the older houses. *There are no restrictions on where prefabs may be built.* If these one-story houses occasionally seem out of place among their two-story neighbors it is not because they are prefabricated but only because they are generally smaller.

Prefabrication is so completely accepted by most people in Fort Wayne that as a construction method it is no longer news. A builder putting up $10,000 to $12,000 houses in the old-fashioned way (taking a month or more to get his house framed and under roof) would attract more attention and comment than a prefabber.

Factory-built houses are so commonplace that many buyers of houses in the $20,000-or-over bracket have had de luxe or oversize prefabs built to their requirements. Prefabs include apartment houses and even churches.

It is also significant that there are houses made by practically every prefabrication firm. After one or two firms broke the ice, others flocked in.

Despite all the prefabrication, however, two thirds of the 26-member NAHB chapter still do nothing but conventional building. Several of the nine prefabbers still do some conventional building.

Why haven't more conventional builders hopped onto the prefab bandwagon? "Vanity and profit," says one prefabber. "Taste and value," retorts a conventional builder.

"It must be the product . . . "

In Fort Wayne prefabrication has snowballed since the war. Says William B. F. Hall, president of General Industries Inc., the city's one prefabricated house manufacturer: "First one man gets into the business, gets cold water dashed into his face by the building commissioner or anyone else who has to make a decision about something new. The builder sticks to it. The public gets conditioned to the word 'prefab.' The public buys when they see the house is no freak. Then the conventional builder is impressed. First he's

The $19,000 four-bedroom National house (top) built by Ralph Shirmeyer is next door to another expansive but conventionally built Shirmeyer house. He believes that each one enhances the other.

Another big prefabricated house is this Pollman-designed model (center) produced by Thyer Manufacturing Corp. Builder Fred Federspiel made it look even bigger than it is by adding a three-car garage.

Typical of the small, moderate-priced prefabs that appear on single lots and in large projects is the New Century house (below).

Photos:

Row of Gunnison houses gains some variety different colored roofs, changes in type and of siding. Looking at these houses Gun dealer Hamilton Hunter says that prefabri need not be disguised.

Still in good shape after 15 years of hard three-room, low-cost prefabs (below) were in 1937 by the Fort Wayne housing auth Early use of plywood construction helped to come invariable early prejudice against prefa

Four-family apartment house sponsored and financed through George Poag, who promoted many such Peaseway duplex and "fourplex" apartments in Anthony Wayne Village and its Village Colony addition.

curious. He says, 'My gosh, if so-and-so can make money on a prefab, maybe I'd better look into it.' Then another builder takes the step—perhaps he's not even so talented as the fellows who tried it before him. But it comes easy. Then all the rest say, 'It can't be the man, it must be the product.' "

At least one prefab builder thinks it is debatable that prefabs can be built any more economically than conventional homes. "Any economy," says builder Fred Federspiel, "stems largely from the fact that you can get a prefab roof on quickly."

Why Fort Wayne went the prefab way

1. Proximity to the prefab plants. One big cost item in prefabrication is transportation. The Middle West is the prefab belt where the greatest concentration of factories occurs *(see map, p. 91)*, so transportation to nearby cities such as Fort Wayne is cheap. National and Gunnison, two of the giants, have plants in Indiana. National, in its Lafayette plant alone, produces 40 prefab houses a day.

2. The G.I. market. As in other cities, Fort Wayne had to provide housing for returning servicemen with little capital and a high family potential. At a time when there was no down payment for G.I.'s, prefabs were available.

3. Priorities. In 1946 and 1947 prefab manufacturers granted materials priorities by the National Housing Auth That gave them a big jump on conventional builders.

4. High per-capita wealth and purchasing power. The city diversified industry (air-conditioning and airplane parts, telev and trucks, motors and mining machinery), is in rich farm cou Fort Wayne's effective buying income per family at $6,875 the rest of Indiana today. Every year since 1946 over 1,500 h ing permits were issued (top year: 1946 with 2,046).

5. A good building code. Fort Wayne's model code worl hardship on the prefabbers. One dealer says: "It is a truism the worse a comunity's building code is, the higher up the valuation goes. Prefab builders get a good break from the code and good valuations from the FHA office."

6. A fair shake from FHA and VA. Says Bill Hall: "T wasn't anything particularly different about FHA and V Indiana except that they were more familiar with and educat the early efforts of prefabbers—Gunnison started down in Albany, for instance." Gunnison dealer Hamilton Hunter "The government favors prefabs in the low-priced field. Off think the buyer gets more for his dollar."

Not uncommon are prefabricated houses among conventionals. Small house is two-bedroom General Industries model.

o-ceiling window, brick front, wide overhang mark eneral Industries house, which is set well back from eet, framed by tall trees.

Dealer service. Hunter attributes a large measure of the s of prefab builders to good public relations. "The big s always came back to right any wrong for the customer."

Mortgage financing. The Lincoln National Life Insurance main office, Fort Wayne) made some of the first mortgage on prefabs. Insurance companies and banks thought the age risk was small in this community of solid, thrifty citizens a high health, education and intelligence record. Progressive age bankers, particularly in Fort Wayne's Lincoln National learned building costs thoroughly. "That recognition by the ig lending institutions," said one dealer, "went far to promote rate-cost housing. It helped give the veteran a home." Charles lly, vice president of the Lincoln National Bank, says banks o handle interim financing of prefabs because "the market le is compressed into a shorter period." "Financing is most rtant," says builder R. C. Metcalfe. "I am selling a mortgage as as I am selling a home."

ab pioneers in Fort Wayne

ost prefab builders will agree, it was necessary to educate omebuyer and to convince real estate interests of the soundness efabrication. Three pioneers did the job in Fort Wayne.

William B. F. Hall. In 1938 he chairmanned the Fort Wayne Housing Authority, which built 50 three-room dwellings of prefabricated plywood panels (with WPA labor in an otherwise idle plant).

George A. Poag, builder and realtor. With more vision and aggression than capital he virtually re-established the building industry in his home town during the depression. He bought precut or partially fabricated materials from Pease Woodwork Co. and built moderate-priced homes.

Builder Ralph L. Shirmeyer. He started building prefabs before the war, took a National dealership later and built it big. He is now one of National's biggest dealers.

What the conventional builders think

Otto Nord, president of the Home Builders Association of Fort Wayne, thinks his houses (custom-built, up to $60,000) will still be standing when prefabs are torn down, but he admits if it were not prefabs, "many young people wouldn't have homes." His neighbor, builder R. C. Metcalfe, thinks Nord and other top-flight builders like him could help the prefab industry. But Nord says, "I'm busy now as a conventional builder. If things get tough in higher-priced homes, I can always get the prefab homes to build if I want to."

John B. Worthman, another high-quality conventional builder whose efficiently organized building company uses four basic plans tailored to a customer's needs and wants, says simply that he likes conventional building.

To each his own

Each type of builder tacitly, if not verbally, will admit there is a place for both prefabricated and conventional homes in Fort Wayne as elsewhere.

The prefab builder, for his part, is in the business because:

▸ He can build more homes and make money. Most prefabbers shoot for 10% profit, settle in some cases for only 6%. Ralph Shirmeyer has built over 200 houses every year since 1946, estimates that his organization would not build more than 40 conventional homes per year if it were to shift back to conventional building only.

▸ He ties up less of his working capital. Most dealers estimate that they require only about one fourth of the capital to stay in business as a prefabbers.

▸ He does not take up as much of his time. The routine of prefab building promotes efficient systematic procedure.

The conventional builder, for his part, is sticking to his last doing because: a) he likes it; b) he makes money at it; c) he fills the demand for homes over $25,000 where "the buyer's personal tastes must be met." Prefabbers agree that prefab building is generally limited to the under-$25,000 price tag.

Is the customer satisfied?

To any question about how prefab home dwellers feel about their homes, prefab dealers answer in terms of sales. "They buy 'em," says one, "and they're still buying." Thyer-dealer Fred Federspiel cites the cases of two of his customers: "One young man bought a two-bedroom model, sold it and bought a three-bedroom model. Another man who bought one of my homes added many extras and sold it himself at a clear profit of $1,800." Federspiel is now building him another. The family that owns its second prefabricated home is not a rarity in Fort Wayne.

Prefabs fill special needs

Factory-made parts are used for structures as small as brooder houses and as big as two-story apartments

Prefabricators are covering an increasingly wide range of building needs and territories. They have found a ready market:

1. where houses must be built quickly (flood disaster or critical defense areas), for industrial employees;
2. where labor is in short supply;
3. where low cost is a primary consideration.

Their products include grain bins, incubators, week-end cottages, concession stands, milk houses, corn cribs, motels, schools, garages, medical and dental clinics, light industrial buildings, kennels, utility houses, bunk houses, field offices, recreation halls, warehouses, company rental dwellings.

Prefabbers are building for large-scale developments, public housing, military housing, defense-area housing, custom-quality and low-cost housing. They build for the industrial and farm markets here and in Canada, Alaska and abroad.

Volume production, volume building

In one of the first projects under the Wherry Act, American Houses showed what prefabrication could do to produce military rental housing fast: it supplied 1,000 units in a $10 million project at Fort Bragg, N. C.—in a year's time. So successful was the project that American got another 1,000-unit order for a second section. The company has built 1,700 programmed units so far this year, expects to produce another 700 in '52.

Knox Corp. has concentrated on large subdivisions of government-programmed housing at the AEC Savannah River hydrogen plant and in several other critical defense areas. Range of prices: $9,750-$15,000—with strong emphasis on houses below $13,000. National and Gunnison also ship into the fast-growing Savannah River area.

Precision Built Homes Inc. is another example of a big project prefabricator. After concentrating on several thousand dwelling units in its own projects, it offered the merchant builder prefab homes this year for the first time.

Thyer Manufacturing Corp. is supplying 225 units of Title IX homes in Camden, Ark. J. A. Jones, the builder, decided to use prefabs because of speed of erection and economy. Thyer has another 143 units tagged for Hampton, Va.

All told, prefabbers supplied better than 6,000 homes for critical defense areas. PHMI says prefabbers supplied almost 20% of the total number of houses that have been programmed for defense areas thus far.

Military housing—PX to hospital

American is the biggest producer of shelter for military personnel. Gunnison can produce insulated steel shelters versatile enough to be used as barracks, mess halls, administration buildings. Variations can be used for field hospitals. Total shipping weight of one of the units is 13.5 tons. Two advantages: the buildings resist termites and fire.

Public housing—savings insufficient?

Prefabricators also have their foot in the public housing When the Chicago field office of PHA approved the first pref cated public housing project last year, Gunnison was Johnn the spot. The firm provided 91 prefabs for the New Albany, area. American is furnishing 125 dwellings for another p housing project under construction at Lumberton, N. C. But is not happy, says William E. Bergeron of the PHA Chicago office. He told prefabricators: "We were of the opinion two ago that substantial savings could be achieved by using fa produced homes. Our experience has been otherwise. . . ."

Industrial housing, permanent and profitable

One firm that concentrates on company houses is Southern M Manufacturing. Manufacture, shipping and erection are do Southern's crews. Southern has no dealers, says: "They don long in this kind of business." Southwest American Homes, ton, which sells mostly to builders of sizeable projects, is supp Alcoa with 140 one-family company rental units at Port La Tex. Hope Natural Gas Co. chose Pease-Fabricated home workers at a new power-distributing plant, is tickled pink abo acceptance and permanency of the houses which can be resold

Relocatable housing moves by road or RR

Houses that can be erected on one site and later moved elsew have occupied the attention of several prefabbers. Among t two California companies, Mobilhome Corp. of America and Lumber Co. Mobilhome designed a two- and a three-bed desert-type house for HHFA's relocatable housing program. N Roll-A-Way house, originally designed for the same HHFA gram, is being sold in northern California. It can be transp on highways without special permits, or shipped by rail.

Alaskan prefabs—HHFA is pleased

For the first time, prefabrication is figuring prominently i Alaskan housing program. West Coast Mills supplied Anch with 106 units this year. Also in Anchorage, 252 precut h were erected by Robert Johnson Associates. Three Seattle bus men expect to erect several hundred Gunnison prefabs in Fairb Juneau and Anchorage. An HHFA official who toured Alask impressed with the quality of construction, speed of buildin value provided the Alaskan buyer of prefabs. These sell for $1,000 to $1,500 more than comparable housing in metropolita

Prefabricated apartments brought reorders

Another fertile field for prefabrication: garden apartments. Ty of several is Lumber Prefabricators Inc., which supplied family apartments for a 350-unit Warner-Kantner project in cinnati. W-K were so pleased with the ease of erection at Canterbury Gardens project that they bought another 910 without requiring LPI to submit bids.

as where school populations grow rapidly. several prefabbers vide school facilities. American has built eight schools like in the vicinity of AEC's Savannah River project.

orp. concentrates on building large subdivisions of govern- ogrammed housing in critical areas like the Savannah River, ese 180 five- and seven-room units in Fleming Heights, Ga.

Inc. prefabs motels like one below, also does taverns, churches, lls. This motel with exterior of 3/20" birch plywood is on a '4' slab. Semico tallies shipments by dollars instead of units of varied building sizes, expects to do $850,000 this year.

n, biggest producer of houses for large-scale developments. 112 single and multistory units for Sylvan Knoll Apartments 'ord, Conn. (below), 461 apartments for Warwick Gardens in News, Va., another 630 units in Richmond, Va.

Flood-disaster housing was supplied by Page & Hill, which built a 250-unit project in Topeka, Kans. (above), another for Pierre, S. D.

This Knox-Bergstrom fold-out telescopes into a complete package. A transportable three-dimensional unit is formed by two adjacent units....

...Prefabricated panels and precut lumber stored in the units are used to complete the frame of the Knox-Bergstrom house when it arrives at site.

General Industries built 86 demountable 500 sq. ft. houses near the Kingsbury Ordnance Plant in Indiana.

H-plan and V-roof

One creates patios and terraces for different kinds of outdoor living;

the other opens up views of California's spectacular land

Architect John Funk's latest house is a handsome variation on a number of themes. Specifically, these are—

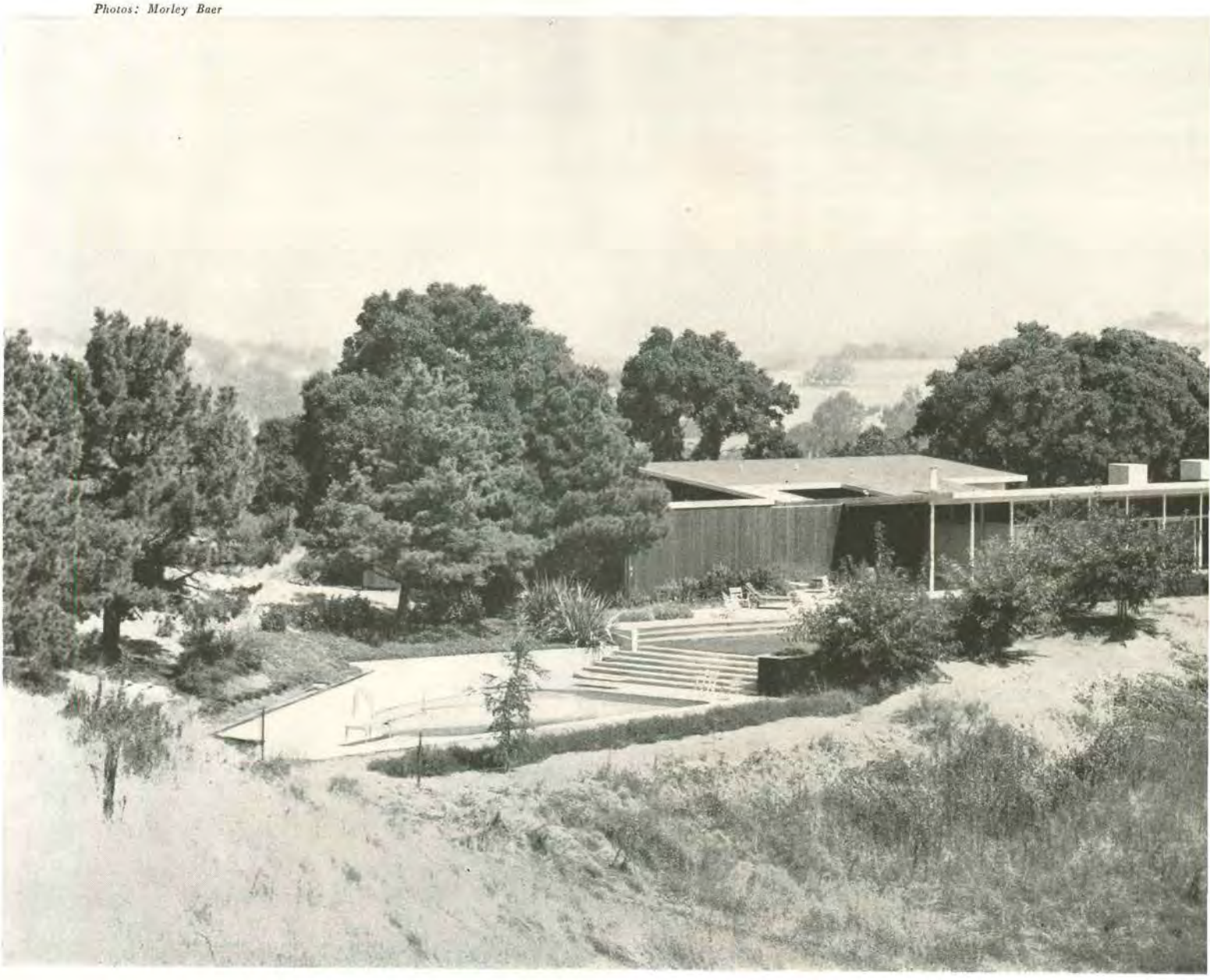
The H-plan, which separates daytime areas from nighttime areas, link between them as an entrance lobby.

The outdoor house (an increasingly popular California notion) consists of a series of inexpensive "outdoor rooms" that adjoin the spaces. In this case, the "outdoor house" contains an entrance cour court, dining court, service court, sunbathing court and viewing ter

And the V- (or butterfly) roof, which dips down over the cente plan, but soars up toward north and south to point at important opposite ends of the site.

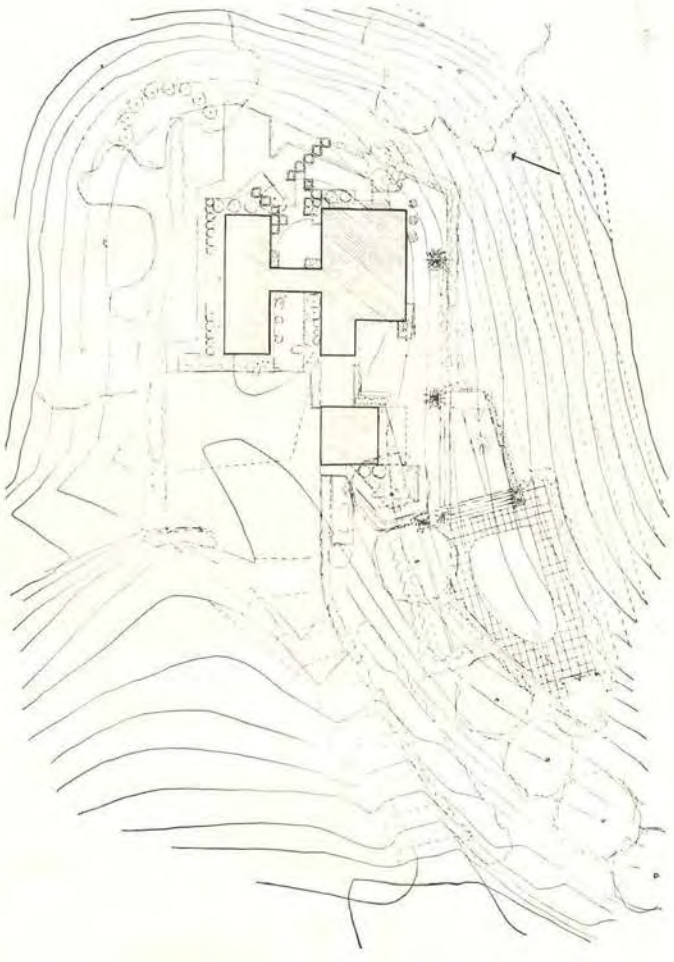
To these basic themes, architect Funk has added his own, familiar brand of workmanship; and nature, in turn, has added some of her most spectacular Ca devices: sweeping views all around from the top of an oak-covered hill.

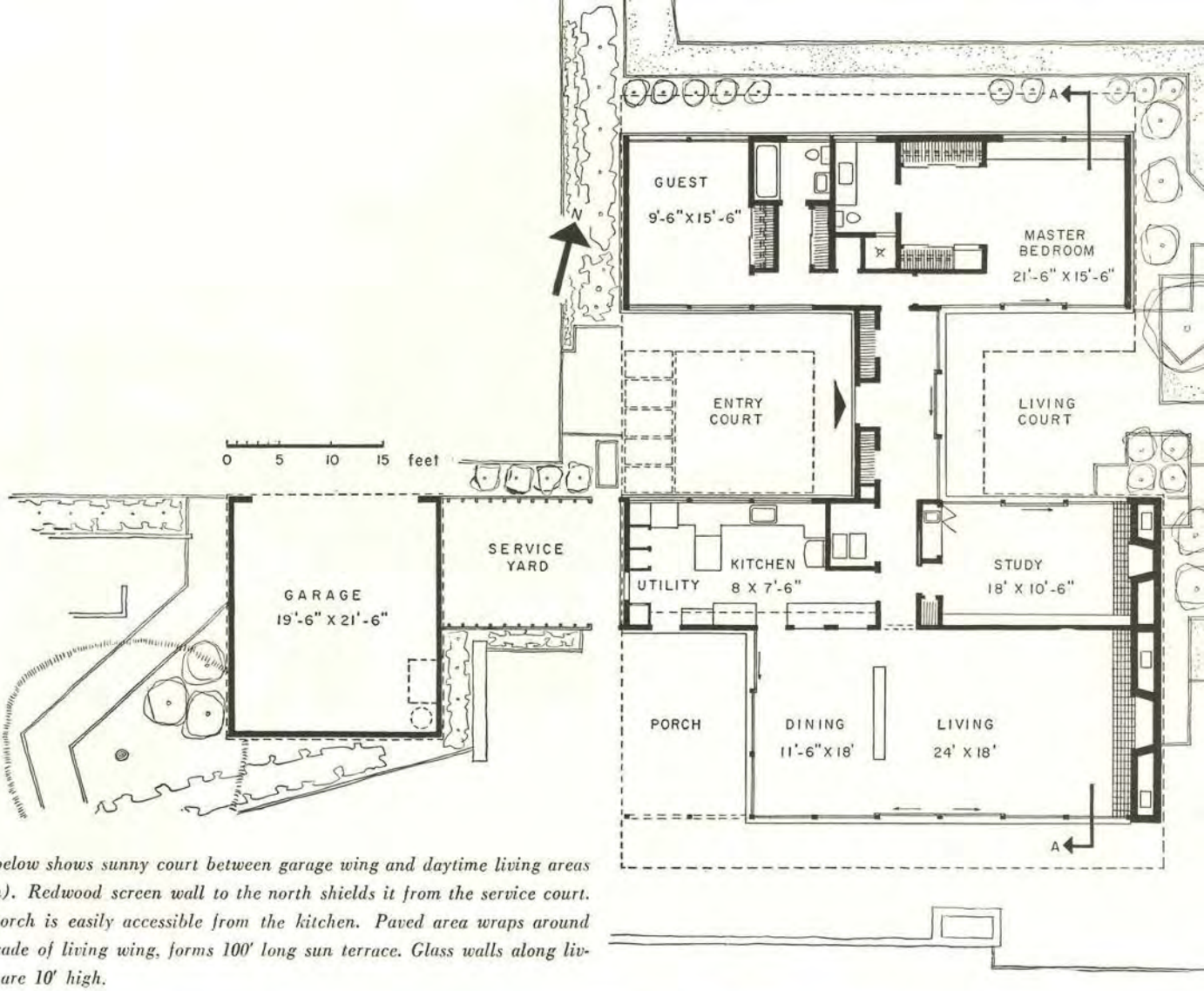
Photos: Morley Baer



TION: Redwood City, Calif.
FUNK, architect
), ROYSTON & WILLIAMS, landscape architects

tterfly roof (seen from the south in the picture below) opens living areas toward the principal view of a lovely valley and hills, lets in the sun under a 4½' overhang. To the north, it p the bedrooms toward a secondary view of Palo Alto. Swim-ool (free-form à la California) is seen, right and below left.





Picture below shows sunny court between garage wing and daytime living areas (see plan). Redwood screen wall to the north shields it from the service court. Dining porch is easily accessible from the kitchen. Paved area wraps around south facade of living wing, forms 100' long sun terrace. Glass walls along living area are 10' high.

room has spectacular views to the south of rolling nd pleasant valleys, proves once again that site plan- s wonderfully simple if you build in the Bay Region.

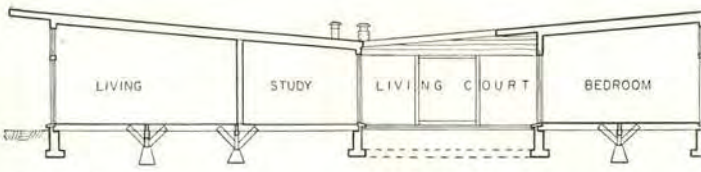
Study has its own fireplace, faces intimate patio located between daytime and nighttime wings. Note the contrast in scale between living-room (top of page) and study views. Furnishings seem a little too massive for this elegant structure.

advantages of the H-plan are becoming more ·ent every day: separation of bedroom areas from areas during the day means better sound insulation and easier keeping (because the nighttime wing doesn't have to ·pt presentable at all times); moreover, the outdoor s between the legs of the H—the "holes in the cheese," hich you don't pay much of a price—can be turned handsome, intimate patios. Funk used one patio as a d entrance court, the other as a living court upon which the study and the master bedroom open through wide g doors of glass.

addition to the basic H-shape, Funk designed a garage which (being again linked to the main house by free- ing screens) has formed a few additional outdoor rooms d the periphery of the building proper: a service court, ı sunbathing court with adjoining porch. These face catch the sun but keep out the breeze.

out these outdoor rooms Funk says: "They are very in- : in scale, afford a welcome contrast to the rest of the space views." To emphasize this intimate scale, the land- architects used small-scale paving, small-scale geo- : patterns in flower beds, and small-scale planting ı the semi-enclosed areas.

Living court between study and master bedroom is intimately landscaped. It is visible immediately upon passing through the entrance door. Cost of house was about $12 per sq. ft., excluding architectural fees and the landscaping.



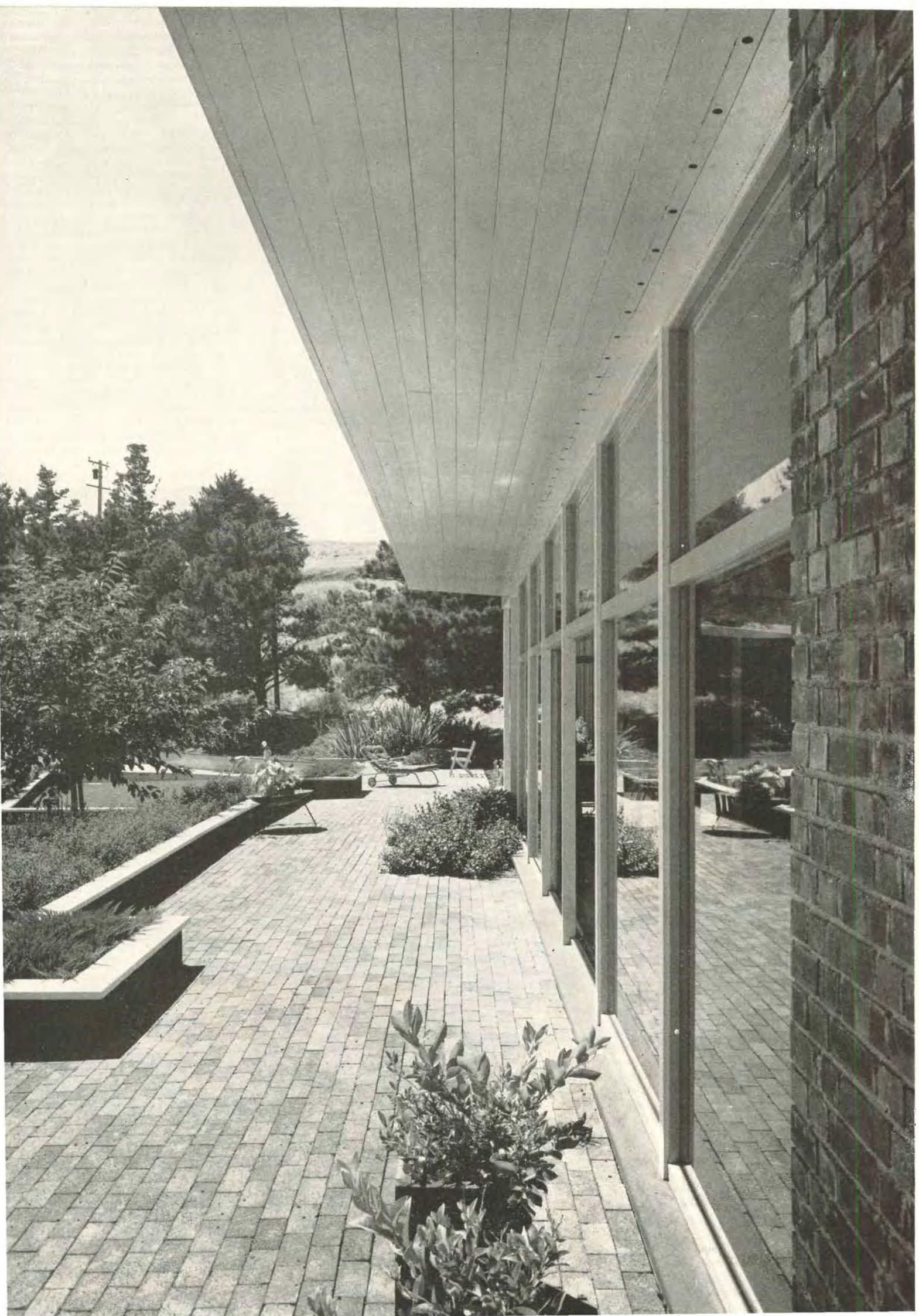
SECTION A-A

Section above and picture below illustrate structure and effect of butterfl Opposite: view of paved terrace along south facade. Retaining walls used for outdoor sitting to face interior living areas.

The advantages of the butterfly roof are related to each specific plan problem. (Cliché butterflies, a common sight nowadays, generally serve no apparent functional purpose whatsoever.) Funk's design is a beautiful example of how to get the most out of the butterfly: he had his principal views to the south, faced his living wing that way, and wanted to lift up the roof—the brim of his hat, as it were—to let in as much of the midday sun as he could get (he cut sky glare with a 4½′ overhang). And he had his secondary views to the north, faced his bedrooms *that* way, and again lifted up the roof in that direction to emphasize that view as well.

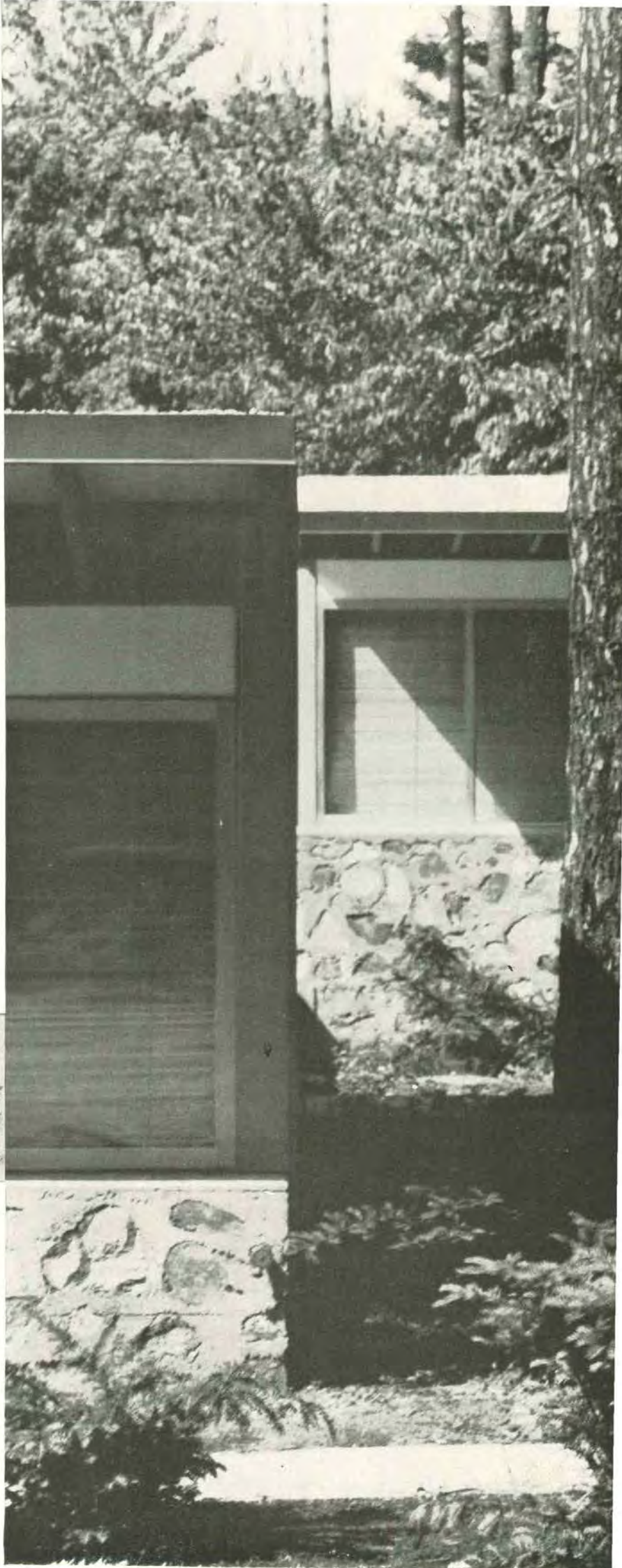
Where the V-shape dips down Funk placed most of his service rooms, which don't need high ceilings anyway. The roof deck is supported on dropped 4″ x 6″ beams, carried on 4″ x 4″ posts, 4′ on centers.

The butterfly shape does something else for Funk's house: since the site is a flattened top of a hill, a flat-roofed house might lack drama, seem lost among the heavy oak trees. The V-shape of the roof, on the other hand, is self-assertive and vigorous, turns the house into an interesting sculptural counterpoint in contrast with its natural setting. The formal terracing and the spacious flights of steps leading up to the house stress this sculptural effect still further.



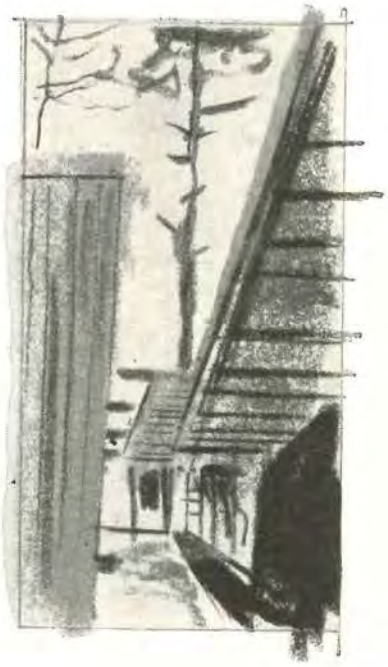
Here is how Alexander Girard goes about designing a house

. . . and this is how his friend, Charles Eames, thinks you should look at the end product



This story is concerned with two houses in Grosse Pointe, Mich. They were designed by Girard, one for his own use. The photos, drawings and layouts on these ten pages (all by famed designer Charles Eames) are an unorthodox attempt to explain the special character of Girard's work. As you leaf through, you may get the impression you are in some wonderful country fair—and that is exactly the impression you get as you walk through Girard's houses.

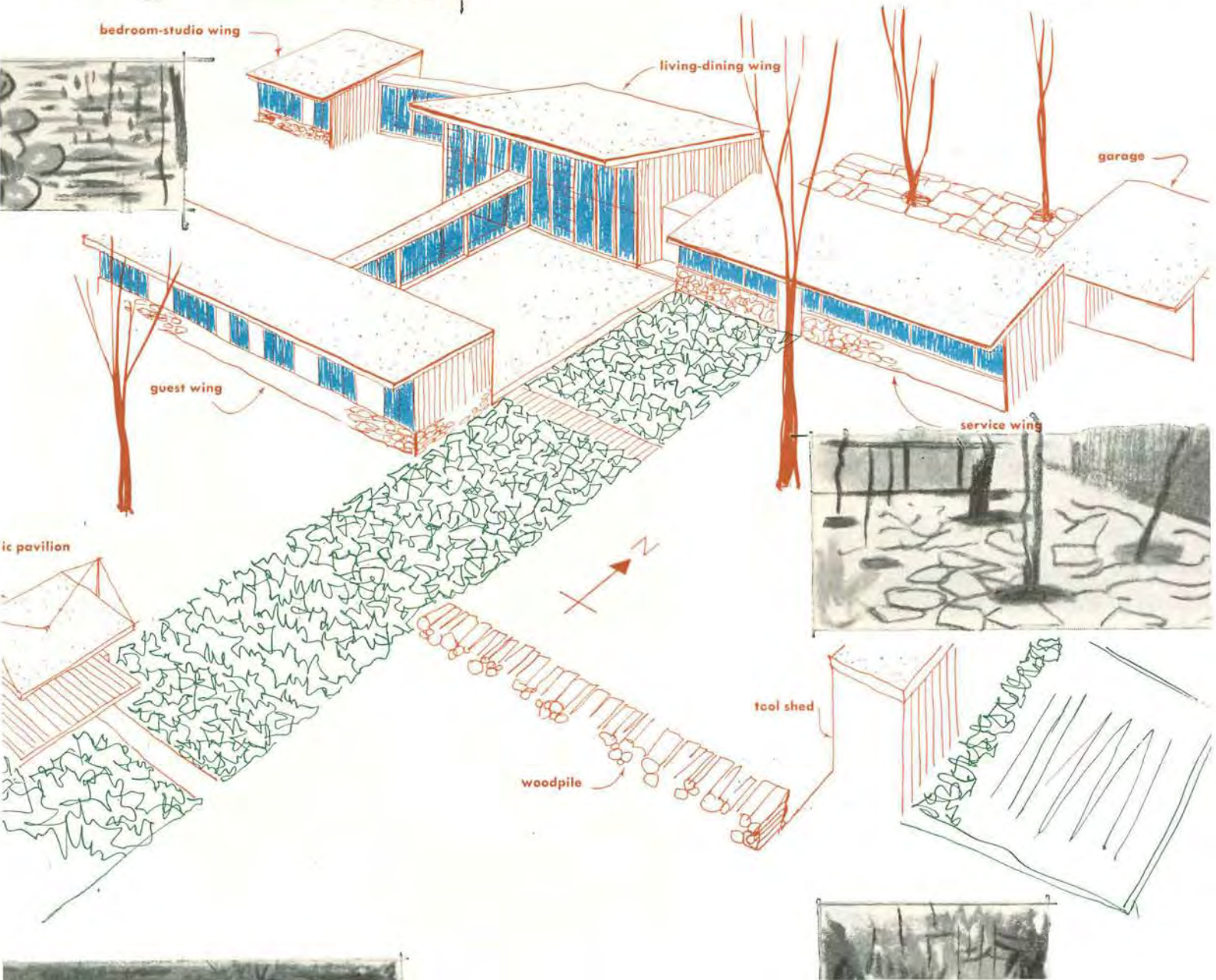
Photos: Charles Eames



The first house is really four separate houses *linked by glazed passages: A service house with kitchen and utilities; a living-dining house; a house for guests; and a house for the owners' bedrooms. Between these houses are paved and planted terraces. To the south is a picnic pavilion, suspended between two posts.*

Because this house is so big and so elaborate, it is hard to understand it all at one glance. Instead, the final, total impression is the sum of a lot of detailed impressions; and on this and subsequent pages, Charles Eames has recorded some of the many detailed impressions you get as you walk in and out and around the buildings.

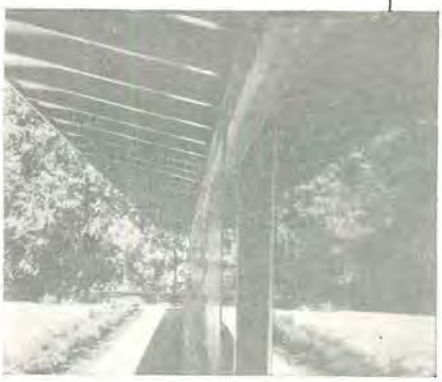
Girard is tremendously interested in details—the smaller the better—so that the fleeting glances recorded here (glances of a pile of logs, or of some paving stones) are no accidents in the design; they are points of interest along your way, small enough for the human eye to take in, and placed by a designer who knows better than most how to keep the observer interested and amused.



Glazed link between wings

Bedroom wing seen from picnic pavilion

End wall of bedroom-studio wing

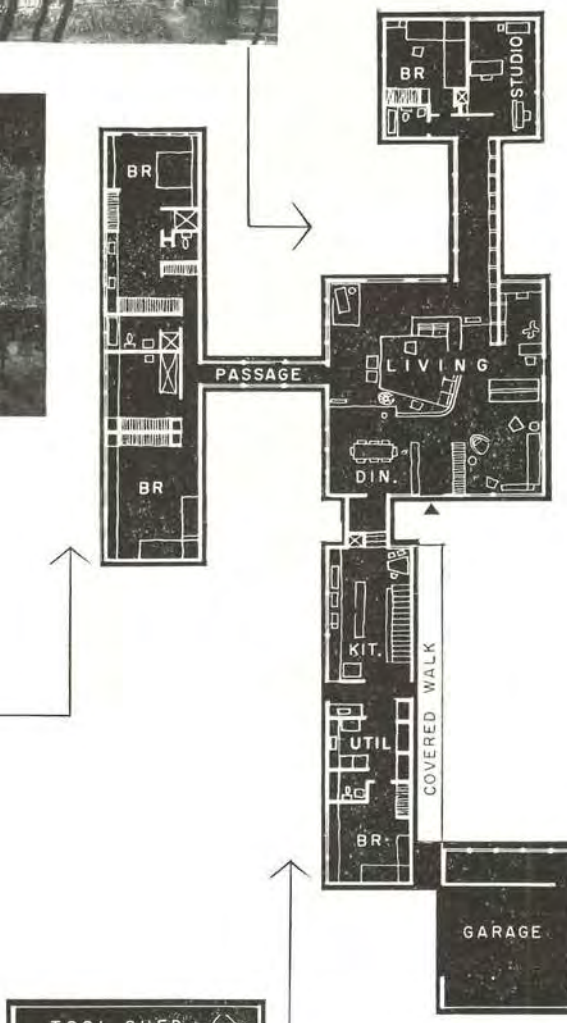


Roof overhang along guest wing

Tool shed

Approach between garage and service wing

Terrace between living and guest wings



e between living-dining wing and guest wing seen by night (above).
impression of same space by day is shown in sketch below.

For all its preoccupation with detail, this house has a definite consistency in the over-all design. This consistency has been described as a "consistency of confusion." A very human consistency, in other words. Girard has a real and often humorous tolerance for such human failings as knickknack collecting, trophy displaying, untidiness within reasonable limits and general, aimless puttering around. His houses encourage man's more relaxed and extrovert pursuits. For this reason, some critics have thought that. . .

Girard has revived the Victorian house—in spirit, though obviously not in its mannerisms. Girard's houses are as modern as any built today: open plans, huge walls of glass, structure used decoratively, indoor-outdoor planning done concurrently—all these are obvious features. But they seem less self-assertive here than in most modern work, for the plethora of wonderful, small-scale "junk" with which Girard litters (and lets his clients litter) the interiors of his houses gives them that special atmosphere that makes people want to spend relaxed hours browsing around in antique shops all over the world. A trip through a Girard house is as full of surprises and delights as a walk through the great bazaars of Istanbul, or the stalls in London's Flea Market—and just as much fun. In all this excited confusion, however. . .

The architecture superimposes an orderly pattern. His pattern is nowhere near so rigid as that of doctrinaire modern houses. But it is there nevertheless. It is a pattern very much like a checkerboard. Black squares are indoor areas; white squares are open courts and terraces. As in the checkerboard, openness and closedness alternate constantly, so that each closed area faces an open one, and vice versa. Among the many advantages of this pattern, three stand out: first, *changes in grade* can be taken care of without trouble, since the black squares can be linked by inclined passages as easily as they can be linked by level walks; second, each black square has *its own kind of view,* its own time for sunshine, its own little garden—small enough in scale

Dining area with free-standing buffet

Kitchen counters with built-in spice containers

Eames' impression of living area with fireplace

Picture of living area taken through skylight shows gourd-shaped fireplace, free-form seating arrangement, scattered pillows, plants, chairs, objets d'art

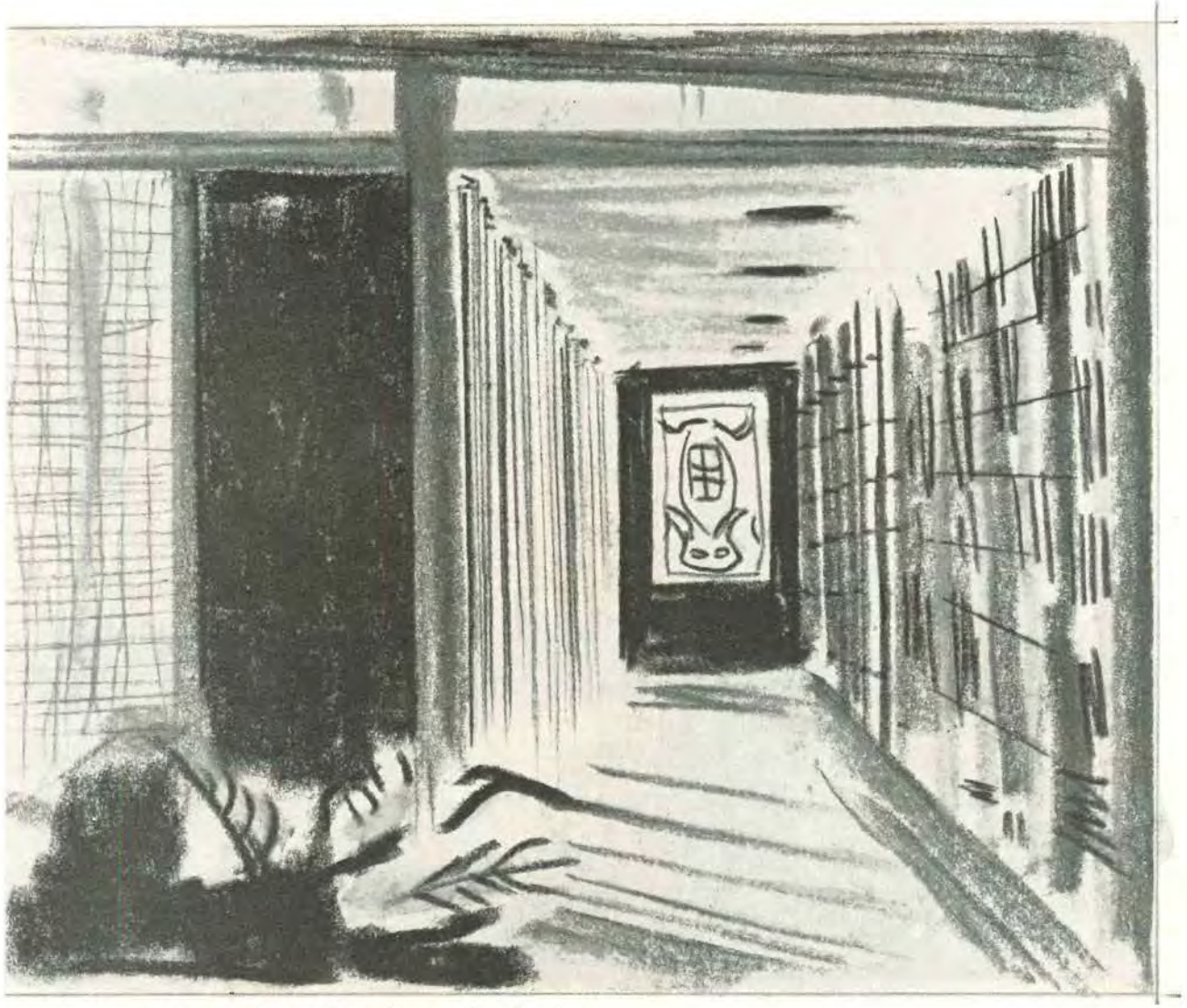
Living area as you see it when sitting down

ermit "back-yard gardening" of a limited kind; and, finally, the white squares in lans become *real outdoor rooms* (because they generally have at least three real) and thus get an atmosphere of privacy and intimacy. One magic by-product of kind of plan, incidentally, is that the outdoor rooms can be intimate in the day- but very spacious at night. The trick is that at night, lights will be mirrored in glass walls until the reflections finally vanish in some dim infinity *(see p. 123)*.

n close examination, still another pattern begins to emerge. This is attern of the softly curved, amoebalike free form Girard knows how to master as w others. This pattern seems to go through all of his work: you sit down in a d living room, for example, and next to you is a lovely, rounded and brilliantly ed plaster object made by Mexican Indians. It rests on a slightly larger, but ly curvilinear shelf or tabletop—which, in turn, is right next to the very much r, but equally free-form couch you happen to be sitting on. The pattern becomes fascinating all the time: you look up and find yourself facing a hand-sculptured, tos-plastered and gourd-shaped fireplace, and there are more free-form screens, s, tables, lamps and *objets d'art* around you than even a Freud might have ied up. Far from seeming overly busy or overly nervous, this collection of free of all sizes, shapes and colors hangs together as organically as a cell structure in e. By literally flooding his interiors with such forms—and making the rooms elves (more often than not) irregular in shape—Girard gets a total effect that narkably unified, like a colorful tropical jungle seen at a distance that helps all the many different ingredients; or like a fantastic patchwork quilt of bits of de, silk, printed cotton, felt and velvet, all in brilliant contrast with one another, l hanging together to make a harmonious whole.

ese are some of the things that Charles Eames was trying to say in this photo- ic report of his trip through Girard's Wonderland.

Same living area as it might appear to dog stretched out in deep fur rug.



View down ramp between living-dining and studio wings.
Book shelves at right, glass wall at left.

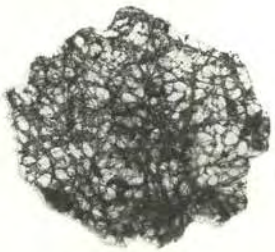
Passage to guest wing

The consistency of confusion in Girard's work is charmingly evident in pictures, which show, among other things, some marble chips on the roof crisscr with pine needles, some objects fastened to the dining-room wall, some patterned surfaces given a curious striation by the Venetian blinds behind them, some G designed printed fabrics, and a few rather special views of ceilings and canopies tha can only get if—like Mr. Eames—you know how to take a photograph while lyin on your back.

This is no hodgepodge, and therein lies the consistency, the art in Girard's worl these curiously unrelated elements assembled under (and on top of) the same roo as if they really did belong together. This is *collage* architecture. And as in c painting, it is not merely the paste that holds the different bits and pieces tog it is the unifying personality of the designer—plus the unifying personality of the as the designer has so neatly interpreted it.

View from living area toward studio passage

Link between living and guest wings



Pine needles

Roofscape

View of kitchen ceiling

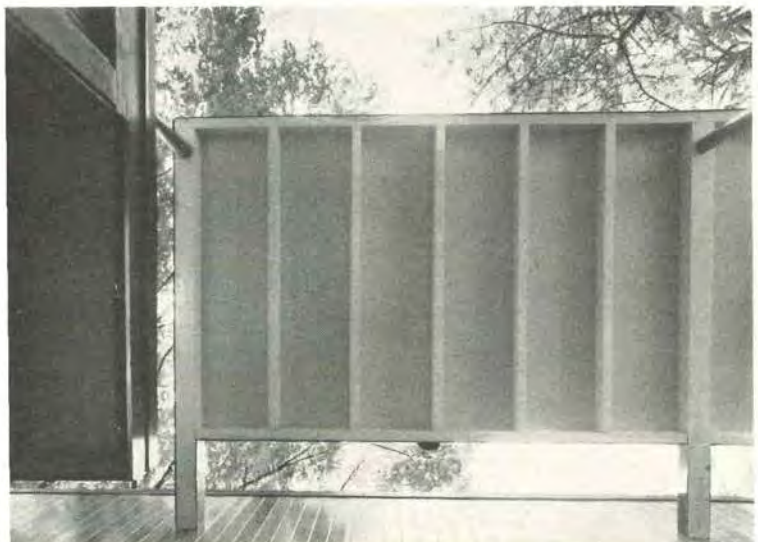
Glimpses of the sky

Patterned glass

Bedroom corner

Lamp over living room shelf

Girard-designed fabric



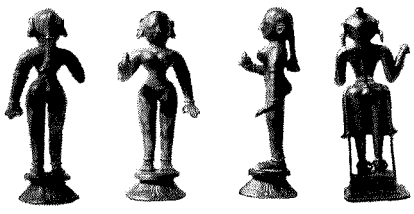
Objet d'art on living room wall

These are the tools Girard needs to design his houses, fabrics, interiors

. . . and here is how **Alexander Girard's own hous**

looks to Mr. Eames . . .

Wall adjoining Girard's dining porch has abstract relief of driftwood, boards, objets
Left: Girard and collected primitive sculpture.

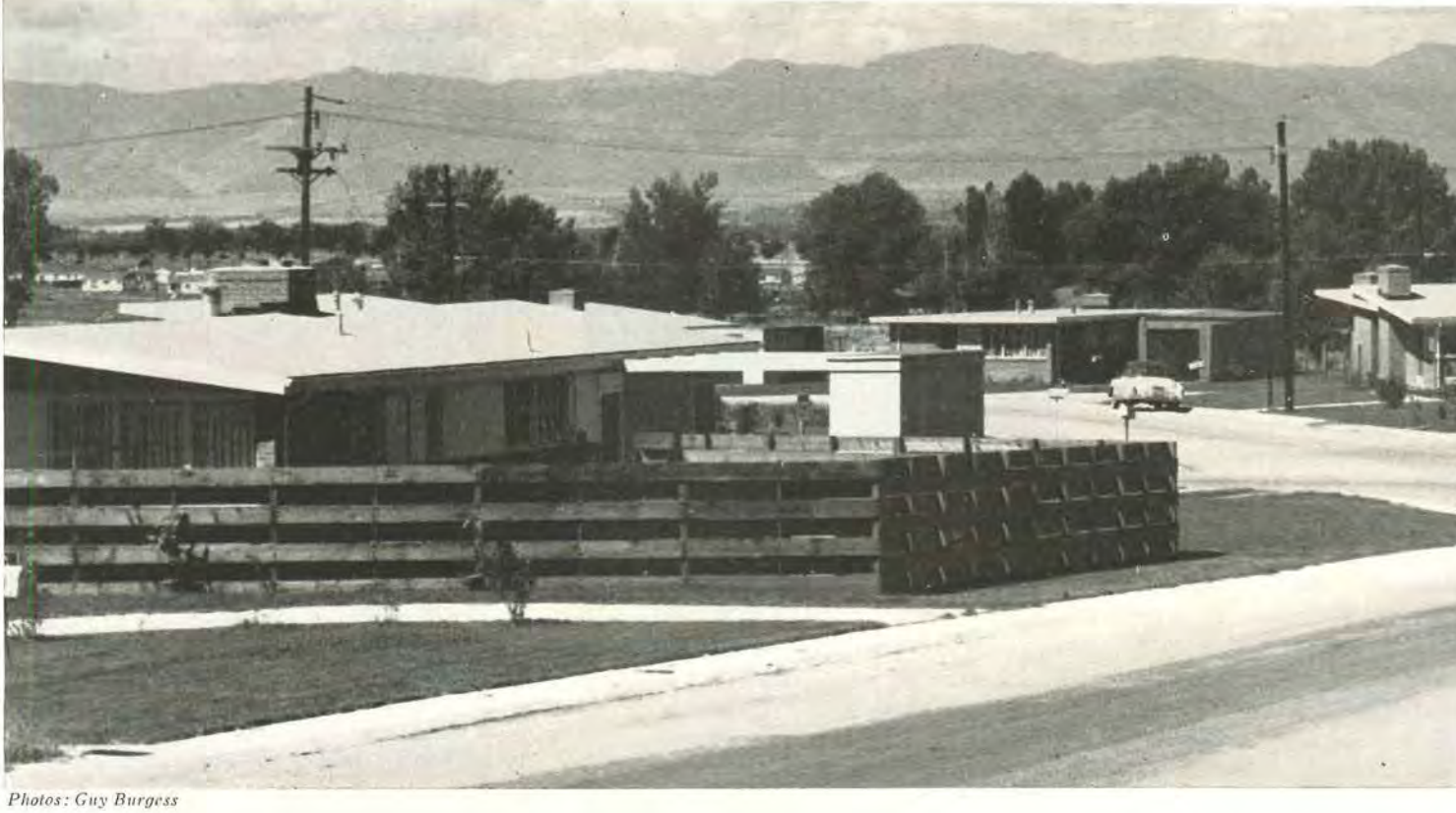


e pictures show that Girard's own house is closely related to the one on the pre- pages. They also tell several things about Girard. First that he works next wall of shelves stacked to the ceiling with brushes, paste, inks, paints, wire, and toys. Also that he has painstakingly, over the years, nailed odd pieces of ood board and crates and other *objets trouvés* to the side of his dining terrace ate an exceedingly handsome abstract relief. Finally, that his own living room not be more casual—the selection of an elaborately decorative table here, a l wall there, and of numerous plants, lamps, trays, clay figures, boxes shows his tently good taste.

d that, of course, is the clue to the whole secret: confusion, knickknacks, free junk or driftwood or toys—all can have consistency only if they are selected consistently good and imaginative taste. So that Girard's art is not only a con- art, but an art of contrasts as well. The sum total, the end result of it all is an nment full of fun, full of relaxed and humorous tolerance—an environment ed for people to live in happily ever after.

Some of the exquisite "junk" collected by Girard and displayed in his house

View of Girard's living room—a homogeneous interior of many diverse parts



Photos: Guy Burgess

Siting with sight-lines. These houses near Denver are farsig

looking at the view, not into the neighbors' windows

There are 32 houses on this 11.4-acre parcel, plus a hearty two-acre community green. This means that 90′ x 120′ is a good-sized slice of land for any one house. And since the houses, all planned by the same architect, are scrupulously contemporary in their design, there is a lot of glass in their walls.

The familiar combination of a crowded site plus contemporary design all too often makes for a public kind of paradox in the finished development: the owners of the houses sit behind their windows and watch each other through "the changing pageant of the seasons" with waning enthusiasm. There have been cases where the glass was wallpapered eventually.

But this is not so here. In the Mile High Housing Association near Denver, enthusiasm has been consistent since the first families moved in two years ago. The reason for this is that Eugene D. Sternberg, who planned this project, has other notations on his letterhead besides architect; he is also a trained site planner, and city planner, and he brought his experience to bear on this little community.

He had two advantages:

1. Off stage, there are beautiful mountains, a range of the Rockies. He selected his site with a fine view of these (and also with the most favorable orientation for Denver). When you look out your window in this development, you are more likely to raise your eyes to the far prospect, than to contemplate your neighbors' laundry.

2. The land slopes slightly—more than it appears to in the photograph above. (Examine the contour lines, right, instead. There is an 18′ drop from one corner of the land to another.)

He brought to these advantages these additional devices:

▸ A loop road layout, with irregular subdivision of the parcel. Araphoe County in Denver is not generally familiar with loop street layouts, so this took "a lot of talking and education."

EUGENE D. STERNBERG
architect and site planner

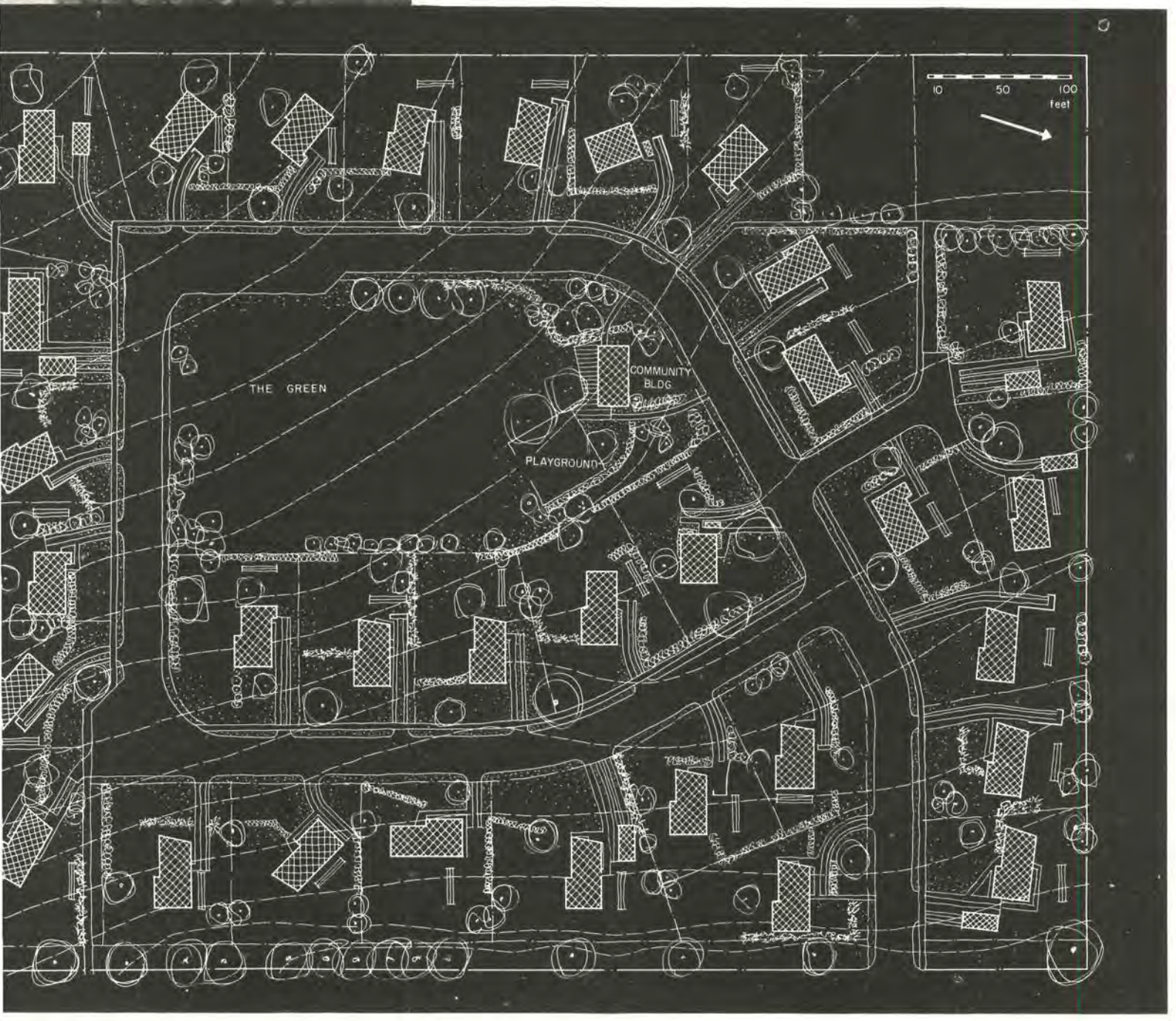
M. WALTER PESMAN
landscape architect

O. HOWARD MILLER
assistant designer

BOND ENGINEERING
civil engineers

BILL BROWN
builder

Roads *are deliberately curved within the project to slow up traffic. Acre at northwest corner of property is set aside for project vegetable garden.*



▸ Variation in the relationship of one house to another. This generality sounds easy (generalities usually do) but it took a lot of study, since Sternberg was working with only four basic plans for the 32 houses, and was unwilling to sacrifice the solar benefits of an open south exposure for any of them. His considered solution, which retains a remarkable amount of privacy for each family without selling them short on view, orientation or exposure, can be appreciated only by studying the subtle tiltings and off-setting and land dividing in the site plan on p. 131.

Framework plans

Says architect Sternberg, "The planning also is aimed at creating a residential atmosphere with community feeling instead of a block after block development."

The four basic plans used in this development (shown on this and the next two pages) are not rigid solutions. They are economical frameworks for individual houses. Almost all the people in this development were members of the faculty at Denver University (including the architect) and there was no wish for conformity off the campus. The four house types vary from 850 sq. ft. to 1,650 sq. ft., with two sizes of 1,000 sq. ft. and 1,240 sq. ft. in between. The prices: 850 sq. ft.—$11,000; 1,000 sq. ft.—$11,800; 1,240 sq. ft.—$13,500; 1,650 sq. ft.—$15,500 (without land).

The project was completely presold, and built on a co-operative mortgage totalling $367,900, with $90,000 down payment (mortgage is by New York Life Insurance Co., in co-operation with Garrett-Bromfield of Denver). Monthly payments range from $70 to $100 per house.

The houses are combination frame and brick, and a good deal of this handsome brick is left exposed in interiors as well as exteriors. All houses sit on similar concrete slabs, although a variety of warm-air heating systems were used, including combination radiant wall and radiant floor systems plus direct air distribution.

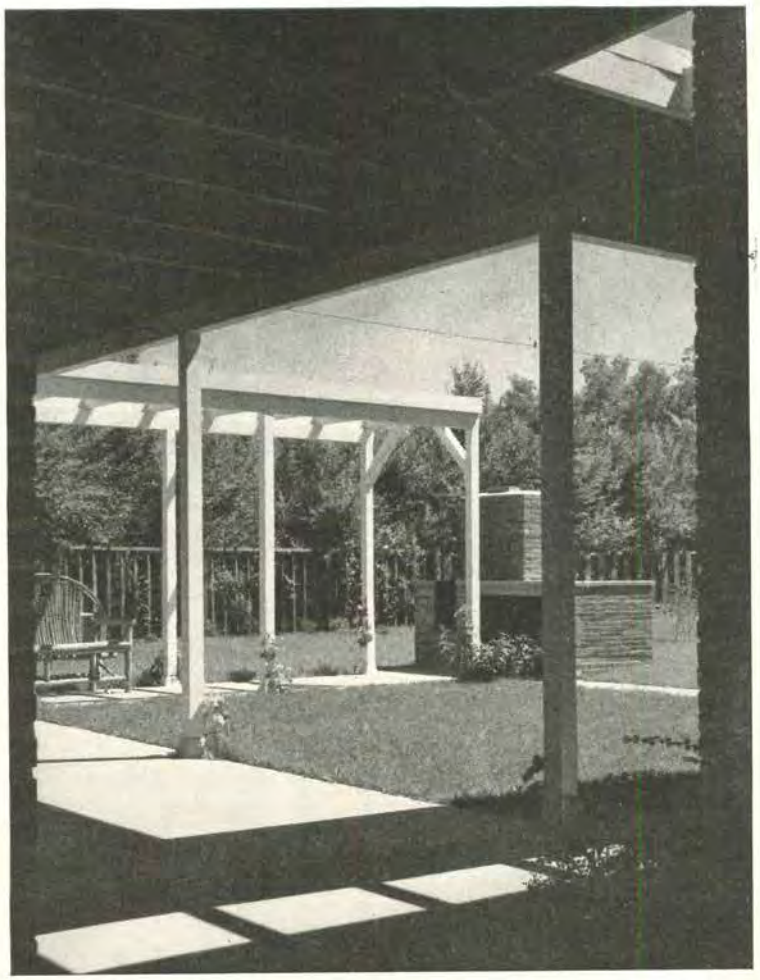
Changes in the clothing put on the basic floor plan include variations of roof type, of exterior brick finish (or exterior wood), of color, and shifting of the facades which face the street. Dark colors were used freely in combination with pastels at the choice of the individual owners—but with the advice and quietly determined direction of the architect.

The largest house, shown in plan below, uses a split level at one end to include five bedrooms. From the living room you go down six steps to two of the bedrooms. On this level there is also a bath, a workroom and the utility room. The other three bedrooms, with a second bath, are above, up nine steps from the living room.

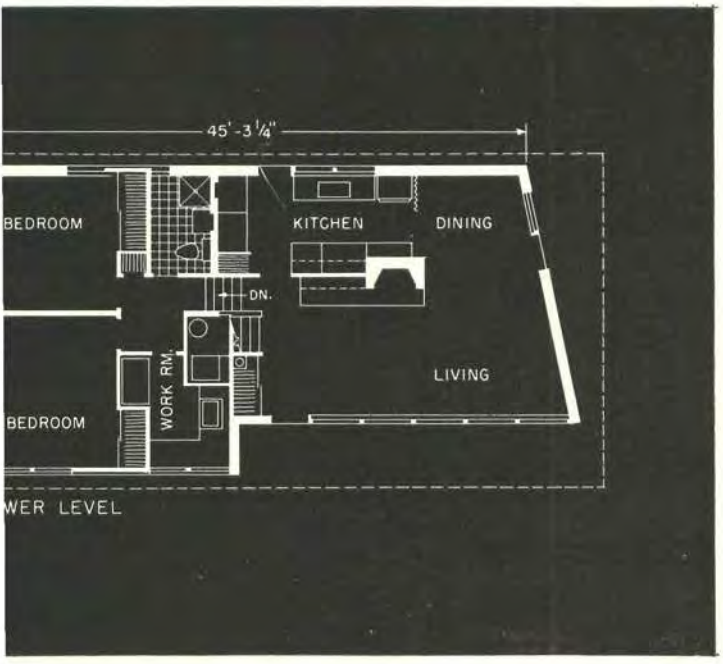
This is the largest house, with plans and interiors at the right

Living room *of largest of these house designs, looking toward the half stairway up to bedrooms. Photo directly to right is view down into living room from the bedrooms; above right you go around the corner of the living room to look into the dining area.*

Fences *are all subject to approval of architect and are all made of redwood. Above is part of community playground.*



Trellis *is terminated by exterior barbecue. This photograph also gives an idea of the continuous outdoor living space in the project.*

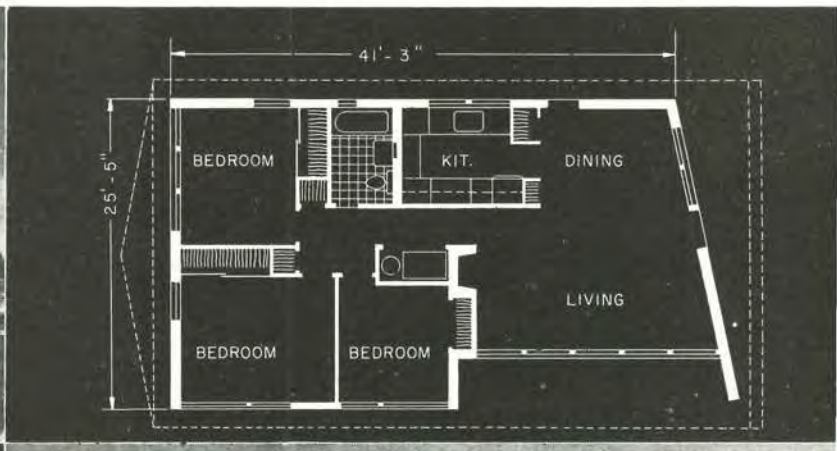


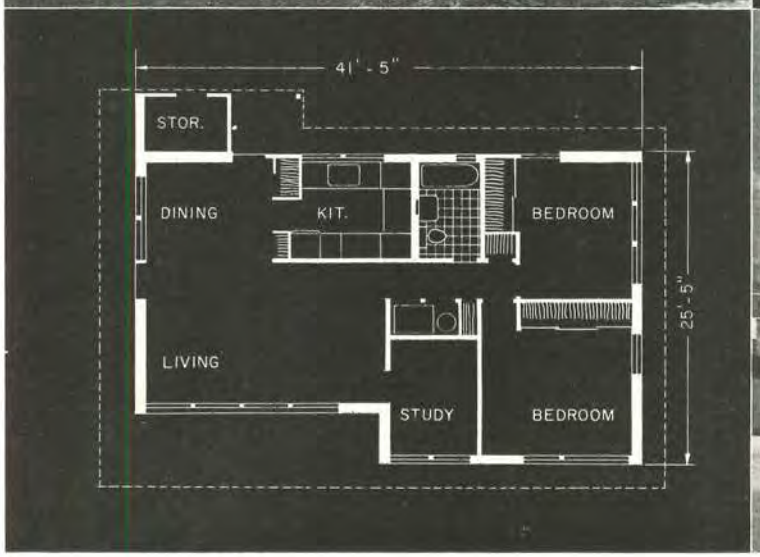
A typical COST BREAKDOWN (for the 1,650 sq. ft. model):

Miscellaneous items	$ 137
Excavation	268
Concrete walls and footings	300
Masonry	2,192
Dampproofing	22
Concrete floors	724
Rough carpentry	2,960
Finished wood flooring	213
Millwork	510
Windows, frames and glazing	458
Doors and frames	327
Stairs	122
Steel	28
Insulation	126
Roofing	198
Sheet metal	97
Painting	892
Finish hardware	117
Tile and bathroom access.	20
Linoleum	270
Weatherstripping	46
Kitchen cabinets	269
Medicine cabinets	26
Plumbing	1,080
Heating	643
Electrical wiring	370
Fixtures	100
	$12,515

This 753 sq. ft. house (plus carport) is smallest size

Below are two other versions of around 1,000 sq. ft.





FHA—cooperative insurance or political subsidy?

The first big homebuilding question the new administration must face is what to do about HHFA. It is five years now since that superagency was set up to co-ordinate existing housing agencies and consolidate duplicating functions. It is perhaps unimportant that HHFA has just added one more layer to the duplication. It is perhaps unimportant that HHFA has been too busy with its own projects to do much co-ordinating.

But it is very important indeed to look at the record of what HHFA has done to FHA. This magazine has gone on record repeatedly that the creation of FHA is the best thing that ever happened to the homebuilding industry and the home-buying public. Whatever the doubts may be about HHFA, there can be no question about FHA.

What has HHFA done to or for FHA? The answer is reasonably clear and reasonably simple. HHFA is a Fair Deal agency, set up for Fair Deal purposes. And so, naturally and understandably, HHFA has used FHA to further welfare state concepts and Fair Deal politics.

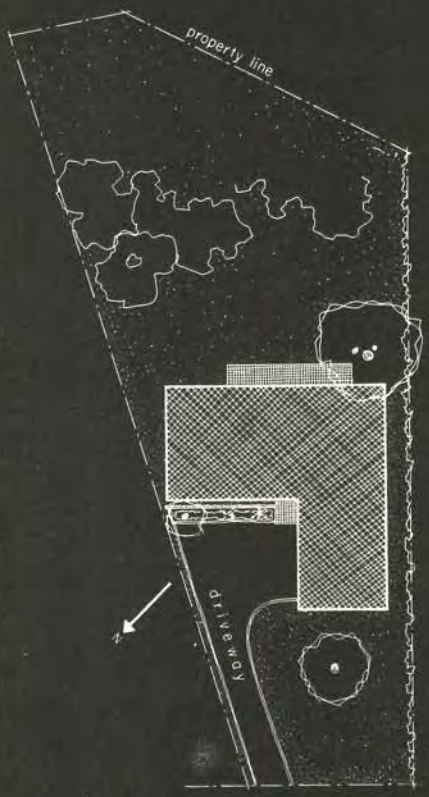
HHFA is making FHA a social-purpose agency rather than a co-operative insurance agency—a social-purpose agency used to grant different sorts of privileges to special classes of builders and owners, with special terms for defense housing, low-priced housing, prefabricated housing, co-operative housing, large-scale housing, and so forth. The originally straightforward FHA insurance system has been made so various and complex that even the best-informed officials can rarely be sure of the rules without consulting the book.

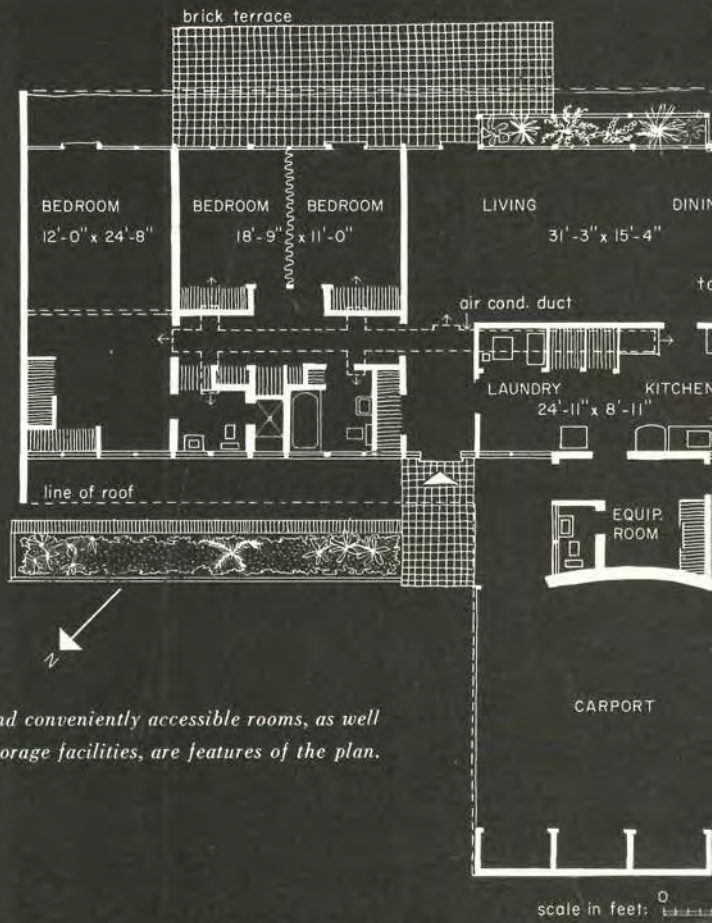
HHFA "co-ordination" has imposed upon FHA many of the purposes of public housing and has turned FHA away from the business policies that won FHA the confidence and esteem of the homebuilding and home-financing world.

We know few thoughtful homebuilders, thoughtful mortgage lenders, or thoughtful regional officials of FHA itself who do not deplore the influence of HHFA on FHA. We know few who do not believe FHA should be given back its independence, to serve as an example of co-operative insurance on a business basis.

We have great respect for HHFAdministrator Raymond Foley as a shrewd, informed, tireless and devoted public servant. And so perhaps it is important to recall that before HHFA was set up it was none other than Raymond Foley who warned the Senate Banking Committee that such a catch-all superagency might do more harm than good to FHA.

The front of the house, facing a 90° curve in the street, meets the problem of on-coming car headlights with a nearly solid wall. A strip of windows at the ceiling line provides adequate light and cross ventilation.





Comfortably large and conveniently accessible rooms, as well as unusually good storage facilities, are features of the plan.

CATION: Beaumont, Tex.
)WARD BARNSTONE, architect
E D. GILSTRAP, general contractor
ALTER P. MOORE, structural engineer

Photos: Shoemake-Stiles

Oriented to the prevailing breeze, the rear of the house faces southeast toward the broad, wooded end of the triangular lot. This entire facade is glass, with awning-projected windows for the bedrooms, sliding sash for the living-dining area.

More space for less money

Economical construction and resourceful planning mean a bigger, more livable house

This small (2,100 sq. ft.) house will help today's homebuilder on two perplexing questions:

1) How cut construction costs?

By borrowing commercial construction methods (such as 6′-4″ module based on standard awning-projected and sliding sash), architect Howard Barnstone has reduced unit costs, created a more favorable rate of exchange between the owner's dollar and the space to be bought.

2) How give a medium-priced house commodious proportions and near-flawless circulation?

By taking the pattern of family traffic as his guide, he has devised a plan that eliminates waste space, enlarges usable space and steps up the general efficiency of running the house.

Planned to cut construction cost

Economy of construction can be credited principally to the use of the modular system and the use of a single, sheet material for roof deck and finish ceiling.

The structural system employs double 2″ x 10″ redwood beams bolted to 4″ x 4″ redwood posts which are rabbeted out on two sides to receive one half of the thickness of the beams.

The roof consists of 2′-8″ x 8′-0″ cement and wood fiber board resting on steel purlins, which in turn rest on the beams. A built-up roofing was applied to the deck but no further treatment was given the ceiling. Excellent insulating and acoustical results are claimed for it. The architect estimates that more than 50% of the cost was saved by this method as compared with separate decks, insulation and ceiling-board construction.

One drawback involves lighting where no "between-decks" space exists for electric conduit-to-ceiling outlets. Here Barnstone had to run cable in the recess between double beams or up through and across the roof; despite these measures he is dissatisfied with the lighting he achieved.

Planned for privacy and convenience

A plan specifically adapted to family traffic (two adults, two children) was a major consideration. Barnstone made certain that it could flow from any room in the house to any other location without tracking across another room. The central entrance and short bedroom corridor give direct access to every room (except the private master bath).

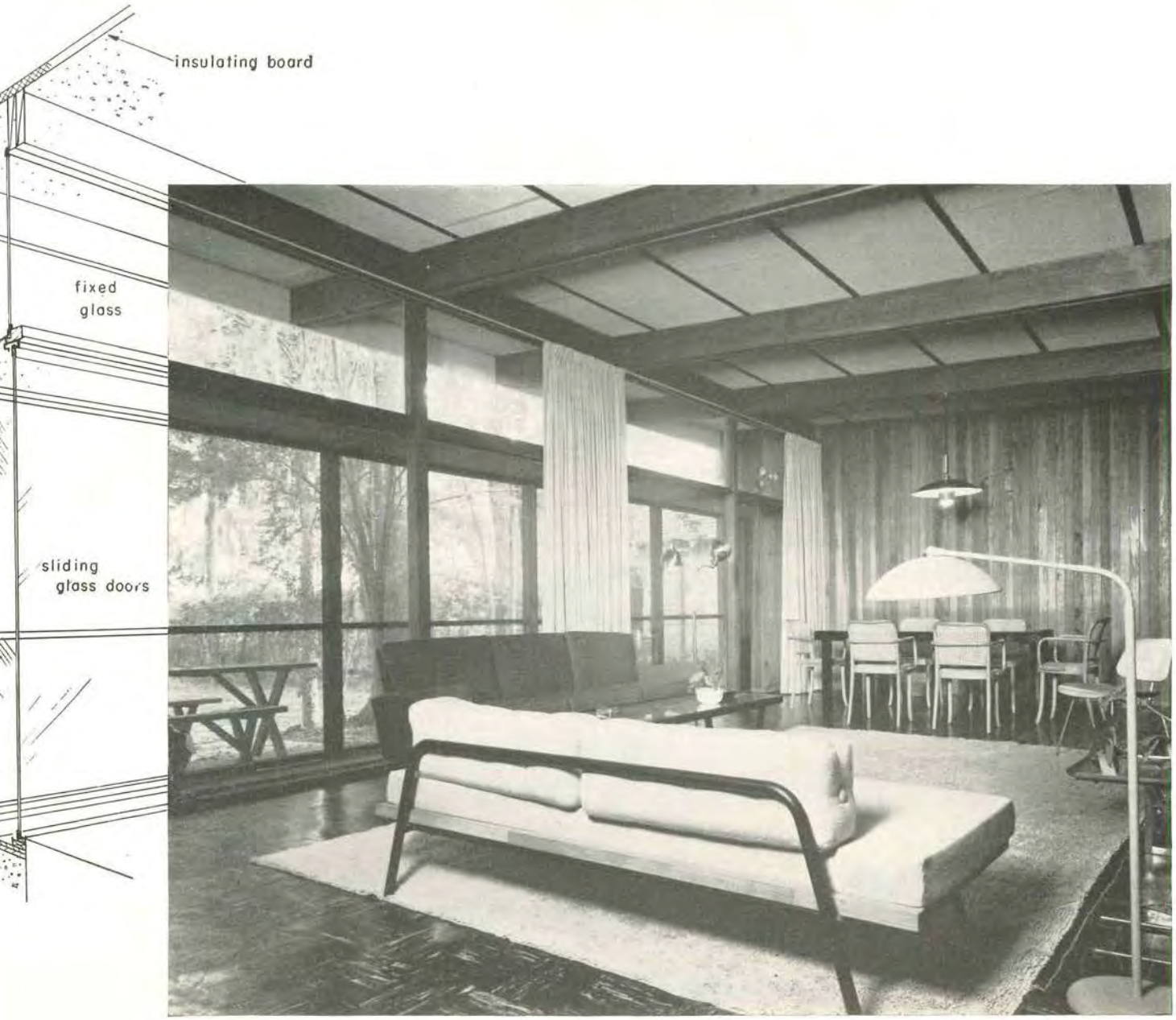
The kitchen-laundry is on the street side for service from street and carport. This side of the house is distinguished by plentiful "yard" storage, artfully concealed. Lower kitchen windows are the only break in the privacy afforded by the redwood wall sweeping across the house.

- The living and dining areas were combined to make a generous, high-ceilinged area, and were isolated from bedroom traffic.
- The two small children's bedrooms have a folding common wall that promotes privacy for both children and adults by providing a daytime play area so the children are less likely to monopolize the living room.
- Adjacent to the main bearing wall of the carport are toy storage area and a supplemental lavatory that can be reached conveniently from the kitchen-laundry or from all outdoors.
- The five principal rooms in the house all have a view through a glass wall of the garden and neighboring woods on the southeast.

The Blums—as straightforward in their approach to the architect as he was in his approach to the house—sacrificed the psychological value of a fireplace to the practical value of air conditioning. They left most of the problem solving to the architect. For example, details to take care of the humid climate include: deep overhangs, awning sash, rooms open to the southeast breeze, the generous use of rot-resistant redwood.

As evidence of the local appreciation accorded this house, it received an architectural award at the Texas State Fair this September.

The clean, uncomplicated lines of the house suggest tha necessity of avoiding the slightest extravagance in d can be turned into a visual asset.

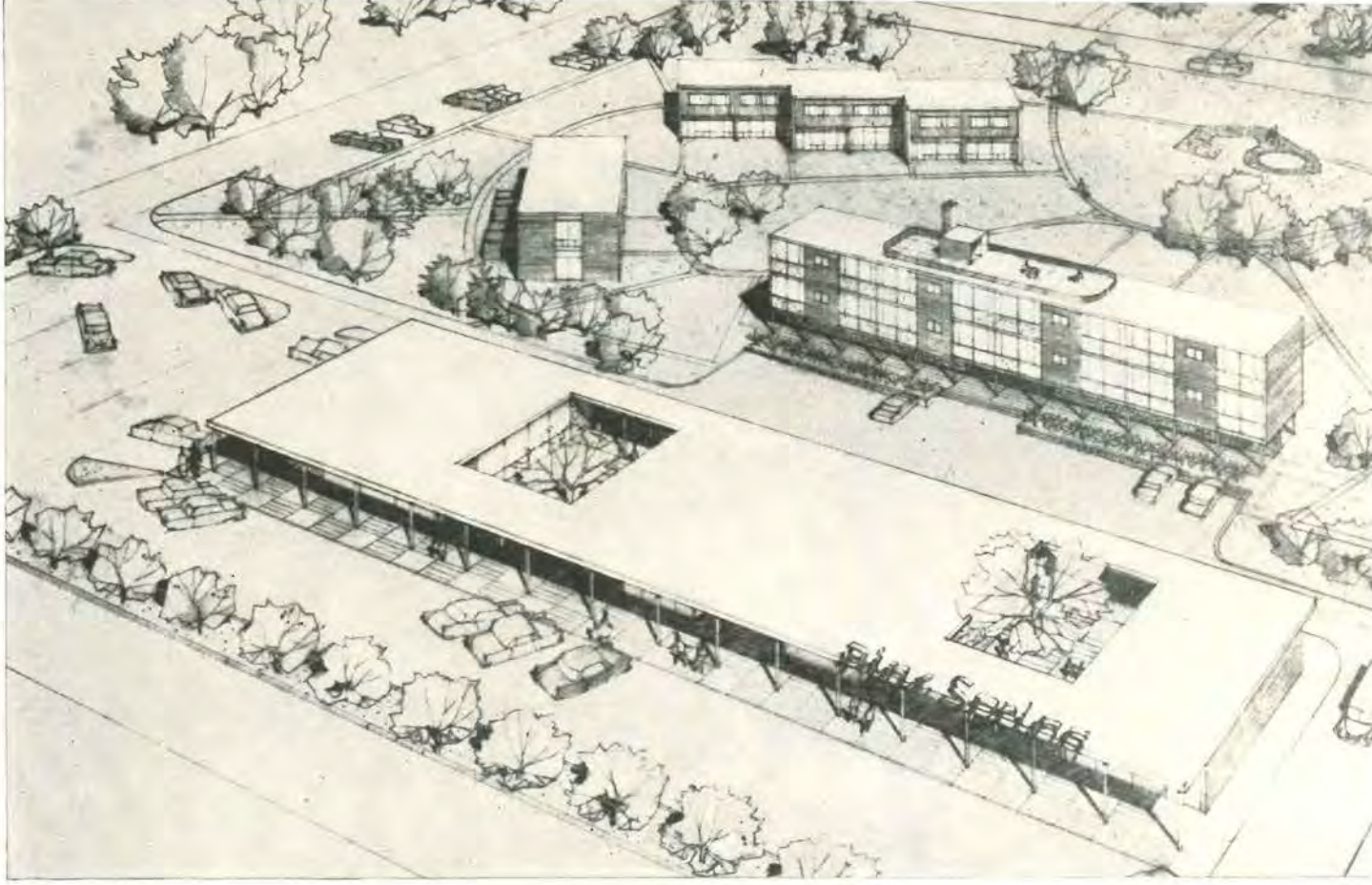


The roof structure is clearly visible in this picture: double redwood beams, steel purlins, cement and wood fiber board which also serves as the roof deck. Space between the screen cage and the sliding sash is part terrace, part plant bed.

partition between the children's rooms open them aytime use as a playroom.

Cost Breakdown:

Excavation	$120	Millwork	1,400
Fill	100	Sheet metal	160
Concrete	1,100	Painting	1,050
Steel	560	Hardware	250
Lumber	4,600	Plumbing	2,100
Carpentry labor	4,100	Electrical	1,300
Brick	460	Heating & air condition	1,800
Windows	1,600	Tile work (ceramic)	600
Roof (structural cement fiber boards)	1,350	General contractor's fee	1,800
Roofing	650	Total Cost	$25,100



LESSON FOR → builders: to sell houses, get a fine site plan, fresh desi

↓ architects: one design job for builders can lead to others

If houses are harder to sell next year, as many builders believe they will be, builder-designer teams should know about the newest success in Washington, D. C. Consisting of only 125 houses, a few apartments and a row of stores, this development has so many admirable features it deserves wide recognition.

LOCATION:
Fairfax County, Va.
9 miles from downtown Washington

BUILDERS:
Eli and Gerald Luria,
Arlington, Va.

ARCHITECTS:
Keyes, Smith & Satterlee;
Francis D. Lethbridge, associate

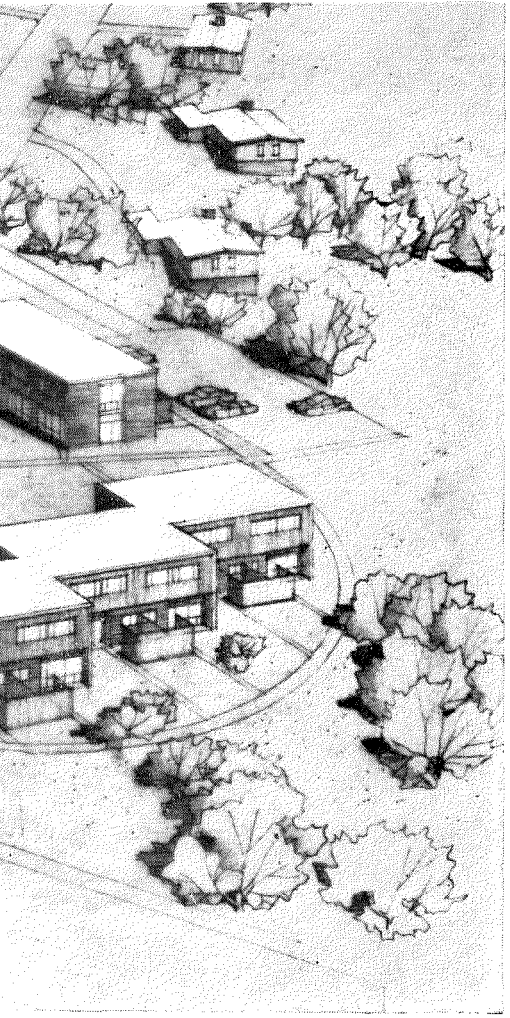
Price range of houses with land:
$15,250 to $20,500

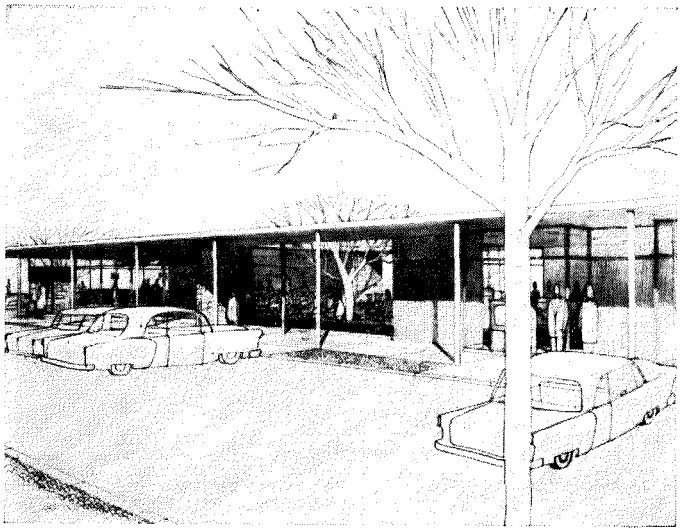
For architects this development demonstrates that:

1. They can well afford to spend time with merchant builders.
2. Builder clients who begin with a few houses may go on buying architectural service: apartments, shops, office buildings, large houses.
3. Architects can sell many related services builders are happy to pay for.
4. By helping to create an entire community where people live well, architects can achieve a deep and permanent satisfaction.

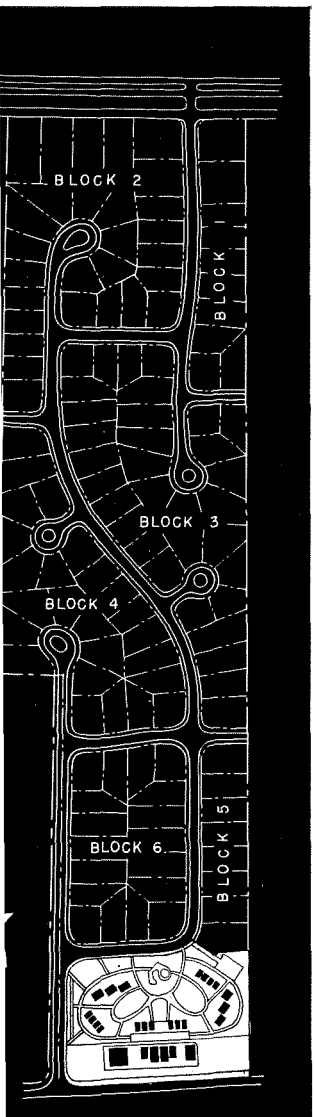
For builders it proves that:

1. In a competitive market, up-to-date design pays off in houses just as it does in the sale of every other product that people buy.
2. Experienced architects have a special talent for design that makes one group of houses, stores or apartments stand out above others.
3. Architects brought in early can contribute many ideas that go far beyond the design of the building.
4. It is better to pay a skilled architect than to overpay a salesman. A well-designed house practically sells itself.
5. Once a builder gets a taste of the many satisfactions that come from a fine community he will never do another ordinary project.





Large drawing, left, shows how the five-acre apartment and shopping area will look when completed. Row of six stores has two open-air patios where people may sit and relax or perhaps have refreshments in good weather. Stores have far more charm than usual row of shops, will be a community asset. Below is the street and lot layout for entire project.



Apartments and stores in an attractive park. Homebuilders who look with envy at large shopping centers but haven't enough people in their project to support a number of stores can learn a lot from this modest commercial area.

In most projects individual house owners do not want to live close to apartments or stores. Yet so skillfully have the architects laid out these five acres that they will be a community asset rather than a liability.

The Lurias saved every possible tree, turned this end of the property into an attractive park. The apartments and stores will not tower above the nearby house but form a buffer between the one-family area and the busy traffic on the main highway beyond the stores. The architects have used the park to add value and charm to both the shops and the apartments.

The design of the stores has much to commend it. For this small, intimate neighborhood, the stores are intimate in their design. Proportions of the group and relation of height to width are good. An outstanding feature is the open-air gallery which cuts through from front to back in two places. The drugstore, at the right end, may use its gallery as a patio to serve drinks outdoors in summer. The store on the left will be a food shop and the stores in the center will be rented by small neighborhood merchants.

The architects laid out the pleasantly meandering street plan shown at the left. Roads follow the natural contours so the builders had less earth to move than if a gridiron pattern had been used. This creation of curving streets and small neighborhoods increases the value of the land and brought many buyers.

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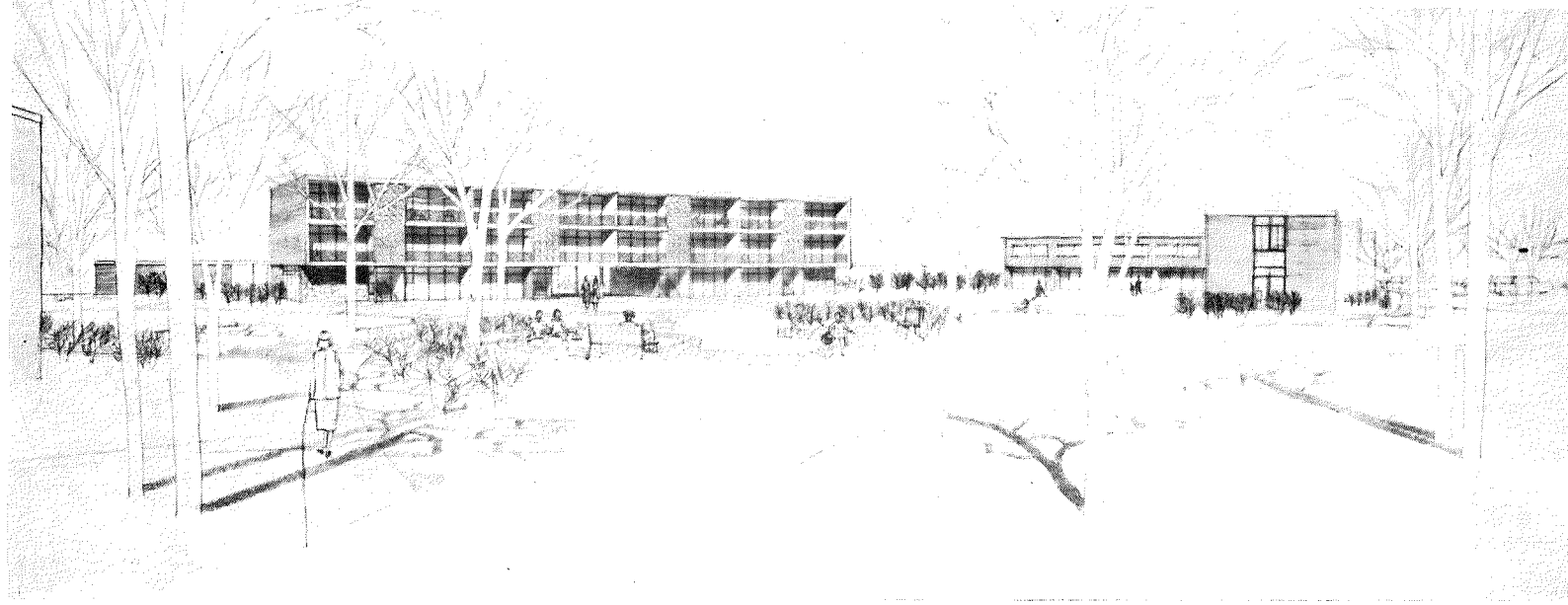

Sketch above shows apartment group as seen from the one-family house area. These are truly "garden apartments," as the five buildings are well separated and surrounded by trees. The large building has only one-bedroom units. Four smaller buildings are duplexes with two bedrooms upstairs. Total group has 55 apartments, or 15 families per acre.

Proper orientation adds livability and value. In their apartment house area (a and in their houses the Lurias have added thousands of dollars in perm value and an inestimable amount of better living for future families th the careful way that every building was put on its site. In a speculative opment houses are usually lined up in rows and the builder shrugs responsibility in regard to orientation. Picture windows face any dir regardless of view or exposure. Garages may be on the south, blocking sunshine.

But architects Keyes, Smith & Satterlee and Lethbridge know that the of a house or apartment for family living can be nearly doubled if hou land are related to each other. Because of the excellent job they did previous Luria project where the builders have had the most satisfying e ence of their building careers ("they're the happiest, least complaining of buyers we've ever seen") the builders were willing to pay $40 per h give the architects time to study every location. Then the particular which best fitted each site was chosen, and it was twisted or turned on until it made the most sense. Admittedly the big lots of ½ acre or mo wooded, rolling land gave them an opportunity that not every builder h

This careful site planning calls for a specialist, not a construction su tendent. The $40 bought the time and judgment of specialists who k much in their field as lawyers or accountants (without whom no builder along) do in theirs. But ultimately the builder doesn't pay the $40 hims is paid for by the buyer who, if he knew what he was getting, would c it one of the best buys he could make.

Actually, the Lurias got a big return on this $40 investment. For location of the houses means a great deal less earth moving, shorter dri —but of greatest financial importance, it often meant turning a on house into a two-story which brings a larger profit than the smaller

The drawing opposite shows one small section and how houses vary i tion to contours of the land, trees, view, summer and winter sun and b Most houses have their window walls where they get a pleasant view, a one of their neighbor's service yard.

ders put best foot forward with model house. The Luria Brothers put full responsibility for the model house on their architects who sited the house on its lot, chose the particular model to go there, did the color schemes outside and inside, and also took over the entire job of decorating. The 55-acre project will have 125 houses when completed, with a total of 20 variations that sell from $15,250 to $20,500. Houses are improved versions of builders' last project.

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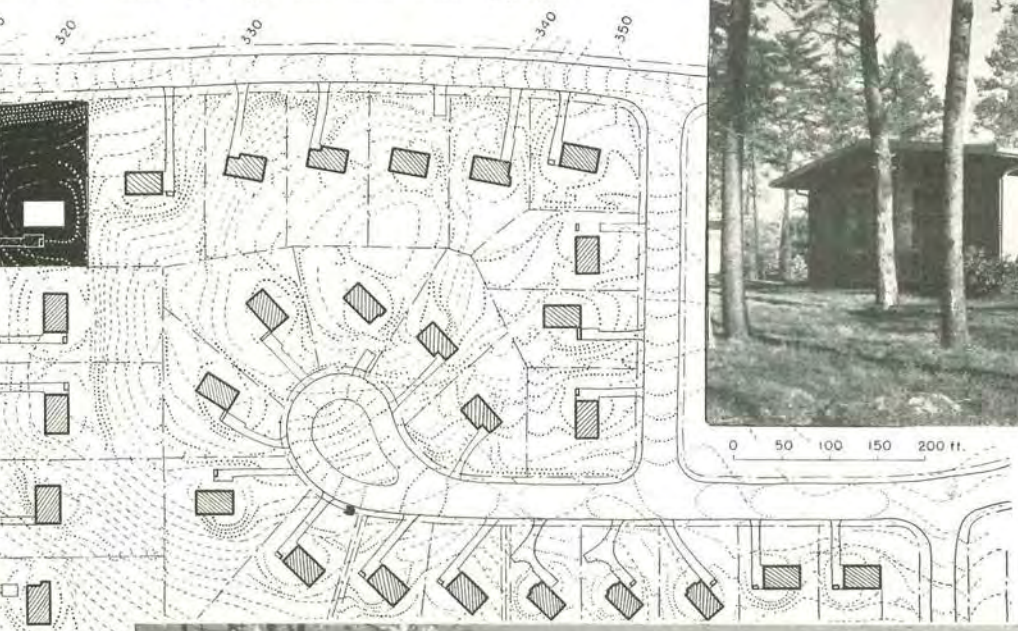
Photos: Robert C. Lautman

lan (model house upper left) shows small section of project

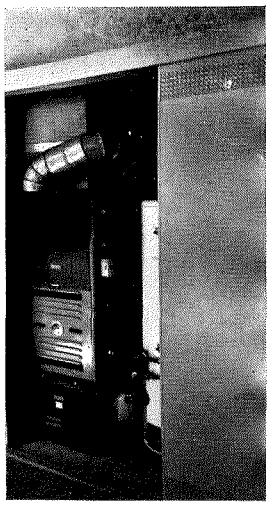


Photos above and below are opposite sides of model house. (Front view with car in carport is lower right, page 146).

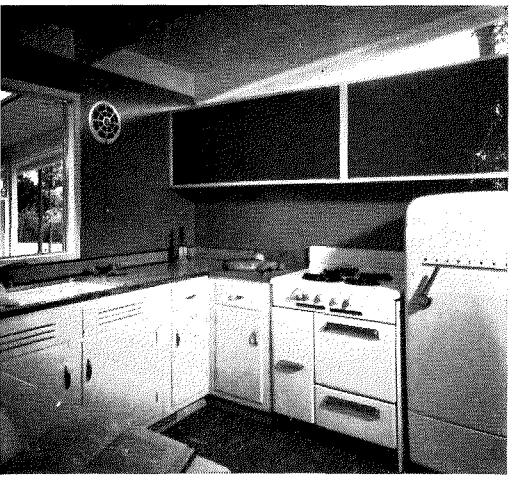
This is smallest of the three bedrooms. It s floor to ceiling windows which in this room only at bottom. Room seems larger than it i cause of sloping ceiling and white planking, w is more popular with buyers than dark ceilin

Photos on these two pages are of the model house, which has 1,066 sq. ft., is built on a slab, sells for $16,750. View above shows portion of living room from the dining area. View from large windows of all houses is usually like this. Below: the fireplace faces the window wall.

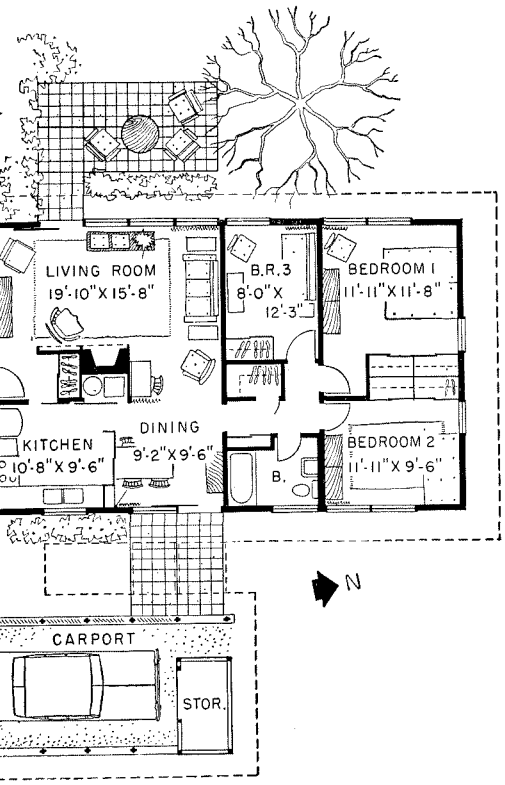
Opposite view from upper left photo. This shows how vertical louvers on the carport create a baffle from shutting out sight of automobile and creating a more fied entrance. Open roof framing beyond door ties and garage together yet lets in light.



Architects designed an excellent treatment for furnace room, which is opposite kitchen. An inconspicuous sliding metal door, with perforations top and bottom, uses the same overhead track as curtain that shuts living room off from kitchen.



Kitchen is well arranged, is equipped with range, refrigerator, double sink, garbage grinder and exhaust fan. As in all other rooms, storage here has been carefully planned by the architects.



Steady market for contemporary design. The Lurias know from experience that modern designs will sell in Washington, D. C. Two years ago they began building some 205 similar houses at Holmes Run, not far from this new development. With Regulation X forcing big down payments, sales set no national records but were steady, and enough to keep well ahead of construction. In fact, the fresh new designs sold so much better than conventional houses in the same price class that at least four other builders decided to follow the leader. Buyers constantly sent friends to the sales office—a new experience for the Lurias.

When the Lurias began looking for new land they decided to get the best they could find, for the success at Holmes Run convinced them that people will gladly pay extra for good land.

They could have repeated last year's models without any changes. But they wanted to do better. So, with the architects' constant encouragement, they decided to make their basic house 160 sq. ft. larger, with larger living room, bath and bedrooms. They added several new models, improved the variations, restudied the entire carport planning, put in more cabinets and better millwork and decided to do a better color-styling job.

It is one thing to want to do a better job and another thing to be willing to pay for it. The Lurias deserve special credit for being willing to back up their good intentions. "Most builders try to cut down on every item," said Eli, "but we have found when you spend more you get more."

What the Lurias did that is unusual in builder circles is to trust the architects with numerous details that designers do not usually do. Satterlee and Lethbridge, representing the architectural firm, spent dozens of hours studying the 55-acre strip and the contour maps. Then they suggested where the roads should go, how the lots should be divided, where to put the apartments and the row of stores. FHA at first did not want to go along with the street plan but then approved it because of the success of the Holmes Run layout and house orientation. County requirements are that lots be at least 10,000 sq. ft. but most of these are 14,000.

The architects delivered three times as many drawings per model as they did for Holmes Run. This makes for better detailing, better houses. It was this kind of careful designing that impressed FHA and brought its co-operation.

Satterlee and Lethbridge supervised the construction of the first houses, chose the color schemes for the entire project, and took full responsibility for furnishing the model house, whose photographs are shown on these pages, They also worked out the sales literature.

The architectural firm received $5,600 for the drawings, $3,600 for site planning, and got a fee of $50 per house for continuing supervision, preparation of color schedules, advice on landscaping and general help in setting up the operation. This is $124 per house for the 125 houses and not excessive for the vast amount of work done. If the Lurias should use these same designs on a subsequent project, as is probable, their design cost would drop considerably. The builders would rather pay skilled architects who make a long-term contribution than salesmen. The Lurias are now selling four or five houses a week at an exceedingly low sales cost. They say they are doing well compared with other Washington builders.

One design job leads to another. Pine Spring is the second group of houses that the architects have done for Luria Brothers. In addition they have also done a small group of houses for a third Luria brother who has his own firm. For Gerald and Eli they have designed the five apartment buildings and the stores as part of Pine Spring, and are now doing a medical office building and another apartment. Both the brothers have also had new houses designed for themselves. There is little doubt that as the architects help the builders to prosper, there will be a continuous program of design work. The moral to architects who doubt the wisdom of working with merchant builders would seem to be: get 'em when they're young and on the way up and they'll give you business as they prosper.

continued on next page

What architects can do with one basic plan. Although Pine Springs has five plans, numerous variations, one- and two-level houses and a variety of carports, there is one basic style. This makes work go faster for the mechanics, simplifies the assembly of framing panels made in the cutting yard and gives the Lurias the benefit of larger purchasing.

The two-level houses are specially successful. Where many builders would have scooped the top off the gentle slopes, knocked down trees and put in one-story houses, the architects designed houses to take advantage of the slope. They took what is essentially a one-story house with a basement and turned part of the lower floor into a large room. This downstairs room can be a study, a playroom, a place for entertainment or it can be partitioned off to include a fourth bedroom.

In the sketch at the lower left on the opposite page is a view of one type which uses the lower level for both a large study and for an additional bedroom. The bedroom is at the lower right, using the space which the garage has in the house shown in large photo above. A carport is added to replace the garage.

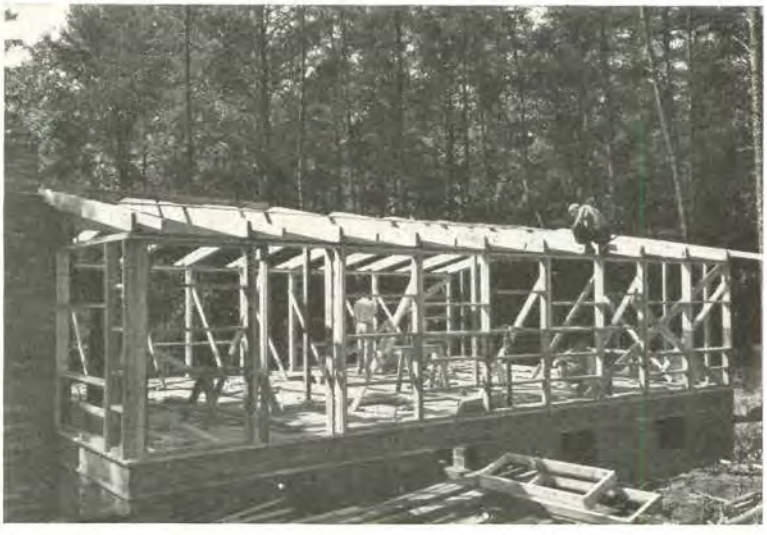
This excellent use of basement space should be copied by many builders who have similar sloping ground but who let their houses stick out of the ground and put in small, high basement windows and in general use no imagination to develop a daylight basement. The Lurias finish their lower room in pleasant paneling and with asphalt tile and add a fireplace. Many people are glad to pay from $3,000 to $4,000 more for the extra rooms.

Truss roof with post construction. Construction is essentially the same as in the Lurias' previous development: a truss roof used with 3″ x 6″ posts which are bought by the carload already milled and rabbeted to size. The rabbeting speeds up the installation of the large glass walls. Trusses and wall panels are precut and assembled at the site in a temporary cutting yard, where considerable millwork is also done. Five men put up the walls for one house, apply sheathing and erect trusses in eight hours. Three men and one helper sheathe the roof in one day. Walls are insulated, have cypress or redwood siding. Heating in the basement houses is gas-fired forced warm air, and in the slab houses is counter-flow, with concrete ducts under the slab leading to registers in the outside walls.

View below at left is front of model house, which is turned with narrow end toward street. Widely extended roof over carport creates illusion of much wider house. On right is same plan turned with wide side to street, same size carport but no breezeway. All have outdoor storage.

Photos: Robert C. Laut

y builders who "throw away" good basement space can t by study of the house above. Basement has been ed into attractive, paneled all-purpose room with fire- e. Another version of the same house is below, showing el with garage space converted to bedroom, carport added.



Construction is of framing panels preassembled in builders' yard of 3" x 6" posts rabbeted at sawmill. Trusses are two 2" x 8" spaced 4'-½". Ceiling is of 2" x 6" planks with roofing felt plus built-up roof. Overhangs are 2' or 3' on all sides. Roof pitch is 1½ to 12.

Progress in air conditioning

Builders and manufacturers reach new agreements on their joint problems

"If we are to sell more than 700,000 houses next year, we must offer new things that we don't now have." So said NAHB president Alan Brockbank at a conference of merchant builders and air-conditioning equipment manufacturers in Chicago, Oct. 3. "We can pick up from 300,000 to 400,000 additional sales with new products such as air conditioning," he suggested. "There is nothing our customers need more than air conditioning, especially in warmer parts of the country."

"Air conditioning," Frank Cortwright added, "is not only the most exciting but also the most important new idea in housing today."

From the meeting came new statements as to what the builders want, what the public wants and what the manufacturers can provide.

An important step forward was the appointment of a joint committee on which Dick Hughes, Martin Bartling and Cliff May will represent builders; John Gilbreath, S. J. Levine and A. E. Meling will represent manufacturers; with William Henderson representing the Air Conditioning & Refrigeration Machinery Assn. and Lee Miles, Keith Davis and A. R. Gilkerson for the National Warm Air Heating & Air Conditioning Assn. Consultants will be R. W. Roose and Bill Nessell. This committee is already at work. Among its first duties: to prepare material for the annual NAHB convention which will be held in Chicago in January.

Just announced *for the merchant builder market, is Carrier's two-ton unit, 3' square, 5' high, with both heating and cooling inside a neat package.* *(See p. 188 for complete story.)*

"Musts" for the air-conditioning system

Builders and manufacturers agreed on these points:

Space: the combined heater and air conditioner must not take more than 12 sq. ft. of floor space.

Accessibility: the unit must be located so that a serviceman can get at it easily and have room to work. He should not have to go through the main living rooms.

Noise: builders should avoid a central location for equipment since the noise of the steadily operating unit may prove to be a nuisance, especially if there are louvers in the equipment-room door.

Initial cost: because the largest untapped m market for air conditioning is in houses from $10, to $12,000, the total bill for both heating and c ing installed must be under $1,000 for such hou The lower the price, the larger the market.

Operating costs: while no one is yet sure low such costs must be, all agreed that they mus kept to the lowest possible figure. If operating c are high, FHA and VA will penalize the buye air-conditioned houses by insisting that he hav higher income.

Efficient, compact, automatic: manufactu agreed that equipment should be in a neat pack should be as efficient in its operation as a ref erator or a warm-air heater and that it should automatic. It should maintain a maximum 80° t perature with 50% humidity.

Fewer extra costs: "The thing that's kil air conditioning is all the extra cost after the leaves the factory," said builder William Farring of Houston. "The connections should be as sim as an automatic washer's." Everyone agreed the plumbing and wiring hookups must be as in pensive as possible.

Sales appeal vs. efficient design

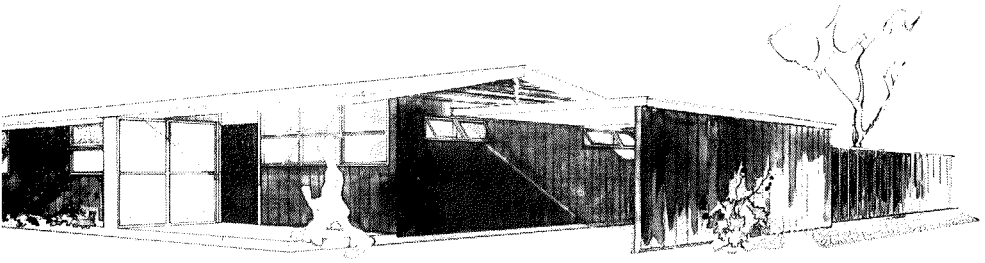
"We must have air-conditioned houses that sell," said chairman Ned Cole. "If a design fea won't help sell the house, we throw it out."

An air-conditioned house is usually a compron between what is best for the cooling system what buyers want. A windowless house might ideal to prevent heat gain, but no one would bu

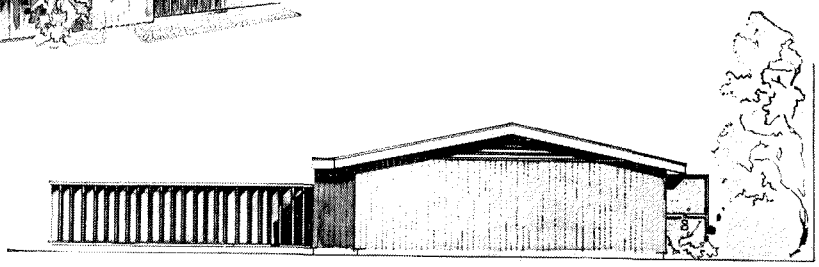
"While manufacturers say fixed windows are l FHA in our area of Texas won't accept station windows," said Dick Hughes, who opened the m ing. Windowless west walls reduce solar heat g but several builders said customers do not like th

How large a unit for the builders' house

Residential air conditioning for houses of 1,000 ft. or less is still so new that no backlog of exp



der Dick Hughes *exhibited these preliminary sketches for his air-conditioned house and asked for comments. Engineers sed these design features: white roof, wide overhangs, venti- d attic, high windows which admit less direct sun, a windowless t wall, well-shielded east windows, roof and sidewall insulation. conditioning engineers advised that in a well-designed house size of the cooling unit could be reduced by one third or more ch also drastically cuts the operating expense.*



WEST ELEVATION

e exists. Manufacturers' engineers do not yet w size requirements for houses in different parts the country.

Several builders have reported successful sum- r cooling with units of less than two tons. Build- Fonde & Bartling of Knoxville cool their 1,000 ft. houses (of which only 825 sq. ft. is actually he rooms) with a one-ton unit centrally located. out 30% of the wall area is windows. Houses well insulated, have wide overhangs and double zing and are weatherstripped.

cooled vs. water cooled

cause of water shortages and high operating costs many areas, builders have shown great interest ir-cooled units. Large parts of the Southwest are rt of water, and in all areas FHA is likely to alize a unit which promises high monthly costs. nsequently several manufacturers have already duced an air-cooled unit or have one in the ign stage.

A builder will be moved to improve his construc- n 1) so that he will be able to get away with less ling tonnage, and 2) because he will then be able se air-cooled equipment even in its present stage development. Air-cooled units work more effi- ntly in small sizes than in larger sizes.

tch the moisture

t and moisture from kitchen, bath and laundry be a serious problem to residential cooling, espe- ly in a humid climate.

Variations in humidity may make more difference he amount of refrigeration needed in two differ- areas than variations in temperature. A builder Houston, for example, needs a more powerful t than a builder in dry El Paso putting up the e size house.

To get rid of moisture and heat in kitchen and nrooms, manufacturers recommend installing an ctive exhaust fan in each of these rooms. Stoves, ers and hot-water heaters should be vented di- ly to the out-of-doors.

What are the annual costs?

Because so little is known about operating costs of air-conditioning units in various parts of the country, one of the early jobs of the newly appointed joint committee of builders and manufacturers will be to make such a survey. A recent report by Straus-Frank Co. in Houston showed that the electrical bill for an average three-ton system was $93.90 for a six months' cooling season, and a five-ton system cost $173 per season. A two-ton unit is estimated to cost $60-$70. Houston's electrical rate is 1.7¢ per KWH. To these costs must be added a very small water bill and a maintenance charge.

A survey made by Carrier Corp. in Dallas, Wichita Falls, Mobile and Lincoln revealed air-conditioning costs for electricity were lower in these cities than in Houston.

But it is well known that living in an air-conditioned house offers some by-product savings. Families in Philadelphia, for example, which used to take summer cottages on the ocean, report they no longer do so because they are more comfortable at home. Texas families with air conditioning say they no longer find it necessary to go to air-conditioned restaurants or to movies to spend a comfortable evening. There are also savings in cleaning bills for curtains, rugs, etc. For some families there are lower medical bills because of less hay fever or fewer allergies.

"Why shouldn't FHA make allowances for these savings?" some builders asked.

Builders are invited to write the building editor of HOUSE & HOME regarding their experiences with residential air conditioning. How much are operating costs in your area? Do FHA or VA encourage or penalize air conditioning? Which features of air conditioning most appeal to the house buyer? What size unit have you found satisfactory for your house? What are your problems?

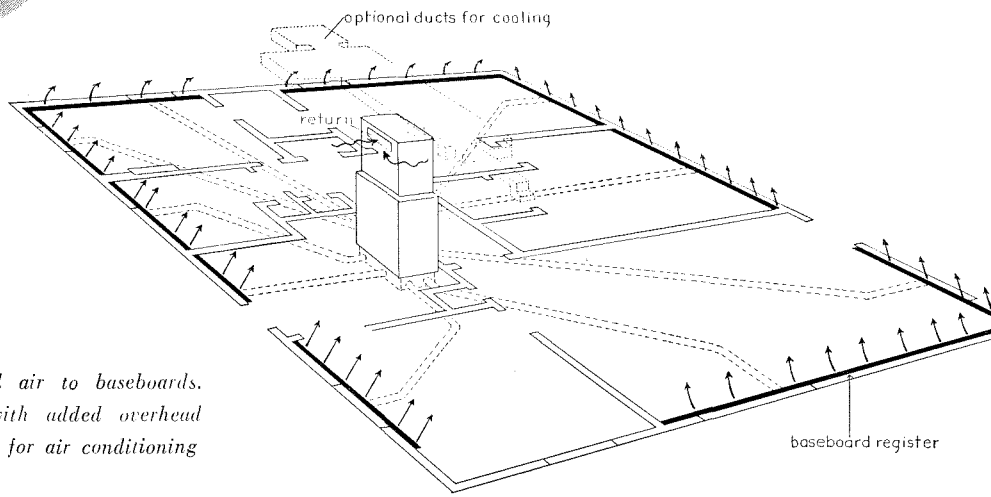
Warm-air baseboards

. . . faster than slab heat

. . . less apt to cause smudging

. . .easily reversible for summer cool

Baseboard registers replace wooden baseboards. Warm air is discharged through openings just above the floor.



Radial ducts feed air to baseboards. Reverse system with added overhead ducts can be used for air conditioning

Here is a brand-new heating method—perimeter heating with warm-air baseboards.

Its advantage over radiant heat in the floor: it responds much quicker and gets more heat to the outside walls where you need it most. If the weather changes, the sluggish radiant system must change the temperature of five tons of concrete (in an average house) before changing the room temperature. Its disadvantage—less assurance against cold floors.

Its advantages over floor-register perimeter systems: you don't have to cut the carpets to install the system. The new system also gives a more even blanket of warm air over windows.

Its advantages over many wet-heat systems: quicker heat, lower cost, and summer cooling is easily added. Compared to hot-water baseboards, it is claimed that the new system blows warm air away from the walls, thus minimizing the chances of smudging.

So far only half a dozen small companies produce the new warm-air baseboards. But other firms plan to make them soon. One large manufacturer will announce its new baseboard unit in January.

How does it work?

Perhaps the main feature of the new system is that it establishes an even blanket of warm air over outside walls and windows. The air enters rooms f holes or slots in the long slim metal register w takes the place of the ordinary wooden baseb

The warm air is fed to the baseboard regi by ducts which fan out from a central furnace the spokes of a wheel. In slab houses the wa from these ducts helps keep the floors warm. the most part only one duct is necessary per board since most baseboards have adjustable o ings which facilitate supplying air evenly alon entire wall.

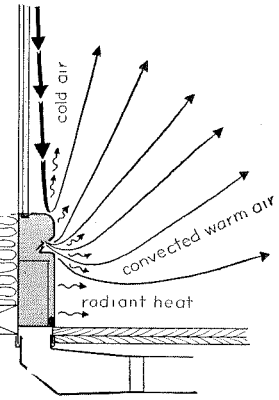
Since the metal baseboard is also warmed u around 130°, it acts as a radiator; as much as of the total heat supply is radiated across the f which further reduces the danger of cold floors

Temperature of the supply air ranges from to 190° depending on the particular system. blows horizontally into the room for several in then floats upward so smudging is minimized.

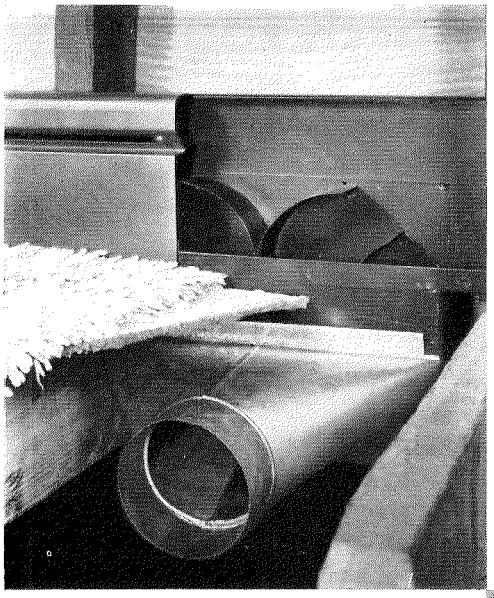
Installation is simple

The warm-air baseboard is basically just a version of perimeter heating; builders can u in any type of house—slab, crawl-space or basem

The metal baseboard is generally of 20- or gauge steel designed for use with either plaste



supply air neutralizes drafts. Radiant heat from baseboard warms floor.



Directional vanes apportion supply air evenly to both halves of each baseboard. Depending on the manufacturer, baseboards have round, square or slotted openings.

Warm air from baseboards will blanket entire width of picture windows. House below by General Construction Co., Michigan City, Ind.

Studios

Metal baseboards can be used with wet- or dry-wall construction, are installed under all or most of outside walls depending on heat needs.

vall construction. Conventional furnaces are with either small or large ducts. Velocities ally will be higher when small (4″) ducts are but the baseboard unit acts like a transformer y case, converting high-velocity air into a slowly ıg stream as it enters the room.

the furnace is centrally located, builders may up to $100 in a small house (more of course larger one) simply by eliminating excessively duct lines. As with other perimeter systems, a single return near the middle of the house quired.

gineers recommend that the return grille be ed high on an inside wall; the devitalized warm hich normally stratifies near the ceiling is then ly pulled back to the furnace.

ersible air conditioning

baseboard heating installed, a builder can provide for year-round air conditioning. High wall ducts may be added as shown in the am on the opposite page. The homeowner y reverses the air flow during the summer, cool air is supplied from these interior ducts. falling to the floor the air is withdrawn by aseboard ducts and returned to the furnace.

Costs

These metal baseboards are currently priced at from $1.50 to $2 per ft., the actual length required depending upon the heat loss from each room. Manufacturers expect prices to come down as production increases. Other than the baseboards, total installed cost is a little more than a perimeter system with the same furnace and similar ducts.

Some sample prices:

- In Youngstown, Ohio, International Homes installed baseboard heating in 26 slab houses selling for $9,950. With 4″ ducts and a gas furnace, total cost averaged $480 per house.
- In Quakertown, Pa., total baseboard heating cost averaged $550 in three-bedroom $12,000 houses of which $390 was for material including the furnace.
- In Stoneham, Mass., builder Peter Savelo pays $740 to $900 for baseboard systems in ranch-type houses selling for $13,000-$19,000.

Other builders in various sections of the country have thus far reported excellent results with this new system—even in Alaska where it has been tested against frigid subzero winters.

The Housing Research Foundation suggests—

some ways builders could help manufacturers tap a new mark

and manufacturers could help builders offer more salable h

Excerpts from "New Frontiers for Home Builders" by C. W. Smith, published by the Southwest Research Institute, San Antonio, Texas.

It is not a small market you builders control: $6 billion in an average year. Manufacturers who ignored this market in the past are beginning to consider how they can better serve you. They are anxious to produce the items you want, but find it hard to establish two-way communication to learn your needs.

Here are a few suggestions to both builders and manufacturers:

Builders want ranges and refrigeration built in

Kitchen ranges and refrigerators for the most part are still designed to be installed in houses already built. Yet every new house must have a range and a refrigerator, just as it must have a bathtub. Today no builder would think of trying to sell a house without a built-in bathtub. The same thing will happen with kitchen ranges and refrigerators. This will require, of course, wider adoption of the "package" mortgage and also more general inclusion of this type of equipment in FHA appraisals.

With unitized kitchen ranges the oven can be waist high where it is more convenient, and the dirt-catching spaces which existed around the old-fashioned "streamlined" kitchen range can be eliminated. Most model houses utilize these ranges, and there is no doubt that the public prefers them. As volume production is achieved the price will undoubtedly be reduced.

Appliance manufacturers will some day discover a potential market of one million refrigerators a year to be built into the counter space as an integral part of the kitchen and with convenient drawer compartments. Present-day refrigerators are unsightly and waste space, and it is hard to move and clean around them. They are also inefficient because cold air spills out every time the housewife opens the one large door while she juggles articles around to find things on the back of a shelf.

. . . and better planned kitchen cabinets

Millwork companies could logically furnish a great variety of components which would be helpful to you homebuilders if you would define your needs specifically and convince them that you offer a ready market for a reasonable volume of production.

Kitchen cabinets are standard equipment in every new house but their convenience still leaves much to be desired. Base cabinets too often have doors and inaccessible shelves instead of convenient drawers. Countertop space under the wall cabinet could be utilized more efficiently to store electrical appliances—a storage need almost universally ignored.

Other millwork items builders need include storage-wall interior partitions, better awning-type wood windows, front door frames with fixed glass areas next to the door, roof trusses and modular-engineered exterior wall components.

Builders want more efficient windows

Windows have always been a problem, not as a source o but because people insist on opening them for ventilatio satisfaction with the double-hung window is almost un Casement windows permit better ventilation, but involve ing and screening problems and offer no advantages in c ence or protection. Awning-type windows are a great improvement, but the screening, hardware and weatherst problems still remain. Metal windows offer no design in ments over wood windows, and they are unsatisfactory climates because so far no manufacturer has produced houses that is thermally insulated between the outside and surfaces of sash and frame.

When houses were built of stone or logs, openable w were doubtless the easiest means of providing ventilatio day windows should probably be designed only to adm and permit a view. Fixed glass areas seem the most solution, with separate or adjacent ventilation units eq with fixed screens and louvers for weather protection ventilating louvers in exterior walls could be either ab below the fixed glass where, in all likelihood, they wou tilate the rooms more efficiently than openable windows middle of the wall. Combination frames with fixed glas and ventilating louvers are already available from one sources and there is an expanding market for the pro of similar designs by millwork companies which could these units available in every part of the country without sive shipping costs.

. . . and doors that won't warp

Builders throughout the country report that domestic slab warp, particularly when exposed to the weather. To ge factory slab doors many have imported them from Finla other foreign countries. Surely this is an opportunity fo domestic manufacturer.

Builders want waterproof wood finishes

In recent years paints have been improved considerab both interior and exterior use but we still need a good w proof natural finish for exterior woodwork. The warm grain of natural wood can contribute a great deal to the of a home; yet so far there is no satisfactory method of fi this exterior woodwork to make it weatherproof and still its natural color and grain.

Scientific research should be devoted to this problem l we feel confident it is not insoluble. A fruitful field for e tion should be some of the new silicone products or fluoro

continued on p

Matched Beauty

with Unmatched Performance

t's what Ro-Way offers you!

When you specify Ro-Way garage doors for any style of residence, you *know* their simple beauty will blend perfectly with the architecture of the house itself. See, for example, how the clean, horizontal lines of the popular Ro-Way *Classic* actually become part of this handsome ranch design.

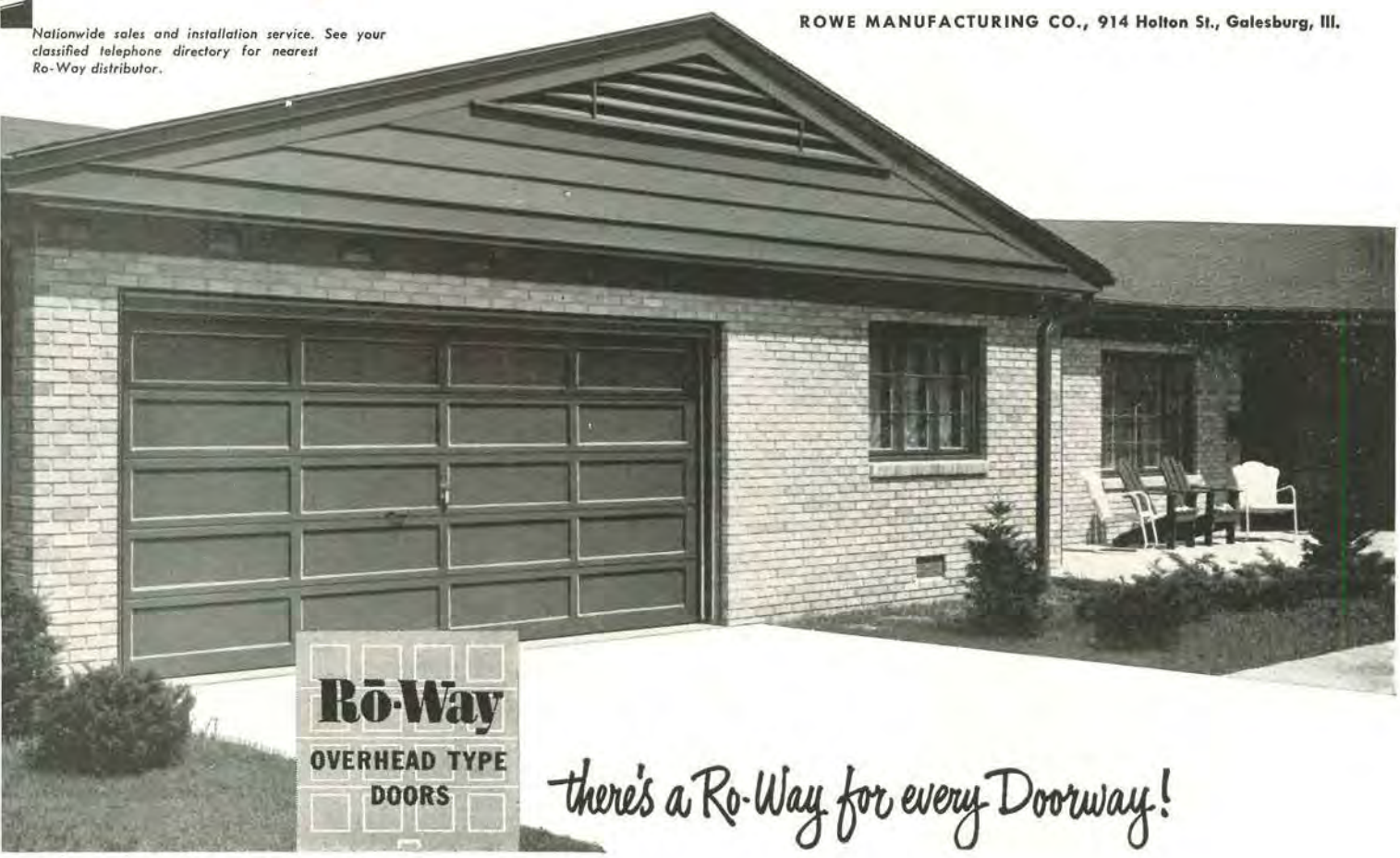
You can be sure, too, that Ro-Way offers unmatched performance. With friction-reducing Taper-Tite track, Seal-A-Matic hinges, ball bearing Double-Thick Tread rollers, and Power-Metered springs . . . smooth, quiet operation is built right in.

In fact, *every* pace-setting feature of Ro-Way doors is designed, engineered and built for *matched beauty with unmatched performance.*

To be sure of such quality, be sure to specify *Ro-Way* Overhead Type Doors.

Nationwide sales and installation service. See your classified telephone directory for nearest Ro-Way distributor.

ROWE MANUFACTURING CO., 914 Holton St., Galesburg, Ill.



there's a Ro-Way for every Doorway!

derivatives. Adapted to waterproofing masonry walls, these offer antiwetting and durability properties while still permitting the surface to "breathe."

Even bathrooms could be better

Although plumbing fixtures and bathroom equipment have been improved a great deal, there are still opportunities for new products. For example, in the old-fashioned medicine cabinet it is necessary to open the mirror door to get to the shelves. Frequently, especially in lower-priced houses, the mirror is too small to serve any useful purpose and the shelves inadequate to hold the things people try to put on them. Now, with wider acceptance of the new vanity type of lavatory, we should be able to install a large fixed mirror on the wall and provide more convenient storage space in drawers under the vanity.

Toilet tanks that hang on a bathroom wall are noisy, occupy valuable room space, and tend to drip condensation water on the floor during humid weather. You can definitely look for toilet tanks to be eliminated through the development of an economical, quiet, low-pressure flush valve, or, at least, to disappear into a wall recess or to be hidden in a wall cabinet. Either way they could be insulated thermally so that warm, moist air could not condense on the cold tank and insulated acoustically so that the noise of the tank refilling could not be heard all over the house.

Builders want variable control furnaces

Some manufacturers have tried to sell products such as heating units rather than trying to sell comfort, livability and economy.

That is one reason why many heating units do not perform more satisfactorily. On automatic hot-air furnaces the intermittent operation of the burner and fan is noisy and unnecessary.

Especially on gas-fired units, it should be entirely possible to provide a variable control on the burner. There is no reason why a gas-fired heating unit could not be modulated automatically to compensate for moderate or extreme cold. And the volume of air circulated from the heating unit could be modified through a variable speed fan.

. . . and less humidity

Often manufacturers of one piece of equipment do not consider the over-all problem.

Manufacturers of heating units, for example, could help to reduce the humidity in houses in the wintertime. It would be relatively simple for them to educate their dealers to install these units so that a small percentage of outside air could constantly be introduced

continued on page 158

HOW TO CASE A WINDOW

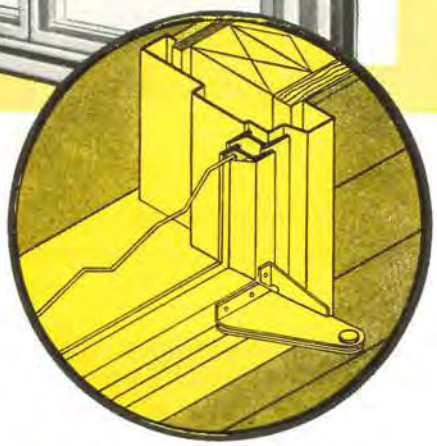
with STEELCRAFT *UniTrim*

(Complete Inside-Outside Trim)

The Right Combination for Low-Cost, Attractive Window Openings

Here's one of the biggest time and money-saving developments to enter the building field in years. Think of it! Using only a hammer and nails, you can install UniTrim in just a few minutes. The installed cost of UniTrim and casement window is considerably less than the multiple piece window frames and trim. UniTrim is a complete inside-outside window trim and is designed especially for use with wood construction although a complete range of sizes and types is available for other types of construction.

Here is the new modern method of installing and casing a window. Get the cost-cutting, money - saving facts about Steelcraft UniTrim today.



No extras to buy . . . the window sill, the window stool, the inside moulding and the outside trim, the inside trim, the fins, the flashing—everything it takes to trim a window. It's all *galvanized* and *bonderized* with a baked-on coat of paint for long-lasting protection.

STEEL Craft
REG. U.S. PAT. OFF.

STEELCRAFT
MANUFACTURING COMPANY
ROSSMOYNE, OHIO (IN GREATER CINCINNATI)

THE STEELCRAFT MANUFACTURING CO., Dept. HH-1152
9017 Blue Ash Rd., Rossmoyne, Ohio (In Greater Cincinnati)

Please send me complete information on Steelcraft UniTrim in combination with Steelcraft steel casement windows.

Name_____ Title

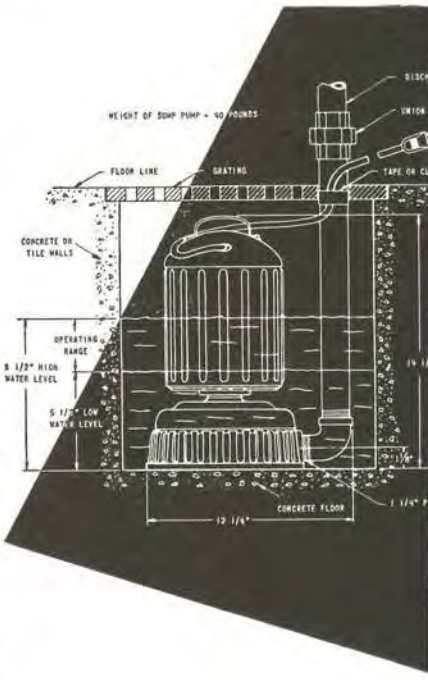
Company_____

Address_____

City_____ Zone____ State_____

FAIRBANKS-MORSE

NEW Submersible Cellar Drainer

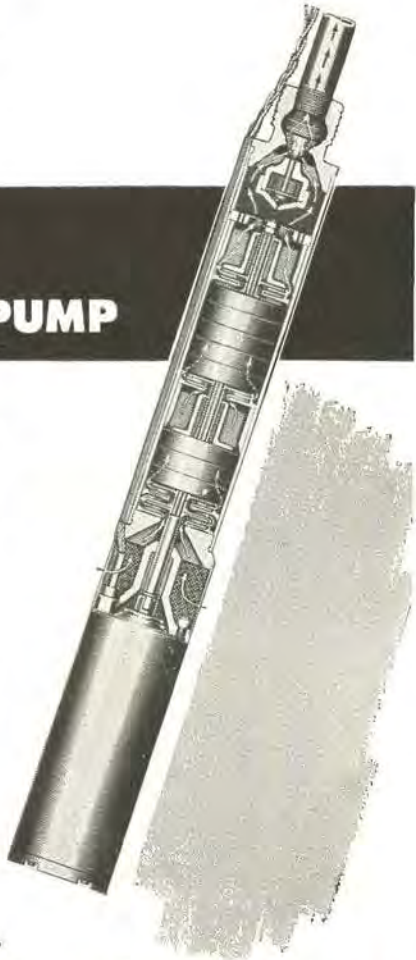


You and your clients can be sure of ample, dependable protection against damage in basements by flooding if you have this *new* Fairbanks-Morse submersible cellar drainer installed!

It has many advantages. It can be concealed in a sump only 16″ x 16″ x 16″. (See diagram). It will discharge as much as 3600 gph. against a 10-foot head. The big screen area permits only trash-free water to reach the impeller. Operating range is set at the factory. Thus, no float adjustment is necessary. Motor and operating switch are enclosed in a water-tight stainless steel housing which also serves as a float control.

FAIRBANKS-MORSE

DEEP WELL SUBMERSIBLE PUMP



Architects, builders and drillers in all parts of the country are recommending the sensational Fairbanks-Morse submersible pump. It features complete submersion of *motor and pump;* absolutely quiet operation; ease of installation; minimum maintenance; single instead of double lengths of pipe; and a range of capacities at depths to 140 feet to meet all requirements.

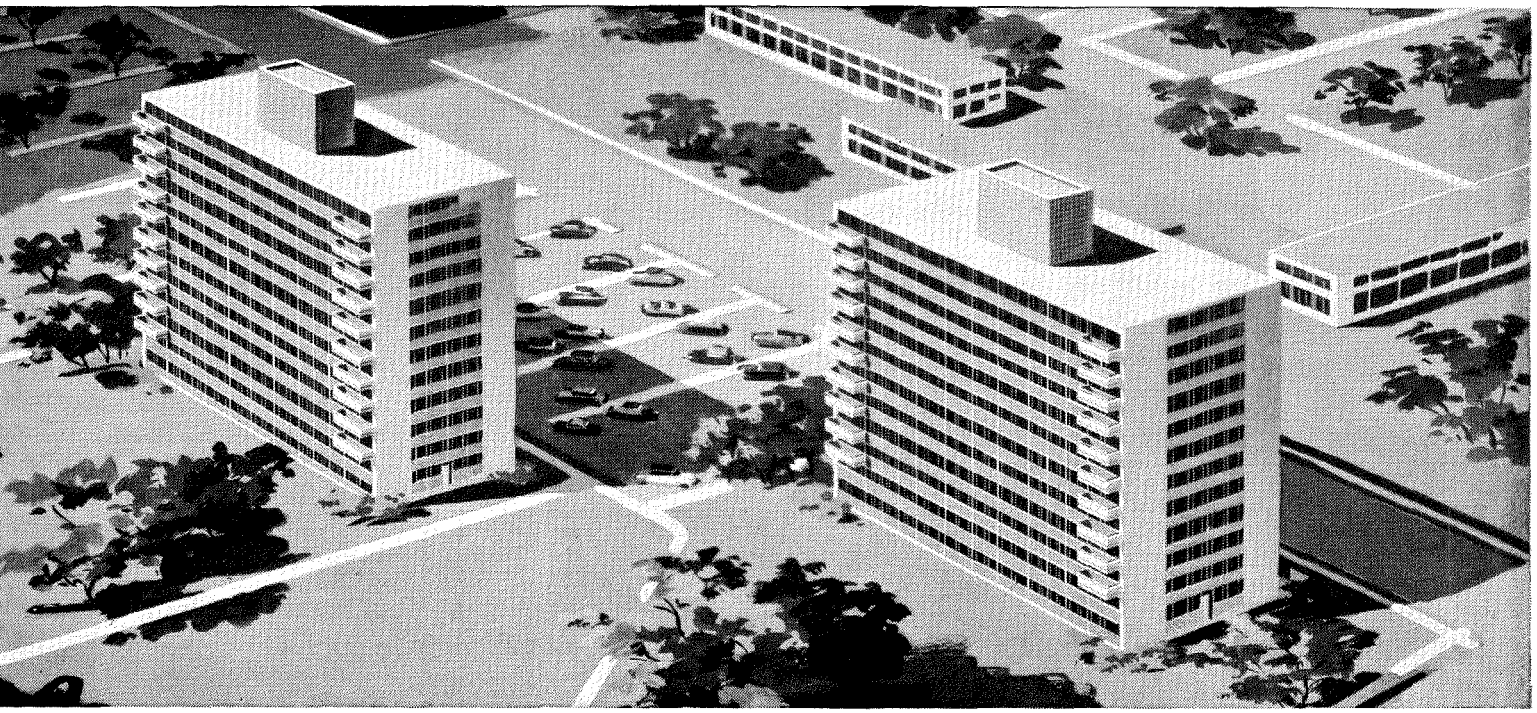
Send for Specifications

If you do not have complete specifications of the deep well submersible pump and the submersible cellar drainer in your files, ask to have them sent at once. Address, Fairbanks, Morse & Co., Chicago 5, Illinois.

FAIRBANKS-MORSE

a name worth remembering when you want the best

HOME WATER SERVICE AND LAUNDRY EQUIPMENT • ENGINES • GENERATING SETS • HAMMER MILLS • MAGNETOS • MOTORS • MOWERS • PUMPS



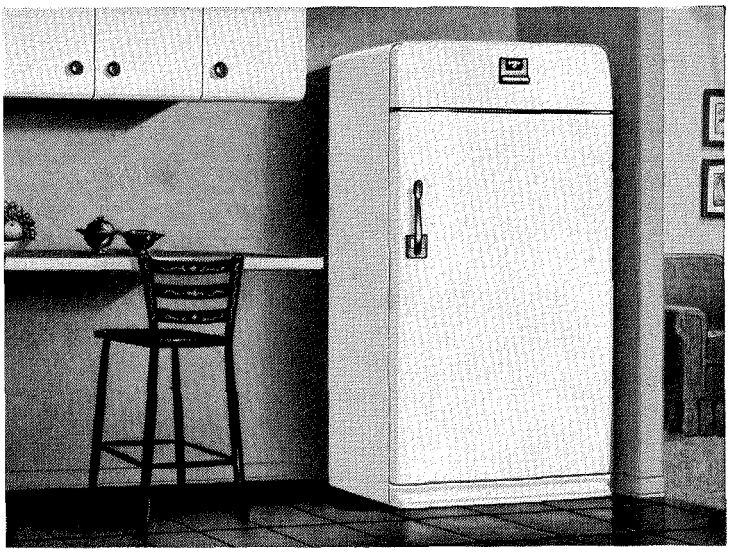
LAKE MEADOWS has selected Frigidaire refrigerators for the first two 12-story apartment buildings in new Chicago community

ecently, work started on the Lake Meadows project which is eing constructed on Chicago's south side by the New York Life nsurance Company. This is Chicago's first redevelopment un-ertaking in partnership with private enterprise. When com-leted, a modern community on a 100-acre site will take the lace of a once blighted area.

The first two 12-story buildings now under construction will ave 238 apartments (2 to 4½ rooms). Approximately 54% of the xterior wall surfaces of both buildings will be glass. Plans call or concealed radiation, many room-width picture windows, and new Frigidaire Refrigerator in each apartment.

More and more builders are finding Frigidaire Refrigerators ideal for modern apartments. These streamlined, handsome refrigerators offer maximum storage space — and yet they're compact, designed to fit easily into today's smaller kitchens. And Frigidaire Refrigerators are famous for low-cost, trouble-free service. This economy and dependability are especially important to builders of apartments with a great number of kitchens.

For more information on Frigidaire Refrigerators and the many other Frigidaire household appliances, call your Frigidaire Dealer, or the Distributor or Factory Branch that serves your area. Look for the name in Yellow Pages of your phone book. Or write Frigidaire Division of General Motors, Dayton 1, Ohio. In Canada, Toronto 13, Ontario.



Sketch of typical kitchen in Lake Meadows, showing new Frigidaire Refrigerator. To residents and builders alike the name Frigidaire means "top quality" and the last word in modern convenience.

FRIGIDAIRE Appliances — Refrigeration and Air Conditioning Products

Refrigerators • Electric Ranges • Food Freezers • Water Coolers
Home Laundry Equipment • Electric Water Heaters • Air Conditioning
Electric Dehumidifier • Commerical Refrigeration Equipment

Frigidaire reserves the right to change specifications, or discontinue models, without notice

into the system and moist air consta
hausted and never recirculated.

We predict that humidifiers will d
from warm-air heating systems becau
day's tightly built houses, the moistu
off by showers, laundry equipment,
and the occupants themselves puts r
midity into the air than is needed.

High humidity can greatly contr
the deterioration of a house and the
fort of the occupants. Warm, moist a
the house is constantly trying to get
when the temperature is low, becau
saturated cold air contains much le
vapor than warm air. Practically no
building material is entirely vaporpr
impervious vapor barriers are not al
stalled so carefully as to eliminate
or cracks in the joints. Consequentl
houses in cold climates constantl
moisture. It soaks through exterior w
frequently saturates insulation, renc
ineffective. This can cause the outsid
paint to blister and peel off. Constan
tion of the insulation or sheathing c
even more serious structural deterio
framing members.

Dehumidifiers for summer use are
expensive to buy and operate for gen
Eventually perhaps a better way will
to squeeze the water out of the air so
can be more comfortable in warm
In the meantime we should make eve
to reduce winter humidity by turnin
humidifiers on heating units and by
ing ventilation both in the house an
exterior walls and roof outside the in

Builders want summer cooling

There is a tremendous untapped ma
home cooling, and most presently
equipment is unnecessarily expensive
could offer your customers summer c
a reasonable cost, you would have a
dously attractive merchandising asse

In the summertime the heat which
counteracted comes from the sun, an
sorption type of refrigerating unit
source of heat to actuate it. In the
type of refrigerating unit was ope
flame or, more recently, by an elect
sistance heater. When hooked up to
cooling units, why should not absorp
refrigeration be actuated by solar he
sun is what makes us hot, why not ha

Another development in thermoe
that should certainly be explored is t
bility of using the same cooling me
to cool the house, the home food fre
the food refrigerator. A cooling me
pumps heat out of one place into
While we are pumping heat out of th
the refrigerator and food freezer, w
we figure out a better means of disp
it? This same heat would undoubte
a lot of fuel now used to heat water.

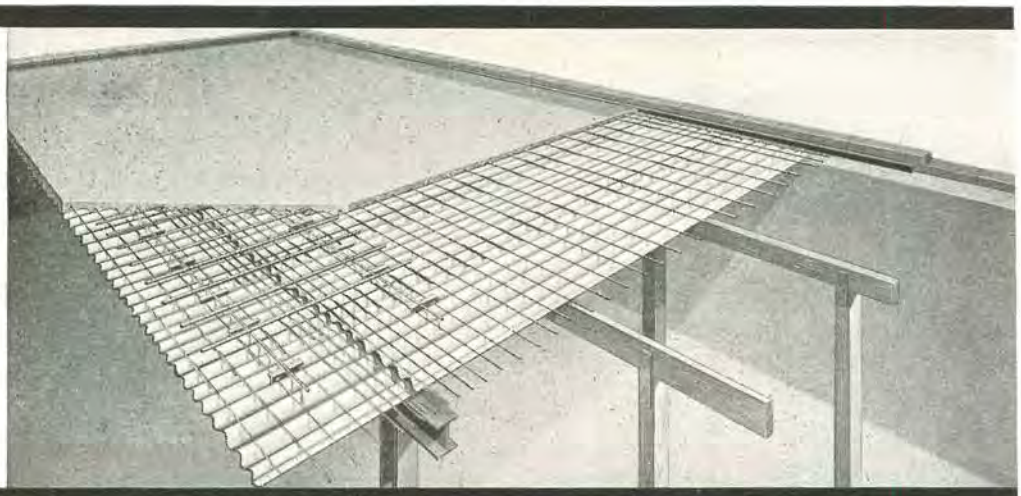
. . . A NEW PERSPECTIVE IN BUILDING!

COFAR

- ▶ Reinforced concrete construction.
- ▶ High-strength, deep-corrugated steel manufactured with welded closely spaced transverse wires (T-wires).
- ▶ Positive reinforcement permanently anchored to and combined with structural concrete.
- ▶ Concrete floors and roofs without forms.

STRENGTH UNLIMITED

AR! Deep-corrugated steel, 100,000 psi and ger (the main reinforcement), and T-wires perature reinforcement) in one manufactured uct . . . all the positive steel needed in the tural concrete slab! Design follows normal rete structural procedures. Full range and n freedom is given concrete slab construc- with continuity and weight saving. Hot-dip y galvanizing insures building-life perma- e. Build strong . . . build COFAR.



TIME AND MONEY SAVED

AR makes concrete floor and roof construc- ı one-stage operation . . . no forms to build tear down. Construction is clean and fast. reting in multi-story buildings moves indoors f the weather. Large or small, your building ter, costs less with COFAR.

CE AND LIGHT RECAPTURED

:, clean, corrugated-pattern COFAR ceilings ıe new look to many homes. Fire resistant for xposure with lightweight modern ceiling pro- ı. COFAR saves enough head room and veight to add stories to skyscrapers. Busi- office or residential . . . COFAR is the answer.

'VICE on application and design by ılified COFAR engineers.

VIEW of all COFAR designs.

OTHER GRANCO PRODUCTS

CORRUFORM for steel joist floors.

TUFCOR corrugated deck used with cementitious insulating fills for roofs.

GRANCO ROOF DECK flat-top roof deck rotary-press—UNIformed.

not take it. Actually there are very few. We effect savings in the nature of 80%. I think conventional builders pay $5 an outlet, while we install them in the plant for about $1. *If we could get prefabrication into the plumbing we could save the customer $300 or $400.*

Ford: Twelve years ago, we had a prefab that could be installed complete with fixtures to sewer for less than $80; added to the plumbing outfit made it less than $150 at that time.

Baldus: *One quarter of all houses are built by owner-builders. It is a market.*

To what extent does the industry fix the builder's sales price?

Price: We don't permit more than a 10% net profit before federal income tax. The biggest problem is that builders are not businessmen. Most of them never make a dime. *We have a unified accounting system we force builders to use, and we police them.* Our biggest worry is that they may lose money and hurt innocent people.

O'Brien: We *must* control that sales price. If we produced a package that was economical, as most of our packages are, and then allowed those savings to be dissipated by a dealer in the field, we would lose the whole concept.

Price: The thing that worries me most is to have our builder buy his subcontracting right. If he goes out and makes a bad plumbing buy, a bad wiring buy, or a bad heating buy, he can flub his savings away, and then the markup gets clear out of line.

Ott: We police the bookkeeping, but not the markup. We found it difficult to do that. We try to set it, but holding it is another matter.

O'Brien: We police the markup. We try to maintain a maximum on it. Roughly of 10%.

Price: We have a lot of builders working for 6% and 8%. But the reason you have to give them a 10% maximum is that you have to convince the prospective builders. They want to think they can make it that to begin with. We police the markup 98% of the time.

Taylor: It has been our experience that the rank and file of the builders will charge what the traffic will bear. They like to be under the market. But if you go to Washington, D. C. and set a dealer up, and he is selling for $9,000, or he could sell for $9,000 what is currently being sold for $9,600, he will try to get somewhere around $9,200 or $9,300 if he can get the VA or FHA to up these figures in their appraisal.

Thyer: We can't police the markup at 10% until we get the same size as Price.

Hall: These two fellows who police, we have to compete with them.

What can prefabricators do for the builder over and above delivering the house?

Prentice: For example, how many of you supply advertising material for your distributors? (There was a big show of hands.)

Price: We don't charge them for it, and in addition *we run ads and pay for them.* We have a unified accounting system. It has been voluntary and in a short time will be compulsory.

Prentice: Do all of you have your houses cleared with FHA and with VA so that the builder has no headaches at all?

Renner: There are codes in these different areas which result in the local FHA overruling the Washington FHA.

Prentice: I take it then that in a community *if there is anything wasteful required by the local code, FHA instead of helping to break down aids and abets the obstructionism.*

Prentice: What help do you give the distributor with his interim financing?

Price: We have an acceptance corporation, but *we only finance 30% of our entire dealer output, so we have to help them finance locally or bring in New York banks.* Our first desire is that the financing be procured locally because that makes better relationships. We only use our acceptance company as the last means.

Prentice: If your builder cannot get his interim financing locally, you can supply it from a big lender? How many of you are able to do that? (Almost all raised their hands.)

Why are prefabs better for the mortgage holder?

Renner: The mortgage holder knows tha house is well designed, well engineere professionals and constructed with the material. He knows that the home has sale value because of its proven public a tance. *The mortgage holder is lending m on a unit that must meet the minimum s ards in many widespread areas.*

Ott: *Because of the speed of erection, mortgage lender starts getting returns f on mortgages, than on conventional ho*

Hall: In Fort Wayne you pick up the n paper and see the houses by model nu and year, and advertised very much as would a used Chevrolet. You see a "Catalina" advertised; that is about a says. *A prefab has the advantage of a article:* over the years anybody can loo the bluebook and know exactly what is and quote the market, because hundre people trade in it all the time. It has be a commodity.

Price: The proof of the pudding is that gage lenders have had such a marvelou perience, these 71 or more companies have had them. *There is a very low ra delinquency.*

Is there a prejudice against prefabricated houses?

Price: The only prejudice in this busine just converting the builder to a new w building houses. The public accepts pr any place we go. Sell the ladies. They the houses. It doesn't make much diffe about the men.

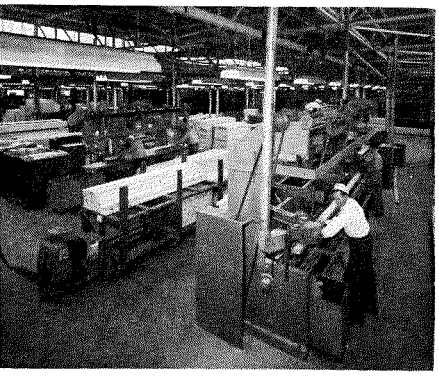
Ford: You sell your bankers, dealers, lu dealers, and the banks and you are al

Prentice: Do you have no problem wit consumer when you first go into a town

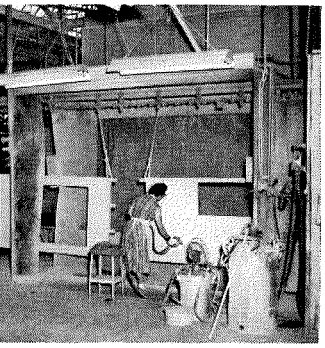
Price: No.

Mainland: One of our dealers is the le

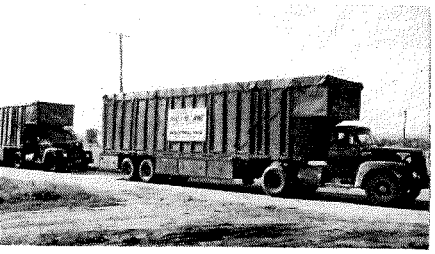
: *In some areas pre-*
cators can probably save
consumer 20%.



-speed *machinery in modern factory saws,*
and notches lumber to close tolerances.

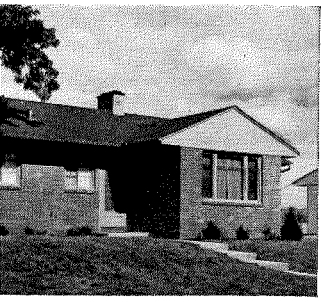


panels *move through paint*
for prime and finish coats.



& Hill *houses, one to a truck, travel up to*
iles from the Minnesota plant.

prefabs, *like Gunnison's below,*
rick-veneered by builders.



builder in Adrian, Mich. For approximately six months following our dealer's first model opening, the prospective customers were against prefabrication. After a few houses were constructed in the rough stage, people began to notice the sturdy construction and the speed of erection. The builder, without any need for local advertising, began to sell the houses because they were selling themselves.

Price: Last year our budget for educational advertising was $\$1/2$ million, and this year it will be $\$1\frac{1}{2}$ million. *People in many new towns where we have no dealers send in requests for our houses.* So the usual thing today is that when a builder finally comes in to us he has six sales in his pocket. We are getting most of our builders through that method. I have found from studies made across the country that the public is 20 to 40 years ahead of the builder. Not necessarily ahead of the banker today, but even the banker was in that category in 1947 as far as acceptance goes.

What areas are prefab territory?

Prentice: What is it about Fort Wayne that makes it the first city in the US that I know of where you prefabricators take almost 100% of the business?

Price: I can name you ten towns where we started dealers at the same time, and they have the same thing. We control the small house market in Lafayette, in Joliet, Ill. Lansing, Mich. is no different, and neither is Battle Creek. I know that Gunnison has done particularly well in Grand Rapids.

Prentice: Can you compete in Long Island?

Ott: I would say that would depend pretty much on the concentration put on in a locality by the various prefabricators. Indiana has more prefabricators than any other state. There are not very many prefabricators in the East while a majority are located in the Midwest. Long Island is quite a distance away and we have concentrated in the Midwest.

Price: I would say the high regional concentration is equally divided between Indiana, Illinois, Michigan and Ohio. It doesn't make a bit of difference where the plant is. The biggest shortage this industry has is trained personnel; *we can expand only as fast as we can get competent salesmen and servicemen.*

Hall: You can only stretch your manpower so far, and a product that is hard to ship is at a disadvantage when shipping long distance. *Plot the location of the plants and you plot the location of the concentration.*

Taylor: In selling prefabricated houses, as in selling other products, you have favorable climates and you have unfavorable climates. For instance, take Long Island. In the first place, you have got some nasty code problems there. Plywood is banned from a great deal of the area by the code. Levitt concentrated there for the most part. In addition to that, practically all the labor that builds houses on Long Island is labor that lumps the job. A man building 100 or 150 houses in Long Island, or 1,000 at a time will place a contract not for 150 houses with one person, but 15 with this one and 15 with another. And a man may have three or four sons or two or three brothers in the deal. I don't mean that cannot be broken down, but the builders on Long Island are committed to lumping labor.

Prentice: Indiana is the state with the biggest proportion of prefabs?

Travers: Yes. I would say at least 30% are prefabs.

Hall: I would say Ohio was second.

Taylor: In the places where the prefabricating industry is active in merchandising their product, they are doing about 25%.

Prentice: And you do particularly well in Pennsylvania?

O'Brien: Yes.

Price: So do we. In Springfield, Ill. we provide them with 40% of all their applications. In Indiana we give them roughly 33% and we are really going up in Chicago.

Can prefabricators crack codes—Chicago, for instance?

Price: We can crack Chicago. We first had to get blanket approval on the suburban code, and then the county code and then FHA and VA gave us full valuation. Then we had to get a contract with the labor unions to handle it because Chicago is different from any other place in the world. Our total shipments there this year will be over 500, and it is going up by leaps and bounds. *Chicago is the biggest market for prefabrication in the Midwest.*

Prentice: It seems the Chicago market is now

Anderson: *Prefabbers take a builder who doesn't know his costs and change his methods.*

ripe for the plucking. Are there any other major markets? I can see a lot of groundwork has to be done before you can move in.

Price: It takes several years. I would say work has been done for two years in St. Louis, Detroit and Cleveland. We have blanket approval in Cleveland over every past obstacle.

O'Brien: Washington, D. C. is one of the richest markets right now.

Hall: The large metropolitan area with the racketeer code has always been the hard one to crack. In addition to that, the little suburbs of the large cities which have a fire station for the city hall are hard because they have big-city ideas and small-city people.

Price: *One of the big things that helps us is the blanket approval we got from the Pacific Coast and different codes. We are abo get approval in the Southern code an New York State code and we cracked Massachusetts.* In six months we are goi get over the hump in New Jersey. We had the head of our code department wo full time for two years "cracking" codes a lot of troubles have been over 2 x 4 s we have used 2 x 2's and 2 x 3's.

Prentice: If I were a conventional builder, I think I would be a lot more s knowing that prefabbers had taken over of the State of Indiana.

Price: Why scared? We have not taken anything. *Homebuilders using prefabri have taken over. We don't build a hous don't sell to a private individual, we for builders and sell to builders.*

Hall: You wouldn't be scared; you woul come a dealer.

Are climatic differences against the general adoption of a standard prefab house from coast to co

National Homes *sells its dealers an easily installed, one-piece moisture barrier to cover the slab.*

Prentice: Aren't most of the existing prefabricated houses primarily houses designed for the part of the country northeast of Memphis?

Ott: Our feeling is that eventually we will have to get a home designed for the specific area where it will be erected. I don't feel that we can continue to take a northern house and ship it down south. To be in keeping costwise with their very low-cost homes and in keeping architecturally, we feel that we are going to have to design a house that is more in keeping with the Florida or southern area if we want to operate down there.

Prentice: Do any of you design reg houses? (Mr. Taylor and Mr. Thyer their hands.)

Taylor: The type of house they build o Pacific Coast today is not very well ad for prefabrication. In a lot of the areas will throw up a framework, put some ch wire on the outside of it and splash stucco against it and that is a house. I mean it is not a potential market, but th you are talking about in Ohio, Illinois, In and Michigan is a different climate. We do much business out there on the Coa

Builder *who buys full-width panels with siding and windows may use mechanical cranes or large crews to install them.*

Will air conditioning be a feature of prefabs in the near future?

A show of hands indicated a majority were working on including air conditioning.

Prentice: How much more do you think it will cost for year-round air conditioning than for present heating plants?

Thyer: For a three-bedroom house, $500 to $700.

O'Brien: I would say $400 to $600 for a 900 or 1,000 sq. ft. house.

Prentice: In other words, your builders are supplying heating now, and if they turned that heating system into a year-round air-conditioning system it would cost $400 to $600.

Price: We are considering it, but it is a matter of price. When it gets down to about $100 or $200 difference, we will have it.

Hall: We sell a two-bedroom house $7,000 and three bedrooms at $8,000. are other things that come first befo conditioning when you are trying to get that absolute borderline.

Best: We have model homes up now f public to criticize and take apart for they include air conditioning. *We had 6,000 visitors for National Home Wee the acceptance was very good on air tioning.* That particular house is 900 and air conditioning will cost $600 m works in connection with a down-flow fu and the furnace fan will do the job f cooler. So it is very economical to use, doesn't take any space. It just hooks up top of the furnace in a small utility roo

The truck tractor *that delivers house has mobile crane that quickly swings panel off truck and into position.*

: We have a test model with air condition- It is not offered to the public.

er: We are certainly exploring air con- ning. We feel it is a coming thing.

rs: We will not sell a slab house unless take a washer and drier. We feel the e is not well planned unless it has them in the utility room. If you get a woman in a utility room splashing around with an old-fashioned washing machine, you will see why.

Price: We put a new combination washer and drier in our 1953 house and were able to sell it cheaper than the 1952 model. In addition we have shipped over 25,000 specially designed furnaces. We ship kitchen cabinets, too.

Travers: *We will not sell a slab house unless the buyer takes an automatic washer and drier, too.*

prefabricators supply free help to their dealers on land planning?

Price, Taylor: We do.

We actually get the raw land subdivided approved by FHA land planning. Then send the plan of lots to us and then *we locate the houses to show the architectural design, setbacks, yards, color styling.* We do the whole ball of wax and present it to our dealer. If he agrees, he builds it that way and, if not, we modify it to his desire within reason.

Design Ideas *originated in bigger houses are being incorporated in prefabs. Above, wardrobe storage built-ins in Harnischfeger pilot model.*

t is being done to improve the design of prefabs?

r: Our houses for next year will be rn. This year our trend was much more d contemporary design than the year e. *There will be larger overhangs, lower and in some cases flat roofs.* Much more will be given to the detail of windows. rn this job over to outside architects in ent parts of the country, North Carolina, essee, Virginia, New York City, and we heir ideas. But we never let the architect out the plans without an engineer be- we found that the average architect will a pretty good house but he will add 10 or 15% to the cost.

son: *In the last three years we have spent $50,000 in architectural service outside of our firm.* If you go into a small town and look at the houses that were built by local builders, houses that cost just as much as our houses, you will find our houses are better. That is a "plus" that the homeowner gets in prefabrication that he does not get elsewhere in the same price range.

Prentice: It seems to me one of the outstanding new developments in prefabrication is the way you are becoming design conscious and taking advantage of that. *You can absorb design costs at very little added cost per unit.* I think the competition of your better-designed houses is going to improve everybody's design.

General Industries *has gone further than most in building plumbing and fixtures into its low-cost demountable house.*

are costs being cut?

We have a good vapor barrier between coarse gravel and concrete: a special , asphalt-impregnated blanket made the f an entire house. It is rolled out over area and there is no chance of a break. have worked out a procedure for our rs to install our plumbing. We give them nce in the purchase and installation of ng. Dealers are checked primarily for bing and wiring costs. If a dealer is the average, we demand that he and his ber or electrician come in so that we can him get the cost to the proper level.

Much of the high cost of labor stems the fact that house building is very y a materials handling operation. We ndertaking now to make much more ex- e use of mechanical equipment in the ing of material so as to make it possible ld, in the factory, houses in much larger ns—the whole 32′ section across the front of the house, for instance, in one piece. The fact that all the joints are eliminated makes it possible for you to apply the finish in the factory. We have just six exterior panels: front and back, two ends, and the two gables. The exterior is all prime painted, storm windows in place, weatherstripping in, door and windows hung. Interior trim and finish surface is all on the wall. One complete house is loaded on a trailer. The truck has with it a portable boom, and when the truck arrives at the site, the truck disconnects from the trailer, the portable boom is erected and set up with a power takeoff. The truck arrives at eight o'clock and is completely unloaded at half past ten. The truck is back, normally, with us the same day.

O'Brien: I think that our new Harrisburg plant will be the most mechanized housing plant in the world. Steel coming in from the mill goes on rollers and houses come out the other end.

Ahrens: *With plumbing, painting, etc., I doubt if prefabs can cut over-all costs 20%.*

REVIEWS

Air infiltration through weatherstripp nonweatherstripped windows. By C. and W. T. Peterson. Bulletin No. 35 of versity of Minn., Institute of Technolog 6" x 9". Illus *

This booklet reports some really facts on the subject of air infiltrati houses. The authors point out t tremendous acceptance of insulation past 20 years has radically lowered bills. But insulation still does not o air infiltration from windows and doo sequently cold-air leakage may acc approximately 35% of the total heat typical *well-insulated* house.

Weatherstripping can reduce inf loss to only 17% of the heat loss. Th corresponding saving of almost 25% ing costs.

Here are some other noteworthy sions the authors reached:

- Where no weatherstripping is use times as much air leaks through a fitted window as through a well-fitted
- Six times as much air pours thro cracks and crevices of ordinary through a weatherstripped window.
- Air leakage is so reduced with stripping that the addition of sto makes little difference in the rate of tion. Storm sash, though, greatly red filtration through nonweatherstripp dows. (Regardless of weatherstrippin erly installed storm sash decreases *through* the glass by about 50%.)
- Locking nonweatherstripped w greatly cuts down air leakage.
- Packing strips need be installed o of weatherstrips for poorly fitted
- The optimum groove clearance wh permit reasonable ease of sash moven found to be .025". Therefore this di was selected as the recommended clearance for rib-type metal weather

The problem of drafts and h through windows is only partly c with double glazing, storm sash, etc.

This booklet presents the case for stripping. It makes significant rea spite its scientific language.

The authors based their over-all on climatic conditions in 12 selected the US covering a full range of conditions. Their findings are based financed by the Weatherstrip Resear tute.

Mr. Lund is a professor of mechani neering at the University of Minne also assistant director of the Enginee periment Station. Co-author Peterson seareh fellow in mechanical engineer

* Available free on request to the We Research Institute, Box 101, Riverside,

ound table letters:

"The low income family and the too cheap house"

Scores of letters, for and against, provocative, adamant and informative, have poured in to HOUSE & HOME on the subject of its October Round Table.

The Round Table proposed extensive modernization of old dwellings, more liberal financing of improvements on existing houses and of the "*new but not too cheap*" house, and a functional "filter down" system to meet our housing needs.

Comments on these proposals came from all parts of the homebuilding industry. The issues debated are of such import that we have had to publish this special 12 page supplement.

From government officials

Men in key governmental positions were quick to sense the importance of the Round Table's program. Senator Sparkman, D., Alabama, approves heartily of the panel's motives, but labels its conclusions "an assist not an answer." HHFAdministrator Raymond Foley defends FHA policy. Agreeing with the Round Table's conclusions, Jesse Wolcott, ranking Republican of the House Banking & Currency Committee says: "There is no economic justification for rent control." Director of VA Loan Guaranty Bert King seconds the idea that "existing homes must play an important role in satisfying the Nation's housing needs."

From newsmen

Newspaper editors tell how the program would fit the local needs of their own communities. A condemnation of the "cracker box" house comes from the Oregon *Journal* and a criticism of the "filter down" system from the Houston *Post*. "The boys talked cold turkey," says the real estate editor of the Indianapolis *Times*, but warns that a new housing ordinance being considered by the local Common Council is likely to prove "a hot potato."

From architects

Architects are particularly verbal. "Squeezing a house too much is like squeezing a lemon," says Royal Barry Wills of Boston. "Pretty soon all you have left is the rind and a squirt in the eye." But Architect Ed Fickett of Los Angeles believes it is inefficient management which delays the production of a really low-cost house.

Cross section of the industry

Builders, financiers, contractors, manufacturers, public housing enthusiasts —all have contributed their ideas, hopes and plans. Here indeed is a significant cross section of industry reaction to HOUSE & HOME's free enterprise plan to meet the need of better low cost housing.

"Filter up" or "trickle down"

Sirs:

HOUSE & HOME's Round Table is encouraging in many respects; disturbing in others.

It is significant and encouraging, particularly to me, that such an industry group now publicly recognizes the importance of making new housing better in both quality and size, of replacing or rehabilitating our large volume of substandard housing, of meeting the needs of the lower-income market, of getting better building codes.

All of this is good.

On balance, I believe this Round Table reveals the growth of the one necessary major factor never before present in sufficient force to make real progress on the job —an industry awareness of what the total job really is. With that established, exchange and discussion of ideas as to method can begin to produce real results. No idea should be discarded because it is new.

As for the specific proposals which came out of the Round Table, it is always a bit discouraging to be told that private industry cannot make progress in serving the needs of the mass of our people unless the government underwrites practically all the risk. Yet this seems to be one of the conclusions to be drawn from the Round Table proposals. Further, it is surprising to be told in effect that the government has been keeping the industry from producing better housing because it does not underwrite substantially all of the risk no matter what the price. And I cannot agree that the policy which Congress established for FHA of insuring higher percentage loans as the price class descends is a bad one.

The Round Table completely overlooks the special provisions already offered by the FHA system to encourage bigger and better low-cost houses—provisions that relatively few builders have put to real use. These provide that $7,000 maximum valuation base for 95% insured loans may be increased by $1,000 each for adding a third and fourth bedroom. To construe the FHA limit on its most liberal terms as a policy to force all housing below $7,000 is a completely mistaken idea. I fear it still reflects the effect upon the industry of the several years of emergency building and financing when homebuilding had to concern itself too little with costs, prices, design, and high quality. Fortunately, we now seem to be getting into a situation where a slightly more restricted market calls for real salesmanship and more competition in values.

There is a good deal of evidence that the market will absorb a great many more good houses if they are offered at attractive prices, with a larger down payment than some of the industry have been willing to admit.

Certainly the housebuilder's new interest in rehabilitating old houses is wholesome, though the idea itself is far from new, and housing officials have been calling attention to it for years. More than 13,000,000 Title I loans have been made to repair or improve existing houses. I wonder what would be the condition of existing housing if we had not been pursuing that course for years.

This is not to say, however, that there exists no opportunity for an amended type of government guarantee in this field. Indeed, this is one of the very promising aspects of the builders' new interest evidenced by the Round Table. Both the government and the industry could explore it with a view to more adequate remaking of old houses than is ordinarily possible under FHA's Title I. Whether some of the specific proposals to that end advanced Round Table are the best is less important than t idea. But if these proposals are based (as the d seems to suggest) on the idea that we can rel "trickle down" theory to meet all or most of ou income housing needs, I cannot agree with them. as the over-all housing shortage continues, the ap of seemingly painless financing to the old hous will inflate prices and work strongly against the of taking care of a low-income family by letti move into the dwellings vacated by the purchases expensive new housing. However, if normal su demand factors can come into play, so that the the old house will be properly marked down, the effect will begin.

All this will not solve the whole problem by an but it could become one of the factors in privately a broader market.

In this letter I can only indicate that many of t touched upon in the Round Table are encourag some discouraging, and my silence about them n not indicate either assent or dissent.

Probably it was not intended, but it would be get from the report the idea that if the various p advanced were adopted, it would enable the in forget the task of finding ways to produce more g a good, adequate house for a low price. This is challenge to the whole housing field, and I kno thoughtful builders do not think it can be aban that it is impossible to achieve. Certainly I do n have continued, constructive discussion.

RAYMOND M. FOLEY, *administrato*

We believe it is important news that Mr. Foley shoul such an interest in developing an amended type of G guarantee to finance the rehabilitation of old houses.

H&H was interested to learn that FHA does allow 95% on 3-bedroom houses up to $8,000. Not one of the 30 od of the Round Table was aware of that fact!

The Round Table's point: the cost of slum reh should be borne by the owners. The plea for help in fina was of secondary importance.—ED.

". . . More houses, not more slums. . . ."

Sirs:

For leaders in the private housing business look at the low-cost housing problem, as they hav HOUSE & HOME'S Round Table, is a good thing. be better, however, if when they looked at the ho ture, they wouldn't turn it upside down.

That is the reaction I get after reading some o posed answers they suggest for the low-cost p they see it.

Their call to do more in rehabilitating, impro maintaining sound old and existing housing is good, as far as it goes. But that is an assist, not a After years of hearings and study drawn from a in the housing and finance field, one fact still rer big problem is a shortage of housing, and the o meet that is by a high level of new constructio only way to support such a level is to build h the mass of people can pay for.

With government help the industry has g panded its production into the moderate-price that largely accounts for their present record homebuilding. But even then, they have not

rs:

. . . The most thorough and complete plan devised . . . a workable solution to the using problem.

JOHN WEINHART
Detroit, Mich.

rs:

Read with great interest the Round Table eport, so clearly highlighting some of the derlying weaknesses of the housing busi- ss of this country . . . and pointing out e important things to be done if we are make the most of our opportunities.

H. R. PECK
Vice president and general manager
Armstrong Cork Co.

ALTORS object to rent control and IA pressure for the too-cheap house

rs:

Congratuations on both the conclusions and e constructive recommendations that re- lted from your meeting.

The pressure for cheap housing by HHFA rough FHA if continued will create new ighted areas. Existing single and multiple using is available which can be rehabili- ed and modernized to provide better and eaper housing than that now being used. this were encouraged, then new housing uld and would be encouraged to meet the ed of better housing.

I sincerely trust the HHFA and FHA will ve favorable consideration to your Round ble recommendations.

BYRON T. SHUTZ
Herbert V. Jones & Co., realtors
Kansas City, Mo.

's:

In recent years government has emphasized w construction and attempted to budget housing needs not only in a quantitative in a qualitative way. What people can ord to pay has been estimated on a basis the residual amount left to them for rent purchase. Your conclusions that more at- tion should be given to the existing stock housing is certainly substantiated by the ts. Better facilities could be provided at ower cost for middle-income occupants.

S. EDWIN KAZDIN
Real estate consultant
New York, N. Y.

s:

We are all aware that if the basic idea rehabilitating existing dwellings were perly implemented many of our slums ld be entirely eliminated; and those not inated could be minimized.

he basis and amount of FHA financing determined by the appraisal. The appraisal of an older house is not in the same category as the determination of value on a new house. Most of the employees of FHA, following formulae established in Washington, determine new construction values on a simple matter of applied mathematics. The valuation of an older house requires much greater judgment. With this judgment must be coupled imagination so that the appraiser can visualize the final value of a completed project after rehabilitation.

As the price range increases the percentage of FHA loan ought to decrease. In any depression those one-family dwellings in excess of $12,000 will slide off more percentagewise than those dwellings under $12.000.

GEORGE GOLDSTEIN, *MAI, appraiser-realtor*
Newark, N. J.

Sirs:

I think it's a swell job and go along with it almost entirely.

It is not only FHA, however, but also the banks which must take a broader view in the financing of a rehabilitation program. The insurance companies and savings institutions too should attack this problem aggressively. I believe there is much that could be done on a long-range plan with conventional loans. Bankers, in my opinion, are ducking too much responsibility and trying to throw it on government.

The greatest contribution of FHA has been in improved methods which are now being applied in almost all conventional loans. But again I wonder if we are not leaning too heavily on government. We can never expect imagination and progress when we rely on bureaucracy.

JOSEPH W. LUND, *president*
National Assn. of Real Estate Boards

Public housing to be given away, taxes to be paid in full!

Sirs:

Unquestionably slums are created faster than private builders and public housing can rehabilitate them, because of unrealistic and unnecessary rent control. Equally important and extremely difficult to combat is politics. If government at the local level were serious about stopping slums, it would enforce existing fire, health and building codes. Yet officials in too many of our cities are closing their eyes to such conditions.

I have no sympathy with public housing in any form. In California the opponents to public housing, a year or two ago, published figures clearly demonstrating that it would be less costly to the local taxpayers for the government to build houses and *give* them away free and clear, provided full local taxes were paid.

I believe that featherbedding by unions is as responsible for high costs as obsolete codes. Some of them have gone too far in adopting practices which penalize their own members who share with all citizens the need for better housing at a price they can afford.

I sincerely believe that our economy can absorb a million living units per year for some time to come. To the 550.000 new families must be added the loss in homes due to obsolescense, fire, removal for commercial expansion, condemnation for highways, military establishments and air fields and the need for more vacancies.

There is no more effective weapon to combat the spread of public housing and to eliminate rent control than vacancy. Obviously, no one would like to see a high vacancy rate, but a more normal percentage would keep prices in line and put more properties on the market for rent. There are always those who cannot or should not own a home and no discussion in housing is complete without making provisions for this substantial element in our economy.

ALEXANDER SUMMER
past president of NAREB

Sirs:

A factual, interesting and truthful statement of present housing conditions. . . .

WILLIAM J. ELLIOTT, *realtor*
El Paso, Tex.

Sirs:

I am in complete accord . . . except the conference failed to consider the low cost of the partially completed home, which the homeowner can himself complete.

HARRY R. BURGESS, *president*
Hampton Roads Realty Corp.
Elmira, N. Y.

Not thrilled with pride

Sirs:

. . . a great service to America.

Legislation which does not recognize geographic requirements and variations fails not only to *aid* approximately half of the nation, but confuses and hurts that half.

In our territory, the lowest-priced new house that we have been able to offer is held to $9,950. It is held down to that figure by cutting every possible corner of cost in sales expense, land cost, grading, elimination of sod, and by giving the barest minimum of modern construction requirements. Those who are identified with it cannot by any stretch of imagination be thrilled with pride.

Of all the factors tending to make housing different, rent control is the most serious deterrent to a free use of both new and existing properties being built or converted.

R. H. THOMSSEN, *MAI treasurer*
Clapp-Thomssen Co., realtors
St. Paul, Minn.

Texas—Of course we should build "small homes" larger but most of my prospects spend all their income and save very little. It's a shame their homes have so few sq. ft. of area but how can they eat their pie and have it too?

New York—The fact that our houses are small and inexpensive is the only reason people are able to afford them.

Illinois—The trend to smaller rooms and basementless houses is making the small-family residence more of a temporary camp than a home.

To me it seems "American" that each family arrange its home ownership according to its means rather than to start out with a house complete and large enough for the possible future.

In our past history large families were housed in log cabins and turned out not only good citizens but also great leaders in the development of our country.

New Mexico—The houses being built today are too small but in this area the small house is being sold. People don't have the money for larger ones.

Maryland—A two-bedroom house is allowing many people to own their homes who would never have thought of it before.

Today every house must have a good bathroom, a good kitchen, both with modern equipment, and a good heating plant—this no matter how small the house.

A typical family: both the man and wife work. If they have children they "farm them out" to a mother or aunt. The wife doesn't want much work to do in keeping the house. They are in the house only for their breakfast and evening meals and to sleep. Usually as soon as they have finished dinner they are out somewhere to a movie or some other recreation. They do not want too much yard to take care of.

Montana—The proportion of 1,000-2,000 sq. ft. houses that we design is now proportionally *much* more than it used to be in contrast to those with only 700 to 900 sq. ft.

Long Island—You cannot get more than a two-bedroom expansion-attic house for $8,500; still with today's conveniences you get relatively more than when we or our parents were buying a house.

West Coast—Modern small houses are not causing delinquency any more than large- or medium-sized houses.

Nebraska—We saved a lot of divorces by building small houses—fast.

On the general point of design:

"There is great public interest in fenestration. The buyer is willing to put a higher proportion of the total costs than ever before into picture windows—insulated glazing, casements and similar items."

"There is a perfect 'mania' for the ranch house. We have a stereotype in all price ranges which is certainly going to be dated."

* * *

On two points I felt your recommendation did not follow the Round Table discussion. You say "We believe FHA needs more funds to meet its requirements and we urge Congress to restore the cuts in FHA's authorization." Many of us feel that what FHA needs is not more funds but a better use of what they have.

My second difference arises over uniform codes. I approve completely the solution you propose. However, I dislike the implication that you want towns to adopt a uniform code without choice on their part. . . .

NORMAN P. MASON
Past president
National Retail Lumber Dealers

A second market for prefabricators

Sirs:

We are particularly impressed with the recommendation to the prefabrication industry that to "tap a second market . . . prefabricated house manufacturers interest themselves in those needs of the local volume builder who would not be likely to buy complete prefabricated houses."

What you refer to as "a second market" has, for the past two years, been this company's primary market. Our experience in better than doubling our annual output in 1952 over 1950 attests to the accuracy of your conclusion. By mass producing house components to the specifications of the individual builder and his architect, it is our view that fabrication integrates the practical knowledge and skill of production-minded men with the creative, imaginative, architectural mind.

We hope that by this means we may be able to help the support of your program.

W. L. MAINLAND, *general manager*
Lumber Fabricators, Inc.

Sirs:

This is such an excellent presentation from several viewpoints, including present faults in FHA financing, that I think all dealers should read it for their general information. Many of them could use it to advantage in connection with rent control and public housing talk. I would like to send out 225 copies to our mailing list.

W. J. HOWARD
Montana Lumbermens Assn.

Sirs:

. . . Laudable . . . the plan merits thorough and widespread study. . . .

Revere's Quality House Institute now part of the Southwest Research Institute has as its purpose bringing quality in design and materials to merchant building which would make low-cost housing more livable and more durable, more attractive to the homeowner, builder and investing banker.

C. A. MACFIE
Vice president and general sales
Revere Copper & Brass Inc.

Sirs

If the Construction Industry is to mee challenge from the "New Dealers" for h ing, it must get busy.

The plan outlined in your Oct. issue is tim to the point and should be enthusiastically lowed by everyone in private industry enga in providing homes for Americans.

FRED R. STAIR, *presi*
Farragut Lumber Co.
Knoxville, Tenn.

Sirs:

. . . The best thing you have so far don focus attention on the need for quality in day's housing.

CHARLES M. MORTENSEN, *managing dire*
The Producers' Council, Inc.

Sirs:

. . . Favorably impressed by the Ro Table conclusions. The discussions were "down-to-earth" as any I have seen. The portant thing now sems to me to be the of "follow through."

CHARLES LAMPLAND, *vice presi*
Lampland Lumber Co.

". . . the money or the credit to b them . . ."

Sirs:

. . . In the right direction . . . more at tion *must* be given to old buildings.

Some of the economists talk about construction industry being caught up demand. They're wrong: American fam will continue to insist on decent place live in so long as they have the money credit to buy them.

As long as employment is sustained, I ent activity in the construction field continue.

The work you're doing with these Ro Tables will accomplish much in this resp The vision you are showing in organi these groups will continue to create lea ship for your publication.

MELWIN H. BAKER, *chai*
National Gypsum Co.

Sirs:

We agree most heartily with the formulated.

C. R. RAQUET, *vice pres*
F. C. Russell Co.

Sirs:

. . . Common sense and constructive th ing. . . .

The architect can contribute added valu styling and sales power. It is most impo that the building industry as a whole sh undertake to upgrade general appreci of the value of the architectural functio

C. B. SWEATT, *executive vice pres*
Minneapolis-Honeywell Regulator C

t the term could be cut to 18-20 years in-
ıd of 25 years. The only drawback to ade-
ıte housing at the present time is the down
ment and the monthly payment.
Ve are firm believers in the rehabilitation
the older houses, which generally are lo-
ed in well-established areas with all the
enities—churches, schools, etc.

DON HEDLUND
Carroll, Hedlund and Associates, Inc.
Seattle, Washington

s:
An accelerated program for the conserva-
ı of existing housing certainly removes the
ential liability of slums and conserves the
ic community services in the most eco-
nical manner. Such a program is essential,
ticularly around slum-clearance projects.
Your encouragement of better-quality
ısing with a free choice by the owner as
cost is fundamental. American security
enhanced by the larger investment of its
zens in housing.

EDWARD L. JOHNSON, *vice president*
Bell Savings & Loan Assn.

s:
Financial institutions should take a good
k at your recommendations with respect to
IA and consider local campaigns for lib-
ılized improvement and rehabilitation loans
hout recourse to FHA insurance.
FHA has done a good job but there is no
son why it should do the whole job. It is
ıe private institutions assumed their share
the burden without government subsidy.
Your Round Table is the best presentation
this American problem that I have had the
asure of reading. You should be congratu-
ed.

J. HOWARD EDGERTON, *president*
California Federal Savings

A and its own earnings

s:
'or some time I have felt Congress has
n too strict on allowance of funds to FHA
its operating budget. The agency is mak-
money and should be permitted to use a
sonable portion of its earnings to improve
operation.

AUBREY M. COSTA, *president*
Southern Trust & Mortgage Co.
Dallas, Tex.

:
. . Definitely a step in the right direction.
most cases better materials and sounder
struction methods were used in the older
perties.
Most of these old homes have three or four
ooms. In our section, many G.I.'s who
ght two-bedroom homes are already look-
for larger houses.

CARL F. TROUTMAN, *manager*
United States Savings & Loan League

Sirs:

. . . Constructive . . . impressive read-
ing. . . .

Surely pressure for cheap housing—$7,000 or less—in this economy is a fallacy. The merchandise so produced meets neither the requirements of home buyer or lender.

E. L. CARLSON
Second vice president, mortgages
The Fidelity Mutual Life Inurance Co.

Sirs:

I believe that the agreements reached at your Round Table with regard to lack of uniform standards in our building code, would be supported by the mortgage lenders of the nation almost without exception. The problems outlined in this report are of great concern to the savings and loan business and I feel that a co-ordinated effort, such as is suggested in this report, would be most constructive and is the proper starting point in a program of improving the living conditions of our moderate-income families.

JAMES E. BENT, *president*
Hartford Federal Savings & Loan Assn.

Sirs:

. . . Greatly interested in your free enterprise plan. If FHA and VA would take the same interest in rehabilitation as they do in new construction, the public housing problem would be solved. And if municipalities would enforce the sanitary and health regulation as to substandard dwellings, they would secure the co-operation of all.

JAMES V. DAVIDSON, *president*
First Federal Savings & Loan Assn. of Toledo

MANUFACTURERS, SUPPLIES and GENERAL BUSINESS MEN voice warm approval

Sirs:

I am 100% behind the program.

Federal-sponsored housing has been a failure in every department.

It is called "low-cost housing" and is the highest of any in the country.

Some federal projects are now as high as 22% vacant for lack of people who qualify for occupancy—partly, because the really needy are seldom favorably considered. Your approach is much better than a merely critical attitude toward the existing federal projects.

C. W. KISTLER, *president*
C. W. Kistler Co.
Miami, Fla.

Sirs:

Let us have more group gatherings of the building industry, including FHA officials, to tussle with our common problems. There is an ominous need for the meshing of the many important factors of our industry to exchange information and make recommendations for its future.

CLARENCE A. THOMPSON, *chairman*
Thompson Lumber Co.
Champaign, Ill.

Sirs:

We heartily agree that increased emphasis on quality in low-cost housing is vitally necessary. Today's pressure for low-price homes is forcing builders more and more to turn to cheaper, lower quality materials. This decreases the real value of the home even faster than the price.

Low-value homes provide reduced comfort, attractiveness and convenience. They offer a poorer investment to the homeowner. And their accelerated deterioration into substandard housing makes them only a one-generation contribution to our country's housing needs. In the long run, their cost is disproportionately high.

D. D. COUCH, *vice president, sales*
American-Standard Products

Sirs:

An excellent job and bound to be helpful to all of us.

F. STUART FITZPATRICK, *manager*
Chamber of Commerce of the US

Sirs:

. . . Sound and progressive . . .

For the past two years I have sensed that young homemakers are reluctant to become too heavily encumbered. They recognize high costs and feel them. I have noticed their "do it yourself" attitude and their pride in acquiring fewer things but getting these without sacrificing quality. This adds up to a better use of existing housing. Any additional help to these people by FHA or any other source will be really worthwhile.

WM. F. FRANKET, *president*
Parkay, Inc.
Louisville, Ky.

". . . So much better than living with your inlaws . . ."

Sirs:

I asked friends of mine in the retail lumber industry all around the country if they thought we were building the right size housing in the right price range; if we were meeting our obligation to America in providing the right sort of housing to promote good citizenship, to deter juvenile delinquency, and to reduce the divorce rate.

Not many dealers go along with the theory that the *small* house in itself causes any increase of our social problems. As one said, "the smallest house is so much better than living with your in-laws."

Here are excerpts from their letters:

Massachusetts—The bankers here frown on the four-room cottages.

three-bedroom houses but just did not have the necessary down payment, whereas couples who had reached the age of retirement and whose families had grown up, married and left home were interested in getting out of larger houses and into two-bedroom homes.

HART ANDERSON, *vice president*
Page & Hill Homes

Sirs:

Bravo and congratulations! How about more of these factual exposés?

ROBERT E. OTT, *general manager*
Harnischfeger Corp., Houses Division

Sirs:

The Home Builders Association of Metropolitan Washington congratulates H&H and endorses every one of the views outlined in your plan. We believe that through a program of this kind we have found the principal answer to public housing. Your plan will be circulated among our members, and you can count on this association doing everything possible to sell this idea to the Home Building Industry in the Washington area.

JAMES W. PEARSON, *executive director*
Home Builders Assn.

Sirs:

We use aluminum exteriors, aluminum windows, cement slab, no maintenance or upkeep: $7,000 including lot.

C. L. BARTEL, *realtor, builder*
The Bar-Tel Co.
Muncie, Ind.

Sirs:

In the last two months we have had many requests for small compact homes, about 70% of them with two bedrooms, and all to be on one floor. People are willing to invest $12,000 to $12,500 and are putting their older houses on the market. We should modernize these dwellings for the younger generation who are raising families. Their problem is that they need more living and bedroom space than can be furnished in new low-cost houses.

HAROLD L. LARSEN
Builder & contractor
Seattle, Wash.

FINANCIERS comment on low-cost housing in a high-cost era

Sirs:

The tragic consequences of any short-sighted housing policy of expediency which produces large numbers of poorly planned houses of inferior quality to satisfy a current housing demand will inevitably be more slums instead of fewer.

We must be realistic. The purchasing power of the dollar is down. The homebuyer should expect to pay as much relatively for good housing as for other sound products of labor. Good housing means well-planned, soundly built structures that have a long and useful life expectancy. Anything less than good housing becomes a snare and a delusion which leaves its owners embittered and supicious of the whole idea of home-ownership.

Available materials and construction facilities should be concentrated in the production of the much needed medium-priced house for the average family. Here is the builders' opportunity for tomorrow and the best way to minimize public housing construction.

Rehabilitation of existing economically and structurally sound dwellings can solve several problems, including slum prevention and clearance, transportation, excessive depreciation, loss of mercantile revenues, and even municipal bankruptcies.

There is no doubt that savings and loan associations will co-operate heartily in the basic objective of H&H's campaign for better housing. Such a program is in fact "right down our alley."

OSCAR R. KREUTZ, *executive manager*
National Savings & Loan League

". . . out in the wilderness . . ."

Sirs:

I think that those in our business should be financing homes with all the household gadgets installed and that we should be granting attractive-sized loans with modest monthly payments, recognizing that the house is good security for 20 years at least.

On the question of the FHA, however, I am out in the wilderness crying alone. I think it should be modified so that the rate is a realistic one which permits us to make loans freely and guarantee the borrower that when he loses his job, or is ill, or cannot pay for any number of reasons, the FHA will advance his payments at a higher rate of interest. That helps him keep his home instead of losing it, helps the lender to maintain a good mortgage instead of wasting money on foreclosure expenses, and spreads the desire for homes among those who don't like to assume purchases under which they will have to take a loss.

There is no question but what solution of the low-cost problem is on the shoulders of private enterprise.

BEN H. HAZEN, *president*
United States Savings & Loan League

Sirs:

You have performed an important service.

We, too, have felt for some time that the pressure to provide low-cost housing in this high-cost era can only result in the construction of large numbers of houses with inadequate living accommodations.

E. L. STANLEY
Asst. manager mortgage loans
Provident Mutual Life Insurance Co.

Sirs:

. . . A very successful meeting.

I would advocate long-term financing f new or old housing. Fifty-year 5% mortga is not unreasonable providing, however, t mortgage paper can be cashed over t counter. This, of course, would carry rig requirements as to architecture, constructio space, loans, etc.

JAMES G. POLK
James G. Polk & C
Louisville, Ky.

Sirs:

In my judgment, the government has be wrong on three assumptions:

First, that everyone wants to own a hom Second, that home buyers want to buy cheap, small, five-room bungalow. Third, th public housing is the only way to provide lo cost housing.

Your report brings out very clearly th there is much value left in the millions older properties which could be recondition on a low-cost basis.

FHA assistance in rehabilitating old properties, plus the enforcement of health a fire ordinances, would go a long way to cu ing our slum problem.

H. F. WHITTLE, *president*
H. F. Whittle, Investment C
Los Angeles, Calif.

Sirs:

There is no question in my mind but th the homebuilding and home-financing indu tries have got to concentrate on this proble if we are to retain the freedom from gover mental restraint which is the keystone of o industry.

SAMUEL E. NEEL, *counsel*
Mortgage Bankers Assn. of Ameri

Sirs:

. . . Logical and sound.

Much of the demand for houses with mo than two bedrooms might be met by revisi the property-improvement loan procedure provide a lower interest rate and a lon repayment period. This would prevent f ther deterioration of the older sections.

DEAN RICHMOND HILL, *presid*
Hill Mortgage Corp.
Buffalo, N. Y.

Small homes to be expanded

Sirs:

Your leadership . . . is greatly appreciat

But a small home *can* be very successfu the plan is done so that it may be expan by the owner-occupant. It must be archit turally planned and placed on a plot la enough so the house can expand with cramping the use of the ground area.

There is no reason why old houses, m ernized, should not be given the same do payment privilege as new houses. It may

ability to reach all income groups with his
oduct, the public housing program should
expanded. It must concentrate on vacant
d as must the urban redevelopment pro-
m.

The FHA program is socialization of the
rtgage insurance business, while the 115%
rtgage is the socialization of risk. It makes
sense to have socialism for the rich and
vate enterprise for the poor. I do believe,
wever, that we can limit the amount of
ialism, make it temporary, harness it in the
blic interest, and ultimately desocialize
using. I think, for example, the housing au-
rities can legitimately build more housing
low- and middle-income groups if the hous-
is thereafter sold to private owners. When
shortage eases for all groups, the authori-
s can then shut up shop.

CHARLES ABRAMS, *attorney*
New York, N. Y.

s:

Your Round Table is the first we have heard
any concerted move, other than our own
elf-Help Housing, Inc., chartered last year
der Massachusetts law as a nonprofit cor-
ration) and that of a group in Philadelphia,
give attention to this problem. Steering be-
een the extremes of "public" and "private"
using, we are seeking to develop successful
idential neighborhood renewal. Self-help
mwork of neighbors with skilled profes-
nal guidance may be one way. We are in-
ested only in ways that will encourage
edom of enterprise and individual self-re-
ance while also improving residential struc-
es, improving neighborhoods and stabiliz-
, perhaps even increasing, municipal tax
ome from real estate. We intend that each
ctical neighborhood effort we foster shall
ome self-maintaining.

JOHN T. BLACKWELL
Executive secretary
Self Help Housing, Inc.

ILDERS accept the challenge—offer illenges of their own

s:

ent control should be stopped at once. It
ses the sad neglect of a large percentage
he rented property in this country. Owners
onprofitable rented property cannot be ex-
ed to spend money on such housing. If
owner received profitable rent, he would
ble to maintain and improve the property
n the rent income.

think it might be rather dangerous for
A to make loans 95% of full value for re-
eling and modernization. However, 95%
he actual cost of the repairs and improve-
ts should be a safe loan.

WALTER S. JOHNSON
Walter S. Johnson Building Co., Inc.
Niagara Falls, N. Y.

Sirs:

Hallelujah! Welcome aboard the good ship *Free Enterprise.* Your article is jam-packed with common sense—an excellent exposition of what can be accomplished by the building industry.

Of course, the plan will be scoffed at by the public housers as the "hand-me-down" system. They seem to prefer the "hand-me" system—nothing down—now or ever.

EDWARD R. CARR
Past president NAHB

Ten-year houses at half the cost

Sirs:

I find it hard to criticize FHA policies without acknowledging that they are a great contribution to better housing. I think that FHA underestimates the very high percentage of value per dollar added to a house by the amount between $7,000 and $9,000 or $10,000. That is where you get the most for your money in housing.

We have found that FHA considerably restricts the ingenuity of the builder by being in some cases too conventional in its specifications and design concepts.

I am going right on building permanent and durable houses that will be perfectly sound 50 years from now. But some day we are going to realize that in much less than 50 years these perfectly sound houses will be ridiculously antiquated. When are we going to learn to build ten-year houses at half the cost so that we can have a new one just as we can have a new car? With present concepts of the buying public, building codes, and the housing and lending institutions, it would be absurd to attempt to build such a house. But we have to do it some time and I think the manufacturing industry ought to start thinking about it.

I am not in full agreement with your findings in regard to space although it is true indeed that the size of some $7,000 houses is ridiculous, cruel and unwise.

But while the too small house is a physical burden, the too large house is going to be more and more a financial burden, not only from the standpoint of carrying costs but maintenance, heating, air conditioning and housekeeping costs in this servantless age. We are finding so many ways to put more house under the same roof.

Air conditioning is inevitable and the smaller the cubic content of the house the more air conditioning is within reach. Certainly the $7,000 house is an economic and social mistake. But let's not go overboard on merely increasing size. Increase livability and functional space.

RICHARD HAIL BROWN
B-D Development Co.
Birmingham, Ala.

Sirs:

Substandard housing in the South can easily be remodeled to help alleviate the housing shortage in low cost brackets. A new FHA plan will be required to enable a buyer to finance these reconditioned houses. A smaller down payment is necessary. This plan will allow a builder to accept old houses in trade.

MARVIN HENRY
Marvin Henry Builders, Inc.
Houston, Tex.

Sirs:

The problem of public housing will never be solved by local referendum or by public controls (laws) to prevent it on the local level, the state level, or the national level. These are not cures, just sedatives. The problem must and should be solved by private enterprise on a profit basis. "Operation—Trade Secrets" will help. We must husband our resources of every description: planning, financing, architecture, engineering, fabricating, construction, etc., to the end that we produce a better and better house at a lower and lower cost in the field of need. Everyone is entitled to good, clean, habitable dwelling places. We homebuilders must supply this great human need on a profit basis. It can be done, it must be done, or we must forever "hold our peace." When a great human need presents itself, it is a function and obligation of government to encourage private enterprise to fill that need; hence, the FHA and VA.

ERNEST C. JANSON, *president*
Ernest C. Janson, Builder, Inc.
Springfield, Ohio

Private enterprise for less than half

Sirs:

If this story could be carried successfully to the public, there is no question but that the present housing program would have a short life indeed.

A revealing sidelight on this question: the Miami Housing Authority plans to build 1,000 housing units in this area. Two local builders have offered to build them at less than half the Housing Authority's estimated cost. Secretary of Commerce Charles Sawyer said not long ago, "The way to cut down on government spending is for private industry to show it can do the job for less." It will be interesting to follow the developments of this offer.

EMIL J. GOULD, *housing engineer*
Miami, Fla.

Sirs:

One of our dealers in a large metropolitan area gave us a full report on a recent "open house" which he held. For several years our sales curve has shown an increasing demand for three-bedroom houses. Yet our dealer said that his sales were largely of two-bedroom houses. Most of the younger people *wanted*

plumbing and kitchen equipment are too costly to put in an old shell which represents only about 27% of the total cost of the house.

S. Robert Anshen, *AIA*
San Francisco, Calif.

". . . rich human relationships . . ."

Sirs:

I have long advocated *remodeling* rather than *destroying* existing neighborhoods. In many cases there are rich human relationships built up during the years which it would be a shame to destroy. These existing values are inspiring to a sensitive designer.

The problem must be looked at as a whole. Density must be made to the correct ratio, traffic patterns altered, open space and play areas added. It is not enough *just* to remodel buildings.

When one thinks of the great investment in utilities in existing communities, one cannot afford not to first look there for housing.

Anything that can help stop the ugly and sterile subdivision practices that ruin the outskirts of our cities has my hearty approval.

Dan Kiley, *AIA*
Charlotte, Vt.

Sirs:

Until major steps are taken to build a house better, the only way a better product can be delivered to the owner is by retaining proportionately low down payments for $10,000 to $15,000 as is now possible for the $7,000 house.

The matter of delivered product against cost is becoming more and more serious due to land costs. This is not only serious in what it does to the house cost, but is fostering the "small lot" type of development.

We have just designed houses for a builder in an area where the same house came under three different building codes. Due to the various requirements of these three codes, the builder's cost on a $15,000 house varied between $300 and $500. Obviously ridiculous when you can stand at one house and practically see the other houses. All were approved by FHA and VA, even though the building department required different ways to build the same house.

A. Quincy Jones, Jr., *architect*
Los Angeles, Calif.

Sirs:

It is a mistake to categorize housing and needs for housing into types—"luxury," "low rent," "subsidized," "public," "private enterprise." Some may condemn a public housing project, solely because they think government shouldn't build or subsidize. The same people may approve a speculative development, overlooking or apologizing for the fact that it is comprised of bad building, badly disposed, badly located, because it is privately sponsored and low in cost. We feel that all buildings, old and new, utilities and landscaping are a national asset; if we spend $x million this year on housing to reduce our shortage of units, we should be able to feel that we have made not merely a costly, temporary improvement but that we have improved our national assets. We should be able to feel that our money has been used efficiently and prudently, not because we are timid about the venture but because the resources available to the venture seem always to be inadequate to the task.

William Keck, *architect*
Chicago, Ill.

"We have examples, we have the means, we lack only the will"

Sirs:

The Round Table is not a real plan but a plea for more subsidy to the "free enterprise" builder, and less to the consumer. Its tone is timid and shows a lack of faith in the potential of a properly organized and directed building industry.

Paradoxically, it states that the building industry can't take care of the total demands through new construction—because it never has—and then states that a new market for new construction and old must be opened up to avoid saturation.

If we haven't the organizational ability and the means of co-ordinating public and private interest to the extent of assuring a reasonable framework for salvaging the good in our cities without compounding the bad, let them rot. Let's not pour good money after bad.

In order to get better new houses at lower cost, isn't it clear that first comes good basic land-use planning, then rationalized zoning, intelligent up-to-date building code requirements and labor practice? Mortgage insurance should be based on these factors as prerequisites. With a sound foundation to build on, *increased volume* can bring our costs down quickly enough.

Cannot H&H call on both presidential candidates to convoke a committee immediately after election to carry the Round Table discussions further, and within a more basic framework? Membership should be based on the supposition that a mature housing program can be brought into being through effective co-operation between the various components of both industry and government. We have got to have planning on a national, state and local level, which comes somewhere near approximating what has been taken as a matter of course for years in such countries as Sweden. We have examples, we have the means, we lack only the will.

Carl Koch, *AIA*
Cambridge, Mass.

HOUSING EXPERTS give hard fa

and make penetrating charges

Sirs:

1. Your proposal represents the vi neither of the whole homebuilding indus nor of all the people with a stake in it. Notal absent are citizens' groups, consumer int ests, labor, and government.

2. Salvaging old housing is desirable a you are to be lauded for bringing the mat up. Slum demolition will have to be curtai because of the growing housing shortage lower-income groups. A program to impr old housing is therefore vital.

3. Old housing and new housing cannot separated. All housing new today will be tomorrow. The pool of old housing exists a functions because it is better than the one- a two-bedroom economy units now ulcerat the landscape. Unless new housing is sa factory and continues entering the marl America's old housing pool will be rapi depleted.

4. Your plan lays too much emphasis the $7,000 house and too little on the mont carrying charges that are the main deter nant in shelter costs. An interest reduction the level warranted by the government gu antee would permit a better house at the sa monthly cost as a $7,000 unit, though capital cost might be greater.

5. Any program involving old housing c not overlook the important problem of ra movements. The nonwhite population more than doubled in 30 standard metrop tan areas in the Northwest, North Central West. Neither the private nor the public bu ing industry has attended to minority ne These minorities (Negroes, Mexicans Puerto Ricans) have therefore overcrow into old dwellings; cubbyholes have l cut out of apartments; obsolete housing been mustered into use and given a long l on life, while ransom prices are being paid dwellings into which the minorities are b herded like sheep. The amount of substanc housing lived in by nonwhites, for exampl more than six times as great as for whites, the overcrowding more than four times great. Unless decent housing is provide public and private enterprise for these nority groups at costs they can afford, housing will not be improved, for a land who can charge $60 per room monthl Puerto Rican Harlem or twice the w market rental in Miami need pay little a tion to improving old housing. Without a for solving the minority shelter problem, program will bog down.

6. Housing history shows that little housing can be substantially rehabilit during a housing shortage.

7. Until the private builder demonst

spread information to our profession so
t more of those who are able will take part.
r profession must assume its obligations for
own good, for the good of the industry and
the good of the country.

The idea of refurbishing existing houses is
od common sense, but we must not forget
-cost new houses. Savings should not be
ough reduction in size alone.

We all know that structure and envelope
ve been explored very little. We also know
t integrated instead of haphazardly sepa-
e utilities could reduce these basic costs
nsiderably. Why put the machinery for re-
gerator, range, washer, dryer, furnace, air
nditioner and whatever, each inside a sepa-
e and expensive enameled cover? Why not
ve an engine room for these, out of sight,
accessible?

The wider adoption of the package mort-
ge, allowing the building of "complete"
uses would reduce the over-all total cost of
egrated and equipped houses. Then, as you
, monthly payments could be still lower.
If we think that such goals are far in the
ure, it is only because they are stifled by
ilding codes, FHA, and the manufacturers
emselves. I fully agree with your views re-
rding these factors in our industry. Some-
nes, I think our leaders have looked at the
st so long through eyes in the back of their
ads, that they have forgotten how to use
es that look forward.

L. Morgan Yost, *FAIA, chairman,*
Committee on the Home Building Industry
The American Institute of Architects

s:

go along with the Round Table almost
the way but I cannot share your en-
usiasm for remodeling. My experience
h HOLC conversion jobs during the war
s discouraging. The increased housing
rdly justified material and labor costs.

Van Evera Baily, *AIA*
Oswego, Ore.

reasonable standards

s:

To work within the financial envelope im-
ed by FHA seems impossible in view of
ir so-called standards, in most cases, un-
sonable. They are not cognizant of climate
erentials across the country, which must
l do affect housing requirements.

Houses, like any other manufactured item
ay, will eventually have to be subassembled
chanically if the mass market is to be satis-
l. It is impossible to put a nationwide price
a house of a given size for all climes in the
. This sort of thinking is what is wrong with
the housing agencies.

suggest, in the case of FHA, instead of
e money for more bureaucratic conser-
ism, a complete rehabilitation, from the top
vn. Most people in the upper-bracket posi-
ns in these agencies have been there so long
ir interest seems to be the maintenance
their civil-service status rather than the
work involved in solving any problems not stated 15 years ago at the instigation of the "make work program."

Your statement "Not enough architects understand the hard economics of small houses and volume building" is perhaps true. Neither do enough builders. Architects, because of training and educational background, should be able to understand and help solve these problems much more satisfactorily than the run-of-the-mill homebuilder. Perhaps we had *all* better rise to the occasion.

Richard S. Colley, *architect*
Corpus Christi, Tex.

". . . like squeezing a lemon. . . ."

Sirs:

Squeezing a house too much is like squeezing a lemon. Pretty soon all you have left is the rind and perhaps a squirt in the eye.

The FHA has done much to improve the quality of the low-cost house but the pressure put on small builders to produce a house for less than $7,000 cuts the quality and the space below an even sensible minimum. Let's have encouragement of reasonable space for reasonable cost and be done with arbitrary maximums and minimums that however equitable in one part of the country, are completely unfair in another.

Rehabilitation of older houses is a must in any event.

Royal Barry Wills, *AIA*
Boston, Mass.

Sirs:

The pressure applied by FHA to encourage construction of $7,000 houses is unwise in our present economy. The house is being whittled down to nothing. First the extra bath, then the third bedroom, two ft. off the living room, eliminating the attic and the basement, a window here, another there, until someday there will be no house. An extra $1,000, especially in minimum builder houses, can make tremendous differences in space and equipment. Insured loans should be increased to preserve the amenities. Only the rich can afford a poor bargain or a house too cheaply built. Sadly enough, those who can least survive the penalty are saddled with houses too small, poorly equipped, and soon destined for obsolescence.

That low-cost housing can be eased by remodeling older houses is good in theory. The trend to turn old houses into apartments must be watched and controlled so that approximate density of dwelling units per acre can be maintained. This kind of remodeling immediately starts a general degradation of the community. Remodeling is practical and a fair financial risk only if the house to be remodeled is in a healthy neighborhood.

There is a basic shortcoming in the building industry: dollar for dollar, one gets the least for his money in purchasing a house because the house is still a handcraft product. We must experiment more freely and invest in nonprofit prototype design to make any substantial progress without compromising with the semimodern or quasi-industrial house. Unless we can meet this challenge socialized housing must replace free enterprise.

George Matsumoto
Assoc. professor of architecture
North Carolina State College

Sirs:

The too cheap house

Present government policies are creating new slums by the emphasis on the "too cheap house." Architects and builders with the best will in the world cannot provide an adequate facility for $7,000 in most areas. When such projects are built, they must use cheap materials to get first costs down. They either deteriorate rapidly or require high maintenance costs. The owner would be better off paying $6.47 or $12.92 more a month for higher quality construction.

The two-bedroom house

The two-bedroom house is extremely wasteful economically and socially. An adequate space standard for an American family with two or three children is three bedrooms plus an all-purpose or television room. This is not as apparent when the children are small (although the all-purpose room is a wonderful playroom for tots). Its principal benefit comes when the children get into their teens and need room for entertaining their own friends without making the parents retire to their bedroom for privacy. (Remember the old parlor and sitting room.)

Rooms are too small

In some areas an adequate house of reasonably good quality can be built for $8.00 per sq. ft. If this house has 1,000 sq. ft. in it, approximately 200 sq. ft. can be added for $2.50 a sq. ft., or $500 (assuming no more doors or windows, etc.—just space). The 1,000 sq. ft. house would cost $8,000, plus $2,000 for a lot, plus $1,000 for miscellaneous fees and overhead, plus $1,000 for profit, all of which makes a house sell for $12,000. Thus, adding 20% more space costs only 4% more in total or the buyer pays only $3.24 a month for 200 additional square feet, or .016 cents per additional sq. ft. per month! (Compare this with office building monthly rentals.)

Except in exceptional instances, it is uneconomic to repair existing houses because

neglect well-built housing and then tear it down to make way for new dwellings of perhaps inferior size and construction should be brought to the attention of every city planning and housing official in America.

Amen 1,000 times to your suggestion that rent control should be stopped at once. No business group in the history of the world has ever received such sadistic treatment as that visited upon the American landlord. True, nobody wants to pay any more rent—but why should the landlord be singled out when *his* costs and taxes are rising like those of all other businessmen?

The wisdom of the Round Table's members is proved by their praise of FHA as an outstanding example of sound collaboration between government and business.

The American home hunter should be grateful for the unique recommendation that FHA should encourage the sale of houses fully equipped under the package plan. Here is pioneer thinking — and all for the buyer's benefit.

Of course, the suggestion is likely to run into some difficulty with the merchant-and-loan company lobbies. The suggestion most likely would meet a lot of opposition in the Philadelphia area where many homebuilders finance their new houses through FHA. They also control the short-term credit houses through which the home buyer finances his new equipment.

DEAN R. MCCOLLOUGH, *editor*
Philadelphia Daily News

Sirs:

Of the many surveys, committee findings and individual pronouncements by spokesmen for various segments of the housebuilding industry, none has seemed more profound than your own.

JOHN W. KEMPSON, *real estate editor*
Newark News

Sirs:

Congratulations on the success of the conference, and upon this very informative and comprehensive presentation of the far-reaching plan which developed from it.

KENNETH W. PAYNE, *executive editor*
The Reader's Digest

Sirs:

Since public housing developments provide new homes for only a small segment of the slum population, and since urban redevelopment in most cases displaces tenement dwellers to build for middle income tenants, rehabilitation of old dwellings *is* required.

But the sad fact remains that slum ownership is highly profitable; safety and sanitary laws have a tendency to bog down somewhere along the line before they are enforced, and the few owners who *do* attempt to rehabilitate old properties find that money to remodel them is hard to borrow.

Landlords who do repair their tenements should be given some sort of guarantee that tenants who mistreat the properties will be forced to pay damages.

Your program is ideal for St. Louis—I only hope it won't remain too long in the field of ideals.

NELL HURLEY GROSS, *real estate editor*
St. Louis Globe-Democrat

ARCHITECTS agree that builder and architect must function together

Sirs:

Every architect interested in his profession must be glad of your work for better low-cost housing. The crippling effect of unreasonable rules is perhaps the most wasteful road block to a rational, good-value, low-cost house. Local codes cost every builder a large share of his total expenditures.

Although the FHA has done an invaluable service, many of its rules are blindly against innovations, open planning, centralized utility cores, and spatial freedoms necessary to make a small house both low cost and an adequate frame for living.

The antiquity of standard parts for building is a source of great wonder, especially in plumbing. When did Fuller's unit bathroom first appear? And what could be more anachronistic than the standard water closet in the 5 x 7 bath? The cost of the various utilities (such as cooking units) has made many clients of relatively expensive houses balance the scale in favor of more space and less "labor saving." When will these individualized, porcelain-enamel-boxed beauties be combined in a modest package which can work quietly in a simple environment? I think the standardization of building parts should be on the basis of small and easily workable units with maxmium flexibility. When you establish a standard of 8′ ceiling heights, you eliminate spatial play vertically (so important in a small unit).

But it is in site planning where builder's houses today fail most miserably. No individual can ever be happy in his home when it is repeated every 60′ for seven miles. It is a question of the need for human scale. This can easily be achieved by existing natural barriers, i.e. hills, trees, rocks, hedgerows even, if they are not swept away before the bulldozer. The need for individuality is great, and this cannot be achieved by varying the roofline or shifting the door or the carport. It can, in fact, be very well achieved with the same house, set in different relationships to its surroundings.

Your proposal for rehabilitation of old houses is economically sound and psychologically important, to provide historical continuity and preserve vital ties.

HENRY HEBBELN, *architect*
New York, N. Y.

Sirs:

At a local meeting similar to your Rou
Table I made an effort to see how many buil
ers were building a better-than-average hous
or attempting other than the normal grid-si
plan. I found not a single architect-design
house or site plan of merit. Is all of our tir
spent in "phony peace talks," or are the buil
ers, architects, engineers, bankers, etc., rea
to work together for a better product? I b
lieve it is possible even *with* the restricti
measures imposed to produce a low-cost hous

The waste in most small structures today
appalling, not in materials alone, but also
labor. Most of this I attribute to insufficie
time being spent with each subtrade. T
problem may be worked out with the vario
subcontractors, but by the time the soluti
passes through the chain of command to t
field boss the thought is twisted and lost. T
line between the architect's office and fie
work must be unbroken to solve problems
the proper cost.

It is difficult for most builders to und
stand why an architect should be interest
in any site problem other than the width a
depth of the lots involved. If the proper a
proach to the site-plan problem were
tempted by more builder-architect teams,
believe the antiquated zoning laws and gr
site plans would soon begin to disappear.

As to the preparation of drawings, I ha
always felt that the architect should not
pect a profit, but derive all profit from roya
obtained each time the house is repeat
Planning is the most inexpensive phase of t
entire job—when prorated against the ov
all project. The money and time saved in t
field pays twofold for the effort expended.

Your comment on rehabilitation is a go
one. The complexity of the problem howe
leads me to believe that the line of least
sistance will lead few builders into the fie

EDWARD H. FICKETT, *A*
Los Angeles, Calif.

"our leaders looked to the past"

Sirs:

I agree with practically everything
Round Table said.

Architects are playing far too small a p
in housing the nation. Most architects, w
their present outlook, are ill equipped to w
with volume builders. Many who *are* w
equipped think so poorly of the opportun
that they avoid it.

The homebuilding industry has ri
quickly; a few architects have come al
with it. As in the development of any indust
many who have were burned. But the prize
great, and the field is the most essential p
of the building industry. We on the AIA Co
mittee on the Home Building Industry h

WSMEN were almost unanimous in eir endorsement of Round Table oposals

s:

Your Round Table report is an almost rfect example, I think, of how effective nomic common sense can be when it is plied conscientiously to a major, complex blem which concerns the life of almost ry family in America. Giving everyone ncerned with housing full credit for good entions—which undoubtedly is not deved in many instances—the fact remains t sound information and good understand- of the essential economic background equally important.

You have done the best job of providing s information and understanding that I've n anywhere and your report should be eal help not only to the businessmen, the fessional men, and the government offiIs who have to do with housing, but also the rest of us who cannot help but be ncerned about it.

BERNARD KILGORE, *president*
The Wall Street Journal

s:

You are right in many respects. Arthur Binns, realtor of this city, has taken runwn properties in slum areas—colored ms—and by renovation and modernization de them profitable renting projects.

GEORGE KEARY, *real estate editor*
Philadelphia Daily News

soapbox for cracker boxes

s:

The H&H Round Table plan for improving housing situation is the first all-around, usible and "non-soap-boxy" summary of situation it has been my pleasure to read. om here the ideas and most of the consus seem logical. There might be argument one point—that possibly too much emsis has been placed on removing pressure m the builder to construct a $7,000 house. However, in this area we have many vetns forced to purchase low-cost "cracker es" under their GI mortgage assistance. ey often would prefer an older home with larger living space and greater air of pectability, a place to entertain friends and se a family. But neither GI nor FHA proes a solution to his financial problems in instance and to own a home he must purse a "cracker box" with little livability.

Even more space possibly could have been en to the matter of bringing building codes to date. Portland is one of the many cities which performance of new materials and nniques does not carry weight under psy" building, wiring and plumbing regulations, which often vary on state and city levels without apparent reason.

LAMAR NEWKIRK, *real estate editor*
Oregon Journal

Sirs:

. . .A remarkable job, thought-provoking and significant. The recommendations of top spokesmen in the housing industry are worthy of further study.

I agree with some of the recommendations, particularly those dealing with the package mortgages, the need for better financing for remodeling work, and the need for streamlining housing costs through uniform local building codes. However, I disagree vigorously with the Round Table's contention that new housing priced at less than $7,000 should not be encouraged.

The Round Table suggested taking existing dwellings as trade-ins for resale to lower income families, as is done by automobile distributors. This analogy is misleading when put into practice. Home owners and landlords are a curious breed. Give them easier financing for reconditioning their properties and what happens? Immediately they begin to think their rehabilitated homes are worth more than new homes and they boost their selling prices and rentals upward and out of the reach of the low income groups.

SAN WEINER, *real estate editor*
The Houston Post

Sirs:

We carried an Associated Press account of the Round Table proposals in all our editions of October 6.

Since then real estate and building circles here have told us the report states exactly their often-enunciated belief, namely that the older homes should be fixed up first.

THOMAS S. HANEY, *city editor*
Akron Beacon Journal

Sirs:

The Round Table's free-enterprise plan for better low-cost housing clearly is the product of expert thinking.

In Memphis, many well-integrated neighborhoods of older homes could be revitalized for generations of future use if financing such as the Round Table proposes were available.

The new home, at the going price in this fast-growing city, is not the answer for fast-growing families of only average income. The generous space, substantial construction, convenience and beauty of several sections now facing decline *would* be the answer if a way existed to finance their redevelopment on liberal terms.

ALFRED C. ANDERSSON, *real estate editor*
Memphis Press-Scimitar

Sirs:

I find myself in complete agreement with this program for better low-cost housing. I know that there is growing acceptance of the common sense and should-be-obvious truth that good low-cost housing in most communities can be provided a lot more quickly by modernizing old dwelling units.

ERNEST A. BAUMGARTH
Home section editor
The Detroit News

Sirs:

. . . Represents the constructive thinking urgently needed to solve this nation's scarcity of low-cost housing.

The boys talked cold turkey and I'm proud of 'em. Their ideas and suggestions will, I believe, work well here in Indianapolis. Financing low-cost housing is one of our biggest headaches.

Indianapolis has about 33,000 substandard homes—about one out of every four. Most of these could be remodeled quickly and economically and made into decent living quarters. But, unfortunately, slum property ownership is still quite profitable here.

A new housing ordinance, based on American Public Health Association, is now being prepared for adoption by the Common Council. It'll be a hot potato because it will give the building commissioner power to compel landlords to keep their property up to standards.

If there was one phase of this low-cost housing problem the experts overlooked, I'd say it was *new methods*. That to me looks like the big frontier in homebuilding. It hasn't been touched—except perhaps by tilt-up construction. The old ways of building homes are becoming prohibitive because they cost too much. We'll just *have* to find new methods, and I think we will.

DONALD TEVERBAUGH
Real estate editor
The Indianapolis Times

". . . America's greatest asset . . ."

Sirs:

. . . A perfect illustration of modern American businessmen thinking at their best.

I have looked at so many new homes I've prayed that somebody with influence would challenge the cheap houses being built today.

I haven't seen a house built in the last five to seven years that is anyway near so good as one built 25 years ago, provided $1,000 could be spent on the older home.

Nobody interested in America's greatest asset, her houses, can disagree with the point that the government and the building industry should work together to put more emphasis on long-range value, design and livability and less on price alone.

Your Round Table's mature and humane attitude on slum clearance is inspiring, and its finding that no nation is rich enough to

reached much of the lower-middle income market where a large part of our most urgent future demand lies.

Yet these industry leaders conclude that the way to go lower is to go higher, that up is the direction of down. They want the government to stop favoring the lower-cost home and help them to build more expensive houses as an answer to the lower-cost market.

They seem to sense the contradiction of this approach, for they offer an explanation of how this system of reverse economics *will* do the job. Their explanation is the old, well-worn "filter down" theory, under which you build an expensive house and by chain reaction, a series of vacancies is created that will reach down and house a low-income family in a ninth- or tenth-hand house. That theory has been expounded as long as I can remember, and every time it has been completely discredited.

What it means is that we will house the poor by building for the rich. We will house the many by building for the few. We will produce housing for the large masses in the middle- and lower-income field by building only for the small, select market at the top of the income pyramid. The first casualty of such a policy would be the booming home-building industry itself, for at present rates of production it would soon saturate the upper-level market.

We don't have to try the "filter-down" principle to know how it would work. That is precisely the way we operated until the last 20 years or so, when we found that it hadn't worked. The large number of slums and the slum conditions that the Round Table group deplores, as do I, is in good part the result of this "filtering" process. Not enough housing was produced to filter down, in the first place, and so our slums are terribly overcrowded. And such housing as finally did filter down to the price level of low- and moderate-income families was so worn out and obsolete, after paying for itself several times over, that it was scarcely fit to live in. What we need are answers that will produce more houses, not more slums.

I do not mean to disparage the earnestness of these panel members, nor the real value of such a discussion, in which the members have recognized not only the problems but also at least some sound answers. I hope they will continue their concern with the low-cost housing problem, but in future discussion I hope they will turn the housing picture right side up when they study it.

SEN. JOHN SPARKMAN
D. Alabama

The GI and the existing home

Sirs:

I was keenly interested in the exchange of ideas arising out of your Round Table on low-cost housing. We agree that existing homes, whether "as is" or renovated, must play an important role in satisfying the nation's housing needs, including the needs of World War II and Korean veterans. As a matter of fact, nearly half of the three million GI home loans guaranteed so far have been used by veterans to finance the purchase of previously occupied homes, although in the past several years with new construction at a peak the proportion of GI loans for existing homes has been closer to one-third. In this connection it is significant that our GI loan statute does not distinguish between used houses and new houses. A used house—or improvements on a used house—can be financed on the same liberal terms as a new house. Also, VA regulations and procedures are designed to facilitate increases in the amount of the GI mortgage on existing homes for subsequent improvements and alterations. For improvement or alteration loans below $8,000 in cost, VA's credit-control regulations require only that the veteran pay closing costs in cash. Also, the maximum maturity is the same as for all home loans: 25 years where the cost is less than $12,000.

T. B. KING
VA Loan Guaranty Service

" . . . Attractive credit and interest terms . . ."

Sirs:

1. The Round Table's conclusion "This country's need for better housing is far too great to meet through new construction alone" is supported by the great weight of present-day expert thinking.

2. "We can provide good low-cost housing in most communities at lot more quickly and a lot more economically by modernizing old dwelling units. . . ."

While FHA Title I has been most helpful in this regard, it is entirely possible that more attractive credit and interest terms are indicated. I believe, however, there should be proper safeguards against sending good money after bad and prolonging the inevitable in neighborhoods where the buildings are past repair.

3. "We are not likely to eliminate slums until we take the profits out of slum ownership. . . ."

Very true. Many cities have overcome the slum problem by requiring strict compliance with applicable local codes.

4. "Rent control should be stopped at once. . . ."

There is no economic justification for rent control except in critical defense areas.

5. "We believe pressure to force new home prices down under $7,000 a mistake."

Admittedly this policy raises a serious question in the minds of many as to the administration's real motive, especially since it cannot of itself attain the avowed goal.

The argument presented by the panel against the pattern of mortgage loans is compelling and like them, I am unalterably opposed to "changing the concept of FHA from an economically sound insuring agency to a pressure instrument for the welfare state," I do believe, however, that the utmost care should be exercised in the relaxation of credit controls to guard against stimulating an inflationary upsurge.

6. "FHA should help by making its appraisers give more credit for better quality."

Unquestionably, of prime importance. I was unaware that FHA was having difficulty attracting and holding first-class chief architects and appraisers due to the inadequacy of salaries offered.

If this condition can be laid at the door of Congress because of a cut in the FHA operating budget, then I concur in the panel's criticism that it is "penny-wise and pound-foolish" and that the cut should be restored.

I subscribe completely to the opinion that one of the biggest single obstacles to getting the price of a good new house down is the multiplicity and diversity of local building codes. I believe the federal government should take the lead toward correcting this situation, exerting influence through the housing and home agency to bring about adoption of standard codes at the local level.

REP. JESSE WOLCOTT
R. Michigan