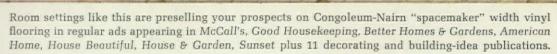
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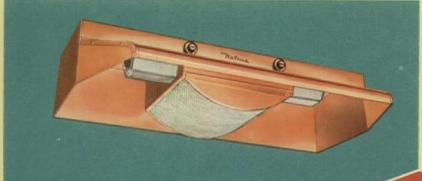
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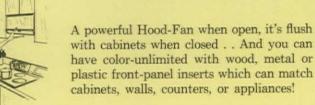




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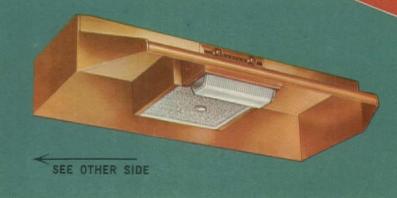
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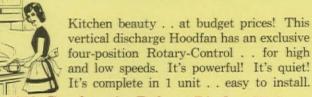




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February 1963

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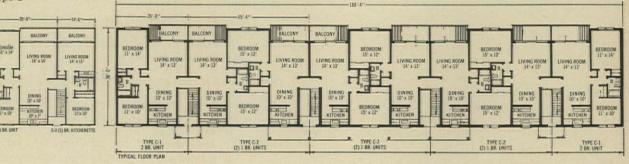
Remodeling: good design has become a key to volume and profits . . . Scattered-lot building: how to capitalize on a growing new market . . . The basement: cheapest space in the house

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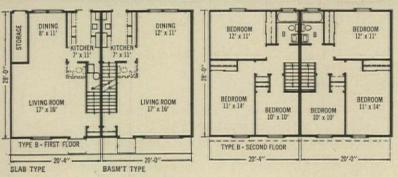


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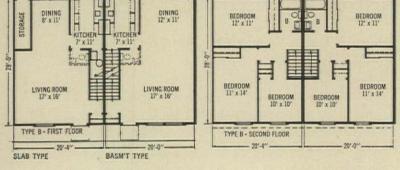
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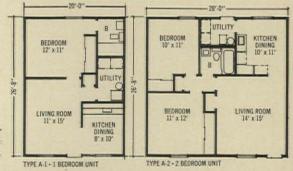




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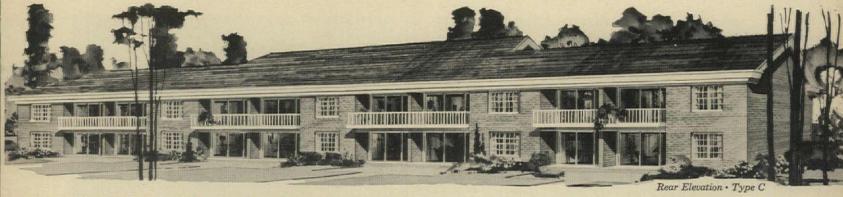
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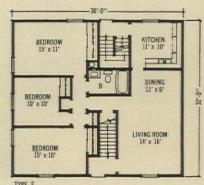
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The quiet fight to settle whether mutual S&Ls can be sold

In Los Angeles federal court, S&L Tycoon Bart Lytton and the Home Loan Bank Board are wrestling over an issue vital to officers of federal S&Ls. The question: can association officers who own escrow and/or insurance companies doing business with their mutual S&Ls sell these businesses and legally deliver management control of the S&L to the buyer? If they can, they have a valuable commodity. The case:

HLBB charges that the way Lytton gained control of Beverly Hills Federal S&L was ilegal. Lytton says it was not. He has made no effort to conceal his capture of Beverly Hills. In 1961 he bought Southland Mortgage Co., owned by Beverly Hills' then-president Eugene Webb Jr., for \$1.5 million (News, May '61). Southland handled most escrow work for Beverly Hills and, in fact, its existence largely depended on this relationship. The sales contract provided this relation was to continue; subsequently Webb's board resigned and was replaced by Lytton people.

The HLBB charges Webb and his wife, Marguerite, violated their fiduciary responsibility to shareholders by "making special and secret profit in return for transfer of proxies" to Lytton. HLBB demands that a new shareholder election be held under court supervision to replace the Lytton board.

But Lytton and the Webbs contend that the entire transaction "was in all respects in accordance with usual and normal practice, custom, and usage."

Lytton is so sure his purchase cannot be upset that (through Beverly Hills) he himself started the court fight by asking federal judges to issue a pemanent writ of mandate for his action.

A decision seems months off. But the HLBB already has brought enough pressure to halt a deal between Beverly Hills and Lytton's own state-chartered Lytton S&L. In the deal Lytton S&L sold \$15.2 million of loans to Beverly Hills, getting a 3.4% cash (or \$516,800) payment. Simultaneously Lytton bought \$15.8 million of loans from Beverly Hills at par.

California ponders state loans for private land development

The State of California is moving toward getting into the housing business in three big new ways. After more than a year of study (and \$150,000 of research and reports from consultants), a governor's advisory commission on housing problems has just handed in a report recommending, among other things, that:

- **1.** The state should make direct loans to cities and counties, and to private developers to buy and develop land. The state should do some land development itself—perhaps using eminent domain—where it is the prime mover of a new community (e.g., a new university campus). The aim is slurb prevention (a slurb is the California-like sprawl combining the worst features of both urban and suburban life). So a state agency would do the basic land planning.
- **2.** The Cal-Vet program of 3¾ % state-subsidized loans to veterans for homes (which accounts for some 55% of the state's bonded debt) should be junked. In its place, California should adopt an interest-subsidized scheme for middle-income rental housing like New York's controversial Mitchell-Lama program.
- **3.** A state housing agency should be created to sell bonds to finance the new schemes and to compile housing market data on a big scale.

Even before the report was formally presented to Gov. Edmund G. Brown (D.) by Commission Chairman Ned Eichler, the Bay area builder, the Home Builders Council of California was attacking its middle-income subsidy ideas as "a giant step toward ultimate socialistic state control of the housing industry." What happens in the Democrat-controlled legislature, Eichler predicts, depends on how hard Brown pushes. In his inaugural speech, the governor asked for one anti-slurb law: a ban on haphazard formation of new cities and service districts (because such moves are often a tax dodge). He also spoke of "disturbing trends" in housing—evidently referring to the commission's questionable assertion that many middle-income families cannot afford *new* housing because its cost is rising faster than incomes.

WASHINGTON INSIDE: The East Coast dock strike is straining good relations between labor and the Kennedy Administration. So the U. S. Chamber of Commerce and the National Association of Manufacturers are rolling up their sleeves for a drive to put labor unions under the anti-trust laws. Building has a big stake in this: Seven of the 16 strikes involving over 10,000 workers last year hit building.

How to win in Washington: The Federal Trade Commission dropped a year-old false advertising complaint against two Midwestern home improvement companies because the complaint was poorly drafted.

FTC has a novel solution to such snafus. It wants Congress to let it issue *temporary* desist orders against *suspected* violators. This would correct the "regulatory lag" found in the remodeling cases, it argues.

Housing agencies cook up surprises for skittish Congress

The menu in the oven at HHFA and FHA includes an end to part of FHA's red tape diet—by killing room count limits on apartments, for instance—and more sweeteners—for big-ticket remodeling loans.

But the political mood on Capitol Hill this year makes prospects for any major changes in housing laws uncertain at best. Southerners are piqued over President Kennedy's anti-discrimination order, and feel that supporting laws for more housing subject to the order would be poor politics back home. Insiders predict the House and Senate won't even hold hearings to consider minor changes in housing laws. Southerners fear such hearings would stir up fresh proposals for desegregation.

This dilemma is particularly pressing for Sen. John Sparkman (D.) and Rep. Albert Rains (D.), both Alabamans who head the housing subcommittees in their respective houses. But they may go along with this much: extend some programs which expire this year (Sec 221d2 and Sec 221d4 for middle income housing, Secs. 809 and 810 for military housing) quietly. Rains may sidestep the prickly anti-bias issue—and keep his stance as a housing leader—by putting his subcommittee on a nationwide circuit of hearings on completely different issues (e.g., how new programs set up in 1961 are going, and how FHA is dealing with foreclosure and credit report ills).

Deadline to die. The two sections of the Sec. 221 program (d2 for sales housing, d4 for apartments) expire June 30 as programs for middle-income families and revert to housing for persons displaced by public projects like urban renewal and highways. Buyers of homes under Sec. 221d2 can get 40-year mortgages if their incomes are not high enough to qualify for 35-year loans. Houses under \$9,000 can be built under FHA's rules for low-priced homes (News, Nov. '61).

Sec. 221d4 has been overlooked, although FHA officers last fall began pushing it as "like Sec. 608 with cost certification" (News, Oct.). FHA waives economic soundness for these rental projects, and loans can be 90% of replacement cost.

If the mid-income provisions expire, both programs will again be limited to displaced persons. This means that a cumbersome bureaucratic process will begin again before builders can get Sec. 221 commitments: HHFA would have to estimate how many units an area needs for displacees; builders would then have to apply for units out of this quota.

FHA's controversial Sec. 221d3 program for 31/8% loans (bought with Treasury cash by the Federal National Mortgage Assn.) runs for two more years till mid-1965. The pro-public housing National Housing Conference may suggest slashing the rate to 1%.

The two military housing plans (Sec. 809 for sale housing to servicemen or civilian employees, Sec. 810 for rental housing) die Oct. I. Both have been little used but hold interest for Southerners. Sec. 810 is used chiefly at Redstone Arsenal in Sparkman's home of Huntsville.

Sweeter fixup loans. FHA is still not satisfied that the big-ticket fixup market in older-city neighborhoods is being tapped by recent changes to Sec. 203k (News, Dec.).

So agency men want to ask Congress—if they can get clearance from HHF/Administrator Robert Weaver and the Budget Bureau—to convert Sec. 203k's twin program, Sec. 220h, from a plan limited to urban renewal areas to all neighborhoods.

That change would add three more goodies to the program: 1) economic soundness of a loan would be waived, 2) loans would qualify for FNMA special assistance with Treasury cash, and 3) foreclosed loans could be paid off in cash (although no interest is paid after the date of actual default while interest on debentures runs 60 days longer generally).

Under the agency's plan, Sec. 220h's multifamily rules which permit buy-up, fix-up projects for operative builders under the same cost limits would be opened across the board.

End room counts. Architects and builders have long condemned FHA's mortgage limits per room for warping good planning and design. Some architects have resorted to balconies in Alaska (they are credited as a

quarter room) to get the maximum room count to keep mortgages within Congressionallyordained limits.

Now FHA brass want to ask Congress to scrap the whole idea. They believe they have enough administrative control to keep builders from abusing the new privileges by building too many one-room efficiencies. FHA wants to switch to a limit of \$25,000 per unit, the same as for homes.

The proposal faces almost traditional suspicion in Congress. Lawmakers have long maintained that abuses cannot be kept out of the program without mortgage limits per room. They argue too that FHA's rental-housing financing is aimed at providing suitable quarters for large families.

New rules for lenders. A superleak has brought into the open preliminary findings of a Presidential committee on financial institutions. The ideas of the committee need President Kennedy's approval before they go to Congress, but point the direction the Administration may go. Main recommendations:

- Federal charters for savings banks, long a goal of savings bankers.
- Remove present limits on interest paid on time and savings deposits by commercial banks. Stand-by controls would be substituted to apply to banks, S&Ls, and savings banks. S&Ls have fought proposals for stand-by control in the past.
- Continue present reserve requirements on commercial banks and impose similar limits on S&Ls and savings banks.
- Ban state-chartered S&Ls from soliciting funds across state lines,
- Give the Federal S&L Insurance Corp., governed by the Home Loan Bank Board, more authority over state-chartered S&Ls.
 FSLIC would get power to pass on branch applications by member state-chartered institutions.
- Increase FSLIC and Federal Deposit Insurance Corp. insurance from \$10,000 to as much as \$25,000 an account.

Capitol Hill observers expect Congress to do little with such proposals this year, because the controversies they arouse could jeopardize tax cutting plans of the Administration.

What S&L men want from Congress

A new list of long-range legislative goals of the powerful U.S. Savings & Loan League has just been adopted by its executive committee and board of directors.

Some of them may not be aired publicly for months or years, depending on timing tactics yet to be pondered. But this is what the 4,800-member League wants:

Cut HLBB's apron strings. Directors fear that the HLBB exercises too much authority over regional Home Loan Banks. They feel that regional bank directors, not Washington, should have power to set the interest they charge on their advances to local S&Ls.

They feel that present rules forcing Home Loan Banks to set aside a 20% reserve allocation is too restrictive. The League thinks half that—10%—would be enough. In one move in this direction, HLBB has just given regional banks more control over test appraisals in examining local S&Ls than ever before.

Land purchase loans. Federally chartered S&Ls can lend money for land development now, but the League leaders want Congress to change the law to let them lend money for land purchases as well.

The change they seek would let S&Ls buy raw land and subdivide it with the idea of selling building lots. Some state-chartered S&Ls, notably in California, already have this power; they want federal S&Ls on an equal footing.

Home improvements. Leaders want the \$3,500 limit on Title I home improvement

loans increased. The five-year maturity limit should also be extended. But directors disagree on the specifics; they voted down the idea of an 8-year, \$5,000 ceiling.

They also seek a law upping the 15%-of-assets limit on improvement loans to 25%.

Broader lending power. The League adds some new types of loans to the list which HLBB Chairman Joseph McMurray says he will ask Congress to adopt to broaden S&Ls lending authority.

The League wants HLBB to reconsider its ban on collateral loans on personal property items like cars and equipment. Directors say HLBB should encourage more lending on condominium mortgages, and issue liberalizing rules to spur it.

They say the law should be changed to let federal S&Ls invest in savings and share accounts of other institutions insured by the Federal S&L Insurance Corp.

Crackdown on brokers. Directors fear that high-pressure tactics by savings account brokers (who funnel savings from some large investors to S&Ls) will taint the industry. No S&L can take more than 5% of its share deposits from brokers.

Directors want FSLIC-insured institutions barred from accepting accounts from brokers who acquire the accounts with give-aways and other gimmicks that exceed limits imposed on the insured institutions themselves. They feel that some brokers have used the FSLIC name and shield improperly to solicit accounts and want use banned by uninsured institutions.

Directors oppose any merger of the FSLIC's insurance reserves with the Federal Deposit Insurance Corp., which insures accounts in commercial banks.

HLBB orders closer watch on builder ties to S&Ls

The Home Loan Bank Board has spelled out for the first time what it considers unsafe and unsound lending practices for S&Ls.

The guidelines are part of an overhaul of HLBB's policy on test appraisals of property an S&L holds in security for its loans. They are HLBB's reply to criticism of HLBB procedures by a government operations subcommittee headed by Rep. John E. Moss (D, Calif.) last year. Now, presidents of the 11 regional Home Loan Banks can order test appraisals of local S&Ls without getting Washington approval.

Regional bank presidents must make test appraisals in two situations:

- 1. When builders pay the fee of S&L brokers who secure funds for the S&L, which then lends the funds back to the builder.
- **2.** When real estate held by S&Ls has changed ownership "two or more times in comparatively rapid succession within a short period, particularly if there has been a material upping of purchase price."

By singling out these two practices, the Board alerts its field examiners to watch for them when they audit S&Ls. Chairman Joseph P. McMurray stresses that this does not mean such practices are common—or that S&Ls are making unsound loans.

"The action is an effort to narrow the area of judgment as to the need for test appraisals and assist S&L management better to determine what may be considered safe and unsound," he says.

The new HLBB rules make clear that examiners will be looking especially for S&Ls whose expense ratios and dividend rates exceed the norms for S&Ls in the area.

How S&Ls get money for mortgage lending also will be examined. HLBB calls these practices suspect: 1) giving bonuses, 2) advertising of rate or rate increases in a manner indicating pressure solicitation of funds, 3) extensive advertising outside the institution's normal business area, and 4) using give-aways either directly or through brokers. A substantial increase in number of mortgage loans made is another danger signal.

The rules relate loans directly to the local housing market. Examiners are told to probe into builder tie-ins when:

- An S&L has concentrated loans to a few speculative or operative builders, or loaned money heavily in a declining area.
- An S&L continues to grant loans to a speculative builder who is already heavily indebted on homes unsold for long periods.

• An S&L appraises property at amounts substantially above sales prices, especially for new homes sold on a competitive market. The board recognizes that some adverse economic conditions in the community might cause such a situation. Professional appraisers are disturbed about this guideline, saying sale price is lower than appraisal in many special cases.

FHA REGULATIONS

FHA adopts insulation rules for air conditioned homes

The rising number of homes with central air conditioning has led FHA to adopt minimum insulation standards for the first time. The rules are effective March 1.

The rules combine the number of square feet in an air conditioned house and a dry bulb temperature design rating for each geographic area to produce a maximum heat gain allowed for each house. Copies of the new rules for individual localities are available at district offices.

FHA tightens screening for borrowed down payments

Agency underwriters will now take a much closer look at Sec. 203i loan applications from buyers over 62 years of age who plan to borrow part or all of their down payment.

Elderly buyers may borrow down payments from relatives, close friends, employers, or "a corporation or organization established for humanitarian or welfare purposes" under present rules. But in some instances FHA finds that welfare organizations are planning to lend money which was donated by builders.

FHA warns that such practices may "circumvent the cash investment requirements." It has just told district offices to ask these five questions: 1) Was any portion of the loan derived from real estate, building, or mortgage-lending interests? 2) What publicity is given to availability of these loans and by whom? 3) What standards are used to determine eligibility for loans? 4) What is the interest rate and term? and 5) Do fund donors take a direct or indirect part in managing the lending agency? Any builderagency tie-in will disqualify the loan.

Boost funds for statistics, JFK asks

For years research and fact gathering for housing has been shortchanged. Federal budgets spent more money on peanut research than collecting accurate market facts for the nation's biggest employer of labor and long-term capital. Now, President Kennedy's budget for the fiscal year beginning July 1 proposes spending \$7.1 million for getting builders better housing statistics (vs. \$2.7 million this fiscal year).

HHFA would get the biggest boost: from \$375,000 to \$2.5 million plus the assignment of developing details of some significant new studies which up to now have been largely



HHFA'S SCHUSSHEIM
Better data for better decisions

in the Census Bureau. But Census and the Home Loan Bank Board also would get more money and Census would continue its familiar starts and vacancy series. To these would be added:

• An expanded house sales study. HHFA started this study a year ago (News, Sept.) but new funds would find out who is buying new houses, their family size, previous residence, race, and other facts. Researchers would find the same data for renters of new apartments.

- A vacancy study for metropolitan areas. Census' vacancy rates for the nation are almost useless in localities. So vacancy rates would be collected for 25 metropolitan areas this year. Next year 35 areas with 65% of all housing would be covered.
- Preparation for a housing inventory in December 1964—An inventory—an invaluable yardstick of where we stand—has not been taken since 1956, and updated figures are needed.

Getting better data on housing has had rough sledding in Congress. The HHFA research department was largely inactive from 1954 till 1961, when the department was reactivated under Dr. Morton Schussheim, former research director for New York State's rent commission. Last year HHFA sought \$1,450,000 for "urban affairs and research," but its pitch to Congress was so short and technical that most Congressmen got the impression some projects were silly. Result: HHFA got only \$375,000, including \$225,000 for its new report on housing sales.

Housing men contend a lot more could be done with FHA data. A periodic check of applications might spot trends in heating plants and other equipment, for instance. In one amazing trial run, figures on 140,000 houses broken down by heat zones were fed into computers. Expectably they showed that climate accounted for higher cost differentials. But when labor rates were added, it turned out that housing costs varied *inversely* to wage rates. The surveyors want to find if this means high-paid labor is more efficient or that some other factors are operating.

If the statistics plan wins favor in Congress, some building industry spokesmen can be expected to oppose it. Their often-heard argument is that an operating agency cannot be purely objective in plotting economic trends in its own field. They fear HHFA could make the figures justify whatever it was trying to promote.

Realtors vs. lawyers spat spreads

Illinois and California are scenes of two new brushfires in the continuing guerilla war between lawyers and real estate men: The dispute is over whether filling out standard realty forms constitutes the illegal practice of law for realty men.

In Illinois, the Chicago Bar Assn. asked a court to enjoin Realtors Quinlan & Tyson from preparing preliminary contracts, securing title reports, drawing deeds, and "preparing the many documents ordinarily required . in the course of a real estate transfer." Master-in-Chancery James C. Leaton agreed with the lawyers and Circuit Judge Cornelius J. Harrington issued an eight-page memorandum opinion sustaining him.

The opinion notes that Illinois courts alone determine 1) what constitutes the practice of

law, and 2) who shall be authorized to practice. It concludes that any layman may act as his own lawyer but when he undertakes to give advice to another, he is engaging in the unauthorized practice of law. Thus a broker may fill out blanks in a standard form but may not change the provisions of those forms.

Defending Attorney Austin L. Wyman says: "Many lawyers believe that if they don't curb this trend, there will arise in every area of legal practice the equivalent of the accountants who are so active in income tax work. But if the bar doesn't modernize its views, some day there will be a lawsuit against an IBM electronic brain for doing such work.'

In California, the state bar charged Coldwell-Banker & Co. of Sacramento with practicing law without a license by "unlawfully preparing leases and illegally giving advice to customers in lease discussions."

The bar asks the court to define what does and does not constitute legal practice, and to bar Coldwell-Banker from doing legal work.

Californians feel sure the issue is going to require legislation, but no bills have yet reached the just-convened legislature.

Appraisers change name and add new professional rank

The Society of Residential Appraisers becomes Society of Real Estate Appraisers and the fourth group to change title (NEWS, Dec.).

The association is also adding the new professional designation of senior real estate appraiser. The designation will be open only to the 3,200 appraisers who have already attained the familiar senior residential appraiser rank. Broad experience with non-residential property is required for the new rating.

LOCAL MARKETS

Denver's high vacancy rate: why?

Do apartments rent fastest if they are close to downtown? Realty analysts who look at Denver's rental troubles are beginning to ask what the magic of location really is.

Vacancy rates have jumped from 3.8% to 16.6% in 11 months (News, Aug.). But a study of five typical apartment houses shows that the most distant one (15 miles) has a vacancy rate close to zero while the one within walking distance of downtown is 1.4%. And the vacancy rate is 30% at one in-between apartment five miles out.

All five are close to shopping, but there the similarities end. The walking distance to shopping and other amenities is an important renting reason, and the wishes of apartment owners to select tenants carefully play a part. Here's what the survey found influenced renters:

Behind high vacancies. Cherry Creek Towers, a dramatic addition to the skyline of southeast Denver, is a year-old structure facing a pleasant stream-and 30% vacancies. No bridge crosses the stream to the shopping center on the other side which tenants would normally use. Its rent schedule (\$130 for the cheapest one-bedroom apartment) is next to the highest, and it styles itself as "a skyline concept in luxurious apartment living." It requires a one-year lease, unlike all but one, but provides a lot of extras like a swimming pool, air conditioning, individual screened patios, and dishwashers.

Empire House, only two miles from downtown, is the most expensive (\$155 for a onebedroom unit) and seeks high-income ten-ants on a "very selective" basis. After six months of operation, its vacancy rate is about 15%. The apartment includes some posh extras: a 3-hole putting green and a squash court (on the 16th floor), health club, and a soiree room for "effortless entertaining."

For low vacancies. Camellia House, within walking distance of downtown, is an older house recently remodeled to provide air conditioning, electric kitchens, and dishwashers. Its tenants are downtown workers

who can afford to pay at least \$110 for a one-bedroom apartment. One sales boast: Everything is nearby." Vacancy rate is 1.4%.

In contrast, Briarwood, which also houses downtowners, is an older building with a 9% vacancy. Located four miles from downtown, it provides few extras for the \$100 a month it charges for one bedroom. The unfurnished apartments were lowered \$5 monthly recently, and a rent free month is offered in exchange for a year's lease.

The suburban Arvada Square Apartments, 15 miles from downtown, was opened three years ago. When the developer went into receivership last June, the vacancy rate was above 50%. But under three separate and new managements, the rate has been cut to zero. Security Trust Co., managers of the Patio apartments section (see photo), did this by 1) cutting the number of furnished apartments to reduce transients, 2) establishing a mini-mum one-year lease, 3) setting up a nursery and pre-school facility, and 4) landscaping and redecorating. Cheapest two-bedroom units rent for \$95.

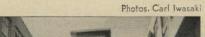
Other apartment managers are tightening their market analysis. Van Schaak & Co., manager of 250 buildings with 3,500 apartments, is pointing for older tenants who are giving up their homes for apartments.

"They offer little trouble, seldom move, almost never complain and pay promptly, says Van Schaak's W. M. Lakus. And swimming pools, recreation rooms and hotel-type lobbies aren't necessary to attract them.

"Swimming pools, rec rooms and that sort of thing appeal to the steno set," Lakus says. "They create noise, and often wild parties drive away more desirable, older tenants.'

However, up-to-date furnishings-built-in stoves, refrigerators and air conditioningare musts, as are elevators, fire proofing, soundproofing, incinerators, lawns and quiet.

A year ago, there was a free-swinging battle between operators of the newer developments and the older, established management concerns. Then the old-timers withdrew from the 'gimmick competition."





RENOVATED Camellia House has 1.4% vacancy.



SUBURBAN Arvada Square has no vacancy.



NEW Cherry Creek Towers has 30% vacancy.

Mississippi revolts against anti-bias order; complaints hit two builders

Mississippi lawmakers have forbidden public housing and urban renewal agencies to sign contracts for financial aid from the federal government.

But officials of the Public Housing and Urban Renewal Administrations say this is the exception rather than the rule for Southern renewal and public housing agencies, where the impact of President Kennedy's antibias order is being felt first.

Only five of 194 Southern public housing projects in planning when President Kennedy banned bias in federally financed and assisted housing have been cancelled. The five: Midlothian, Tex., Donaldsonville, Ga., Flomaton, Ala., Clarksville, Tenn., and Gaffney, S. C. Newton Ga. has withdrawn an application.

But PHA officers point out that 85 Southern towns have pledged not to discriminate against applicants in their projects. Location is a key to their willingness; most cities expect no white applicants for projects in all-Negro neighborhoods, or vice-versa in white projects.

No federal help. No urban renewal projects have been cancelled, although the new Mississippi law apparently ends eight projects in that state. The law was hustled through the legislature and signed by Gov. Ross Barnett, who faces a citation for contempt of federal court for trying to block integration at the University of Mississippi, within 30 days after the President's anti-bias order (News, Jan.).

The law revokes the power of all public housing and renewal agencies to contract with federal agencies after last July 1. It thus leaves the state's present 84 public housing projects undisturbed. It kills six public housing projects ranging from 18 to 152 units. Four cities had started planning and two had signed a preliminary financial aid contract with PHA—including Aberdeen which had approved the anti-bias pledge.

The eight renewal projects caught by the law save federal taxpayers \$4.7 million. Aberdeen, West Point, Tupelo, and Amory were already planning projects, while Columbus, Corinth, Aberdeen, and Tupelo had sought federal approval of funds to begin planning. HHFA attorneys have not yet cancelled these projects, saying that under one interpretation of the law the towns could go ahead if townspeople voted the projects before July 1.

Builders' dilemma. Two builders in suburban Montgomery County outside Washington have become the first targets of bias charges to FHA. So far, the cases dash builder hopes that discrimination charges will be handled confidentially. Negro complainants have talked freely to newspapers about alleged refusals to sell new homes. The result is headlines and headaches for builders, even though FHA keeps its promise of official silence.

FHA is now predicting that the anti-bias order will cut no more than 2% from FHA voume. The agency's analysis was made at White House request.

But FHA applications slumped sharply in some Southern cities. Atlanta's FHA office got 795 applications in December (vs. 1,255 a year earlier).

In the first of the two FHA complaints, a Negro school principal charged bias by Abraham S. Sind and Israel Cohen in selling a home in Rockville, Md. "My partner and I feel that everything they have done has been

to get publicity and nothing else," cried Sind. "We are not building under FHA, and the entire matter happened before the Presidential executive order."

The high school principal maintained that the builders "have held themselves out as doing business with FHA" in seeking FHA help. Then he went to federal court in Baltimore and won a temporary restraining order against the builders selling the disputed house. In a deposition filed with the court Sind and Cohen said suburban integration is bound to come but that being forced to sell to a Negro now would slow sales.

Cohen feared also that "normal mortgaging amounts would be not available, which means that the operation couldn't continue. [I discussed] only the mortgage amount with one banker and was advised that they would have to assume a devaluation of the property if a Negro would move into their community."

After 30 days FHA rejected the complaint because commitments were granted many months before the Executive Order. But outgoing Commissioner Neal Hardy says FHA will continue to investigate fully any bias complaint, and try to use its good offices to end bias as the President has directed.

In this instance Sind and Cohen "rebuffed me completely on the grounds they were not interested in FHA support of their projects," says Hardy.

In a second case a Negro economist for the Budget Bureau charges that a Levitt & Sons salesman had refused his \$100 check for a deposit on a four-bedroom home in Belair. Two whites, including the president of the National Capital Clearinghouse for Housing Democracy, inquired at the model house before the Negro appeared. Replies a Francis Miller, LIFE



MISSISSIPPI'S BARNETT
A snub for federal money

Levitt official:

"The terms of the executive order apply only to FHA commitments taken out after Nov. 20. Our commitments were taken out before that date." FHA's district office is looking into both cases.

Sit-ins spread. In Edgewater, N. J. near New York City a week-long sit-in won a \$100-monthly apartment temporarily for a Negro mother of three children. Twenty minutes after the mother was first denied the apartment, the building superintendent accepted a \$10 deposit from the white chairman of the Bergen County chapter of the Congress of Racial Equality. CORE members began a sit-in (during which three were charged with trespassing and later acquitted) and filed charges under a state anti-bias law.

The week-long sit-in ended when the Negro mother moved into the apartment pending outcome of the bias charges. Attorneys for the apartment owner say they will contest constitutionality of the state law.

In Brooklyn, CORE members sat-in a model home after they were refused renting one-half of a double at \$190 a month. Builders Herman Marlowe and Ben Lonstein first

continued on p. 14



Barricades and pickets shatter Atlanta's envied racial peace

For years the delicately balanced harmony between whites and Negroes has helped foster Atlanta's explosive growth while many another Southern City stagnated in its problems. White civic leaders always took care to consult a small cadre of Negro leaders (e.g., the Atlanta Voters League and Empire Real Estate Board) on race questions. On occasion they have countenanced racial buffer zones—putting a wooden fence or empty land—between white and Negro neighborhoods even

though Atlanta's 200,960 Negroes (40% of the population) live on only 25% of the land zoned residential.

But last month the harmony gave way to open conflict-over housing. A new All-Citizens Committee for Better City Planning is leading Negroes and the Voters League isn't protesting. Reason: city-erected barricades on wooded sections of two streets leading to allwhite Cascade Heights. Eleven Negroes already live on the two streets on one side of the woods; on the other side Cascade Height's white residents say Negro real estate brokers have been trying to provoke panic selling for 18 months. Homes (ranging from \$23,000 to \$50,000) have been virtually impossible to sell. The residents' association has bought four homes with member contributions to keep them from going Negro and has contracted to buy the last 15 vacant lots for \$45,000. To end the jitters, residents pressed the city to vacate the streets and erect the barricades.

When the "road closed" signs went up, the new and more militant Negro began picketing what it regards as a kind of homegrown Berlin wall. They say they are going to court to test constitutionality of the barricades, and threaten political retaliation against Mayor Ivan Allen, who was elected by Negro bloc voters. Says Allen: 51 of 52 racial conflicts were solved equitably last year. The barricades are No. 52.



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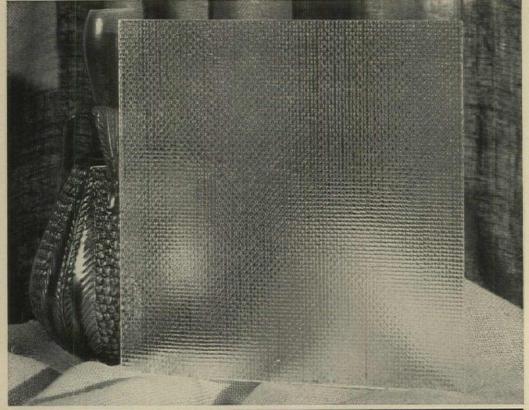
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accepted a rental check, then said the bank providing building funds had refused permission to rent. When the bank denied this to CORE, the sit-in started.

The Los Angeles CORE unit is continuing its sit-ins against three builders; last month Negro physicist Bobby Liley moved into his Monterey Park home won in a marathon 33-day sit-in last spring. (News, May).

The first eight weeks after the anti bias order also brought these developments:

- Gov. Nelson Rockfeller (R.) of New York and Gov. Edmund G. Brown (D.) of California called for stronger anti-bias laws in their inaugurals. Gov. Rockefeller wants a proposal "almost" as tough as the New York City ordinance now covering 90% of all private housing. Gov. Brown seeks a Human Rights Commission to police the state's anti-bias laws,
- The biggest private insurer of mortgages, Mortgage Guaranty Insurance Corp., says inquiries have increased "tremendously" since the anti-bias order on FHA and VA loans. MGIC ended the year with \$1 billion of insurance in force, double a year earlier.
- · Pennsylvania's Human Relations Commission has issued a ban on these words in newspaper ads: "for colored, gentile only, for white only, restricted, integrated neighborhood, mixed neighborhood, Polish neighborhood, St. Gregory's Parish, mixed racial.'

New buttress of anti-bias laws: the 9th Amendment

Colorado's Supreme Court has just upheld (6 to 1) the constitutionality of the State's Fair Housing Act of 1959. The court's surprising basis: the 9th Amendment to the U.S. Constitution.

Justice O. Otto Moore ordered the real estate firm of J. L. Case Co. of Colorado Springs to supply a Negro couple, James and Elizabeth Rhone (he is a research chemist) with the same kind of house in the same kind of neighborhood as the two had tried unsuccessfully to buy in September, 1959. The Rhones gave two Case salesmen a promissory note for \$500, but when they returned with a check two days later they were told the house was sold-to one of the salesmen. A district judge had found that the Case Co. had been denied freedom of contract and the right to dispose of its property as it saw fit under the U. S. 14th Amendment. But Justice Moore leaned heavily on the brief Ninth Amendment ("The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people") to overturn the lower court ruling. Justice Moore noted the same wording in the Colorado constitution, plus the addition of the word "impair" in the sentence.

Granting that the two rights conflicted head-on, Justice Moore said: "We hold that as an inalienable right, a man has the right to acquire one of the necessities of life, a home for himself and those dependent upon him, unfettered by discrimination against him on account of his race, creed, or color.' Added the court: "An inherent human right will be upheld by this court against any person or department of government which would destroy such a right, or result in discrimination." Judge Moore said the order was not taking property without the consent of the owner because the owner of his own free will wanted to dispose of it, and the terms he

set had been met.

KEEP
AMERICAN WORKERS BUSY

UNITED STATES GOODS

S&L leader blisters big-lot zoners to prod reform in his own back yard

Reform, like charity, should begin at home, contends President James E. Bent of Hartford Federal S&L. But too often reformers serve up tough talk away from home and tone down their comments for hometown consumption.

Not so Bent, 1958-59 president of the National League of Insured Savings Institutions. When Hartford homebuilders invited him to talk, Bent picked the two Hartford suburbs of Glastonbury and Simsbury for his horror chamber of zoning abuses.

Glastonbury is "one of the deadest and dopiest towns that ever existed," he cried. And Simsbury is a town "with a great deal of stupidity."

Glastonbury, one of the three or four largest towns in land area in Connecticut, has zoned enough 40,000-square-foot lots to handle every family in the Hartford area which could afford such homes, he charged. At the same time its tax rate is high and the town needs new industry.

Simsbury is typical of many small New England towns dominated by a small power structure that controls economic, social, and political life, Bent continued.

"They [town fathers] have decided that certain types of people shouldn't come into the community."

Return fire. Banner newspaper headlines brought swift and positive reactions. "I am unaware of the fact that Glastonbury has solicited his advice," said Town Father John Q. Goodrich. Any stupidity probably was that of the speaker, ventured First Selectman Russell Shaw of Simsbury. He denied the absence of

growth in his town, and said townspeople wanted the zoning rules they had.

Bent is undaunted by the critics and is delighted with the "excellent" response from other quarters. "Attorneys have called me up and said, 'Thank God somebody has had the guts to say these things'," he says. Other favorable comments have come from homeowners and builders.

And Hartford Federal hasn't lost any big depositors — one fear that keeps many other S&L men from fighting large-lot zoning.

Builders react. Stirred by Bent's words, builders are moving to form a permanent committee of builders, town managers, planners, and zoning officials. The group would meet regularly to thrash out mutual and conflicting problems.

But the first hurdle, says Executive Vice President Russell R. Naughton of the Hartford HBA, is selling politicians on the idea. How builders are wrestling with zoning in other cities:

• In Boston, Morton Weiner called for a massive educational campaign to correct zoning "abuses" as he took over as president of the Home Builders Association of Greater Boston.

Weiner, whose baliwick includes 20 suburban towns with one-acre or larger zones, said the homebuying public "should be informed of what is happening . . . and what effect this is going to have on their own pockets. Abuses of the zoning and subdivision laws by . . . city and town officials are not-



H&H staff

HARTFORD'S BENT For reform, harsh words

only ruining us economically, but making the people a party to one of the greatest crimes of all time."

- In Cincinnati, builders want the city to hire a co-ordinator and expediter to help builders cut construction costs caused by cumbersome city zoning and building procedures. He would 1) develop a unified housing policy for city agencies; 2) speed procedures for handling paper work; 3) develop modifications to city codes to permit use of new materials and techniques; 4) review public policy proposals in the light of community economics.
- In St. Louis, a controversial land use plan proposed for St. Louis County has been rejected by the county council and referred back to the planning commission for restudy. Hearings on the first land use plan had caused councilmen to postpone action on a builder request for rezoning 10,000 acres for residential use. A shortage of land for homes has driven prices up, they say. Now Councilmen say they want to consider the land-use plan and a new zoning map together in late spring.

URBAN RENEWAL

Los Angeles rejects federal handouts for renewal plans

By a 15-0 vote, Los Angeles city councilmen have decided to shun federal planning money.

Mayor Samuel Yorty touched off loud debate on the question by asking the council to let the city apply for \$2.7 million of federal money for a community renewal program. Organized builders opposed the move (News, Dec.) because the "federal government should not become involved in purely local problems."

At a day-long council hearing, speakers used logic and laughter. The Chamber of Commerce—which Mayor Yorty said would support him partly—urged rejection because "the funds expended under the program are intended to identify potential urban renewal project areas . . . It leads also to the scheduling or programming of urban renewal activities." John Loyd of the Small Property Owners Assn. called himself a "Yorty yokel" who remembered the mayor's campaign pledge to protect small homeowners from losing their homes to renewal, CRP is "directly opposite," he argued. The Real Estate Board pointed out that Mayor Yorty could appoint the 47 non-civil service jobs to handle CRP.

The mayor's aides argued that the city needed to take a coherent look at its housing, and that an elaborate lot-by-lot, electronic data-processed survey of population, income, crime rates, employment, health, fire occurrence, and transportation was the answer. Councilmen think this is fine—and now are studying how to harness the city's 161 data machines for the chore. Without federal help, this will cost the city \$600,000 a year.

Resistance to federal subsidies spread south to San Diego. Voters turned down a plan to get \$15 million of another federal subsidy (for public works) by rejecting a \$15-million city bond issue for matching funds.

Design competition hitched to real renewal problem

Ruberoid Corp., 69-year-old maker of tile and roofing, is turning is design competition for architects into a search for proposals for an actual renewal project on New York City's East River. Ruberoid sponsors the richest of the annual design contests (first prize: \$10,000) but the previous four Ruberoid competitions have all dealt with theoretical problems.

Contestants are asked to plan 1,500 middleincome dwelling units on a 16-acre waterfront area in Manhattan's East Harlem.

The city's Housing & Redevelopment Board says the city will give every consideration to using the winning concept in the area renewal plan and will strongly urge the sponsor selected to hire the winner.

Entrants must register with Ruberoid, 733 Third Ave., New York City, by May 15.

COMMUNITY FACILITIES

Judge kills cash demand by city for plat approval

A Wisconsin builder has just won a three-year legal fight against a requirement by the city of Greenfield (on Milwaukee's southwest edge) that he donate \$7,000 in lieu of land to get plat approval.

But Verne A. Ostendorff and his fellow builders were left half-satisfied, because the Circuit Court avoided ruling on the constitutionality of the ordinance. The ordinance provides that builders donate 10% of their land for public purposes prior to plat approval. In this case, Greenfield's plan commission decided that Ostendorff should sell the four lots involved and turn over the net proceeds to the city for future improvements.

Judge Robert W. Landry ruled that "the ordinance does not authorize the common council to substitute a cash payment in lieu of dedication of land." But he said constitutionality of the land provision itself would have to be settled by a case directly challenging it.

Judge Landry also ruled that the Greenfield school board acted legally in restricting Ostendorff to a maximum of 15 houses built per year, in an effort to control school growth.

One small community, Muskego, immediately dropped all donation requirements after reading the Greenfield decision, but other Milwaukee suburbs are still demanding land or money payments to obtain plat approval.

Found: a quick way to break up union work-rule fights

New York City contractors plagued by jurisdictional strife among craft unions, especially on big publicly-aided projects, are discovering a useful persuasive when the going gets rough: tip off the newspapers. When the preposterous details are spread out in cold print, agreements seem easier to come by.

Thus did New Yorkers learn of two of the latest squabbles, both involving plumbers of Local 2. With a union election coming up, muscle-flexing was expectable, but in the process the plumbers managed to exhibit to an intrigued public the anachronism of fragmented work jurisdiction in an industry using more and more assembly-line, mass-production operations.

Of all places for their show, the plumbers picked Penn Station South, a 2,500-unit middle-income co-operative in Manhattan sponsored and largely financed (with \$17 million of pension funds) by the International Ladies Garment Workers' Union.

The plumbers demanded of the carpenters a bigger share of installing kitchen sinktops. The carpenters lug in the factory-made, plastic-covered tops and lay them on the kitchen floor. Plumbers secure the sink bowl to the top while working on the floor and then carpenters lift it to the top of the wood cabinet base and nail it on. Plumbers then hook up the water and drain pipes.

But Local 2 argued once the sink bowl was in the top it became a "plumbing fixture" and they, not the carpenters, should secure it. The carpenters called for mediation.

100-a-year. Normally, the hundreds of such disputes that crop up each year are settled quietly by the unions or a city-wide panel of union and employer representatives in a quasi-judicial arbitration hearing whose decision is binding. Under this "New York Plan" some 600 cases have been settled since 1903.

The plumbers refused this course. After six of the project's 10 buildings were completed in the traditional way, work stopped for two weeks on the kitchen sinks in the seventh while both unions did other jobs, leaving many of the 184 families scheduled to move in fuming after giving up their homes.

At about the same time, over in the Bronx, Cauldwell-Wingate Co., Inc., general contrac-



UNCONNECTED SEWERS

Is it plumbers' or laborers' work?

tor for a 900-unit, state-subsidized middleincome housing project called Lafayette Apartments, faced a similar crisis. The plumbers tangled with Local 731 of the excavating laborers' union over who should lay and connect concrete storm sewer pipe from the project's parking lots and driveways to the city street lines.

The laborers contended the work was a "street improvement" under their jurisdiction. The plumbers said it was piping integral with building plumbing and their work. The contractor had awarded it to the plumbers, fearing that he had more to lose from a work slowdown or stoppage on interior plumbing if Local 2 became exercised.

Problem of timing. Normally, said Bernard J. Rosen, executive vice president of Cauldwell-Wingate, he could resolve the problem "informally" by paying laborers or plumbers to sit idly by and watch the other do the work but "personality conflicts" between rival business agents prevented it in this fight, and both unions refused to complete the work for a month while they argued.

Finally, somebody tipped off newsmen. Two days after reporters began nosing into the disputes, the plumbers agreed to continue connecting and laying the pipe and the laborers to backfill the trenches. At Penn Station South carpenters agreed to take the sinktops sans sinks and screw them down to the cabinet—but only hand-tighten the screws.

The plumbers came along, unscrewed the tops, laid them on the floor and set the bowls as they normally would have done. Then they put the tops back, screwed them fast and connected the pipes.

Builders gain new weapon against union whipsaw tactics

A ruling by a National Labor Relations Board examiner gives builders powerful new leverage at the bargaining table if they negotiate through employer associations.

The examiner says that a union holding a contract with a builders' association cannot break up the solid employer front by coercing individual builders to sign individual contracts. He ordered the Bricklayers, Masons & Plasterers Union to quit enforcing the individual contracts it obtained through whipsaw coercion and return to the bargaining table.

The 2,000 bricklayers walked off their jobs last May when their contract with the Builders Institute of Westchester and Putnam Counties (N. Y.) expired. The union urged builders to sign individual contracts during a 24-day strike, and some builders complied. But the 600-member Builders' Institute complained to NLRB this was an unfair labor practice.

Builders now are jubilant. "The decision . . . reaffirms the right of an employer to designate an association as his bargaining agent," says Executive Officer George Frank.

CODES

Creeping code reform: floor bridging vs. the status quo

Back in 1954, Forest Products Laboratory in a study for HHFA—concluded that bridging in flooring is "much less effective than commonly supposed."

But the study languished. In 1960, NAHB decided it should do something about it. Its research laboratory spent a year and a half and \$25,000 to produce a 124-page book showing that bridging under residential loads is unnecessary.

NAHB Staffer Ward Buzzell was assigned to persuade regional model code groups to abolish their requirements for bridging. After a year of work Buzzell reports:

"We presented the item to each of the code groups. We have had no response from the National Bureau of Fire Underwriters. They are revising their code and we should know some result in the spring. The recommendations committee of the Southern Building Code Congress declined to make the change.

"At the annual meeting of the International Conference of Building Officials the item was held over for further study. I might say the engineering subcommittee approved it, and the Structural Engineers Society of Southern California also approved it.

"We presented it to a hearing of the Building Officials Conference of America and unofficially I hear that it was declined. So we're batting about .250."

At the same time, the Public Housing Administration has accepted NAHB's report and abandoned bridging.

FHA is still studying the proposal. "Of all things," says Builder Harvey (Bud) Meyerhoff of Baltimore, "the public housing people have accepted it because it reduced their costs. And here we are, in the private home-

building industry, still trying to get it adopted." Buzzell, a patient man, adds: "The code groups are very democratic organizations, and it is not unusual for an item defeated in one year to be approved in later years."

Ceramic tile and drywall men battle for the bathroom

Infighting between ceramic tile contractors and gypsum board interests is spreading.

The two groups have been at odds in California for years, but now the battle is breaking out in the Midwest. Builder Cecil Rose tells how the row went in Columbus, Ohio:

The Tile Contractors Assn. persuaded the city council (without consulting an advisory city building commission) to change the building code so only non-absorbent mate-

Associated Press

rials could be used under tile in bath and shower areas. "We are getting blamed for tile falling off when it was not the tile's fault," argued tile installers.

Then the city builder inspector issued an advisory interpretation that only plaster walls would meet the new rule.

Builders rebelled, charging this would add \$30 to the cost of each bathroom. The builders stormed city hall and won a 60-day suspension of the interpretation. During the suspension the city attorney ruled that the code change did not ban gypsum board.

The Gypsum Assn. says the same type of change was beaten down in Detroit earlier last year. The Tile Contractors' Association of America has published instructions for installing ceramic tile on drywall, but some local contracting associations have been pressing for code changes instead.

The model code of the International Conference of Building Officials, widely used in California, requires materials "not adversely affected by moisture" in showers. A move to change the ruling died after a bitter fight at ICBO's annual meeting last year. But San Francisco now permits gypsum board.



SLIDING HOMES in Los Angeles' steep Brentwood section are bringing renewed cries for stricter subdivision and building rules for homes built on cut and fill. City council probers are

trying to find why this pair of \$60,000 homes dropped 15' below street level. Building officials believe springs and lawn watering combined to loosen fill placed over shale.

MATERIALS & PRICES

Labor-management funds to promote special trades banned

The Ninth Circuit Court of Appeals has just ruled illegal a fund set up by plaster contractors and the plasterer's union to promote plaster.

Plastering and masonry men have used this kind of promotion fund heavily, although no one keeps track of how many funds are operating—or how much they collect.

The decision could have far-reaching impact. Joint funds to promote an industry or trade against the inroads of competing products are common in building.

At issue in the court test was an agreement between the Contracting Plasterer's Association of Southern California and Local 2 of the Operative Plasterers and Cement Masons International. Contractors agreed to pay $434 \, \phi$ for each man-hour worked into a fund to promote use of lath and plaster.

The kitty, estimated at about \$350,000 annually, was administered by an equal number of labor and management trustees.

But Paramount Plastering Inc. and a group of other plastering subs represented by attorney Earl Klein challenged the payments when they were refused an audit of the books to see if the fund was doing its job.

Taft-Hartley violation. In upholding Federal District Judge Leon R. Yankwich, the Appeals Court ruled that the employer contributions violated Sec. 302 of the Taft-Hartley Act because 1) the law doesn't provide for such funds and 2) three laborappointed trustees had an effective veto over use of the money by three management members.

Under Taft-Hartley, employers cannot "pay lend or deliver any money or other thing of value" to employee representatives except into trust funds "for the sole and exclusive benefit of the employees . . . and their families and dependents." Promoting an in-

dustry does not fall within this definition, says the court.

"We do not quarrel in the slightest with the laudable objectives of the trust," wrote the judges in an unanimous opinion. "But like so many of such present day problems, our duty is to rule in accordance with that which the Congress 'in its wisdom' has seen fit to enact."

Remedy: Congress. The judges suggested that "Congress might well have, or even should have, provided additional exemptions, permitting the setting up of laudable trusts that are vital to the preservation of the economic position of both labor and management, yet this court cannot be the arbiter..."

Three bills to legalize promotion funds are scheduled to be introduced in this session of Congress. One was introduced in the last session by Rep. Roman C. Pucinski (D, Ill.) but failed to reach the floor because of a squabble over whether the funds should be the subject of collective bargaining. Two substitute proposals have been drafted by the National Bureau of Lathing & Plastering.

All three would legalize funds for "product research and development, product market development, promotion of product with architects, engineers and government contracting officials, product public relations, publication of product technical information."

DFPA spikes fold-up rumor with 'business as usual'

"Are you going to fold up?" For the prosperous Douglas Fir Plywood Assn., whose \$7.3 million budget made it the envy of other trade associations, the notion seemed a cruel jest. But it wasn't. Rather it showed how rumor often embellishes fact.

In the last months of 1962, two of DFPA's

heaviest backers, Georgia-Pacific Corp. (1961 sales: \$220 million) and Weyerhaeuser Co. (1961 sales: \$491 million), gave 60-day notice of quitting as required by by-laws. Never before had two giants threatened to withdraw at the same time, and these plus potential dropouts from smaller companies left DFPA facing a 20% cut in income.

Last month both companies called off their resignations. DFPA President John H. Martinson says DFPA will have virtually the same membership and budget this year as last. A special DFPA committee is meeting with the two giants, who used the resignation route to seek two changes. Georgia-Pacific wants by-laws clarified to permit an orderly consolidation of part of its corporate family; Weyerhaeuser wants more coordination of all wood product promotion.

DFPA is predicting a 9% increase of soft-wood plywood sales for 1963 with a two-pronged sales push: 1) To crack foreign markets, retired Executive Vice-President W. E. Difford (NEWS, Sept.) is being sent on a fact-finding tour to Europe; 2) to boost residential sales, a series of add-a-room home improvements will be promoted.

Plywood price boost fails; overproduction blamed

Georgia-Pacific has just cancelled a \$4-a-thousand-square-feet increase in plywood prices announced at the start of the year.

Other producers had watched with interest but did not follow the lead. Reason: "We're way overproduced," says one pro-

"We're way overproduced," says one producer. Douglas Fir Plywood Assn. figures production at 91% of capacity in December while demand is only 78%.

Armstrong Cork's floor division boosted asphalt tile prices 4%, effective this month.

NEWS continued on p. 32



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Glowing ceilings of FILITE fiberglass diffuser panels are prospect-attracting features in the 155 homes of Meredith Village, \$6,000,000 residential development in Orange, California.

"We have included a FILITE ceiling installation in two baths in each home," Meredith Company representatives report. "Valuable merchandising aids, they highlight the quality and distinctiveness of our homes. They're a different idea in new home sales appeal.

"Because our homes are available in six split-level and two-story designs and 32 different floor plans, the ease with which FILITE panels adapt to all ceiling areas is especially valuable to us," they add.

FILITE panels are used exclusively in Meredith Village homes because "quality styling and constructional integrity is traditional with the Meredith Company". A product of FILON CORPORATION... FILITE panels

are superior in every way. Panels are "Luminous White" in color and reinforced with new "Water Clear" fiberglass for the ultimate in uniform light diffusion. Additional reinforcement with exclusive parallel nylon strands assures a lasting look of lighting beauty.

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PEOPLE



FHA'S HARDY
With changed markets, new problems



FHA'S BROWNSTEIN
For the top spot, a veteran careerist

Neal Hardy quits as FHA chief; Phil Brownstein named to job

Neal J. Hardy resigned as FHA commissioner last month to become director of urban development activities of the Ford Foundation in New York City.

Before leaving, Hardy urged President Kennedy to nominate Philip N. Brownstein, chief benefits director of the Veterans Adminstration, as his successor. The President did so—thereby putting into the top FHA slot a veteran housing man who started with FHA in 1934 when it was born.

A brief White House announcement said Hardy was leaving the \$21,000 post because he had received an offer that Hardy said "affords me opportunities that, for personal considerations, I feel I must accept."

Hardy, 48, feels that in his 22 months in office he coped with problems no other FHA commissioner had faced: rising foreclosures and delinquencies. "A constantly inflationary market can hide a lot of mistakes," he says of the days before he took office. Hardy tightened FHA's operation in several ways. FHA stopped issuing firm commitments, which let builders turn unsold houses back to FHA. Last spring foreclosures rose sharply in south Florida, and Hardy banned speculative commitments in the Miami and Tampa field offices (NEWS, Apr.) He followed this with specific orders to district directors to keep a closer eye on the local markets.

Rising foreclosures brought other problems. Behind the foreclosures Hardy's probers found "woeful inaccuracy" in credit reports. Last July Hardy clamped down — so hard that builders screamed FHA was killing sales. Hardy stood his ground (News, Nov.) and maintained the crackdown was for the good of housing.

FHA had trouble getting its foreclosed homes resold. Hardy, who had served six years as director and general manager of NAHB's National Housing Center before joining FHA, responded by approving a plan by past NAHB President Richard Hughes for wholesaling houses to builders for

resale (News, Oct.). It is working so well Hardy says FHA is about to extend the plan.

Brownstein, the new boss (subject to Senate confirmation), is a government careerist whose long familiarity with housing should help him immeasurably—and that is good news for housing men.

Brownstein, 45, began working with FHA fresh out of high school, working up to chief of the Title I repair loan division. He studied nights at Columbus University in Washington and won a law degree in 1940.

After serving with the Marines in World War II, he joined VA and worked up through the ranks to become loan guaranty director in 1958, in charge of GI housing loans. In 1961, he moved up to chief benefits director in charge of VA's entire benefits and claim services programs.

Gov. Lawrence picked to head anti-bias unit

Outgoing Gov. David L. Lawrence (D.) of Pennsylvania has been tapped by President Kennedy to head his cabinet-level Committee on Equal Opportunity in Housing. Lawrence will receive a salary (amount undecided) and move to Washington for full time duty as the top man in the President's fight against bias in housing.

Lawrence, 73, says he does not like the word "enforce" in connection with his new job, but hopes rather that he will persuade communities and individuals to obey the order

Most committee meetings will be open to the public, he says, because "we have a broad educational function . . . and I can think of few more effective ways to carry that out than public meetings."

The Allentown Call - Chronicle summed up Lawrence's attitude like this: "If he runs true to form, he will be firm in carrying out his duties, but decent, and that is all anyone can ask." Says Lawrence: "I hope I can live up to that description; it is my intention to try."

Most observers agree: "He can be expected to be a tough administrator after an initial period of mediation," says one.

But builders in Pennsylvania complain that the state's anti-bias law, one of the sternest on the books, is enforced with a chip-onthe-shoulder attitude toward builders that makes their job of complying tougher. Many times the Human Rights Commission has signed new administrative orders



PENNSYLVANIA'S LAWRENCE
"He will be firm but decent"

without consulting builders first, they say.

But Gov. Lawrence denies it. "I know of no instance where anyone could legitimately claim that the commission has acted . . . prejudiced or high-handed. The consistent rule of the commission has been to seek compliance with the law through conference and negotiation and only when these efforts fail, to take more direct action.

"But if the complaint is that the commission has determined to make the law meaningful, that is, to make certain that the decision of the legislation is not flouted, then that is correct."

Gov. Lawrence is one of the early backers of anti-bias legislation. As mayor of Pittsburgh he led the drive which made his city the second (after New York) to adopt an anti-bias ordinance in 1958. As governor, he forced a similar law through the legislature in 1961 over the bitter protests of builders and real estate men.

Model code booster urges code unification

In the costly, chaotic building code mess, few men have been as controversial or as steadfast as Hal B. Colling, 70, former managing director of the International Conference of Building Officials. During nearly a quarter-century as ICBO's executive head, Colling sternly maintained there was nothing wrong with codes that couldn't be cured by universal adoption of ICBO's own model Uniform Building Code and relentlessly sniped at reform efforts omitting ICBO.

When he retired a year ahead of schedule last February, in an unspecified "policy difference" with ICBO officers (NEWS, Apr.), Colling counted more than 1,300 cities using the UBC, making it not only the oldest but the most popular of the U.S.' four chief model codes*. But in retiring, the crusty old

*Others are sponsored by the Southern Building Code Congress, used as a code base by 1,000 cities; Building Officials Conference of America, by 475 cities; and the National Board of Fire Underwriters (which deals mainly with fire protective aspects of construction) by "nearly 1,400."

soldier did not intend to fade away.

Instead, he and his wife Ruth,
who for 32 years handled ICBO's
publications have launched a proj

who for 32 years handled ICBO's publications, have launched a project Colling had long eyed, but never felt the partisan strictures of his old job could permit: a technical service to keep building officials and professionals abreast of developments and changes in all four proprietary codes, and in local codes throughout the nation.

We have often thought," says Colling, "that such a service as this would be desirable, but since our primary function was to further the aims of ICBO and to gain acceptance nationally for the Uniform Building Code, it was impossible for us to approach such analytical work without slanting in favor of the Uniform Building Code. In the brief time that we have been analyzing the four codes objectively, we realize more than ever that organizations sponsoring codes will need to follow the advice in October House & Home: 'Simplify or die'."

Built around a monthly maga-

zine, Building Codes News-Analyst, the service includes: 1) supplementary bulletins for major geographical areas, 2) yearly analyses of all four proprietary codes, 3) research and consultant services for subscribers seeking data on specific local codes, and 4) a set of manuals detailing local code provisions by geographical areas. After six months of operation, the service has attracted 147 subscribers, at \$100 a year apiece. About 250 are receiving limited service at \$25 per year.

Almost as if echoing Collings' new viewpoint, the three major building officials organizations have made a first tentative gesture toward unification, establishing a National Coordinating Council "to collaborate in matters of mutual interest." Chairman is **George Van Leeuwen** of Norfolk, Va., a trustee of the Southern Building Code Congress; vice-chairman is **Lawrence A. Lane** of Oakland, Calif., president of ICBO; secretary is **Paul E. Baseler** of the Building Officials Conference of America.



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FLOORING PRODUCTS

OFFICIALS: FHA has picked Architect Orville G. Lee to oversee its Sec. 233 experimental housing program. Lee, an FHA consultant since February 1962, was research architect at Washington State University.

His new assignment: interpret and evaluate proprosals submitted under the program, which was set up to encourage development of new materials, methods, and designs.

So far only one house, NAHB's research house near Rockville, Md. (see p. 116), is being built under the program. Four other are scheduled: a two-story house by Builder Alan Brockbank in Salt Lake City, a solar-heated house in Washington designed by patent worker Harry Thompson, a house with a thin-shell concrete roof by Builder Hugh Thorson of Minneapolis and a low-priced project for the University of Toledo.

MANUFACTURERS: Whirlpool Corp., manufacturer of major home appliances, has named John Platts, 45, as its new president. Platts, vice president of the company's refrigeration group, assumes one of the offices held by Elisha Gray II, who stays as chairman and chief executive officer. Platts joined Whirlpool in 1951 and became a vice president of the Evansville division in 1959.

Monford Orloff, 48, succeeds Edward S. Evans Jr. as president of Evans Products Co. Evans, president since 1945, becomes board chairman. Orloff was vice president of building materials production and distribution.

DIED: Cyrus B. (Cy) Sweet, 62, deputy FHA commissioner from 1957 to 1961, Jan. 4, at Arlington, Va., of a coronary occlusion. Sweet came to the agency in 1954 at the height of the windfall and Title I repair loan scandals, helped clean up irregularities in the fixup program. Appointed FHA's second in command three years later by Commissioner Norman Mason, he was a key man in working out details of FHA's Certified



compound fracture of his left elbow from a fall at Garden City, L.I., has put Chairman Joseph McMurray of the Home Loan Bank Board in a plaster cast from his hip up. "I'm not letting it interfere with my work or social schedule," he says.



LUMBERMAN SWEET

He put FHA into small towns

Agency Program to extend FHA to small towns and rural areas.

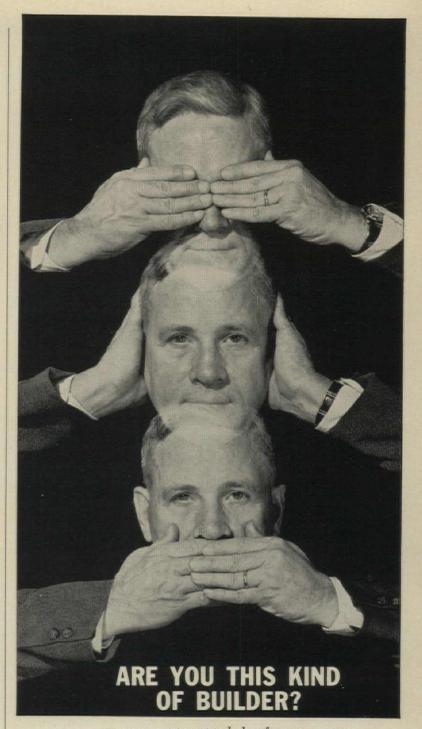
He held the FHA post until 1961, even though Mason's successor, Julian Zimmerman, appointed Lester Condon as a second and co-equal deputy commissioner. After leaving FHA he founded and was president of the American Association of Consultants, specialists in developing housing for the aged.

Before coming to FHA, Sweet spent 30 years in the lumber business with Long Bell Lumber. He was twice president of the National Retail Lumber Dealers Assn.

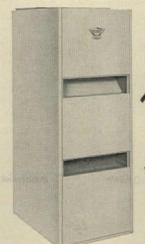
DIED: Henry Stern Churchill, FAIA, 69, bushy-thatched, witty, iconoclastic architect, city planner, writer, and lecturer; Dec. 17, in Philadelphia. Churchill quipped in 1953 that "it wasn't love for humanity that put [public] housing over in the 30s, but the smell of rich and redolent pork." He also claimed that local politicians lost interest in public housing when federal control over local authorities made it too tough to get jobs and patronage. "If you want political support you have got to let public housing have tangible appeal to somebody besides the tenants, who being poor, don't count."

Churchill, traced his interest in big city housing and planning (he was among the pioneer advocates of garden cities) to his design of New York City's Queensbridge Houses in 1937, first of a long line of public housing design jobs.

DIED: Todd Sloan, 67, Colorado Springs builder who had great success with patio townhouses, Oct. 12 in Colorado Springs, Colo.; H. V. (Hal) Simpson, 65, executive secretary of the West Coast Lumbermen's Assn. from 1946 to his retirement last year, Nov. 25 in Portland, Ore.; Preston R. Plumb, 80, one of Houston's biggest homebuilders and an honorary lifetime director of NAHB, Nov. 25 in Houston; Milo K. McIver, 65, prominent Oregon Realtor, mortgage banker and chairman of the Portland Center Development Corp., which will build a downtown urban renewal project, Dec. 1 while inspecting one of his properties.



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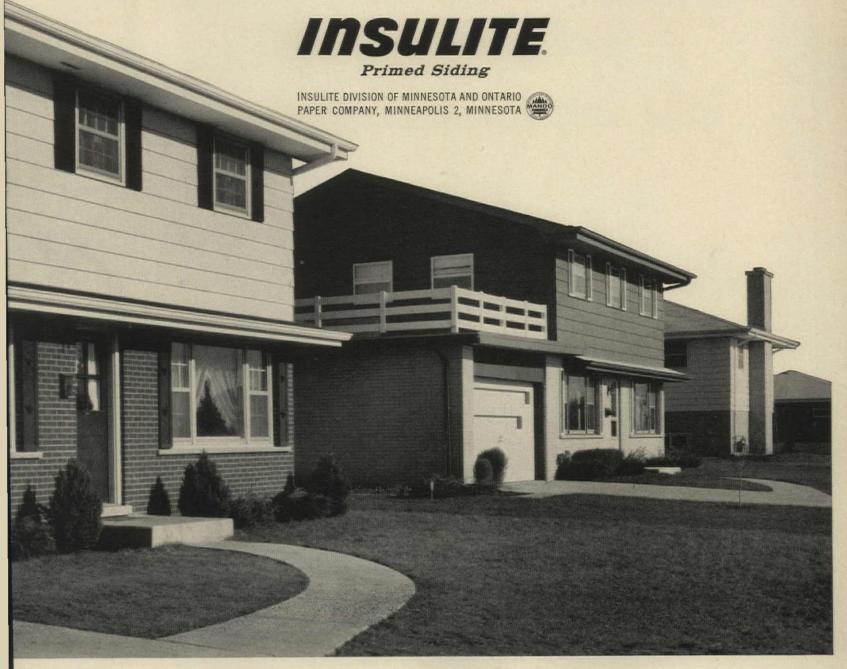
"Test results were excellent and we standardized on Insulite for our Cinderella Park and Willow Wood sub-divisions here in Palatine.

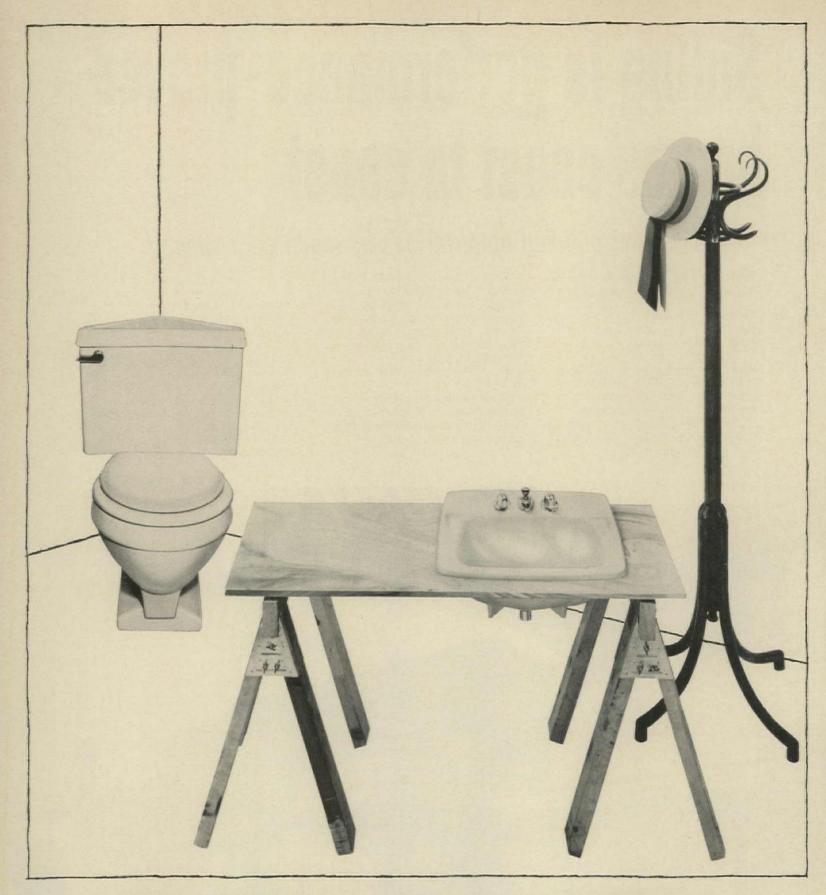
"Furthermore," Mr. Lee con-

tinues, "our service manager tells me that he has never seen an Insulite Primed Siding failure. No paint blisters, no cracks, no moisture problems... no callbacks.

"No doubt about it," states Mr. Lee, "I'm completely sold on Insulite Primed Siding!"

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Eljer Triangle and Brian fixtures were specifically designed for residential use. However, imaginative builders and architects have been specifying them to give an "at home" look to bathrooms in commercial buildings as well. The Eljer Triangle Corner Closet offers you more flexibility in bathroom design, provides more room to move around in, better clearance for doors. And nobody but Eljer makes it. The new Brian "Uni-Rim" lavatory eliminates the old-

fashioned metal rim around the outside edge, can be installed in any type of counter: wood, ceramic or marble. The clean-line styling is the result of research among homeowners and prospective buyers. Comes in six soft colors and snowy white, too. Also exclusive with Eljer. The Murray Corporation of America, Eljer Plumbingware Division, 3 Gateway Center, Pittsburgh 22, Pa.



Low-rate servicing stirs market, eases pressure for smaller discounts

The nation's largest savings bank is putting together a \$100 million deal which mortgage men fear may set an unhappy precedent pattern in coming months.

The deal: Bowery Savings Bank (assets: \$1.7 billion) is buying 5¼% mortgages at 99½ from the Federal National Mortgage Assn. and dealing them out to mortgage bankers for these astounding terms: free servicing for two years, then ¼% for the life of the loan. Up to now, the normal fee for investor-provided mortgages has been ¼% for the first ten years and ½% thereafter; a few straight ¼% deals have been made.

FNMA says \$70 million of the loans, for delivery in February and March, are from California. The remainder are from Texas, Louisiana, and Arkansas. Biggest servicing volume is in San Francisco, Los Angeles, and New Orleans.

As the news spread some mortgage bankers began muttering darkly about the tactics of the New York investors. "We are discouraged with many banks who are willing to make deals on servicing but never give a hoot for past record, standing, or net worth," says one mortgage banker. "They [mortgage bankers accepting the deal] must be out of their minds," cries another.

But one mortgage banker whose company is taking \$35 million of the Bowery loans says the servicing arrangements "are entirely satisfactory." His company's portfolio has been growing rapidly, he points out, and the new loans let it build servicing volume to a point where the concessions (which amount to 1% from normal) do not hurt the entire portfolio.

This view apparently holds among the other mortgage bankers who took the Bowery loans, because Senior Vice President Harry Held of Bowery says mortgage bankers "went right along" with the arrangement. "With the uncertainties of housing starts and the fact that most HFA loans are in existing homes now, this gives us access to newer loans. Over the past two years Bowery has increasingly concentrated on immediate delivery loans."

The FNMA purchases, coupled with new issues of long-term Treasury bonds, could siphon enough money from mortgage lending to ease pressure to invest.

"There probably will be more use of FNMA, usually on the basis of reduced servicing," predicts President Robert Morgan of Boston's 5ϕ Savings Bank and spokesman for the Massachusetts Purchasing Group of 110 savings banks.

Investors are wrestling with a torrent of new savings (savings banks gained a record \$3 billion last year). Morgan notes new pressure toward a 98 price for out-of-state mortgages (vs. a 96½-97½ quoted price). Last month, discounts shrunk in five of the 18 cities* in House & Home's survey.

As Morgan and economists like Dr. Saul Klaman of the National Association of Mutual Savings Banks see it, investor purchases from FNMA (present portfolio: \$2.7 billion) ease this pressure to invest, even if it means taking high-risk mortgages. President J. Stanley Baughman foresees FNMA sales of \$80 million in February, up sharply from \$14 million in December.

And the U. S. Treasury is making no secret of its intentions to drain more money from the long-term market with bond offerings. Reason: Treasury officials are delighted with auctioning \$250 million of 30-year bonds in early January at an interest rate of 4.00821.

The battle for savings is heating up, and S&Ls in Dallas and Houston are increasing dividend rates.

All Dallas S&Ls boosted dividends to $4\frac{1}{2}\%$ on Jan. 1, and some Houston S&Ls which dropped back to 4% in October returned to $4\frac{1}{2}\%$. Atlanta's banks jumped from 3% to $3\frac{1}{2}\%$ on passbook loans and now pay 4% on one-year certificates instead of three- and five-year certificates.

Denver S&Ls are blossoming out in a rash of newspaper ads promoting premiums for new accounts. Columbia S&L is using two-page ads to offer a five-piece casserole and a chance to win a Schiaparelli mink cape-stole or a full-length mink coat. Capitol Federal S&L offers to compound 4½% dividend four times annually plus green stamps. In Los Angeles, one S&L offers free demonstrations on hypnotism, horoscope reading, gourmet cooking, candy making, and karate.

*Prices for the key minimum down, 30-year FHA Sec 203b loans went from 97½ to 97½-98 in Atlanta; from 97½-98 to 98-99 in Cleveland; from 96-98 to 96-98½ in St. Louis; from 97-97½ to 97-98 in Oklahoma City; from 97½-98 to straight 98 in San Francisco.

Report urges ban on new California S&L charters

California's savings and loan regulations are "outmoded" and "have insulated the state from national markets more than any policy of the associations themselves", says a new state-ordered report by Stanford Professor Edward Shaw.

He recommends to S&L Commissioner Preston Silbaugh that no new charters be issued for several years, and that only selected mergers of existing companies be approved.

Significantly, Gov. Edmund G. (Pat) Brown, in his inaugural address, demanded reforms and more control of both S&L charter issuing and operating practices. His remarks were in the part of his speech that dealt with "protecting the public from fraud and other abuses in the market place."

The Shaw report notes that the top 10% of the state's associations control two-thirds of the industry's assets. It criticizes the ratios of operating expenses to capital which are currently higher than any other state, and lashes at "restraint of competition" through rules limiting trading to a 50-mile radius. This divides the state into local markets for savings and mortgages, says Prof. Shaw.

Early last year, Commissioner Silbaugh put a moratorium on mergers of state-chartered associations. His aim is to keep them too small to attract promoters of S&L holding companies.

Prof. Shaw suggests charters might be issued again "when growth resumes, in the late 1960s." How and to whom?: "There is a persuasive case for state auction of charters to eligible bidders," he concludes.

Holding company sidesteps tax pitfalls in mergers

Three East Coast mortgage banking companies are joining in a holding company — a move that may point a new way for tax-trap; ed mortgage companies to join forces.

Their aim: to combine "mortgage banking firms without changing corporate structure, capitalization, identity of trading area or investor relationships of any of the participants."

Vincent Finnigan



ASSOCIATED'S DeFRANCEAUX
An old pro in new ventures

Up to now, mortgage bankers bent on expansion have usually purchased smaller companies outright. But a court ruling in the Nelson Weaver case dampens this course because it says only a small part of the sale price can be called a depreciable asset for tax purposes. (News, Nov.)

How it works. Associated mortgage companies was organized a year ago by Shields & Co., New York investment bankers, as a little talked about private corporate shell. In April, Frederick W. Berens Inc., of Washing-



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LOUISIANA

First National Mortgage Corporation New Orleans

MISSISSIPPI

Reid-McGee & Co.

MISSOURI City Bond & Mortgage Co.

NEW JERSEY

Jersey Mortgage Company Elizabeth

NORTH CAROLINA Cameron-Brown Co. Raleigh TENNESSEE

Guaranty Mortgage Co. of Nashville Nashville

Southern Trust & Mortgage Co. Dallas

WASHINGTON

Carroll Mortgage Co. Seattle

WASHINGTON D. C. The Carey Winston Co. Washington, D. C. ton joined Associated as a wholly-owned subsidiary; Tidewater Mortgage Corp. of Hampton, Va., entered in May; and South Jersey Mortgage Co. of Camden joined in December. Together they service a \$400 million portfolio. Last month Associated took the wraps off its deal by asking Securities & Exchange Commission approval to issue 135,-205 shares of common stock (no price is set). Shields is acting as underwriter. Associated's prospectus shows a net worth of \$2.7 million.

Associated's leaders. One big advantage of the holding company is the potential of stronger management, say its backers. Associated leaders are Philip Zinman, board chairman of South Jersey, who is chairman of the new company, and George W. DeFranceaux, Berens president, who becomes president and chief executive officer of Associated.

Zinman is a past president of the New Jersey chapters of the American Institute of Real Estate Appraisers and the Mortgage Bankers Assn. DeFranceaux, president of the Washington Board of Realtors, was the first in the nation to form a Small Business Investment Co. (News, Apr. '59). He is also a past president of the Mortgage Bankers Association of Metropolitan Washington.

Louis H. Meyer, president of South Jersey, Gerard J. Manack, president of Tidewater and Hector Hollister, executive vice president of Berens, are directors.

Associated hopes to develop "depth in management" through training programs and possible exchanges of officers. And going public lets the company offer stock options to help retain top executives.

Tax advantages. The deal is set up as a tax-free exchange of stock for stock holders of each company, thus sidestepping the tax knots of the Weaver case. Associated issued 67,312 shares in exchange for all Tidewater stock which had a net book value of \$270,000. Another 374,000 shares were exchanged for Berens (book value \$1,150,000) and 423,429 shares for South Jersey's stock (book value \$1,266,000). Other advantages:

- Participants will have a stronger capital structure as a result of an exchange of capital among subsidiaries and the availability of proceeds from stock issues. "More and more," says Zinman, "mortgage bankers must make construction loans, purchase or finance purchase of raw land and bring in required utilities for their builders."
- More efficient automation of reporting, analysis and servicing will be possible. No decision has been reached on whether servicing will be centralized.

Colwell Company buys Los Angeles mortgage firm

Winter Mortgage Co. of Los Angeles becomes the third acquisition of Colwell Co., big California mortgage bankers, in 14 months.

The deal, for an undisclosed cash price, boosts Colwell's servicing portfolio to \$635 million by adding Winter's \$80 million.

The deal adds conventional-residential and apartment-house loan business to Colwell's residential operations, which consisted primarily of VA and FHA holdings.

President W. Fenimore Cooper of Winter recently announced his retirement and four months ago attempted to sell Winter to Union Bank in Los Angeles. The purchase collapsed when one of the three major accounts serviced by Winter vetoed it because it didn't want a large bank as servicer.

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending Jan. 11, 1963.

	Conventional Loans*		Construction Loans*		FHA 207	FHA 220	FHA 2031
City	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Banks, Ins Cos. & Mtg. Cos.	Savings banks,	Firm Commitment	Firm Commitment 35 years	Min. Down 35 year futures
Atlanta	51/2-6	6	6+2	6+2	a	a	97
Boston local	51/4	51/4	51/4-51/2	51/4-51/2	a	a	a
out-of-st.	_	_	-		a	a	96-97
Chicago	51/2-53/4	51/2-6	53/4-6+1-11/2	53/4-61/2+11/2-2	971/2-981/2	971/2-99	961/2-971/2
Cleveland	51/2-53/4	53/4-6	6+1	6+1	981/2-991/2	99-parb	97-98
Dallas	51/2-53/4	6	6+1	6+1	98-981/2	n	97-971/2
Denver	51/2-6	53/4-61/2	6+11/2-2	6+11/2-2	97-98	a	a
Detroit	51/2-53/4	51/2-53/4	6+0	6+0	981/2-99	a	a
Honolulu	6-61/2	6-7	6+1-2	6+1-2	a	a	a
Houston	51/2-6	51/2-61/2	6+1	6+1	97-98 ^{t)}	98bd	961/2-97
Los Angeles	51/2-6	53/41-6.6	6+11/2	6-6.6 + 2-31/2	98-98	98-99	98
Miami	51/2-53/4	51/2-6	6+1/2-11/2	6+1/2-11/2	a	a	961/2-97
Newark	51/2-6	51/2-6	6+1	6+0	981/2-99	pare	8
New York	51/2-6°	51/2-6°	6+0-1	6+0-1	981/2-991/2	981/2991/2	981/2-991/2h
Okla. City	53/4-6	6-63/4	6+1-2	6+1-2	a	a	97 ^b
Philadelphia	51/4-53/4	51/2-6	53/4+1	53/4+1	99	99	a
San Fran.	51/2-6h	6-6.6	6+1-11/2	6-6.6+2-3	981/2-991/2#	991/2-par	971/2-98
St. Louis	51/4-6	51/4-61/2	53/4-61/2+1-2	53/4-63/2+1-2	n	п	а
Wash. D.C.	51/2-53/4	51/2-53/4	53/4+1	6+1	981/2	98b	98

	FHA :	51/45 (Se	c 203)	(b)					
	981	New Construction Only Existing=							
City	FNMA Scdry Mkt#P	FNMA Minimum Down* Scdry 30 year		10% or more 30 year Immed	Min Down 25 year Immed				
Atlanta	963/4	971/2-98	971/2-98	98 ^b	98 ^b	971/2-98			
Boston local	973/4	par-101	par-101	par-101	par-101	par-101			
out-of-st.		961/2-971/2	961/2-971/2	a	a	961/2-971/21			
Chicago	963/4	97-98	961/2-971/2	971/2-981/2	97-98	971/2-981/2			
Cleveland	963/4	98-99	97-98 ^b	98-99	98-981/2	971/2-98			
Dallas	963/4	971/2-98	971/2-98	98	98	971/2-98			
Denver	961/4	97-98	97-98	97-98	97-98	971/2-98			
Detroit	961/4	971/2-98	a	98-981/2	a	97-971/2			
Honolulu	961/4	97	97	971/2	97	97-971/2			
Houston	963/4	971/2-98	97-971/2	98-981/2	a	971/2-98			
Los Angeles	961/4	981/2	981/2	99ch	99	98			
Miami	963/4	961/2-971/2	961/2-971/2	98b	a	961/2-971/2			
Newark	971/4	98-99	98-981/2	99-par	98-99	99			
New York	973/4	981/2-991/2	981/2-991/2	981/2-991/2	981/2-991/2	par par			
Okla. City	961/4	97-98	9798	98-981/2	a	97-98			
Philadelphia	971/4	99	99	99	99	99			
San Fran.	961/4	98-981/2	98	981/2	98 ^b	98k			
St. Louis	963/4	96-981/2	96-981/2	97-981/2	97-981/2	96-98			
Wash D.C	971/4	98-981/4	98-981/2	98-981/2	98-981/2	98-981/2			

VA 51		
	New C	construction
FNMA Scdry	No down 30 year	Only
Mktzy	Immed	Fut
963/4	971/2-98	971/2-98
973/4	par-101	par-101
-	961/2-971/2	961/2-971/2
963/4	97-98	961/2-971/2
963/4	971/2-981/2	97 ^b
963/4	971/2-98	971/2-98
961/4	961/2-98	961/2-98
963/4	971/2-98	a
963/4	97	961/2
963/4	971/2-98	97-971/2
961/4	981/2	981/2
963/4	961/2-971/2	961/2-971/2 b
971/4	98	98
973/4	981/2-991/2	981/2-991/2
961/4	97-98	97-98
971/4	a	a
961/4	98-981/2	971/2-98
963/4	95-971/2	95-971/2
971/4	98-981/2	98-981/2

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

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert M. Morgan, pres., Boston Five Cents Savings Bank; Chicago, Robert Pease, vice pres., Draper & Kramer Inc.; Cleveland, David O'Neill, vice pres., Draper & Kramer Inc.; Cleveland, David O'Neill, vice pres., Draper & Mortagage Co.; Denver, C. A. Bacon, vice pres., Southern Trust & Mortgage Co.; Detroit, Sherwin Vine, vice pres., Gritzens Mortgage Corp.; Honolulu, Howard Stephenson, asst. vice pres., Bank of Hawail; Houston, Everett Mattson, exec. vice pres., T. J. Bettes Co.; Los Angeles, Robert E. Morgan, first vice pres., The Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Newark, William W. Curran, Franklin Capital Corp.; New York, John Halperin, pres., J. Halperin & Co.; Oklahoma City, B. B. Bass, pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Banking & Trust Co.; St. Louis, Sidney L. Aubrey, vice pres., Mercantile Mortgage Co.; San Francisco, Frank W. Cortright, senior vice pres., Bankers Mortgage Co. of Calif.; Washington, D. C., Hector Hollister, exec. vice pres., Frederick W. Berens Inc.

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

Footnotes: a—no activity. b—limited activity. c—for local portfolios, d—on spot basis. e—FNMA is only purchaser. f—lower price is for loans under 80%. g—depending on location. h—limited 6%. k—for 25 or 30 years. w—interest charged to borrower. x—FNMA pays ½ point more for loans with 10% or more down. y—FNMA net price after ½ point purchase and marketing fee, plus 1% stock purchase figured at sale for 75¢ on the \$1. 2—on houses not over 30 years old of average quality in a good neighborhood.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 51/25 Immediates: 99-par FHA, VA 51/4s Immediates: 961/2-971/2

Note: prices are net to originating mortgage broker (not necessarily net to builder) and usually include concessions made by servicing agencies.

FHA 51/4 spot loans
(On homes of varying age and condition)
Immediates: 96-97

Prices cover out-of-state loans, reported the week ending Jan. 11, by Thomas P. Coogan, president, Housing Securities Inc.

CONVENTIONAL S&L LOANS

(national average, weighted by volume)

	Dec.	Nov.	Dec. 1961
New homes	6.04	6.02	5.98
Existing homes	6.21	6.17	6.22
Construction loans	6.11	6.09	6 14

Source: Home Loan Bank Board. Based on reports for the first ten days of the month from 190 insured S&Ls with \$24 billion in savings (one-third of all FSLIC-insured S&Ls).

NET SAVINGS DEPOSIT CHANGES

(in millions of dollars)

No	ov. '62	% change from Nov. '61	Year to	% change from 1961
Mut sav banks ⁿ	\$147	+206.3	\$ 2,514	+62.3
S&Lsb	830	+7.2	7,761	+8.0
Commercial bankse	300	d	13,600	+31.8

"—National Association of Mutual Savings Banks, b— United States Savings & Loan League projections, c—American Bankers Association, d—November 1961 showed a net loss in deposits of \$200 million.

The developing scandal in syndication

Woes of Louis Glickman, cutbacks of cash distributions by other syndicators, and an SEC probe add up to a shakeout among new realty empires

Public syndication, one of the gaudiest streaks in the postwar mania for land and real estate speculation, is sputtering and staggering toward real trouble. The big questions now are:

- 1. How much of the public's money—and some promoters' money—will vanish?
- 2. Will syndication survive its time of troubles by taking less flamboyant forms?

The denouement was signaled, brutally and swiftly, by the spectacular collapse of one of the most illustrious syndicators of all, 57-year-old Louis J. Glickman of New York City. Laden with debts said to exceed \$10 million and in default on some of them, Glickman, founder, chairman and president of Glickman Corp., lost control when a creditor sold Glickman's controlling stock posted as loan collateral.

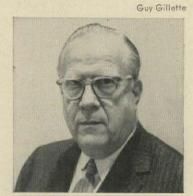
As Wall Street shivered (and Glickman stock fell from 8 to 4½), more bad news about syndication emerged. The Securities & Exchange Commission opened an investigation into the affairs of Glickman Corp. Which analysts take as a danger signal, not only for that company, but for many new realty combines like it. SEC complained publicly that some companies were misleading investors by counting their profits before they hatched. Several large syndications suspended cash distributions, thanks to bankruptcies or financial woes of sponsor tenants. And Tenney Corp., one of the largest publicly-held syndication companies, slashed its distributions from 27¢ to 8¢ per quarter.

Glickman's troubles take on extra significance because Glickman pioneered syndication in its most leveraged form. He was among the first to exchange the partnership interests in a group of realty syndications for publicly-traded stock. As the price of Glickman stock rose in the market, investors piled up juicy paper profits. But the rise was based on profit anticipations which did not come.

How it happened. Glickman lost control to a New York group headed by Francis S. Levien, president of Universal American Corp., a diversified industrial holding company; Wylie F. L. Tuttle, a realty broker-investor; and Lawyer Benjamin Duhl. They put up \$663,000 to redeem Glickman's Class B shares (which control the board). They were held by a commercial factor, Ben Cohn, as collateral for loans, called when Glickman A shares plunged from 101/2 in November to 5 in early December. Other lenders held 813,729 shares of A stock as collateral-all of Glickman's stock and 39,000 borrowed shares - and, Glickman told his directors, most of his other assets as well. His personal financial condition, he said was "critically strained."

To the SEC and to Glickman stockholders, Glickman Corp.'s new president, Louis A. Siegal, began to reveal an extraordinary saga that crowns the avalanche of adversity that has drowned public confidence in real estate stocks.* Ever since November 1960—one month after Glickman Corp. went public—the chairman had been arranging loans by the company treasury without telling the

*House & Home's index of realty investment stocks has dropped 47% in the last 12 months to a new low, compared with a 6% net decline in Dow Jones industrials.



SYNDICATOR GLICKMAN

Toppled by projections gone sour

board or seeking its approval. Incredulous directors first found out in fact last May 1 when auditors revealed the first installment of the drama.

Glickman or his Venada Corp. had, some 131 times, borrowed up to \$900,000 at a time, then repaid it, sometimes with interest, in 13 days to seven months. In all some \$6,191,612 was advanced, most of it from Glickman Corp., some from several syndicates outside the company that Glickman had organized. As of last month, Glickman had not paid \$137,814 the company claimed was due as interest.

From the record filed with the SEC and from the still incomplete investigation of the New York State attorney general, it now appears Glickman was striving to keep afloat a number of syndicates he organized during the past three years through his personal company, Venada Corp. Some of them remained outside the public company ("We wouldn't take them in, the risks were too high," says one director) but others included Glickman Corp. as an investor or holder of net leases on properties the chairman had sold or traded to the company for stock.

Overprojection. All of the syndicates that so far are indicated to have contributed to Glickman's grief are what the trade calls projection deals, the riskiest kind of syndicate financing and, in retrospect, symptoms of a boom gone to excess. A projection is a syndication of a property not yet built, on which the cash return for distribution is figured from estimates of construction costs, operating expenses, taxes, and syndication costs. Sometimes, as in the case of Glickman's

Wedgwood Warren (two New York apartments), the estimates were too low. One of the buildings, Warren House, cost \$3 million more to build than estimated.

Projections got into the picture after prime existing properties—with a visible earnings record and, in the hands of an honest and shrewd dealer, a reliable future income and value—have been priced too high for conservative syndicators to offer at yields to investors of an attractive 10% or more.

The bell tolled for this market with last year's syndication of the Empire State Building's master lease. Backed by some of the most respected names in U. S. real estate (among them: Col. Henry Crown of Chicago and the Prudential Insurance Co. which held the fee) New York Attorney Lawrence A. Wien, 57, offered only a 9% yield. Investors shied away. Wien finally sold off the last of nearly \$30 million in syndicate interests last month, a year after closing the deal. "We contemplate nothing more," says a close Wien associate. In fact, he adds, Wien, whose virtuoso performance in syndication is unmatched, never would touch a projection deal.

To attract investors, syndicators had to offer yields of 10% or more. To get them, they took to using syndicates to raise funds to finance the construction or buy equity positions in just-completed specialty structures, such as motels, bowling alleys, apartments. The only assurance of the promised return to investors thus became the promoter's own vision of the future and often his notoriously inaccurate guess on costs.

Trio in trouble. Not only Glickman but also increasing numbers of other syndicators badly estimated the risks and the results are beginning to litter the landscape around New York, birthplace and heartland of the syndicate promoter. Items:

- Construction stopped last October on three FHA-insured apartment houses in Newark (see photo, next page) and Jersey City, N. J., and Taylor International Corp., one of the promoters and the general contractor, has just filed for reorganization under federal bankruptcy law. Long Island Homebuilders Frank and Norman Seidenwurm, the other promoters, and investors who put up \$2.4 million in the venture, Taylor-Country Estates Associates, were left trying to figure out how to get the buildings completed and when the promised 12% a year might be paid.
- Construction also stopped last October on a 139-room motel at La Guardia airport promoted by Sire Plan Inc., which stood to make a handsome profit on the venture.** Albert Mintzer, Sire president, said only \$1.7 million of the hoped-for \$2.5 million was raised, that the market for motel space in the area is poor and "plans are being recast."
- Construction hardly began before it stopped last year on the boldest projection deal of all, the proposed 950,000 sq. ft. Westchester Plaza shopping center in New Rochelle, N. Y. Promoters Anthony R. Bersani and Bruno E.

^{**}Sire Plan had calculated this in typical syndicator's fashion: construction and furnishings would cost \$1,750,000. From the \$750,000 extra that investors put up, Sire Plan would take \$600,000 for expenses and to pay investors 10% during construction—in effect returning their own money. And another Sire Plan company would lease the motel and take two-thirds of income over that needed to pay the return.

Low, upstate New York builders, raised less than \$2 million from a \$5,825,000 offering whose brochure carried the legend (at the insistence of the New York State attorney general): "These securities are speculative and involve a high degree of risk." Among the risks: The promoters had not yet obtained mortgage or construction financing and the lessee of the center was a paper corporation with no assets.

Fleeing the sinking ship. "We saw the abuses coming and got out," says Marvin Kratter of the projection deal. He abandoned syndication in 1959 when he formed his syndicates into Kratter Corp. (1961 assets: \$98.9 million) and went into traditional forms of financing development. Ironically, it was only last summer that Louis Glickman himself (for whom Kratter once was a salesman) announced he, too, was abandoning syndication and disbanding his securities sales staff.

In three years, Glickman, through Venada Corp., syndicated the following—all in Manhattan—to yield 11% or more:

- 1. A 19-story, 448-room motel which he built, sold to a syndicate, River View Associates in May 1960, for \$4.7 million, and leased back (Sheraton Corp. manages it). SEC filings by Glickman Corp. indicate Glickman raised only \$8 million from the syndication and a first mortgage, but total costs ran to \$11.4 million. The difference, according to sources close to Glickman, was made up with Glickman's funds.
- 2. Wedgwood House and Warren House, two new 19-story luxury apartments, one of which he built himself. They were syndicated together in January 1961, for \$6,645,000 to Wedgwood House Associates, and leased back, guaranteeing rent to the syndicate for three vears. Last month. Glickman Corp.'s Siegal, who is also the General Partner in Wedgwood House Associates, told investors the following bad news: 1) Glickman's Venada Corp. now cannot make the payments, 2) is behind \$58,000 on real estate taxes, 3) has mortgaged its lease to a finance company which refuses to take over operations, 4) there are construction liens of \$280,000 against one building, 5) renting is slow in one building now only 65% full, 6) an old mortgage of \$206,000 on one of the buildings supposed to have been discharged last summer is still in existence. The syndicate has "many, many problems" says Siegal, Distributions have been sus-
- **3.** The Manhattan Industrial Center, 22 factory buildings mostly 50-or-more-years old. Glickman bought them in 1959 from National Biscuit Co. for \$5 million, syndicated and spent substantially more than he estimated to rebuild for multi-tenant occupancy. In December, Glickman Corp., to which the former chairman assigned his lease last year, said only 74% of the space has been let.
- 4. 501 Fifth Ave., Glickman Corp.'s own 21-story headquarters building. Glickman syndicated that and leased it back, also obligating himself for a large-scale renovation job. Venada lost \$226,902 in the first year of operating the structure, the SEC was told. As in the other ventures, Glickman had to pay 11% a year to investors regardless of income to him, which he did with infusions of outside funds. (Most syndicate investors have no way of knowing if the cash they get each month actually comes from their property or others owned by the same syndicator.)

The Glickman debacle stunned the real



NEWARK APARTMENTS

After profit in advance, halted work

estate fraternity in New York, Glickman was in the van of a small group, probably no more than a few hundred once-obscure real estate operators, lawyers, accountants, engineers, stock salesmen and assorted adventurers through whose hands the public poured an estimated \$5 billion into partnerships organized to buy up apartments, hotels, office buildings and other properties in every major city in the U. S. and Canada. To avoid corporate taxes, each property purchased (usually the fee from the syndicate promoter or organizer like Glickman, at a hefty markup) was held by a separate partnership or syndicate with Glickman in complete control (and entitled to fees for running it) as the general partner and the investors, usually putting up \$5,000 for a syndicate partnership interest, as the limited partners.

Alluring tax-shelters. Syndication looked dazzling. Thriving small businessmen and professional people found syndicates effectively converted ordinary income into long-term capital gains through the classic method of getting rich in real estate: sheltering income from a property via depreciation (usually accelerated) and returning the income to the investor monthly as a largely-tax-free return of capital. As the depreciation tax shelter was used up, the building could be refinanced or sold, the investors stake returned along with any profits or excess mortgage proceeds—and taxable at 25%—with the promoter taking 25% or 30%.

Going public. Then, in October 1960, striking the new-stock-issues craze as it heated, Glickman did what some 40-odd other major syndicators were to do in the last three years. He converted 13 syndicated properties (into which some 7,000 investors put \$25 million) into the assets of Glickman Corp. and the partners into its stockholders by exchanging their interests for shares in the new public company, marketed by a top Wall Street underwriter, Bache & Co., at \$10 a share.

This carried the allure of syndication a step further: the tax-sheltered distribution. With adroit bookkeeping and enough trading and refinancing of properties, so the theory went, the depreciation shelter could continue to produce corporate losses and the distribution to stockholders (set in most cases at a seemingly incredible 8% or more, although the syndicates were paying on the average 12%) would be a tax-free return of capital.

But the Glickman disaster seems to confirm the fears of jittery Wall Street analysts and disenchanted investors: Many of the new public combines might turn to jerry-built structures unable to survive a deflationary real estate market made up of properties far less sound than supposed.

Six of the new companies have now been forced to cut or suspend distributions (Tenney, Futterman Corp., Walter J. Schneider Corp., Frouge Corp., Kaymarq Consolidated Corp., Kavanau Corp.) Futterman chopped the payout 37% last year after death ended the meteoric career of President Robert A. Futterman, who had syndicated over 50 properties valued at more than \$100 million.

The vulnerability of a one-man shop, typical of many of the new companies, underscored when Henry J. Goelet, president and creator of Transnation Realty, died last year and the company was put on the market for sale or merger. The stock market crash last May added further pressures when over a half dozen companies with proposed stock offerings failed to sell them, Kaymarq had a \$10 million issue of stock and debentures prepared to help pay off short-term loans incurred when it put down binders on new acquisitions and contracted for improvements to its existing properties. Most of them were garden apartments in Westchester and Queens counties in New York acquired when investors in the six syndicates that owned them traded \$40 of their interests for four shares of Kaymarq preferred and one share of common. But the securities offering went by the boards, and an insurance company denied Kaymarq a loan. The company has since been forced to sell most of its assets; it dropped the dividend on preferred (none was paid on common). Its shares recently were seeking buyers at 1/8, down from a high of 73/8.

Attack on bookkeeping. The SEC hearing on Glickman technically was to determine if the SEC should issue a stop order suspending the effectiveness of Glickman's registration statements covering stock issued when the company went public. Since Glickman's treasury loans had not been revealed in them, nor the condition of the syndicates involved, the SEC alleged, the information supplied was "inaccurate and inadequate." Why, the SEC asked, could a board of directors not have been aware of the flow of some \$6 million of company cash? It observed that Delaware corporation law, under which Glickman is organized, prohibits loans from a corporation to its officers or directors.

SEC is also taking dead aim at the heart of the rising criticism of the syndicate combines. This is their high cash payout to stockholders, using non-recurring income such as profits on sales of property as well as all of their income from operation of properties. Specifically, it cited Glickman Corp.'s payout of \$2,740,000 in cash in the first half of last year compared with only \$2,214,000 in "cash generated" from operations and asked whether this represents a "responsible" policy.

Other firms show even a lower coverage of their payout from stable sources. Tenney Corp. in 1961, for example, paid out 53.1% of its total cash flow in distributions, but it included in cash flow some \$617,053 of profit from syndications, a notoriously unstable source; only 32% came from properties.

This policy came to an abrupt end early last month when Tenney slashed its quarterly distribution to Class A stockholders from 27¢ to 8¢ per quarter. In a report filed with the SEC, Tenney said it paid out \$460,000 in distributions during the quarter ended July 31, but generated only \$379,000 cash flow.

(Conservatively - managed - Uris Buildings Corp., with a 25¢ a share payout, produced

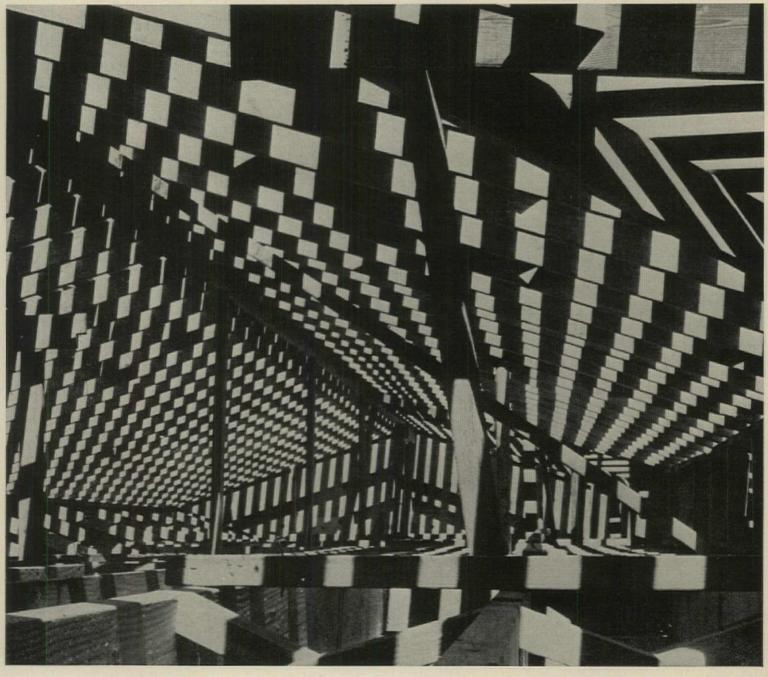


LIGHT YET STRONG



PRE-SEASONED WHITE FIR

Light yet **strong** are the words for White Fir, as pre-seasoned by Western Pine Region mills. This ideal buy for framing is sturdy...light...workable...and has high resistance to shrinkage. These characteristics are brought to perfection by the pre-seasoning processes of the Western Pine member mills. White Fir is available from these mills pre-seasoned **before** milling...**before** grading. It will retain its stability in the yard and on the job. Use White Fir for any structural purpose that conforms to recognized working stresses. For construction that's straight and strong, and stays that way, look for the WPA grade and species marks.



a net income after taxes of 61¢ a share and cash flow of \$2.25 a share for fiscal 1962.)

Clearly, the SEC indicated, paying out cash from sales and mortgage refinancing (instead of retaining it or using it for extra dividends) and including it in cash flow not only is misleading to the public but potential disaster for cash-short operators. To hammer the point, SEC in mid-1962 forced real estate companies, through a new quarterly reporting form 7-K, to break down cash flow between operating income and non-recurring profits with cash distributions set alongside.

White or black. To be sure, like the little girl with the curl, syndication when it was good was very, very good. The great bulk of syndications and syndication companies are still paying investors all they promised. David Clurman, assistant attorney general in charge of syndication regulation in New York State, figures that most syndicates are sound or, at worst, have been bailed out by a rising real estate market or mingled with profitable deals in new public companies to cover the mistakes. Some promoters, like Wien, have dipped into their own pockets to help some syndicates temporarily unable to make full distributions; many Wien early deals pay 15%.

But when syndication goes bad it is horrid. To resolve the Taylor-Country Estates problem, for example, the Seidenwurms have sought another general contract and attempted to work out a plan with FHA, which had granted a total mortgage commitment under Secs. 207 and 220 of \$17,249,300. A group of banks headed by National State Bank of Newark that advanced \$7.7 million in construction funds would take 20-year FHA debentures and the FHA itself would become the mortgagor and advance the remaining funds, according to Nathaniel L. Berger, Associates Inc., underwriters of the syndicate offering. Construction costs have already gone over estimates; promoters hope FHA will raise its commitment. When construction halted last October, Taylor allegedly owed subcontractors over \$2 million. Continental Casualty Co. of Chicago, which had written a \$1.6 million performance bond, moved to forestall suits by subs in Newark federal court.

For the investors, their distributions were paid from their own money raised in the \$2.4 million offering for 11 months. They stopped in December; may not be resumed for six months or a year or more. The investors also paid Taylor the entire builder's profit-in advance-from their funds.

Of the shakeout among syndicators, Assistant Attorney General Clurman says: "If nothing else, it mioht show the public that vou can lose vour shirt in real estate just like any other business. The romance is over.

What next? If syndication has been in the public eye only for about six years, it is no iohnny-come-lately to sophisticated realty investors. Public syndication took off on its gaudy course only after the 1954 Tax Act boosted the possibilities of tax-sheltered cash return from real estate by allowing rapid tax write off. But as a method for buying and owning property, it is decades old.

Despite syndication's present troubles. chances seem to be good that it will remain on the scene. Some experts figure that it is still possible, even amid the upheavals, to syndicate property leased to corporations with top-drawer credit standing and offer investors 7% to 9% return. After all, the return will be really secure. With tax-shelter on the distribution and mortgage amortization, the investor will own the property in 20 or 25 years. Meantime he will have his money back.

Housing stocks inch upward. still trail general market

Strong gains in real estate investment trust, savings and loan, and land development issues offset losses in other categories and brought House & Home's index of housing stocks to 9.19 in early January.

This gain of 3.3% over December matches the rise in Dow-Jones' industrial average (from 646.41 to 668.00). The National Quotation Bureau's index rose 4.4% (from 118.85 to 124.13). On balance housing stocks still lag well behind the overall market recovery.

Problems in some segments of realty invest-

ment stocks (see p. 43) were reflected in a 9.2% setback.

Here are House & Home's averages, combining closing prices for listed stocks with bid prices for over-the-counter issues:

	Nov.	Dec.	Jan.
	7	3	9
Building	5.06	5.24	4.49
Land development	4.45	4.74	4.89
S&Ls	19.47	21.69	22.90
Mortgage banking	14.10	15.15	14.45
Realty investment	7.14	6.97	6.33
REITs	9.46	9.46	10.46
Prefabrication	4.07	4.36	4.28
Shell homes	3.98	4.13	4.06
AVERAGE	8.30	8.90	9.19

HOUSING'S STOCK PRICES

1100311103	311	001		MIC	,E3	
	No	17	Dec	3	Jan	9
Company	Bid	Ask	Bid	Ask	Bid	
BUILDING						
Adler-Built Ind.	1/4	3/4	1/4	1/2	1/8	1/4
Cons Bldg (Can)	61/2	65/8	73/8	73/4	8	81/8
Dover Const	1 4	11/2 43/4	1 43/8	11/2 43/4	11/4	13/4
Edwards Eng	41/2	5	41/4	43/4	41/8	41/2
Edwards Inds	3/4	11/4	1 7	11/4	1	11/4
First Natl Rity	61/2	71/4		73/4 33/8	7 31/8	73/4
Frouge	41/2	51/2	41/2	51/4	4	41/2
General Builders	27/8	3	33/8b		31/81	
Hawaiian Pac Ind Kavanagh-Smith	33/ ₄ 47/ ₈	41/4 53/8	35/8	33/4	3 41/4	31/2 43/4
Kaufman & Broad			151/4b		141/21	
Levitt		33/4	31/2	41/8	33/8	4
US Home & Dev	11/2	17/8		23/8 11/8	2 11/a	
Del E. Webb	77/8	83/4	93/4	103/4	81/2	
Webb & Knapp	1 ^b		11/8	b	Ip	
S&Ls						
American Fin	14	15	17	173/4	181/4	
Calif Fin	73/4	c	90		9e 14	
Empire Fin		121/4	133/4			
Equitable S&L Far West Fin	213/4	90 235/a	223/4	29½ 255/8	321/4 243/4	
Fin Fed	555/8	c	643/4		721/4	
First Charter Fin	261/2	C	DI		343/4	
First Fin West	131/4	31/2	111/4	113/4	147/8 163/8	
First Surety	153/4	17	153/4	17	191/4 243/4	205/8
First Fin West First Lincoln Fin First Surety First Western Fin	181/2	197/8	15 ³ / ₄ 20 ¹ / ₈	215/8		
Gibraltar Fin	26 3/8	194	291/8		291/4	
Hawthorne Fin	9	91/2	11 -/8	111/2	11	111/2
Lytton Fin	223/4	247/8	251/2	271/2	11 26½	281/2
Midwestern Fin	73/4	b e	71/4	b	8b 101/2	
Trans-Cst Inv	141/4	153/4	161/8	173/a	173/8	
Trans World Fin	151/2	c	173/4	C	185/8	C
Union Fin	71/2	81/4	7	73/4	73/8	
United Fin of Cal Wesco Fin	301/2	341/2	363/4	387/0	221/2	
44C3C0 1 III	3242	2472	20-74	2078	7274	4576
SHELL HOMES						
Albee Homes			111/4 10¢			103/4
Bevis		25¢	11/4	13/4	1	11/2
U.S. Finance	61/4	63/4		13/4 73/4		8
Jim Walter	117/8	13		133/4		151/8
Western Shell Wise Homes		3/8	10	1/2	10	3/8 3/8
The second secon	7.0	70	16		10	7.0
REALTY INVESTMENT			March 1	1-6/2		
Brookridge Dev		2/4			18	10
Gt Amer Rity	37/8	41/2 5/8				
Herman & Appley	41/2	5	41/2	5	4	41/4
Income Props	81/4	83/4	8	81/2	63/4	71/2
Kaymarq Cons	15¢	30¢	157/-	11/2	f 151/4	1/8 b
Kratter A Mensh Inv & Dev	13	141/2	13	14	11	13
Presidential Rity	. 9b		85/8	b	81/4	b
Rity Equities	. 70	01/	71/ ₂ 81/ ₄	b	71/2	87/s
Wallace Inv	0*/4	7-/8	0-/4	7.78	1-/4	0.78
THE RESERVE OF THE PERSON OF T						

	Nov	7	Dec 3		Jan 9			
Company	Bid	Ask	Bid			Ask		
MORTGAGE BANKING								
Advance	a	a	8	83/8	9	93/8		
Charter	21/2	3	21/4	21/2	23/8	25/8		
Colonial	123/4	13	13	131/2	3/8d			
Colwell	131/2	141/2	143/4	153/4	15	153/4		
FNMA			811/4	841/2	871/2	903/4		
MGIC		27						
Palomar		71/4	61/4		53/4	61/8		
Stockton, Whatley	111/2	121/2	113/4	123/4	111/2	121/2		
REAL ESTATE INVEST	MENT	TRU	STS					
Conti Mtg Inv				123/4	13	14		
First Mtg Inv				12				
First Natl	83/4	91/4			95/8			
Liberty						77/8		
U.S. Realty Inv	93/4	105/a	83/4	93/4	97/8	103/4		
LAND DEVELOPMENT								
All-State Prop	27/8b		3b		23/4h			
Amer Rity & Pet	33/4	41/4	53/8 65/a	57/8	43/4b			
Arvida	5	51/2	65/a	72/4	61/8	63/4		
Atlantic Imp		131/2	15	153/4	17	173/4		
Cons Dev	63/8 ^b 15/8	21/8	63/4b 17/8	23/8	67/8b 11/2	2		
Coral Ridge Prop	11/2	2 78	15/8	2	11/4	11/2		
Cousins Props			73/4	81/5		81/4		
Fla Palm-Aire	11/2		15/0	2	11/8			
Forest City Ent	53/81		61/4b		51/2h			
Garden Land	23/4		31/4			31/2		
Gen Devel	61/2h		61/2b		7b			
Grt Southwest	17		17		181/2			
Gulf American	53/41		61/4h		63/81			
Horizon Land Laguna Niguel	55/8	61/2 91/2	51/2	71/4	51/4	57/8		
Lake Arrowhead	13/4	21/2	2	21/2	21/2	3		
Lefcourt	16	, 472	9 b	272	1/2			
Macco Rity	41/2	51/4	5	51/2		61/4		
Major Rity	91/2	18	3/8	1/2	3/8	1/2		
Pac Cst Prop	91/21		71/2b		75/8t			
Realsite Inc	1/4	1/2	1/4	1/2	1/8			
Realsite Inc	3b		3h		63/41	31/4		
United Imp & Inv	61/2h		63/4b		5b			
	4		***		3			
PREFABRICATION						2.00		
Admiral Homes	15/8	2 5	11/8	13/4	13/8	17/8		
Great Lakes Homes		43/4	5	53/a		61/4		
Harnischfeger		4-74	183/ab	298	181/81			
Hilco Homes		11/2	1			13/8		
Inland Homes		b .	103/41		95/8	97/8		
Madway Mainline	91/2	101/4	91/2	103/4				
Natl Homes A	53/8	6	45/8	51/4	41/8	45/8		
Richmond Homes		31/4	3	33/8		41/4		
Scholz Homes		11/8	5/8 3/8	1 7/8	3.1	1 15		
Seaboard Homes Steel Crest Homes		31/4	33/4	41/4	33/4	41/4		
Swift Homes		31/2	33/4		33/4	41/8		
Techbilt Homes	1/8		1/2	bid	1bid	1		
a—stock issued on Sep (ASE). e—closing price	tember	28th	at 81	/2. D_	-closin	g price		
bids. *—ex-dividends.	e (NY	DE/.	010	101	scuus.	110		
	antin I	"num	Caluda	nv 9	Co A.	morican		
	Sources: New York Hanseatic Corp., Gairdner & Co., American Stock Exchange, New York Stock Exchange.							

Stock Exchange, New York Stock Exchange.
Listings include only companies which derive a major part of their income from housing activity and whose stocks are either listed or actively traded.

NEW ISSUES

Date	Company	Proceeds to company ^a	Offering price of securities
Nov. 20	T-A Development	\$2,000,000	\$1,000
Dec. 19	Helix Land Co	2,930,000	5.00
Dec. 19	Helix 1960	2,147,400	b
Jan. 3	Star Development	270,000	c
Jan. 8	First Union Realty	10,560,000	13.00d

*—after underwriting discounts and commissions, b— stock offered in exchange for property or services. *—in units of debentures at par. d—stock was over-subscribed.

REGISTRATIONS WITHDRAWN

Date		Company	Amount	Proposed price of securities
Dec.	10	Southwest-Stevens Forest_	\$525,000	\$10,000ª
Dec.	12	Abingdon-Granville Assoc.	640,000	10,000"
Dec.	14	Sentinel Properties	2,000,000	10.00
Dec.	18	Perma-Bilt Enterprises	1,840,000b	8.00h
Dec.	19	Hawaii REIT	10,000,000	10.00
Dec.	20	General Motel	787,500	2,250
Dec.	-	National Mortgage Corp	10,090,700	c

a—in units of limited partnership interests. b—maximum. c—registration was sought for installment certificates to be offered for public sale in denominations of \$1,000 and 410,000 common shares at \$1.15.



Offer her a kitchen she can't help loving...



New free-standing Terrace Top Electric Range has all the striking features of the built-in version . . . including big 23" oven, side-mounted controls.

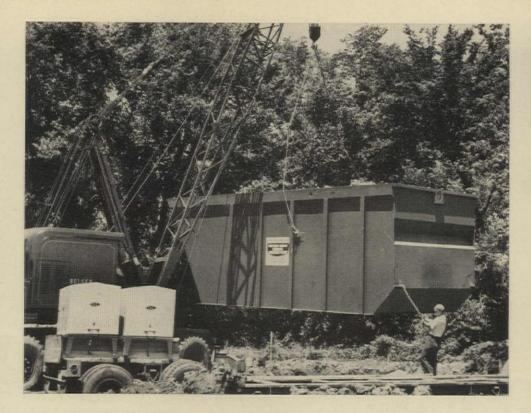
...with the unique built-in Terrace Top Range. Designed to install below standard counter top height, its new split-level design makes all cooking chores easier. Controls are mounted at the side to eliminate reaching over hot utensils. Available with or without automatic timer. Adjustable base assures perfect flange fit with counter top. You can be sure ... if it's Westinghouse

Westinghouse Electric Corporation W. E. Slabaugh, Manager, Contract Sales Dept., Mansfield, Ohio

Please send me catalogue and complete details on the dynamic new line of Westing-

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These appliances, plus Heirloom maple wood cabinets, Micarta® Counter Tops, Heating & Air Conditioning, Lighting, Wiring Devices, and Apartment Elevators are all available through one point of contact. See your Westinghouse residential sales manager.



Package sewerage plant saves a subdivision . . .





... and permits 44 % more lots on the same tract

The factory-built plant got Bascom Development Co. of Merriam, Kan., out of a double bind. Bascom's 36-lot tract was too far from municipal sewer mains to tie in to them. And despite satisfactory percolation tests, 15,000-sq. ft. lots, and extra-large tile fields, septic tanks proved unworkable; soil absorption around the first eight houses in 1960 was so poor the project had to be halted.

Installation of a 17,000 gpd package treatment unit in August 1962 let the project get under way again. It also provided these other benefits:

- 1. Fourteen additional lots. With minimum lot size no longer dictated by septic fields, Bascom was able to reduce each lot from 15,000-sq. ft. to a minimum of 6,500 sq. ft. and thus increase the number of lots to 52 (two are occupied by the treatment plant).
- 2. An additional half bath in the basement of each house. Previously septic tanks were too high to allow drainage from basements.
- 3. A built-in future saving for buyers. With laterals and mains for the tract already in place,

a short extension line is all that will be needed to tie to municipal mains when they reach the project. With septic tanks, the cost of tieing to the municipal system would have been at least \$400 a house. (Bascom was able to advertise "Sewers in and paid for"—a strong sales point in the area.)

Cost of the sewerage plant was \$35,000, or \$700 per lot, compared to \$22,500, or \$450 per lot, for septic tanks. But the \$12,500 added cost of the plant was more than offset by \$38,700 in added revenue—\$28,700 from the sale of the 14 additional lots and \$10,000 in sewerage service charges. Although the new lots are smaller than the original ones, their price was held at the same level—\$2,050—because the sewer system made them more valuable. In addition, Bascom added a \$200-per-lot service charge for tying into the sewer system.

The developer maintained the system until Kansas City annexed the area early this year and took over the plant. When municipal mains reach the area, the present plant can be moved to another location.



Model family in a model house helps sell a new community

When he opened Alii Shores in Hawaii, Realtor T. F. McCormack faced the problem of selling prestige homes (\$28,500 to \$33,500) in an attractive but non-prestige section of Oahu. So he created an aura of prestige by arranging for the attractive family (above) of one of his first buyers to live in his model house while it was being shown.

The family was carefully chosen. The husband is an executive with one of the island's big companies. He made no sales talks but casually told visitors his reasons for buying. His wife is a member of the PTA and the Oahu School Advisory Committee. The fact that her children attend the public school helped remove visitors' doubts about the quality of local schooling.

The buyer and his family were not paid for their stint as "salesmen in residence." But the sales commission on their new home was rebated, and their living expenses were paid during their six weeks in the model house.



Want big crowds at your opening? Try this stunt if you have the nerve

Des Moines Builder Lloyd E. Clarke came up with a sure-fire drawing card at the opening of his 300-house subdivision in Waterloo, Iowa (pop. 71,755). He hired the seven members of the Iowa Sky Divers to parachute into his project. And for an extra touch, Clarke (above, right)—an Army Air Corps bombardier in World War II—joined them for the first jump.

The results? More than 9,000 persons turned out on opening day. And Clarke sold 31 houses on the first weekend—even though his quota for the first year is only 75 sales, and even though he is tackling a new area and a new price range (\$11,500 to \$15,000).

Marketing roundup continued on p. 57

WEST COAST DOUGLAS FIR . WEST COAST HEMLOCK . WESTERN RED CEDAR . SITKA SPRUCE . WHITE FIR BETTER MILL 725 MILL 10 WE STAND STAND MILL 725 WG UTIL MILL 729 C-VG MILL 725 STAND

Coast Region WEST COAST LUMBER MADE IN U.S.A.

You can build salable and practical ideas into your houses, economically, with the standard sizes and grades of West Coast Lumber. Attractive walls and wall units that divide space into areas of comfortable living are framed and covered with any one of the coast region species for individual quality appearance.

This contemporary house is an example. The ceiling in the kitchen duplicates the 4 in 12 roof pitch of the roof to make a compact unit and takes full advantage of the interesting architectural style. The 7-foot room divider encloses the dining area to set it apart from the living room and entrance.

You can design hundreds of space innovations with West Coast Lumber and establish a highly salable quality reputation for your homes.

YOUR RETAIL LUMBER DEALER ...

... is a dependable source of supply. He has available the wide variety of sizes and grades of West Coast Lumber to make your building of quality homes easier and more economical.

Standard West Coast Lumber grades and sizes* used in the construction at the left are:



Soffit material of Western Red Cedar is used to give a feeling of warmth to vaulted ceiling.



Floor Joists are 2" \times 10" West Coast Douglas Fir. Wall framing is 2" \times 4" West Coast Douglas Fir.



Framing for room divider is 2" x 4" West Coast Hemlock and 2" x 6" of the same species.



Paneling is $1" \times 4"$ West Coast Hemlock run to a standard flooring pattern for individuality.



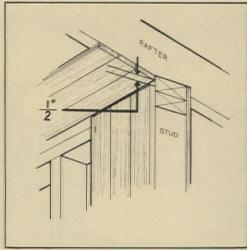
Trim for the room divider is 1" \times 6" West Coast Douglas Fir.



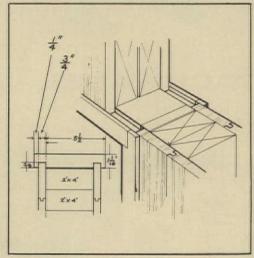
Beams are 4" \times 10" West Coast Douglas Fir supported by 4" \times 4" posts of the same species.



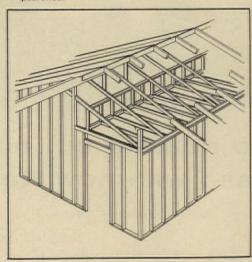
Bracing and properly used 2" x 4" West Coast Douglas Fir for some interior wall framing.



TIME SAVER. Space of ½" between wall paneling and cathedral-type ceiling gives interesting shadow pattern and saves fitting time.



SIMPLICITY FOR NEATNESS. Dado door frames ³/₈" wide and ³/₈" deep to allow snug joint for paneling. Saves time and cost, gives clean appearance.



ROOF WITHIN A ROOF. The same 4/12 roof pitch as the house was used in framing kitchen ceiling to build individuality into a work room.

*A copy of West Coast Lumber Grades, Uses and Specifications is available FREE. Write . . .

WEST COAST LUMBERMEN'S ASSOCIATION

1410 S.W. Morrison Street

Portland, Oregon

1. SLIDE IN ...

2. APPLY TRIM ...



3. ATTACH PANEL...

4. THAT'S ALL!





No counter cut-outs, no lifting, no built-up base with new Kelvinator Slide-In Ranges!

No cut-out saves $2\frac{1}{2}$ feet of expensive countertop.

No built-up base saves cutting, nailing and fitting.

No lifting and juggling of heavy equipment saves installation time and personnel. One person can install a new Kelvinator Slide-In Range flush with counter in minutes!

And with three simple notches and one trim strip, it can also be installed with the range top overlapping the countertop.

Either way, you get the expensive built-in look. The counter backsplash extends across the back of the range. The bottom panel may match the cabinets—hardware is included for quick, easy installation.

(Or a porcelain panel or drawer is available as a low-cost option.)

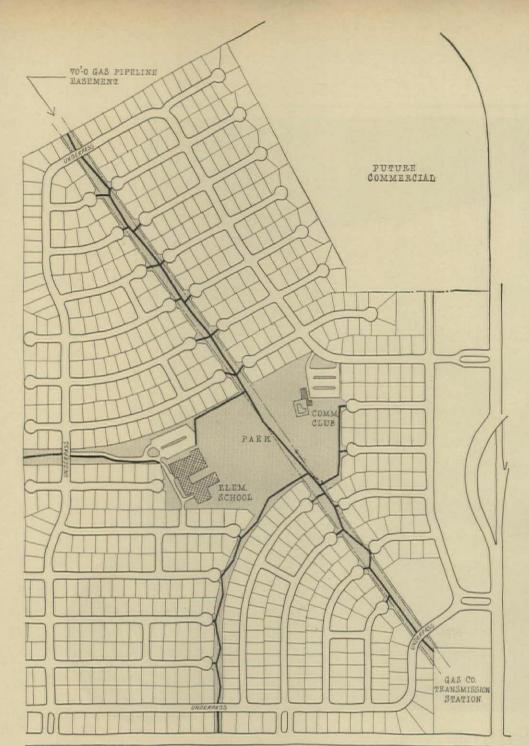
With three models in the popular 30-inch size (20-inch model also available), new

Kelvinator Slide-In Ranges have all the features women want, including a brand name they know and trust, plug-in surface units, lift-off oven door, choice of colors, porcelain or brushed chrome range top, and exclusive Kelvinator foil oven linings that end the dirtiest job in the kitchen—oven cleaning.

So why cut out, build up or drop in any more? Install new Kelvinator Slide-In Ranges and save! Write or wire for full information today.

Kelvinator

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



Deft cluster plan turns a site problem into a sales asset

The site problem: how to plat a 320-acre tract that is cut in half by a 70'-wide gas-line easement. The line is a high-pressure primary feeder, and the easement stipulates that no houses may be built over it and only a minimum of roads may cross it.

The sales asset: a cluster plan which lets children reach any point in the subdivision without crossing a through street. The easement strip is used as one of three landscaped walkways, which lead to a central school and recreation area. Streets dead-end in cul de sacs on both sides of the walkways, and the walkways pass under a perimeter loop—the only through road in the subdivision.

The unconventional plan was designed for Hampden Heights, a Denver subdivision, by Land Planners Harman, O'Donnell & Henninger. Its safety is stressed by the developer, Dream House Builders, in advertising copy that repeatedly carries the initials CSFR ("Child Safety & Family Recreation").

"This has proved to be a tremendous sales

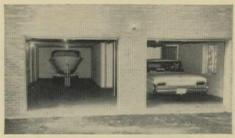
point," says President Ben Ellenbogen of Dream House. "We also have three conventional subdivisions underway, one at the same price level (\$20,000 to \$26,000) and two slightly below, and Hampden Heights is outselling each of them by more than three to one. I'll never do a conventional land plan again if I can help it."

Lots are slightly smaller than they would have been in a conventional layout because of the land in the walkway and school area. But the overall density has been held at the 2.7 lots per acre maximum required by the county. Development costs are about the same as in a conventional tract. "We'll save perhaps \$3,000 in the whole project because roads are a little shorter," says Ellenbogen, "but that's all."

Walkways and recreation areas are owned by a homeowners association, and Dream House is contributing \$100 per house to capitalize it at the start (eventually the tract will have 681 houses). Annual maintenance charges are expected to be less than \$25 a year.

MARKETING ROUNDUP

starts on p. 53



Selling houses to boat owners? Give them storage for their boats

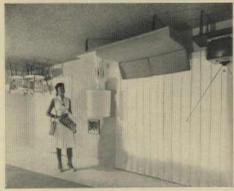
Builder Bradley Dean of Knoxville, Tenn. provides boat storage by leaving out the rear wall on one side of a two-car garage so a boat can be moved into the basement through the garage.

Dean says the additional cost is "negligible" and the effect on sales has been "very good." He points out that many of his buyers can't use half of a two-car garage for storing and refurbishing a boat over the winter because they own two cars. In his area the fire department does not require closed-in garages.

Dean builds about 20 houses a year in the \$18,500-to-\$22,000 bracket.







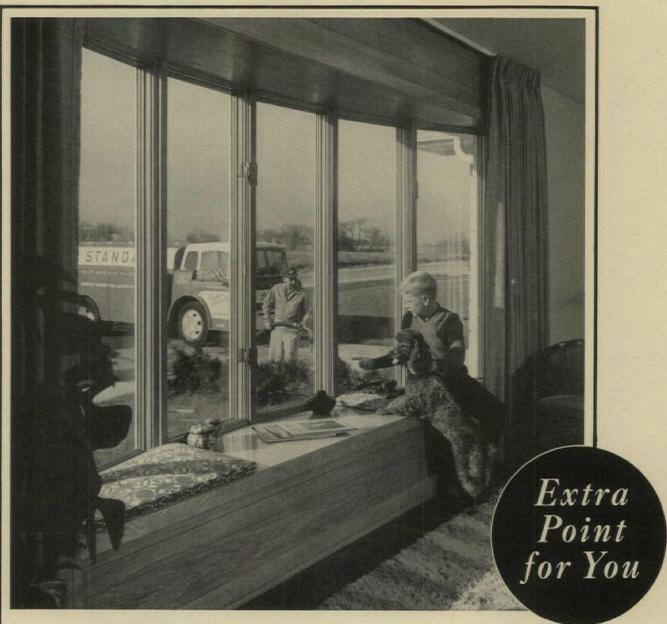
Upside-down house draws 425,000 visitors in 2½ years

So reports Florida Builder Norman Johnson who introduced the topsy-turvy idea at his Sunrise Golf Village, Fort Lauderdale, where eight models are priced from \$10,000 to \$18,000.

Adds Johnson's sales manager, Norman Pischke: "Our community has grown to over 500 homes, and we attribute the majority of the sales to the upside-down house, having a good product, and getting the exposure required."

Built in August 1960, the house cost \$11,-500 and has already been moved one mile from its original site to a new model area. Visitors walk through the completely furnished house on the ceiling, and there is even a mock-up convertible hanging in the carport.

Letters start on p. 82



Window Beauty... that puts money in the bank

YES-MODERN WOOD WINDOW UNITS CUT WINDOW HEAT LOSS BY AS MUCH AS 21% Even while windows of Ponderosa Pine are pleasing the eye and blending harmoniously with charming interiors, they're saving you money too. • For the Ponderosa Pine which frames the glass areas of windows provides 1770 times the insulating value of aluminum. Heat leaks there are cut to a minimum, fuel costs reduced. • Windows of Ponderosa Pine work for you in summer too, blocking out summer heat—as no metal can. And they help keep air-conditioning costs appreciably lower. • Make sure that your new home, or your proposed remodeling, includes the very practical beauty of Ponderosa Pine windows.

Send for your FREE toider "Window Facts", Ponderosa Pine, Dept. HBI, P.O. Box 4886, Chicago Tr, Illinois

WOODWORK OF Ponderosa Pine

PONDEROSA PINE WOODWORK-An association of lumber producers and woodwork manufacturers • 39 South LaSalle Street, Chicago 3, Illinois

This advertisement will appear in February House Beautiful; March House & Garden and Spring issue House Beautiful's Building Manual; spring issue of New Homes Guide; September House Beautiful; October and November House & Garden; November Home Maintenance & Improvement; and December House Beautiful.

You can offer your customers extra cash value with wood window units. This ad drives home the fact that wood windows can effect fuel savings by their ability to reduce heat loss appreciably. Write us for FREE Window Facts booklets available for your customers, Department HH-1.

PONDEROSA PINE WOODWORK

An association of Lumber Producers and Woodwork Manufacturers . 39 South LaSalle Street, Chicago 3, Illinois



KAY VEE SAYS:

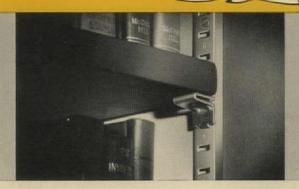
"When you run into a blank wall...
make it a sales tool with K-V Shelf Hardware!"

■ Every housewife who ever rearranged a room will be delighted with the opportunity of rearranging a whole wall — an opportunity you give her when you install K-V 80-180 hardware for open shelving. It's practical, decorative, and versatile. It's inexpensive and easy to install. It's strong and sturdy; keeps shelves straight and sag-free. Ask your K-V distributor about K-V hardware and fixtures, or write for our catalog, today.



For bookcase or cabinet shelving. K-V 255 Standard (24" to 144" lengths, ½" adjustment). K-V 256 Support (¾" long, ½" wide). Nickel, zinc

or bronze finish.





KNAPE & VOGT MANUFACTURING CO.

Grand Rapids, Michigan

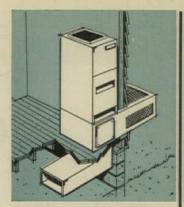
Manufacturers of a complete line of quality drawer slides, sliding and folding door hardware, closet and kitchen fixtures and Handy Hooks for perforated board.

FROM GM-DELCO NEW ANSWERS TO BUILDERS' NEEDS

THIS IS THE NEW GM-DELCO THRIFT-PAK!

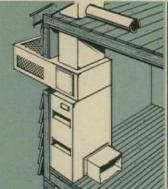
- THRIFT-PAK is builder-designed to air condition new homes in the low-price range, and multiple-unit dwellings, too.
- THRIFT-PAK is a self-contained packaged unit that can save up to \$200 in installation costs over conventional systems.
- THRIFT-PAK is a thru-the-wall system that can be installed by two men in just sixty minutes.
- THRIFT-PAK is factory charged and sealed, all ready for operation.
- THRIFT-PAK is completely circuited to make hook-up faster than ever.
- THRIFT-PAK meets cooling needs up to 32,000 BTU/HR—guaranteed General Motors certified ratings.

THRIFT-PAK INSTALLS EVERYWHERE...QUICKLY, ECONOMICALLY!



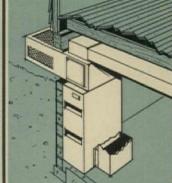
CRAWL SPACE

The Thrift-Pak fits through the wall, connects to distribution duct work underneath the house for economical installation.



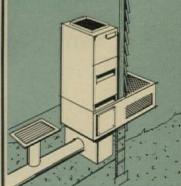
OVERHEAD DUCTS

Popular overhead distribution system uses the Thrift-Pak mounted through the wall and over the heating unit,



BASEMENT

Conventional basement heating installation easily made into a year-round Delco-365 system by locating the Thrift-Pak directly above the furnace.



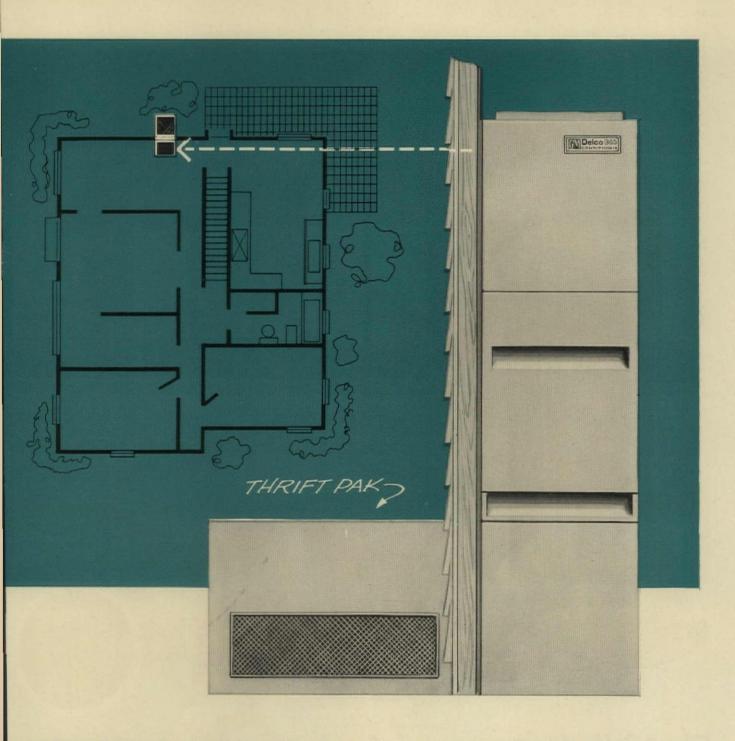
SLAB CONSTRUCTION

Thrift-Pak puts fast, easy air conditioning into slab type houses by installing through the wall and over the supply plenum.



NEW GM-DELCO "DESIGNER'S PLANNING BOOK"

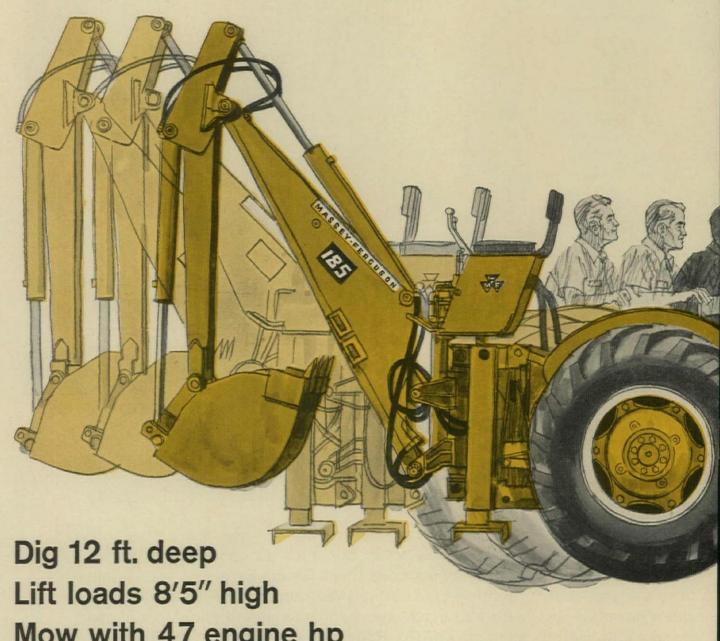
gives architects and home designers a complete "worksheet" on home conditioning installations. There's everything an architect needs with detailed applications, specifications, architect's layouts—clearly, concisely explained. For a free copy write Dept. XB-1.



THRIFT-PAK adds the extra sales power of central air conditioning to help make your homes more desirable, move them faster! By giving your home buyers a year-round "comfort-climate" in their homes, THRIFT-PAK gives you a powerful plus feature to place your homes head and shoulders above competitors. Get the facts on THRIFT-PAK's sales leverage . . . write Delco Appliance Division, Dept. XB-1, General Motors Corporation, Rochester 1, New York.

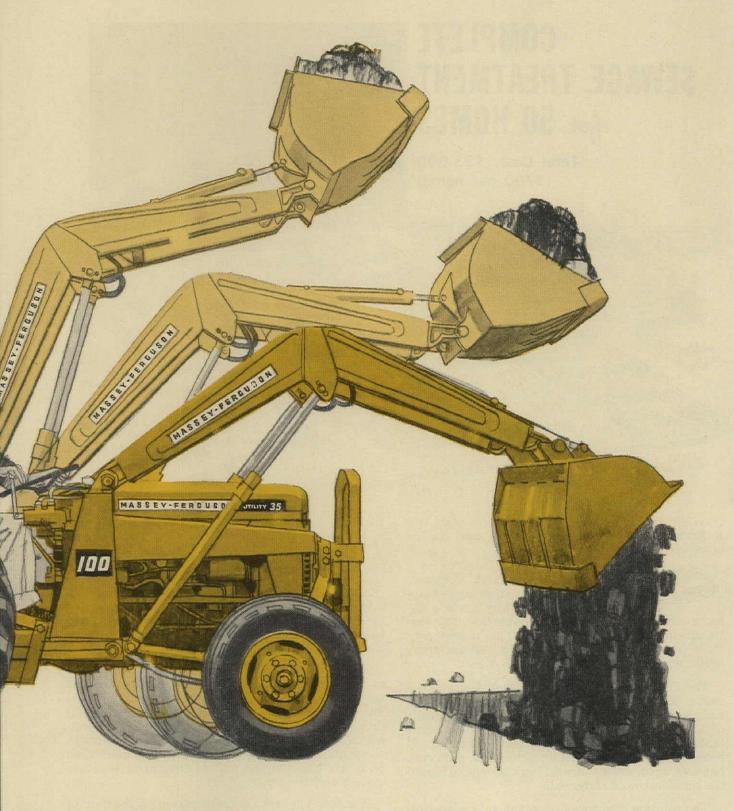


DELCO APPLIANCE DIVISION . GENERAL MOTORS CORPORATION . ROCHESTER, NEW YORK

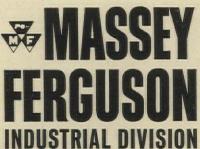


Mow with 47 engine hp Scarify with Ferguson System

Do these jobs and more with the newest low-cost tractor of them all—the MF 35 Utility!



New MF 35 Utility Tractor is a low-cost powerhouse you can put to work on *all* your jobs...it's that versatile. Equipped with the new MF 100 Loader and the MF 185 Backhoe, you can tackle most digging and loading jobs more efficiently and more economically than was ever possible before. And with the Ferguson System, you can hook up many extra utility attachments to the 3-point hitch for outstanding all-job versatility... anything from land-scaping to excavating or trenching. Add to this the economy and power of a 47 engine hp diesel (or gas, if you prefer), and you've got a dollar-saving combination that'll put you way ahead. See the MF 35 Utility Tractor's profit-saving ways demonstrated to you today at your Massey-Ferguson Dealer.



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Call WESTERN UNION, OPERATOR 25, for the name and address of your nearest Massey-Ferguson Dealer.

FEBRUARY 1963 63

SEWAGE TREATMENT for 50 HOMES

Total Cost: \$35,000 (\$700 per home)



COST STUDY: The actual experience of Developer Paul B. Bascom, Merriam, Kansas, at South Wornall Gardens in suburban Kansas City, Mo.



Bascom Development Company turned a proposed 36-home "septic tank community" into a 50-

home subdivision with its own sewerage system and treatment facility at a cost of \$700 per home—only \$250 per home more than the cost of installing septic tanks.

The development of South Wornall Gardens began in 1959. The original survey called for 36 lots, averaging 100' x 150' to meet local requirements of 15,000 square feet per lot for homes on septic tanks. Only eight homes were built before initial home owners were plagued by septic tank problems. Lending agencies withdrew financial support until the problems were corrected.

The solution was to redesign the subdivision for a complete sewerage system including a Smith & Loveless factory-built "Oxigest" sewage treatment plant.

The 17,000 gallon-per-day "Oxigest" plant including accessory equipment cost approximately \$250 per home, delivered to the job site, ready to install. The cost of installing the plant, laying 3000 feet of lateral sewer lines with 15 manholes and five small lateral manholes, 180 feet of efflu-

ent piping from the treatment plant to a nearby stream, a by-pass line around the treatment plant, grading, drainage, wiring to the plant, a 10-foot wide crushed-rock roadway to the plant, fencing, landscaping and a water line to the plant was \$450 per home.

Under this plan the lot sizes could be reduced, averaging 75' x 140'. The subdivision was re-platted for 52 lots... an increase of 16 lots. Two of the lots were reserved for the sewage treatment plant, so the total increase was 14 additional home sites.

The original lot price of \$2,050 was maintained and a \$200 service charge for connecting to the sewerage system was added. On the 14 additional lots alone, the value of the salable land in the subdivision was increased by \$31,500. The sewer connection charge on the balance of the lots brought the total increase to \$38,700, which was more than adequate to cover the cost of the entire sewerage system and treatment plant.

The redesign had a definite impact on the market potential for the development. Home owners were pleased to get the problem "out of their backyards" and activity by prospective buyers was renewed within a week after the treatment facility was installed.

For a detailed cost study on South Wornall Gardens and information on Smith & Loveless "Oxigest" sewage treatment plants, write Dept. 70.



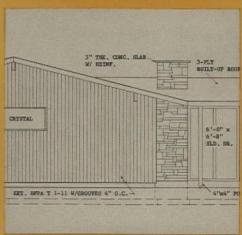
ADDRESS: MAIN PLANT LENEXA, KANSAS

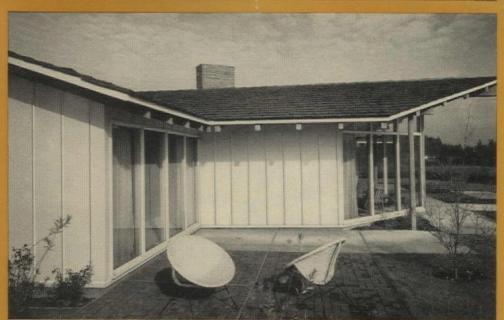
FACTORIES: KANSAS CITY • OAKVILLE, ONTARIO • GLASGOW, SCOTLAND • BRUSSELS, BELGIUM

Another nine-page report to builders from the Douglas Fir Plywood Association















NEW WAYS TO BUILD BETTER FOR LESS WITH

DFPA PLYWOOD SIDING

How 4 leading builders use plywood siding to give their houses the look of quality Cut costs by using plywood combined siding and sheathing 7 new design ideas for plywood sidings A builder's guide to plywood sidings

Plywood siding helps sell today's

How four leading builders add style and value with plywood siding

Texture One-Eleven plywood siding pays off in style and economy at Fairhaven, this new Eichler Homes development in Orange County, Calif. The grooved plywood is used exclusively at the 136-home tract. Over the years, Eichler has found T 1-11 siding a real sales feature because of its distinctive pattern and natural-wood texture. T 1-11 is particularly suited to the crisp contemporary design of this model, by architects Jones & Emmons. Plywood siding gives Eichler two additional strong selling points with his cost- and quality-conscious customers: low maintenance, and durable good looks. He applies the T 1-11 directly to studs without

sheathing, and reports savings due to use of plywood at about \$100 per house.

Fairhaven is one more example of the three-part success formula of this award-winning builder: top-flight design, modern time-saving construction methods, and quality materials. Plywood in Eichler homes is always DFPA grade-trademarked. The four models at Fairhaven give today's demanding home buyers plenty of space and livability: four bedrooms, two baths, separate dining space and a garden court entry. Prices range from \$26,000 to \$30,000, and most homes were sold before completion.



68

quality-conscious home buyers



Carl Mitnick sells these handsome retirement homes at Somers Point, N.J., even faster than he can get the plywood siding on. He uses Texture One-Eleven plywood—its modern, distinctive look attracts buyers, and it helps him cut costs without sacrificing quality. Mitnick builds two houses a week, using the House of Freedom design. The day of his first open house, 6,000 retirement-minded prospects came to look; 42 bought the first week. The House of Freedom was designed by Douglas Fir Plywood Association as a modern, low-cost house to help builders cash in on the growing retirement market. The plans have been used profitably by builders from coast to coast, in many attractive variations. For more information on the House of Freedom, write Douglas Fir Plywood Association, Tacoma 2, Washington.



Panelized plywood siding is a large factor in the success of packaged homes by Briggs Manufacturing Co., Tacoma, Wash. Because plywood can be adapted to so many attractive siding styles, Briggs homes always have a definite look of quality. On this model, traditionally popular boardand-batten plywood siding is combined with Texture One-Eleven on gable ends. Wall panels have framing of kiln-dried lumber, plywood sheathing, and Exterior plywood siding with battens 12" o.c. Ralph Bekken, Briggs vice-president, says that since switching to plywood, the firm has licked problems caused by siding that shrinks and cracks. Plywood saves time and labor in prefabrication, and builders who buy Briggs houses find the panelized wall sections and prefabricated gable ends easy to work with. Briggs manufactured homes are distributed nationally, and the price range of houses when completed is from \$10,000 to about \$35,000.



Rough-sawn plywood siding gives extra sales appeal to houses of C. E. Klock & Son, Tigard, Ore. This new panel is Exterior plywood with the slightly rough texture of sawn lumber. Klock's customers like its warm, natural-wood look. Klock likes it because it cuts labor costs, has ample bracing strength, and assures him of absolutely no siding call-backs. On this house near Portland, the rustic texture of charcoal-stained rough-sawn plywood contrasts with brightly painted accent panels of medium density overlaid plywood. Klock uses the new plywood siding successfully on commercial buildings, too.

Always buy DFPA quality-trademarked plywood



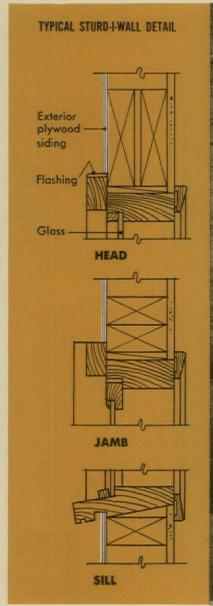
Use plywood siding-sheathing

Sturd-i-wall system builds stronger walls for less money in less time

Plywood siding-sheathing cuts wall construction time by a third and materials costs nearly in half for Dutch Construction Co., Marysville, Mich. One thickness of Texture One-Eleven is simply nailed directly to studs. The wall is structurally strong and rigid, and has a look of style and distinction that attracts home buyers. Partner Harold Wills says the Sturd-i-wall system's speed was a big factor in helping him meet tight construction schedules in the 140-house development. On this model, T 1-11 is stained charcoal. Its texture and color contrast effectively with smooth white-painted

window panels of overlaid plywood. Soffits, also white, are an extension of stressed skin plywood roof panels. Stressed skin panels were also used for floors, and Wills says these labor-saving components added even more to the savings from Sturd-i-wall construction. All four models in the project use the plywood Sturd-i-wall system and standardized plywood components. Prices range from \$15,950 to \$20,500.

For additional information about combined plywood siding-sheathing, write the Douglas Fir Plywood Association, Tacoma 2, Washington.





70

to save \$100 or more a house



These garden apartments in Los Altos, California have plywood Sturd-i-wall construction and cost less than \$10 per square foot. Labor was cut to a bare minimum because plywood siding was applied directly to studs and no additional layer of sheathing was necessary. Another timesaver was the use of prefabricated wall framing sections, up to 8 by 16 feet in size. Siding is medium density overlaid plywood, which has a hard, smooth resin-fiber overlay fused to its surface. It takes less paint, holds paint longer, and gives an exceptionally smooth paint job. The builders, Trojan Construction Co. of Sunnyvale, used four-by-seven-foot panels of plywood, grooved eight inches o.c. to give a reverse board-and-batten effect.

In spite of their low cost, these are luxury apartments and look it. The architects, Kump Associates of Palo Alto, included two-story living rooms, fireplaces and private patios—extras which were possible because of the economies of plywood construction.



The simplest, lowest-cost plywood Sturd-i-wall adaptation is used in this "Hawaiian" house in San Antonio. Builder E. H. Jaroszewski says this is 50% cheaper than a conventional wall. He uses ¾" Exterior A-C plywood inside a standard 2x4 framing system; studs become an exterior design feature. Jaroszewski built this \$5950 model for San Antonio's Project SARAH, a large-scale demonstration of lowcost construction. The wall method is especially good for cabins, or where economy and speed are vital. Insulation and another layer of siding may be added later.

Lapped plywood siding can also be used without sheathing, to get a strong, rigid wall at low cost. Plywood is split-proof and easy to apply: simply nail courses directly to studs with shingle wedges at joints. Insulation may be applied between studs. Another cost-cutter: overlaid plywood lapped siding saves painting time. It is manufactured with a fused resin-fiber overlay permanently bonded to the surface, and takes a superior paint job that lasts for years. On this attractive Colonial house, medium density overlaid plywood siding is precut to 12" widths. Overlaid plywood for lapped siding is available in 8' and 10' lengths; 12", 16" and 24" widths; and either beveled or plain. Regular Exterior A-C plywood may also be ripped for lapped siding.



Always buy DFPA quality-trademarked plywood



Here are 7 new design ideas

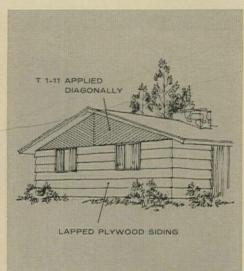
A new, rough-sawn plywood gives this house a Japanese look. Nail 3/8" plywood directly to studs 16" o.c. with feature battens at joints. A highly pigmented stain is recommended for this slightly rough-textured panel. Battens may be flat or on edge, plain or shaped. Any of a number of other textured plywood sidings could be used. 2 An unusual, attractive combination of patterns: lapped plywood siding, set off by a gable end of Texture One-Eleven plywood, with grooves running diagonally. 3 An economical way to build in the increasingly popular Oriental panelized style is to use Texture One-Eleven horizontally. This is much simpler and quicker than nailing up small pieces. Vertical feature battens, 4' o.c., may be applied as shown in detail to set them out from siding. Or 4' lengths of T 1-11 may be butted against projecting battens. Caulk all joints. To get this same general pattern on a larger scale, use horizontal lapped plywood siding, with vertical battens 4' or 8' o.c. 4 Same siding method (plywood and batten) as #1, in a crisp contemporary style. Use medium density overlaid plywood for the smoothest possible paint job; apply directly to studs. To make the most of this clean-lined modern siding, accent it with a high-style fascia board of Texture One-Eleven, grooved 4" o.c. 5 For the two-story house or garden apartment, use overlaid plywood panels with battens for first story; lapped plywood siding, applied vertically, for the slightly overhanging second story. Be sure to slant lapped siding against weather if possible. Write DFPA for application recommendations. 6 Distinctive effects can be obtained by combining two kinds of plywood siding: in this case, Texture One-Eleven for basic siding, smoothly painted overlaid plywood for gable ends and panels under windows. Vertical joints of plywood on gable end may be accented with battens, or simply butted. When combining sidings, it is important to organize them so they will complement rather than fight each other; for example, don't stop one material at a corner, but always "wrap" it around to avoid a chopped-off look. This striking reverse board-andbatten style is simple: apply 14" or 16" - wide panels of medium density overlaid plywood over 3/8" Exterior plywood sheathing. Apply sheathing vertically. Accent the 2" gaps between siding panels by painting or staining exposed sheathing a darker color. You can get variations of this style with plywood panels manufactured in various textures and finishes, with grooves V-shaped or square, 1/2" to 2" wide. See builder's guide to plywood sidings, next page, for further information on plywood sidings and application and finishing recommendations. Or write Douglas Fir Plywood Association, Tacoma 2, Washington.

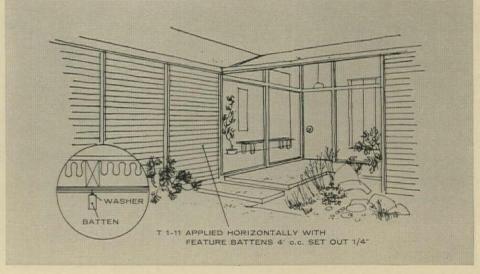


1 Rough-sawn plywood and batten

Texture One-Eleven gable ends and lapped plywood siding

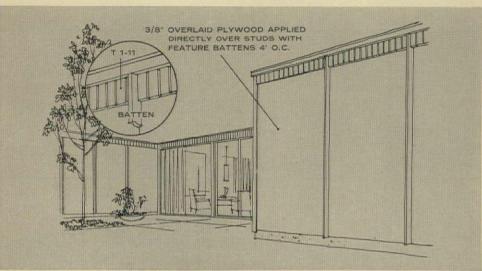
3 Oriental panelized T 1-11 siding

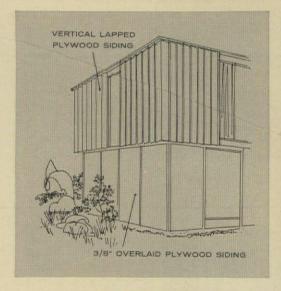


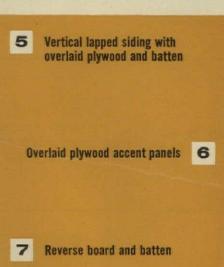


for versatile plywood siding

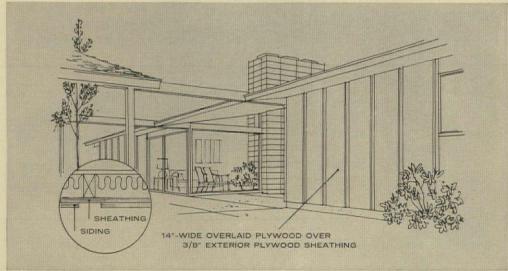


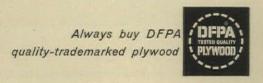












Builder's guide to Exterior

DESCRIPTION / Plywood for siding or other outdoor use must be Exterior (waterproof) type. Be sure of dependable quality and 100% waterproof glue—always look for the edge stamp **EXT-DFPA**

TEXTU

TEXTURE ONE-ELEVEN

Exterior plywood with deep vertical grooves (1/4" deep, 3/8" wide), 2" or 4" o.c. (Other groove spacing available on special order.) Long edges shiplapped for continuous groove pattern. Standard T 1-11 has an unsanded surface with small knotholes and other natural wood characteristics. T 1-11 with smooth surface (sanded or overlaid) also available on special order. T 1-11 comes in standard plywood sizes; 5/8" thick only.

MEDIUM DENSITY
OVERLAID PLYWOOD



Premium quality panel with smooth resin-fiber overlay for finest paint finishes. Overlay is permanently fused to one or both sides of panel, completely blanks out grain. Comes in standard plywood sizes, thicknesses; also precut for lapped siding in 12", 16" and 24" widths, beveled or plain. Also available preprimed.

STRIATED PLYWOOD

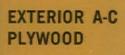
Has closely spaced shallow grooves of varying widths running full length of panel. Striated pattern minimizes vertical joints. Comes in standard plywood sizes; 5/16" and 3%" thick. Also available precut for lapped "striated shake" siding, 16" wide and 48" long.



ROUGH-SAWN PLYWOOD



Has a slightly rough surface, like that of sawn lumber. Grain pattern is partially obscured. Roughsawn plywood is available in all standard plywood sizes; 3/6" thick only.



Smooth, natural plywood. Aface is top-quality standard veneer. A versatile, popular economy panel. Comes in standard plywood sizes and thicknesses.



* NOTE / In addition to the above, plywood sidings with other patterns and textures are available from individual manufacturers.

plywood sidings*

APPLICATION

Use for basic siding, accent paneling, exterior trim, etc. May be applied directly to studs without sheathing. Generally applied vertically, but may be installed horizontally for special effects, with vertical joints butted against inset battens, shiplapped or covered with molding. Use highly pigmented shake or shingle stain.



May be used for board and batten, flat panel or lapped siding. Ideal for accent paneling under windows, etc. Use panels 36" thick for direct application to studs, 516" over sheathing. Smooth surface requires only primer plus finish coat of any good quality house paint. Special architectural enamels may also be used. Prime back and edges where possible.



Use for basic siding, board and batten, lapped siding, accent panels, gable ends, etc. For application directly to studs, use 3/8" thick; when applied over sheathing, use 5/16" thick. Finish with exterior stain.

Use like any plywood siding—panel and batten, flat panel, etc. Especially suitable for ranch-type and rustic styles because of natural wood texture. May be applied directly to studs without sheathing. Finish with a highly pigmented stain.

Suitable for any siding use: board and batten, flat panel, lapped siding, gable ends, accent panels, fences, etc. Use 3/8" thick for application without sheathing; 1/4" is amply strong with sheathing. Follow standard painting procedure for Exterior plywood: seal all edges, use a minimum of two coats of good quality exterior house paint—for even better results, three coats.

THE DFPA TRADEMARK IS YOUR ASSURANCE OF QUALITY PLYWOOD

Today, Quality of construction is more critical than ever before. New building systems make even greater demands on materials, and dependability of performance is absolutely essential. Today's home buyers are more quality conscious. That's why it's more important than ever before for you to specify and buy only DFPA grade trademarked fir plywood. It's the only plywood backed by an industry-wide quality control program, and a quarter century of experience in plywood testing and inspection. This program is supported by the overwhelming majority of the country's fir and western softwood plywood manufacturers, accounting for 85 per cent of industry production.

You can depend on plywood with the DFPA grade trademark because the DFPA quality control program checks every critical step in plywood manufacture. It includes factory inspection by trained quality supervisors—rigorous laboratory testing of production samples, and exposure to actual weather conditions—and in-use testing of new products and finishes. Quality control is backed by DFPA research into new structural systems, and information to help you build better with plywood at lower cost.

Your reputation depends on the quality of your construction. That's why it pays to specify **only** DFPA grade trademarked plywood.

DOUGLAS FIR PLYWOOD ASSOCIATION

TACOMA 2, WASHINGTON

-an industry-wide organization devoted to research, promotion and quality control



Only plywood bearing the DFPA grade trademark is made under the industry-wide DFPA quality control program. Always look for the letters "DFPA."



Total-Electric Homes Averaging 10 Sales Per Week

Sproul Homes, Las Vegas, Nevada, The early sales on 400 of these General Electric equipped Medallion Homes, ranging in price from \$14,500 to \$19,950, have been moving so fast that a construction boost of 800 additional homes is planned.

Busy Builder Has One Word For Rentals: "Great!"

Mayfair Apartments, Memphis, Tenn., One look at the eye-catching exterior brings the prospects in. The General Electric appliances and individual apartment Weathertron® heat pumps keep them there. The rental rate on builder Kemmons Wilson's 72-unit Gold Medallion winner is running well ahead of schedule.



Medallion Home Project 85% Sold Out In Only Four Months

Edgemont Estates, Camarillo, Calif., These roomy Medallion Homes offer the finest in comfortable California living. A kitchenfull of General Electric appliances has proved to be the leading sales feature for builder Walter Scholtz.

BETTER HOMES & GARDENS All-Electric Idea Home for 1962

Brede Homes, Minneapolis, Minn., These Medallion Homes on famed Lake Minnetonka have all the most modern ideas in total electric living. They are completely equipped with General Electric appliances and electric heating equipment.





Total-Electric Retreat For 191 Busy Executives

Eden Roc, Tucson, Ariz., Builder/ Owner Bert Olden used General Electric appliances and equipment to make Eden Roc an all-electric refuge for harried executives. Complete business and recreational facilities are combined in these unique Medallion Apartments.

132 Gold Medallion Apartments 100% Rented Before Completion

Iroquois Apartments, Philadelphia, Pa., Builder Leonard Polis cut construction costs, built greater sales appeal and lasting good looks into each apartment with modern General Electric appliances and electric heating and cooling.



Easier to build, easier to sell—total electric Medallion Homes and apartments equipped by General Electric



General Electric's program for Medallion Home and Apartment builders has speeded construction and sales for these builders, and can do the same for you.

General Electric has a complete line of appliances, heating, cooling, lighting, and wiring equipment. You can call on design and application engineers to aid with any of these. In fact, the talents of an experienced General Electric team join to help you prepare a coordinated electrical system—specifically tailored to your construction needs.

Not only can General Electric provide you with invaluable technical aid, but with all the benefits of one source of supply and coordinated delivery and service as well.

General Electric products are advertised and pro-

By any measure...There is nothing just as good as General Electric

Progress Is Our Most Important Product



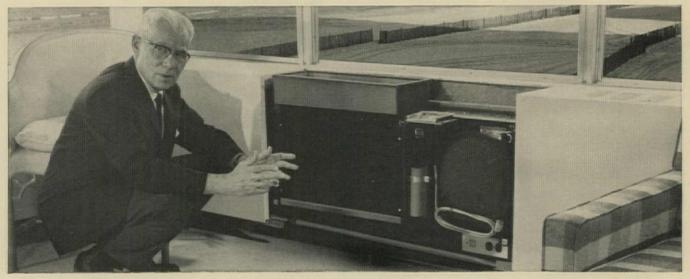
moted to homeseekers as the keystone of any Medallion Home or apartment. General Electric also provides customized merchandising programs for builders meeting Medallion standards and using General Electric products. With the support you receive from this promotional assistance, your Medallion Homes and apartments equipped by General Electric will sell faster...rent faster!

Finally, you benefit from General Electric's reputation for product quality and dependable performance.

	ket Development Operation Co., Appliance Park, HH-2, 230 httucky
I'm interested ir Medallion Home	General Electric's program for s, Please send me more information.
Name	
Company	
Address	



"What we wanted were air conditioners that would go through the wall, give good cooling, be quiet, dependable, good-looking—and tie in with a hot-water heating system."



"What we wanted, we got - 475 General Electric Zoneline 42's."



Listen to Max Schreiber, co-owner of 5757 Sheridan—20-story luxury apartment overlooking Chicago's Lake Michigan beach front:

"We're completely sold on zonal air conditioning systems. They let tenants control their own temperature. They can bring in fresh, fil-

tered air without opening windows, too. And, of course, if a central-plant system goes out, the whole building suffers. No danger of that with a zonal system.

"And we're completely sold on General Electric. We've used their window units in our other apartments and found them most dependable and efficient.

"So when our architects, Loewenberg & Loewenberg,

recommended the new Zoneline '42' for 5757 Sheridan, we agreed right away. It was simple to build in these convector cabinets with the air conditioner above, the hot water pipes below. The cabinet itself doubles as a window seat and shelf. Our tenants have heating and cooling in one good-looking, easy-to-get-at unit.

"And, in talking to our tenants, we found that they are very, very pleased with the *quietness* of the Zoneline '42'. And that, of course, pleases us."

Add the flexibility of zonal air conditioning to your next building with General Electric's Zoneline '42'. Build it in for cooling alone—or combine it with hot water or electric heating. For complete information, write to the General Electric Company, Room Air Conditioner Dept., Building 104C, Louisville 1, Kentucky.

Progress Is Our Most Important Product

GENERAL @ ELECTRIC

By any measure ... There is nothing "just as good as" General Electric



Wall; scored design SD-1, 362 Cr. Charcoal with decorated inserts Rooster Q-4. Counter; SD-1, 390 Cr. Salt & Pepper. Plate 134.

This tiled kitchen work area has a bright, cheery charm...a "special-for-her" custom look that a woman is mighty quick to notice—and want. Just nine American Olean decorated tile inserts

New Decorated make the difference. And they give you a powerful added sales feature for only about \$4 extra! Ask

that sells your tile contractor for complete details

or write for new color booklet 1040, "Decorated Tile". It shows the complete American Olean

collection of colorful decorated tile designs and ways they can be used to help you sell homes.

The code problem ... open occupancy ... top performers

Uniform codes

H&H: When speaking of building codes, why not use a bit of built-in psychology: "Cozy Codes." Object: Ultimately enough eyebrows can be expected to rise in wonderment, and finally things will be done—at the grass roots end. Note what happened to minimum housing codes vs. a stirred-up public!

Let's have a little more forthrightness on the part of Fha. There is evidence of activity on their part which warrants a demand for correction from the bill-paying public. I refer specifically to study-approval by Fha of building materials and techniques.

One would reason that in evaluating a matter FHA gained an opinion. In their official status this opinion should be significant. When the opinion is favorable, they now issue what is called a "Use of Materials Bulletin." Confirming the approval is the assignment of a Bulletin number and a publication date.

However, immediately following, in a special block headed "Warning" FHA states: "The technical description, requirements and limitations expressed herein do not constitute an endorsement, approval or acceptance by the Federal Housing Administration." . . .

The next paragraph switches back to the affirmative, in part. "Subject to good workmanship, compliance with local codes, and the methods of application listed herein, the materials described in this Bulletin may be considered suitable for use. . . ."

Particularly interesting, in addition to the Yes-We-Ain't-Got-No-Bananas theme, is the obeisance: "compliance with local codes." What is FHA doing in the material study-approval business if they haven't got the nerve to say they like or dislike, irrespective of what others decide!

Either FHA approves or disapproves. Period. Anything else smacks of pussy-footing, double talk, panty-waist officialdom.

Finally, President Kennedy, in a first step, has related segregation to federal funds for building. He proposes a possible second step, which could involve conventional funds. A proper blockbuster would be the raising of a hue and cry that the subject of codes be given the same treatment!

Result? The building industry could rise as a giant, thriving, enjoying, based on its merits—completely shorn of its shackles.

H. S. Bowser Santa Barbara, Calif.

• FHA is prohibited by law from outright endorsement of products. Hence its equivocal stance.—ED.

H&H: After reading the article, "Battle for code uniformity gains an inch or two" (News, Nov.), it would seem to prompt an inquiry—"in what direction?"

The idea of state adoption of codes leaves much to be desired. It's both unreasonable

and unfair to infer, in light of the dedication of many "local" building officials, that the public is damned unless the states take over. Just such a move is presently being attempted in California. Builders, together with officials of the ICBO, vehemently oppose this effort. Rather, it's through cooperation of builders, local government, and building officials that the Uniform Building Code is used almost exclusively throughout the State of California.

Lieberman's "missing links" theory might be labeled "Substitute links—a guaranteed method of adding cost through elimination of affected parties," or is he also advocating, for consistency's sake, that NAHRO be kept at the bottom of the heap on redevelopment matters. Frankly, at this point I believe NAHRO officialdom should be blushing.

CARL W. HAALAND, executive vice president Home Builders Association San Joaquin Valley, Calif.

Open occupancy

H&H: Your article, "The challenge of open occupancy" [Nov.] is excellent. You can perform a tremendous service for the housing industry by bringing your readers such objective and unbiased information about the effect of integration upon real estate values and sales.

It seems to be taken for granted that the Executive Order will result in a further shift to conventional financing, but this does not appear to represent the long-term answer. The President has indicated that the present order represents merely a first step and that it will be extended in time to cover other classes of loans and lending institutions. Consequently, it appears that at best, the high-percentage conventional loan represents only a temporary escape. Therefore, the sooner we can adjust our thinking to the changes which the order contemplates, the less disturbing it will be to the housing industry.

Another disturbing matter is the increased use of secondary financing. My knowledge of FHA goes back to its inception in the early thirties. One of its greatest contributions was the elimination of the second mortgage. This financing undoubtedly has been a major factor in the rapid growth of home ownership and in the high level of housing starts. I doubt if homebuilding can continue at its present level without FHA or some substitute which makes it possible to buy on extremely easy terms. I hardly see how the 80%-to-90% conventional loan, even if universally available, could accomplish this result. Therefore, it appears important to preserve a vital FHA program, not primarily for the benefit of the mortgage banker or other investors but for the benefit of the housing industry and the American economy. Some of us feel the best way to achieve this is to extend the executive order to all loans and lending institutions.

> DALE M. THOMPSON, president Mortgage Bankers Association

H&H: I am slightly impatient with those Negroes who crusade for beaches, golf courses, and restaurants—even though this should be their right and prerogative. I feel their energy would be much better spent working for better education, better housing, and higher incomes. When these things are equalized, the rest will come with much less aggravation.

The President's executive order will not have much effect in the South for a number of years and we in the South would be making a grave error if we let this order affect our planning. I say this with some authority, having questioned most of our more intelligent and thoughtful Negro customers. Having put the question in a way that allows for the most frank response. I believe that most of our Negro customers would prefer to live in a subdivision with people whose interests, desires, educational level, and feelings are most similar to their own. They most certainly want a good home, but for the largest part, they do not want an integrated home.

> PHILIP I. EMMER, president Lincoln Estates Inc. Gainesville, Fla.

 Reader Emmer builds one of the best tracts in the U.S. for Negroes.—ED.

Top performers of '62

H&H: Having never made the top ten of anything before, and being more used to brickbats than kudos, thank you for including me in the top ten performers in the housing field for 1962 [News, Dec.]. My whole life has been wrapped up in one phase or another of housing, so I value this honor more highly than any I might ever receive.

BERNARD E. LOSHBOUGH, executive director ACTION-Housing Inc. Pittsburgh.

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Your prospects know Kentile® through steady, month-after-month advertising in LOOK, THE SATURDAY EVENING POST, BETTER HOMES & GARDENS, 16 other leading magazines, and 324 newspapers. This ad features new Kentile Textured Mosaic Vinyl Asbestos Tile.

Here's Textured Mosaic—exciting new idea in Kentile Vinyl Tile Floors! Surprisingly economical. New-home prospects will really respond to its handsome embossed surface. It's greaseproof, so easy to care for. Quality-made to eliminate call-backs, assure prospects that everything in your homes is the finest. Ask your flooring man to show you samples.

There's a Kentile Floor for every home, in every price range. Over 250 decorator colors in 5 types of tile.

HAPPAIL

automatic dishwasher and dryer



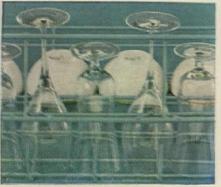
Custom cabinet panels illustrated. Panels available in lusterloy or your choice of six colors.



Only Tappan dishwasher scrubs dishes with hot suds from two directions. Even lipstick washes away. Yet Tappan dishwasher is conversation quiet.



Cut-away shows how only Tappan holds 30to 60-day supply of liquid detergent and water conditioner. Automatically injects just the right amount. No mess. No waste.



Exclusive Tappan Pos-I-Dry moisture sensing device assures completely dry, spotfree dishes, silver, glassware.

ONLY NEW TAPPAN DISHWASHERS hold a 60-day supply of liquid detergent and water conditioner . . . automatically add the right amount to every wash. Only Tappan scrubs with suds, dries china, silver, glass spotlessly clean. And Tappan is the

I want more information	Information Pept. HH 2-3, Mansfield, Ohio on Tappan: ☐ Dishwasher; Built-ins OO' ☐ gas ☐ electric; Space-Saver F	The state of the s
☐ gas ☐ electric; Free Name	Standing Ranges gas electric	
	Standing Ranges 🗌 gas 🗌 electric	

only dishwasher that's conversation quiet. Tappan installs in minutes . . . just slide it in, hook it up. All service is from the front. Start Tappan's exclusive features selling your prospects now.



Garden apartments and townhouses

. . . are the biggest news, the biggest worry, and perhaps the biggest profit opportunity in housing today.

They are the biggest news because we are in the biggest apartment-house boom in history. Last year multi-family units accounted for 29% (410,000 units) of the 1,415,000 private non-farm starts; a 92% rise in two years.

They are the biggest worry because the headlong construction pace is threatening oversupply trouble in some key markets (see News, p. 15 and "Upheaval in the marketplace," p. 110). And investors under pressure to put a glut of money to work may be tempted by unsound deals.

But in most market areas—even in parts of cities where the over-all vacancy rate is high—builders have found real opportunity (and profit) in the right kind of multi-family housing built for sale and rental. For the market—like the market for single-family houses—is very local. And more than in single-family housing, there are markets within markets: for retirees, for bachelor girls, for young marrieds, for families with children, for people who are tired of the struggle of suburban home upkeep. On the next 12 pages, for example, you will see examples from all over the country of apartments and townhouses that are renting (or selling) fast because they hit the right combination of location, design, site planning, and community facilities to tap a specific market.

Beginning on page 98, you will find a four-page analysis of what is still the No. 1 cause of tenant complaints: noise—and what can be done about it.

Beginning on page 102, you will get fresh perspective on apartment design from the ideas and sketches of an imaginative young architect.

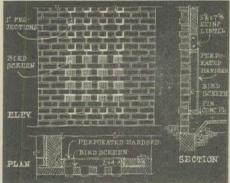
And on page 108, you will see how apartment and townhouse builders are adapting techniques from house selling to the problems of renting apartments.

FEBRUARY 1963



Park-like setting and uncluttered design produce a country club appeal





PERFORATED BRICKWORK adds design interest—and screens air conditioning units. Architects planned design and engineering details with the air-conditioning manufacturer (see also p. 95).

And this was apparently a strong appeal—for these Norfolk apartments rented at the phenomenal rate of 160 units in 168 days, at rents ranging from \$99 for a one-bedroom to \$152 for a three-bedroom unit. This response was so great that it led Community Builders, big Washington-based apartment and house builders, to plan 240 more units on the site.

One of the fastest growing apartment builders in the U.S., Community Builders will erect 1,800 garden and high-rise units this year, has another 6,000 in the planning stage (and land already zoned for them). Behind its record in Norfolk are six principles that could lead to success in almost any apartment market:

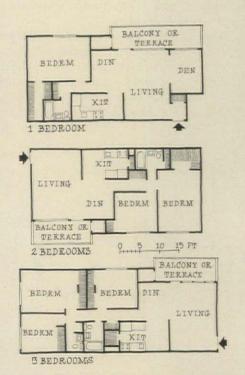
1. Market analysis. The sponsors checked existing apartments (by personal survey), proposed apartments (with mortgage lenders), vacancy rates (with Realtors), employment sources (with state and city agencies); concluded that Norfolk's rapid industrial growth (and a population that doubled since 1940) warranted more apartments in the low-medium rent range.

- 2. Cost study. "We buy closely, estimate closely, and know exactly what a job will cost before we tackle it," says Albert Small, partner in charge of apartments. Building costs in this project were under \$7,000 per unit.
- 3. Plan and design. Community asked the architects—Cohn, Haft, AIA & Associates—to design into the units features seldom offered in Norfolk at this rent range: air conditioning, private balconies, colored appliances and bath fixtures, walkin closets, dining space in the kitchen, disposers, and swimming pools.
- 4. Site planning. Wiring and electric meters are screened from the street, and air conditioners are ingeniously hidden behind grilled brickwork (see detail, left). The builders saved the good trees, spent \$40 a unit for landscaping.
- 5. Marketing. Chief appeal: "recreational facilities of a country club and the space and privacy of a home."
- 6. Renting. The builders used a local Realtor who knew the market firsthand.

Estimated return on investment: 14%.



WOODED COURTS and meandering paths give Pinewood Gardens an attractive sylvan quality.



FLOOR PLANS show wide variety of apartments offered. Biggest renter reactions came from walkin or wall-to-wall closets, dining space in kitchens, covered balconies or terraces.



LIVING-DINING AREA is 20' long. Sliding glass doors (behind curtain at left) lead to a balcony or covered terrace for each unit.



DOUBLE PULLMAN KITCHEN is equipped with refrigerator, 30" range and oven, garbage disposer. Louvered door leads to a pantry closet.



SETBACKS avoid monotonous building placement, create pleasant courts. Deep overhangs shade balconies, minimize sun load and air conditioning cost.

continued



This waterfront apartment project makes the most of expensive land

Just an hour from Los Angeles, the Newport-Balboa beach area is some of the most valuable resort land in California. At current valuation of water frontage (\$4,000 per front foot, more expensive than Wilshire Boulevard, says Builder Bob McLain), the land under the 50 apartments in Volk-McLain's Newport development would come to some \$30,000 per unit. But this land isn't for sale; it was leased by The Irvine Co. (giant California land owner) to Volk-McLain for 55 years—the first

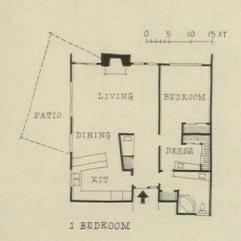
lease the owners had ever granted for longer than 25 years. The long-term lease permitted an \$850,000, 25-year mortgage loan from Lincoln s&L of Los Angeles.

Rather than seek the maximum number of units (zoning permitted up to 75) the builders planned only 50: 10 one-, 34 two-, and 6 three-bedroom units, with \$150 to \$700-a-month rents and one- to three-year leases. The buildings were fully rented in less than six months.

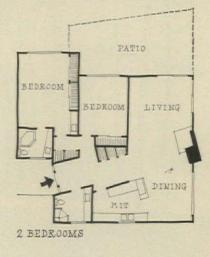
Since the 360' of water frontage could

not accommodate all the tenants' boats, it was a big plus to have a major marina adjoining the property (there are 7,000 yachts in the Balboa area). And careful siting of each building gives every apartment a view of the bay.

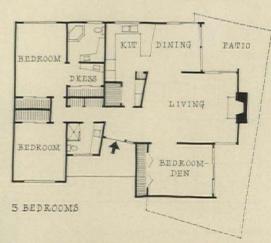
An attractive feature is the outdoor foyer for covered curbside reception of guests (photo right). Although the main landscaping is typical shore-line flora, each unit has a screened private patio where residents can plant as they please.



ONE-BEDROOM UNITS (\$150 to \$200 a month) have angled patios that provide water view.



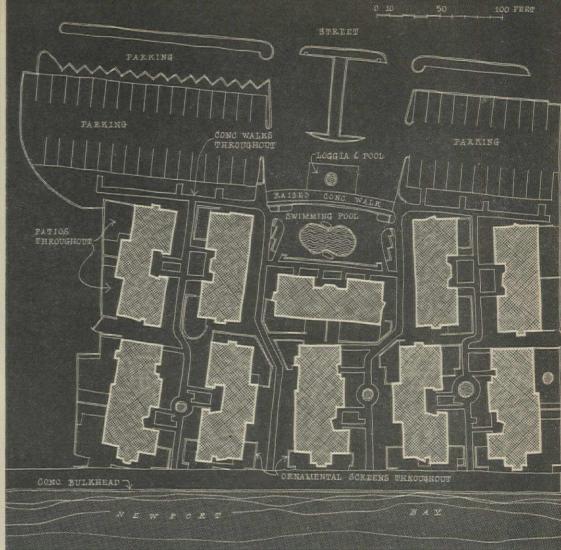
TWO-BEDROOM UNITS (\$295 to \$395 a month) have two baths, fireplaces, many closets.



THREE-BEDROOM UNITS (\$425 to \$700 a month) are in most-wanted waterfront buildings.

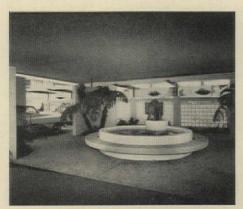


VIEW FROM BAY shows tenants' boats moored at property edge, planted malls between buildings.



SITE PLAN keeps all parking on street side of project, as buffer from street. Inland buildings

are grouped around pool, have view of bay down broad landscaped malls.



ENTRY FOYER has circular pool and seat as focal point, provides protected guest reception.



COVERED WALK leads gradually into garden and pool area, partly visible through wall.

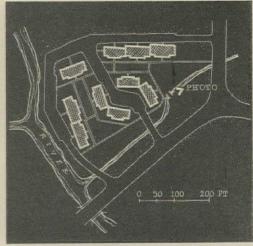


LANDSCAPED MALLS between buildings create the feeling of a garden despite the high land

coverage dictated by the value of the land. Buildings have deep overhangs.

continued





Look at what's happened on a site long bypassed as useless floodland

These garden apartments (five buildings with 40 one- and two-bedroom units) occupy a four-acre Atlanta tract bounded on three sides by streams, which spilled over the land at flood stages, discouraging builders. But Builder J. E. Starr and Archi-

tect Ted Levy enlarged an outlet culvert and sited buildings so that the water danger ended, and buildings were placed so all units have views of woods and broad lawns or face an adjacent golf course). Density is only ten units per acre. Each unit is air-conditioned, has a large utility room, fully equipped kitchen, and rents at \$119.50 to \$137.50. (The two-bedroom units have 1,100 sq. ft. of living space.) Occupancy has been close to 100% since completion.



Apartments with 12% gross return sell to small investors or syndicates

Builder-Realtor William G. Riley has sold 27 of these buildings (totaling nearly 600 units) in Chicago's suburbs in less than two years. His success seems simple to explain: He aims at a special market—small syndicates or individuals who want



ONE-BEDROOM UNITS are built around economical kitchen-bath core, have two outside entrances on opposite sides of building.

a 12% cash throwoff plus the tax advantages of quick depreciation to offset other income. The figures at the right show what he offers.

Each buyer owns a 14- or 20-unit building on its lot, plus a share in a company owning all common grounds which at each of Riley's two projects includes a big pool, tennis court, and other recreation facilities. Riley builds and manages the buildings, guarantees full occupancy the first year. All apartments rent for \$139 a month or more, are well equipped 3½-room units designed to appeal to older families without young children.

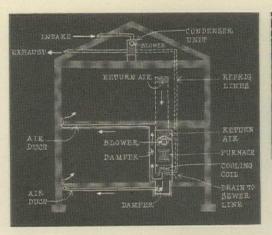
Riley's prospectus (which bears no SEC or state agency clearance) speaks of a 36% return to investors. But this includes equity growth via mortgage amortization. Of course, realizing this part of the profit hinges on a long string of ifs.

Profit in a 14-unit building

Purchase price	\$	161,000.00
Mortgage		133,000.00
Cash investment (down pay-		
ment)		28,000.00
INCOME:		
Rent	\$	23,352.00
Washers and dryers		200.00
	\$	23,552.00
PRIME EXPENSES:		
Mortgage	\$	11,443.32
Taxes		2,085.00
Vacancies and rent losses		1,167.60
Decorating		630.00
Maintenance		500.00
Management services		934.08
Heat, janitor, miscellaneous		3,352.78
	\$	20,113.78
Operating profit	\$	3,438.22
Mortgage reduction (20-yr.		
Aug.)		6,650.00

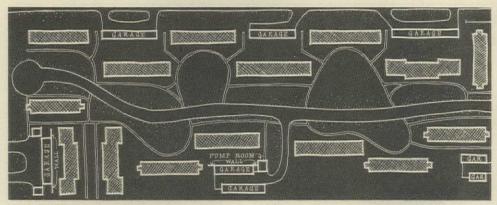


Luxury apartments (with attics) lure well-to-do owners out of their homes





AIR CONDITIONING SYSTEM (left) is concealed in the attic and vented through roof louvers to eliminate noise at ground level. Attic (above) also serves as a large, dry storage area for tenants belongings.



SITE PLAN spaces buildings on broad lawns. Garages are all hidden from view—either by

siting them at the ends of buildings or by dropping them on low grades behind walls,

Despite rentals ranging from \$250 for one-bedroom units to \$375 for three-bedroom units (and three-year leases), 57 out of 60 of these colonial-style units were leased in the first year. And the sponsor—Stewart Sailor, who started building two years ago—plans 30 more.

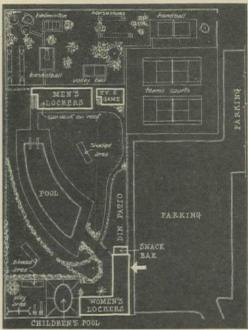
The units are in Hinsdale, a prestigious suburb of Chicago. They rent mostly to couples whose children are grown up or away at school, and who are anxious to trade the headaches of a too-big house and its grounds for simpler, maintenance-free living.

Some units are as big (1,900 sq. ft.) as a house, and the smallest has 1,400 sq. ft. of living space. Each has an attic (for the extra storage space that most renters need), an enclosed garage (essential at these rentals and in Chicago's winter climate), and laundry facilities (so no one has to lug dirty clothes to the basement). Each has heavy block walls to eliminate noise between units, and separate entrances that eliminate corridors and the noise and cooking odors that often go with them. Each has a private outdoor terrace facing the project's broad lawns.

Architect: Norman Steenhoff of Zay Smith & Associates.

continued





Big recreation area is a strong drawing card for commuters

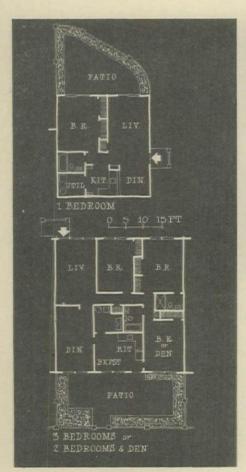
At Builder Mark Handler's 43-acre rental project in Eatontown, N.J., 3½ acres are given to a lavish recreation area staffed by ten people. It includes adults' and children's pools, locker rooms and lounges, courts for tennis, handball, volleyball, shuffleboard, badminton, and basketball, and space for just plain sunbathing on the lawn and 75' deck (right in photo).

Handler's first 120 units—built at a tenunit-per-acre density—are 93% rented at \$118 to \$149 for one- and two-bedroom units—a remarkable price for a suburban location only an hour commute from New York City. Handler also credits radiant ceiling heat for his success. "Our families are enthusiastic about it," he says.

Architects: Gerber & Pancani.



TWO-STORY APARTMENTS are semi-Colonials.





Older couples prefer quiet to swimming

Eight buildings like these, each with four to eight 1- to 3-bedroom units, have had full occupancy in Atlanta because they seem like houses to older couples who have left homes to rent.

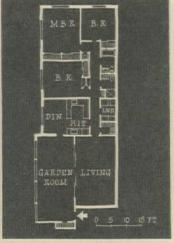
Jack and Jim Embry got only eight units per acre, but built this way for three reasons: 1) stairs are eliminated; 2) each unit has a patio for private outdoor living; and 3) house-like features including storage attics, extra closets, and good soundproofing are possible. No land was needed for a swimming pool "because the people we aimed at do not want the noise and fuss a big pool creates." But parking was kept at the front door.

Forty-six units (renting at \$130 to \$197 a month) are built; 21 more are going up.



BIG GARDEN ROOM, enclosed at a buyer's request, is panelled with prefinished hardwood. Sliding door at right opens this room to living room.







KITCHEN is big enough for separate dining area; plan (center) shows typical three-bedroom apartment with 1,885 sq. ft.; living room (right) is 23'x14'.

All the space of good-sized houses is planned into these for-sale apartments



PUTTING GREEN is one of several community facilities including pool, barbecue, shuffleboard.

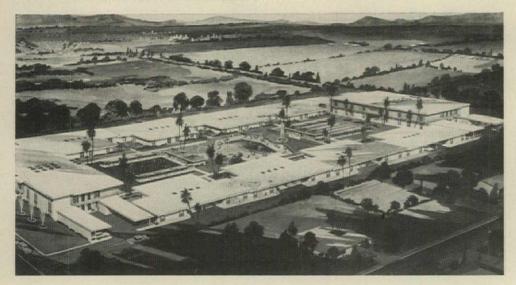
Result: Builder Mel Jensen of Salt Lake City sold 160 (of 176) units within two years, mostly to retirement and semi-retirement buyers. The units range from 1,175 sq. ft. and \$17,750 to 1,885 sq. ft. and \$28,500. The apartments were the first in Salt Lake to be sold on a condominium-like basis (buyer gets a deed, is assessed individual taxes, shares undivided interest in garages and swimming pool).* They are air conditioned and are the first electrically-heated units in the city. Jensen

kept 24 apartments as rental investments for himself. His major sales pitch on the for-sale units: "Investment living with no time-consuming maintenance and upkeep."

Jensen went to great lengths to insulate against noise and weather, even insulated water and sewer pipes. But he still kept his building costs under \$9 a sq. ft. His major discoveries about the market: 25% of the buyers were widows but single-bedroom units were the last to rent or sell; 95% of buyers had previously owned their own big houses; and buyers preferred not to live next door or close to renters.

Return on invested capital: 12% to 15%.

^{*} Only a technical difference keeps the apartments from being a true condominium: The warranty deed does not convey air space to the buyer — only permanent and exclusive possession of the unit.





64 UNITS are in one- and two-story buildings around the perimeter of a five-acre block in Phoenix. T-shaped swimming pool, two activity buildings, bowling and putting greens, and shuffleboard court are in center of tract. Project is in an area of single-family houses.

A pioneer condominium project tests a fresh market

These are the first units planned and built as a condominium project in Phoenix since Arizona passed a condominium-enabling law last May. Opening day was Dec. 30, and eight of the \$20,400 units were sold within two weeks although only six of 64 units had yet been built.

Each two-bedroom, two-bath unit has 1,125 sq. ft. of living area plus a patio and carport. Each was built with a \$12,900 construction loan, and each buyer owns the cubic space within his unit plus 1/64 of the other structures and land in the project.

Builders Richard D. Beery and Russell Riggs, who have built other apartments in Phoenix and Rittman, Ohio, plan to build more condominium projects after completing this one. Their lender, Western S&L Association, expects condominiums will soon become a significantly larger part of housing in its area.

How can other builders develop their own condominium projects? Duane Miller, Western s&L's construction loan officer, has prepared the following guide for builder-developers on the basis of his experience working with title companies, lawyers, and others who steered the condominium bill into law and saw the first project reach the construction stage.

STEP 1: market analysis.

This should cover existing and proposed competing housing units, particularly single-family houses. A rental survey should determine where buyers will come from.

STEP 2: land appraisal.

The developer should have a good knowledge of local zoning practices and should work with zoning officials on how to develop land for condominium use. Then the land is optioned.

STEP 3: getting a lender's interest.

The following six aspects of the project

must be discussed with potential lenders:

A. Sales market: Best prospects to aim at are people over 50 and husband-and-wife working teams.

B. Location: Units must approximate nearby houses in quality and price.

C. Loans: Preferably, each unit should have individual construction and mortgage loans. This expedites deed conveyance during construction by eliminating a new title search and by permitting substitution of mortgagors.

D. Design: Units should have a maximum FHA room count and meet other FHA standards in case owners want to sell under FHA financing later. Good sound conditioning is essential. Design should be simple but pleasing. Noisy recreation areas and swimming pools should be located well away from units. (If units are the luxury type, recreation facilities may not be necessary because upper-income buyers are likely to entertain in their homes or at their clubs.)

E. Management: This should be han-

dled by professionals, not left in the hands of owner families (particularly if families have children). The more units, the less per family management will cost.

STEP 4: architectural services.

After the lender indicates interest, an architect must be engaged to prepare preliminary plans, renderings, and cost estimates. (Many architects would object that this unwisely brings the designer into the act after the basic design decisions have been made.—ED.)

STEP 5: legal advice.

After the lender tentatively agrees on the feasibility of the project, the builder's lawyer goes to work on the many documents required. In Arizona these include legal descriptions of the land, common elements, cubic content of each building and each unit, obligations of each owner to all other owners, and provision for liens in case any owner fails to pay joint assessments.

STEP 6: engineering services.

When architectural plans are ready, an engineer must prepare legal descriptions required by local and state law.

STEP 7: getting lender acceptance.

As plans, documents, and other paperwork are completed, they are turned over to the lender for acceptance. The lender checks on the builder's financial background, makes sure a title company will insure titles, reviews all legal documents, appraises the project's probable success. It then decides on its commitment. Insurance is written as a blanket policy covering a) public liability for casualty and property damage on commonly owned property, and b) fire and extended protection naming all parties as their interest may appear. Each owner later has his own policies for public liability within his unit and fire insurance.

A refresher about condominiums

As H&H explained this new concept in December 1961, a condominium project "is a form of cooperative in which each owner shares ownership of the land, walls, and other common areas but is also sole owner of one particular residential unit." Each owner has a mortgage on his own unit and pays an individual tax bill. He can sell or refinance his unit at will.

Condominiums are legal in all states but involve fewer problems where state condominium laws are in effect. Such laws have been passed in Arizona, Arkansas, Hawaii, Kentucky, Louisiana, Oklahoma, South Carolina, and Virginia. Many more states will follow suit this year.



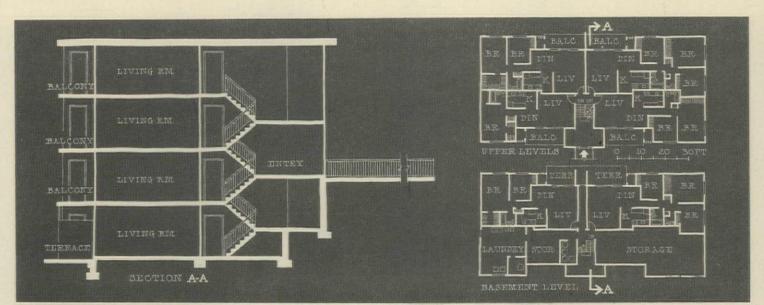
Split-entry planning converts a four-story building into a 11/2-flight walk-up

This ingenious design device hides nearly two floors of the building in the hillside, lets one stairwell service 14 apartments, and held construction costs to an average of \$8,000 per unit. The apartments are filling up fast at rentals from \$102.50 for efficiency units to \$165 for three-bedroom

units. All but 24 of the first 179 units are rented, and the builders plan a total of 308 units on the 13-acre site, a prime location across the District of Columbia line in Maryland.

The units were designed by Cohn, Haft, AIA & Associates, who also designed the

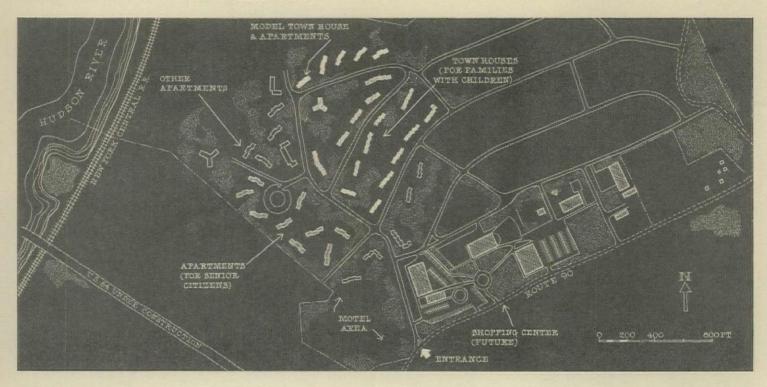
apartments shown on page 86, and used the same grillework design device to screen air conditioning units. The sponsors are Wagman Construction Co. and Colonial Investment Co., which figures on a 13% return on its apartment house investments in the Washington area.



SPLIT ENTRY into a four-story walk-up cuts stair-climbing to a maximum of 1½ flights. Bridge

to entry is at the highest grade level on a slope that drops 12'. Separate apartments (see plans)

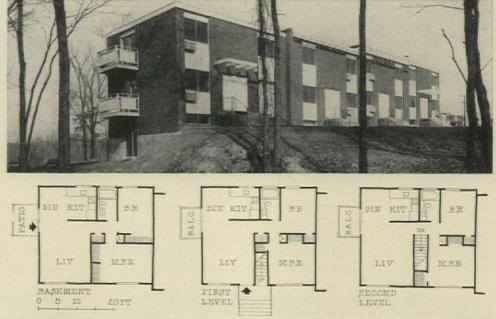
face opposite directions on top three floors; lower floor has apartments facing downhill only.



Apartments and townhouses combine to tap a broad market in a planned community

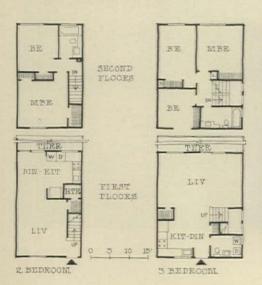
A shrewd analysis of location and market have made Hudson View Park a success. Despite its almost rural location in Beacon, N. Y.—45 miles upriver from New York City—the first 102 units built were 80% rented within six months, and a total of 900 units are planned. The market: 1) retirees from New York City and its northern suburbs, 2) employees of two big IBM plants in the area, and 3) renters and homeowners from the other side of the river (a soon-to-be-completed bridge will double the potential market).

Small apartments for single people and retirees, and larger apartments and town-houses for families with children are in separated sections of the project (see plan above). Rents range from \$52.50 for efficiencies to \$185 for three-bedroom townhouses. The builder—publicly owned General Builders Corp.—financed the project out of its own capital. Costs: \$10 per sq. ft. Return on capital: 12%.



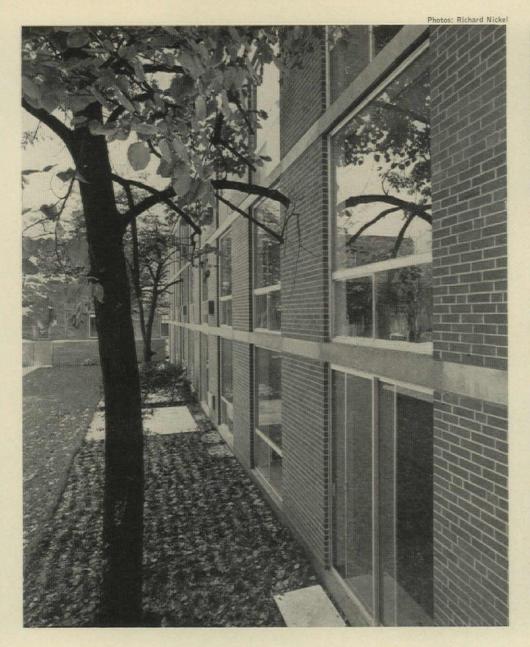
APARTMENTS for young marrieds are stacked three high on sloping sites. Lower apartments are

reached at the side or back. Units on upper levels have individual front entries.



TOWNHOUSES for families with children have two and three bedrooms, are set in staggered rows that

add interest and follow the slope of the land. All have terraces at the rear.





ON ENTRY SIDE, wrought-iron entry balcony helps establish old-town character of building. Trees were protected during construction.

ON GARDEN SIDE, (left and below) big glass walls open all rooms to the view. Living rooms of lower-level units have sliding glass doors.



A walled garden gives nostalgic charm to this small, in-town apartment

Each of the 12 units in the building faces the garden, a 100'x408' plot shaded by tall oaks. This special attraction, coupled with a good location and a thoughtful design (see below) account for the good rental record: The building was fully occupied only three months after completion, though the owners used only classified advertising, had an agent on the premises only on weekends. Rents—\$150 for upstairs units, \$160 for ground-floor units, all one-bedroom—are \$20 higher than the mortgagee originally anticipated because of the premium commanded by the location and design.

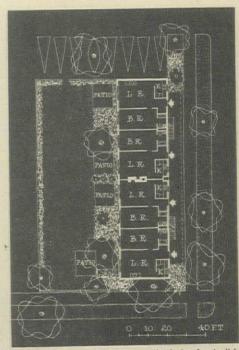
Located in Old Town, an old but self-rehabilitating, close-to-downtown section of Chicago, the building is oriented away from its surroundings, but designed in the character of the area. Limestone stringer courses and iron-grilled staircases define the three levels of the building, and echo the strong horizontal lines of the surrounding buildings.

The three-story height was largely determined by economics: Zoning would have permitted a ten-story building but much higher construction costs would have outweighed the larger rent roll.

Sponsors of the building are the architect—Crombie Taylor, AIA, now associate dean of architecture at the University of Southern California — and Morris H. Hirsch, alderman for Chicago's 48th ward and a city planner by training.

The building cost \$110,000, or \$12 per sq. ft. The architect achieved such low costs (for a downtown building) by using standard local building methods like reinforced slab floors and bearing-brick walls; specifying stock sizes for windows, railings, and room air conditioners; and by close co-ordination with Contractor Fred B. Allen Inc.

Estimated return on the \$55,000 invested capital is 7% to 8%, some of it tax-free depreciation; adequate, say the sponsors, in view of their capital build-up.



PLOT PLAN uses less than half of site for building. Parking, top, is hidden behind 5' brick wall.

In today's new apartments, TV, loud talk, and other sounds from the family next door are still one of the biggest causes of tenants' complaints. Here is what apartment designers and builders should know before they tackle . . .

The nagging problem of noise

Despite widely held opinions to the contrary, the problem is not how to design and build a good sound-reducing wall. Architects and engineers have known the answer to that one for years, and there is a wealth of technical material on the subject (see p. 101). The real problem, as experts like Acoustical Consultant William Ranger Farrell of Bolt, Beranek & Newman see it, is how to select a wall that will reduce a particular type and volume of sound to an acceptable level in a particular living area—and do it at a reasonable cost.

If the problem is to be solved, it must be faced in the early stages of apartment planning. Intelligent planning will cut the noise-reduction requirements of the walls—and thus reduce their cost. Poor planning will mean noisy apartments or unnecessarily expensive walls.

"The ultimate aim of sound control is not solely to make rooms soundproof but rather to create a living environment that is acoustically comfortable," says Consultant Farrell.

So, Farrell points out, the first step is to establish maximum acceptable noise levels for different areas in the apartment—bedrooms, living rooms, and public laundry rooms, for example. The second step is to analyze probable noises: Where do they originate? How loud are they? Are they high or low-pitched, continuous or intermittent? Will they occur during the day or at night when tenants are sleeping? And the third step is to analyze the relation of noise sources to acceptable noise levels in neighboring areas: How can noisy areas be put next to other noisy areas, quiet areas next to other quiet areas so that sound-control requirements—and hence the cost—of intervening walls can be as low as possible?

It is easier to understand noise control if you know the answers to two basic questions about sound:

- 1. How is sound measured? It is measured in decibels (db). Expressed in decibels, the range from a barely perceptible sound (almost oppressive silence) to the loudest noise people can stand (like a pneumatic jack hammer) is from 1 to 120. If a noise level drops 40 decibels, it sounds about one-sixteenth as loud; if it drops 10 decibels, it sounds about half as loud; and if it drops 3 decibels, most people can't tell the difference.
- 2. What makes a wall absorb sound? The heavier and limper the wall, the more sound it will block. Technicians call this its transmission loss. A thick wall made of lead, which is heavy and limp, would be an excellent sound barrier. A thin wall made of stiff light plastic would be a poor sound barrier.

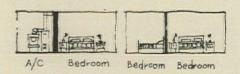
Seven variables affect how much sound-reduction a wall must do

The sound-reducing requirements of a wall bear directly on its cost. So the seven items, taken all together, can affect the cost of an apartment significantly. In theory, the worst combination of these factors could require a wall with a transmission loss of 83 decibels more than required by the best combination. In actual practice, the difference usually ranges from 10 to 40 decibels. Here are the seven in order of their importance:

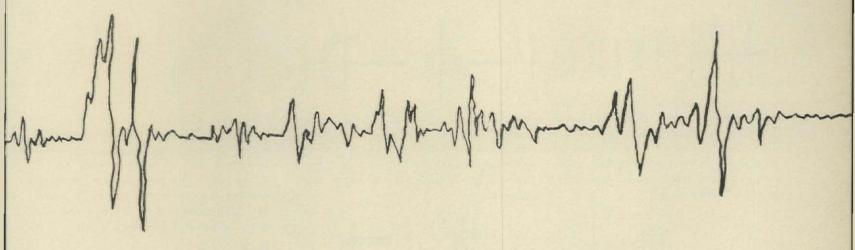


No background noise Background noise

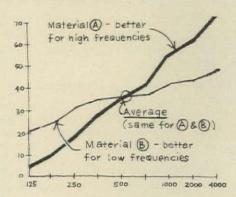
1. The masking effect of background noise. If the level of background noise is high, sounds from neighboring apartments will have to be loud to be heard over it. For example, an air-conditioned apartment on a busy city street will have far more background noise—from traffic and the hum of the air-conditioning—than a country apartment that is not air conditioned. So the walls in a city apartment need far less sound resistance than walls in a country apartment.



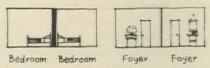
2. The loudness of the noise. The louder the noise, the heavier the common



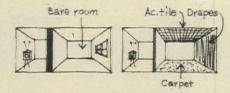
wall between apartments must be. A bedroom located next to a room containing air conditioning machinery obviously needs a far heavier wall than a bedroom located next to another bedroom.



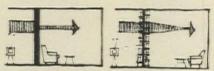
3. The frequency range of the noise. How much materials can reduce noise transmission varies at different frequencies. Some are more effective at high frequencies, some at low frequencies, and others in the middle range (by and large, it is easier to block out high frequency sounds than it is to block out low frequency sounds). For example, a wall could be adequate for reducing the transmission of human voices, but inadequate for blocking the thump of an air compressor.



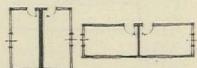
4. Acceptable noise levels for different kinds of rooms. People expect bedrooms to be quiet, living rooms not so quiet, kitchens a little noisier—and they are quite tolerant about foyers. So the sound reduction requirements for a wall between two bedrooms are higher than the requirements for a wall between two foyers.



5. The ratio of common-wall area to the sound absorbing surfaces in a room. The more carpet, acoustical tile, and heavy drapes a room contains, the lighter the common wall can be. Reason: In a hard room, noises reverberate, and in a soft room they are absorbed. But, when two soft rooms are next to each other, most of this effect is canceled out because people have to talk louder and turn the TV higher in soft rooms.



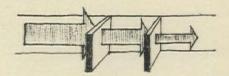
6. The probable distance between the noise and the listening area. The greater the distance, the less work the wall must do. If the noise (e.g., a TV set) and the listener (e.g., a person reading in the next apartment) are close to the wall, the wall will have to be heavier than if they are kept away from the wall. (For one way to solve this problem, see item 6, p. 100).



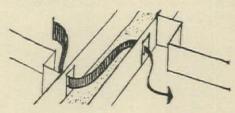
7. The ratio of common wall area to floor area. The higher this ratio the more sound the common wall will transmit. So when rooms in adjacent apartments have their narrow ends on the common wall, the wall can be lighter. But if the wall is proportionately large, it must be heavier.

The right floor plan can make sound control easier and cheaper

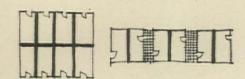
The principles are simple: Locate rooms as far from noise sources as possible, segregate or isolate noise sources, use space as a buffer between apartments, and avoid apartment-to-apartment paths for air-borne sounds. Here are eleven ways to apply the principles:



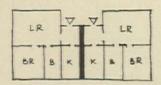
1. Use halls to isolate apartments. Two walls with an air space between them cut sound transmission about 50% more than a single wall twice as heavy as either one. And generally it is cheaper to build two lightweight walls than one heavy one. So halls can be used both to reduce wall costs and improve sound isolation.



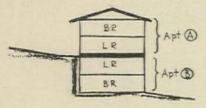
2. Stagger the doors of facing apartments on the same hall. Sound travels best in straight lines. Every time it must change direction some of it is absorbed, some of it is diffused. Staggered doors along a hall force sound to change direction several times and minimize apartment-to-apartment noise problems.



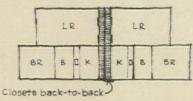
3. Plan in-line buildings rather than cubicle buildings. In a cubical plan each apartment may have up to three common walls that must act as sound barriers. In an in-line plan, with halls between every other apartment, each apartment will have only one common wall.



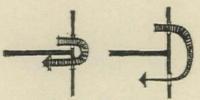
4. Use mirror plans on the horizontal plane. Generally this arrangement will place adjacent apartments so that quieter areas (bedrooms) are next to quieter areas, noisy areas (kitchens) are next to noisy areas. Sound-reduction requirements on both sides of the common walls will be equal, and the full effect of any extra control measures will benefit both apartments.



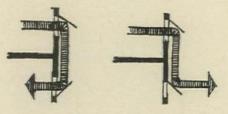
5. Use mirror plans on the vertical plane. In duplex apartments, this arrangement puts noisy areas close to each other (on the second and third floors) and separates quiet areas (on the first and fourth floors) by two full stories. Even though the living room in the lower unit is above its own bedrooms, most people will be more tolerant of noise their own families make than of noise made by another family.



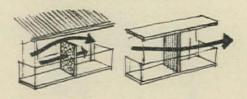
6. Use closets and bookcases to force furniture away from common walls. This will increase the distance between noise sources in one apartment and listening areas in the next one. But do not make bookcases too deep or tenants may load them with hifi sets, radios, and TV.



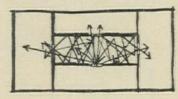
7. Place windows as far from party walls as possible. The closer the windows to each other, the more sound will pass from one apartment to the other. Simply separating windows will stop much of this sound.



8. See that all casement windows open the same way—either to the right or left. Open casements reflect sound along the side of a building. If the casements of adjoining apartments open to face each other, noise from one apartment is reflected into the other apartment. But if both casements open the same way, noise from each apartment is reflected away from the other one.



9. Separate balconies with solid masonry dividers. These walls are effective sound baffles—but only if they are not pierced for decorative reasons and are closed off at top and bottom. A balcony without a roof gains little from a divider—sound simply goes over the top.



10. Avoid small courtyards between apartments. Courtyards act like reverberation chambers. The smaller the court and the higher the building, the greater the reverberation. So courtyards should be wide, only one or two stories high, and, if possible, open on one side. An open-sided courtyard will be even better if the open side is wider than the closed side.





11. Avoid balconies or operating windows across an L. Otherwise sound will travel a straight line from apartment to apartment. If the building must be L-shaped, don't put balconies or operating windows on one arm of the L, or angle the balconies away from the wall and use extra-deep dividers between them.

But

... noise leaks and vibration can undo the best sound-control planning. Even a tiny opening in a wall will let through a surprising amount of sound.

Item: A 1"-square hole can cut the sound-blocking ability of a 100-sq. ft. wall from 50 db to 22 db (at a 1,000-cycle frequency). For someone standing near the hole, the wall would "disappear" acoustically.

Item: A crack just seven-thousandths of an inch wide along the top of an 8' x 12½' wall would have an area of over 1 sq. in.—and would let through as much sound as a 1"-square hole.

Item: An ordinary flush door cuts sound transmission by about 10 db. But with weatherstripping, its rating may be as high as 25 to 30 db.

So it is important to brief foremen and crews on the danger of leaks and the means of avoiding them. Pipes and ducts must be carefully sealed where they pass through common walls. Neither electrical outlets nor medicine cabinets should back up to each other. Visual inspection will not spot all leaks. Best way to pinpoint them is to run a vacuum cleaner (the noise source) on one side of a wall and pass a stethoscope along the other side.

Vibration is not sound. But if it is transmitted to the structure of a building, it creates sound. Potential sources of vibration are plumbing and equipment like dishwashers, garbage grinders, and airconditioner compressors. Pipes should be isolated from the structure and from vibrating equipment (with flexible connections). And equipment should be set on damping mounts or in damping enclosures it should also be as vibration-free and quiet as the budget allows).

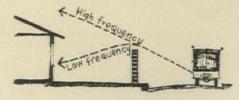
Some widely accepted sound-control theories are little more than myths

These myths have led to practices that don't reduce noise at all or, at best, reduce it only in specific and limited ways. Such practices are often expensive and, even worse, are often used instead of other methods that would do the job right and for less money. Six widely accepted myths:



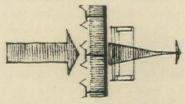
1. "Trees make good sound barriers."

The facts: A belt of trees 50' to 100' wide will cause an average drop in noise level of only 1 to 2½ db more than the distance alone would cause. Such a drop would be barely noticeable.



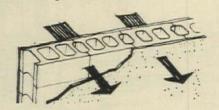
2. "A masonry wall at the property line keeps out street noise."

The facts: Masonry walls are rarely close enough to either the noise source or the listening point to do any good. Most street noises are low-frequency sounds which bend easily and so will pass right over a wall. If the masonry wall were closer to and slightly taller than the building, it might do a good job, but then it would be expensive and would block out light as well as sound. It makes more sense to put a low-cost visual barrier at the property line and use the rest of the money to put an acoustically better wall on the building.



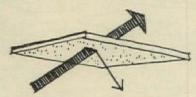
3. "Closets make good sound barriers."

The facts: Closets cut sound transmission little more than the wall they back up against because usually they have doors that are lightweight, louvered, and loose fitting. But when closets are back-to-back they do cut *apparent* sound transmission, because they keep both noise sources and listeners away from the walls. (See item 6 under floor plans, p. 100).



4. "A skim coat of plaster will seal up tiny sound leaks in a porous masonryblock wall."

The facts: Masonry blocks are rarely porous; they just look that way. The skim coat will increase the weight of the wall slightly. But since doubling the weight of the wall would reduce sound transmission by only 5 or 6 db, the effect of the lightweight skim coat would be negligible.



5. "Acoustical tile blocks sound transmission."

The facts: Acoustical tile is good at the job it is designed to do: prevent the reverberation of sound within a room. But it was never intended to be used as a sound barrier. Weight is the biggest item in cutting sound transmission, and acoustic tile is a lightweight material. The typical tile will cause a sound transmission drop of only about 3 db through a wall or ceiling.



6. "Acoustical paint can solve noise problems that crop up after a building is finished."

The facts: Acoustical paint does very little to control noise at any time. It adds almost nothing to the weight of the wall, so it has little effect on noise transmission. And it isn't porous enough to have much effect on reverberation. —Jonathan Aley

Want more information on noise control? Here is a list of sources

Books

Noise Reduction, L. L. Beranek, McGraw-Hill, New York City, 1960.

Acoustics, L. L. Beranek, McGraw-Hill, New York City, 1960.

Acoustics for the Architect, H. Burris-Meyer and L. Goodfriend, Reinhold, New York City, 1957.

Vibration and Shock Isolation, C. E. Crede, Wiley & Son, New York City, 1951.

Handbook of Noise Control, C. M. Harris (editor), McGraw-Hill, New York City, 1957.

Acoustics in Modern Building Practices, F. Ingerslev, Architectural Press, London, 1952.

Acoustical Designing in Architecture, V. O. Knudsen and C. M. Harris, John Wiley & Sons, New York City, 1950.

Less Noise, Better Hearing, H. J. Sabine, Celotex Corp., Chicago, 1950.

ASHRAE Guide: Fundamentals and Equipment (chapter 14), American Society of Heating, Refrigerating & Air-Conditioning Engineers, New York City, 1961.

Sound Absorption Coefficients of Architectural Acoustical Materials, Acoustical Materials Assn., New York City, 1962.

Articles from House & Home

"Noise—a Round Table Report on the Peaceful House," November 1962.

"Today's Good New Apartments are as Noise Free as Most Single-Family Houses," October 1960.

"Build in Some Peace and Quiet," October 1959.
"How to Control Noise in the House," April 1958.

Other articles

"Architectural Acoustics," R. H. Bolt and R. B. Newman; *Architectural Record*; April, June, September, November 1950.

"Design for Hearing" R. B. Newman and R. L. Geddes; *Progressive Architecture*; May 1959.

"The Problem of Acoustics in Apartment Building," R. H. Bolt and R. B. Newman; Architectural Forum; January 1950.

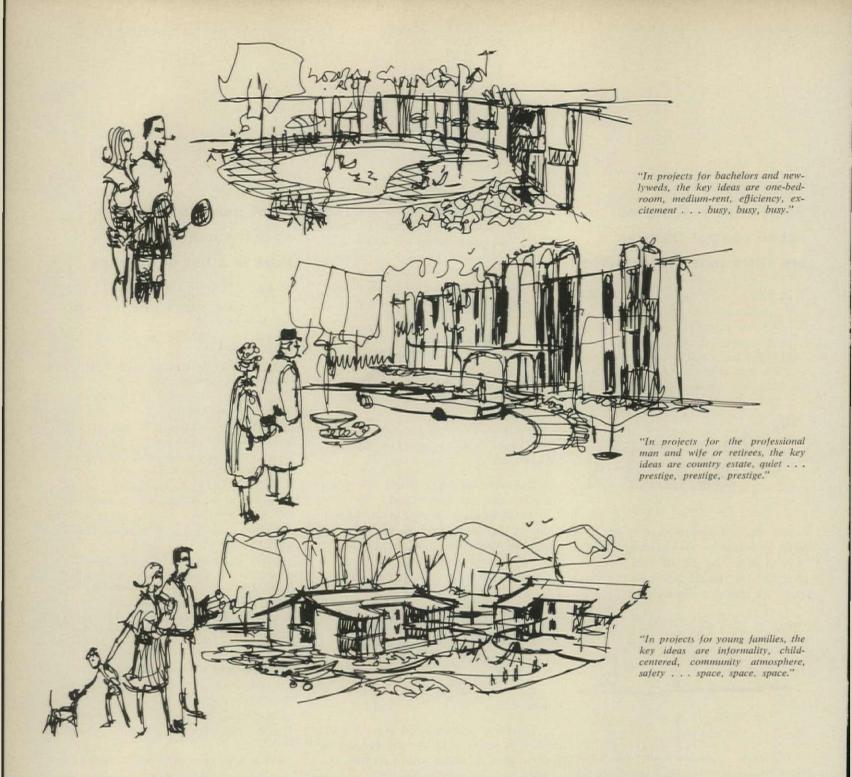
"Revised Criteria for Noise in Building," L.L. Beranek; Noise Control; January 1957.

"Acoustical Privacy: What is it and how can it be achieved economically," W. R. Farrell; Architectural Record; June 1959.

"Speaking of Sound Isolation," W. R. Farrell; Architectural & Engineering News; June 1962.

"Speech Privacy in Buildings," W. J. Cavanaugh et al.; Journal of the Acoustical Society of America; April 1962.

"Sound-Isolation, Ratings of the New ASTM Sound Transmission Class," T. D. Northwood; Journal of the Acoustical Society of America; April 1962.



"What tenants want and need is responsible design . . ."

Fresh thinking on the subleties of apartment design by an imaginative (and practical) young architect

"It's no problem to design a luxury apartment or a very-low-rent apartment—in one case you can afford to spend money, and in the other all you can do is squeeze in the minimums," says Architect Earl Swensson of Nashville.

"Apartments in the middle range are the toughest test of an architect's creativity. Here, he must design what the market wants and needs within a narrow framework that is different for each new project—a framework established by the kind of tenant the owner wants, by building costs and local building methods, by room sizes, by zoning, by the site. He must meet all these requirements—plus his own requirements of good design."

Swensson, a partner in Swensson & Kott, Architects Inc., has designed \$10 million worth of apartments in several states in the last two years. His work gets good marks from owners and lenders. Says Felix Treadway Jr., mortgage correspondent on four

of Swensson's projects: "All good apartments rent fast in Nashville, but his rent faster. And he knows how to design for economy." (Swensson's projects average \$10 to \$12 a sq. ft. or \$7,000 to \$10,000 a unit—and his newest school design has just been bid at \$8.67 a sq. ft. including air conditioning.) Says Manuel Schatten, client and agent on three projects: "We think we have the

best looking buildings in town, and we know they were economical."

Swensson, who recently spent two days with H&H editors while he was in New York, talks fast with a pen in his hand. Above and on the next pages are some of his views—illustrated with his own sketches—that may give you fresh perspective on apartment design.

Fresh thinking on studying a site

"It is not the site itself—but more often the land cost and the rentals an area can support—that dictate the type of apartments (luxury or low-cost, formal or informal) and number of units that must be designed into a project. For example:

"One site we studied was handsome, close-in land—though more than half of it was steeper than 15%. The cost of the land and the rent structure in the area dictated 150 units if the project was to be profitable. On this site, 50 units could be built economically on flat land; putting in 100 would involve the extra costs of building on steep land, and building 150 would have been economically impossible. The site was rejected. It would have made a fine high-rise site!"

. . . on different design for flat and sloping sites

"A flat site (less than 5% grade) is easiest and cheapest to build on, but dull. So you must create interest with the buildings and plantings and recreation area. Flat sites are often better for formal, luxury-type apartments where the building itself is monumental than for clusters of small buildings in a community type project.

"A sloping site (5% to 15% grade) can be exciting. Such terrain most often lends itself to a residential style—with smaller buildings designed to fit the site and take advantage of any view. Hillsides give you an opportunity to tuck apartments into the hill (make them two stories high on one side, three stories high on the other) which can cut construction cost per unit sharply. But 15% is maximum. It drops 7½, or a full story, from the front to the back of a typical 50′-deep building.

"A steep site (over 15% or 20%) is too steep to bother with unless there are special reasons—such as it's very cheap or you are in a hilly city without much choice."

. . . on different design for urban and suburban projects

"In the city, severe, sophisticated design is fine—it stands out from the chaos around it. The same design in the country would look stark, and soon be remodeled into a warehouse.

"In the city, where buildings are typically close to the street, small-scale detailing throwing deep shadows is important. On a suburban site where the building sits back from the road, strong simple lines are better."

. . . on the hazards of the too-small or too-far-out site

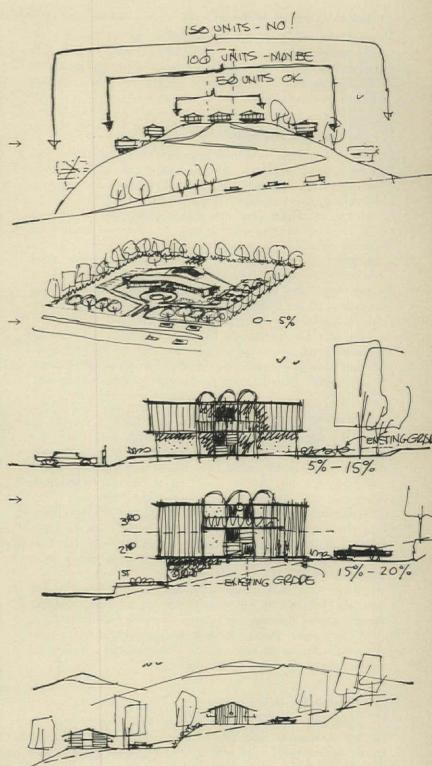
"If a site is too small for adequate parking space, a recreation area, and privacy between units then forget it—unless the neighborhood is top drawer and there is money in the budget for at least private outdoor patios and underground parking.

"The whole idea of suburban apartment projects grew out of the new expressways (permitting more travel to cheaper land in the same time), suburban shopping centers, new schools . . . and long weekends. People move to this kind of project for countryestate living—peace and quiet, swimming pools, tennis courts, open space. If the site does not offer all these things then forget it."

. . . and on siting and orienting buildings

"The most important rule is to place buildings on the site so that no one stares into anyone else's windows. This usually results in varying spaces between buildings that give a project interest, variety, and human scale.

"Air conditioning has made orientation of buildings to sun and breeze much less important than it used to be. So now you can orient buildings to the asset of the site—the view, the best trees, perhaps the recreation area."





continued

Fresh thinking on minimum space requirements . . . vs. people

"Square-foot minimums established by lenders or FHA are just that—minimums. To create a successful apartment, you have to give tenants what they need and want—a design should be tailored to the kind of people who are going to live there, not to a standard. For example:

... on planning bedrooms

"... the big problem is furniture placement. A 154-sq. ft. bedroom can be 11'x14', or 12'x13'—but the wider, squarer room makes furniture placement much easier because the space is much more flexible and the wider room feels less cramped.

"In apartment bedrooms, a big walk-in closet—with a minimum of 8' to 10' of hanging space at least 2'2" deep—is often better than the wall of closets popular in houses. It cuts down the number of doors in the room, leaving more usable wall space. And sometimes using a walk-in closet lets you develop a kind of master-suite where the closet becomes both a dressing area and passageway to the bath [see plan right]. There should be a separate guest entry to the bath or a second bath.

"The bedroom door should be in a corner—not in the middle of a wall where it hampers furniture arrangement. And—both for furniture arrangement and privacy—the bedroom windows should be in a corner. Running them floor-to-ceiling adds spaciousness."

. . . on planning bathrooms

". . . the key ideas are accessibility, zoning, and luxury. The bathroom should be placed so that it is accessible from the bedrooms by a route not visible from the living room. And—more obviously—it should be placed so that it can be reached from the living room without passing through the bedroom.

"Sometimes a bath can have two doors—one leading directly from the bedroom [see above] and one leading from the foyer. In this case, it makes sense to compartment the bath. The linen closet should be in the vanitory section, not the tub section where steam is a problem.

"Luxury in a bath means space (all you can give), luxury materials (we use very expensive tile in the tub area, wallpaper the rest), good lighting, big mirrors over big vanitories.

"A small point: Putting the bath on the corridor lets it serve as a noise buffer for the bedroom and makes possible a small panel to the corridor for cleaning the tub trap."

. . . on planning living rooms

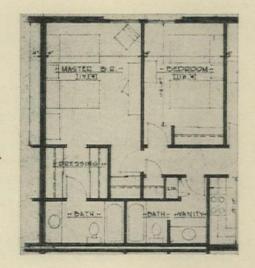
"... you must think beyond minimum space requirements and furniture placement, and worry about creating pleasant living space. Again, width is important. ... A square room permits more flexible furniture placement and more pleasant conversation areas—and feels much more spacious—than a narrower, longer room. Again, the door should be in the corner of the room with direct access to the entry door. And it should have a door to close it off from the kitchen, bedrooms, and foyers.

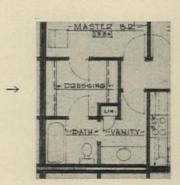
"You can create a luxurious look at low cost by paneling one wall. And it is more effective to panel one wall with an expensive wood like walnut than it is to panel four walls with a cheaper wood.

"In too many apartments, the living room is used as a hallway to other rooms. It is always much better—and usually possible with more care in design—to dead-end the living room."

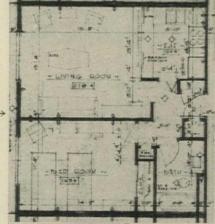
... on planning foyers

". . . the chief idea is not to create an impressive entry but to set up a traffic control center for the unit. With a well planned foyer, you can dead-end every room—and make living in the apartment much more pleasant. This is seldom a matter of added cost. It is usually a matter of more careful planning [see plan, far right]."

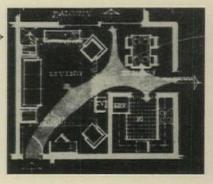


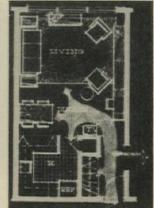












. . . on planning kitchens

". . . the chief needs are convenience, efficiency, and attractiveness.

"For convenience and efficiency you need to think of traffic circulation in three ways: 1) Shopping convenience. The kitchen should be near the entry, so you can put your bags down on the counter, feed them from there to the pantry closet or the refrigerator. 2) Cooking convenience. This means attention to the familiar range-refrigerator-sink work triangle. The kitchen should be dead-ended so there is no traffic in the way of the food-preparation activities. A double-bowl sink, a garbage disposer, a minimum 11 cu. ft. refrigerator are strong selling points. 3) Convenience to other rooms. A pass-through to the dining area has become almost standard—though, for privacy and control of noise and odors, both the pass-through and the door to the living-dining area should have operable doors.

"For attractiveness: use color, use some wood. Running cabinets to the ceiling gives extra storage space; but stopping them short of the ceiling makes a small kitchen seem more spacious."

"Idea: Drop the kitchen counter to 30" at the pass-throughs. Then tenants can use the same chairs to eat at the counter that they use at the dining table."

... on planning for flexibility

"Sometimes the client isn't sure of the right mix of different size apartments. You can hedge. For example, you can design a two-bedroom apartment so it can be converted at a very low cost into a one-bedroom unit and an efficiency. In one project we closed off the bedroom corridor, which became a walk-in closet for the new one-bedroom unit; and we punched a corridor door into the walk-in closet of the second bedroom and made it into a kitchen/entry foyer for the efficiency."

. . . on planning closet space

"... the more the merrier, and 17 to 20 linear feet is none too much for a one-bedroom apartment. Minimums: a guest closet at the entrance 2'2" deep and at least 3' wide (this is a good place to run doors to the ceiling and paint them striking colors for impact and decoration); a utility closet near the kitchen at least 1'6"x2' for the vacuum cleaner, ironing board, etc.; a general storage closet 3'x2'6" for card tables, chairs, extra bed (vital in efficiencies), and out-of-season clothes; 4' to 5' of clothes closet per person; and a linen closet.

"Sad but true: I don't know of a good way to design storage for baby carriages and bicycles.

"You need bulk storage space in the basement: a minimum of 48 cu. ft. per apartment. Wire cages are good enough."

. . . on planning laundry rooms

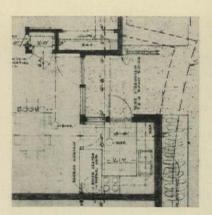
"Generally, the best place is under each unit. But you can also put a laundry-lounge area near the swimming pool or recreation area, so that women can talk or play bridge or watch television or sun bathe or watch the kids while the machines do their work.

"And if you have a lot of apartments per floor, try squeezing in a small laundry room—just big enough for a washer and drier—off the corridor on each floor.

. . . and on planning staircases

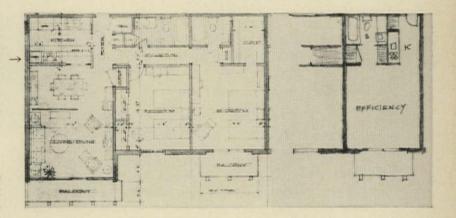
"In a building with a central lobby and corridors, the stairway offers real opportunity for design impact. And except for this kind of stair . . .

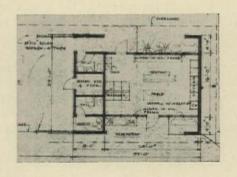
"Stairways should be outside the building line — always under roof, walled in or not depending on climate. An outside stair is cheaper because if you put the stairs inside you disrupt the regularity of the construction module and you lose valuable living space. Outside stairs also let you break up and add interesting architectural detail to what might otherwise be a long, monotonous wall."

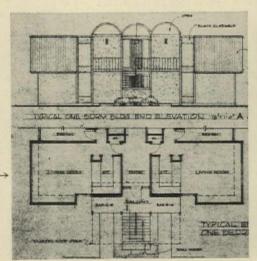


Photos: Shumate Photo Service











continued

Fresh thinking on planning the parking area

"You can put the cars in a strip right off the street, but this destroys the architectural impact of the building (passersby see only the tail end of cars) and creates a traffic hazard (drivers must back out into the traffic). A better solution is to set the parking space behind a planting strip, with an entrance and an exit. The planting strip and the parking area will both fit into a 50' setback. A still better solution is to put tenant parking at the sides of the building and a small visitor-parking area in front, but off to one side. An entry drive (with a fountain) gives design impact to visitors arriving and passersby.

"The best location for parking varies with type of project—that is, the market. Young unmarrieds like parking close to the apartment door; they like to look at their sports cars. In a country estate kind of project for older people, cars should be hidden.

"Right angle parking is best. With a diagonal layout someone always takes two spaces. If possible, allow 9'-width per car and plenty of driveway width to back out into.

"Everybody wants his own car right at his own door, but nobody wants his neighbors car nearby. Cars can be located up to (but no farther than) 150' from the nearest entrance to the building. People don't count the added distance they must walk from the building entrance to their apartment door. Two-bedroom units command the highest rents, so—all things being equal they should be closest to parking.

"On the ratio of parking spaces to apartments: I to 1 is minimum, 1.2 to 1 is the average now required by many suburban zoning boards, and 2 to 1 is not too much in many projects."

. . . on the design of the pool area

"Space for sun tanning is the most important part of the design. Who actually swims? There is nothing worse than 5 o'clock shadow on a pool.

"Specifically: remember that in the summer the sun is well south of west most of the day, but it sets north of west. And in figuring how to site the pool to avoid shadows, remember that pools are used at different times of the day in different kinds of projects: A pool in a project with lots of children is used heavily from early morning until four in the afternoon, but a pool in a one-bedroom project is used mostly from two o'clock on, and is always busy in the after-work hours.

"There are almost always divers; they need 25' of water, 8' deep. Beyond that point the pool needs to be only 3' to 4' deep.

"Neither the bachelors nor the oldsters want to be bothered by children (and vice versa). If your project is big enough, consider two separate swimming pools. In a project with a lot of children in the 1-to-6 age group, provide a big wading pool with lots of space around it—and watch safety precautions!

"And avoid the public-pool look!"

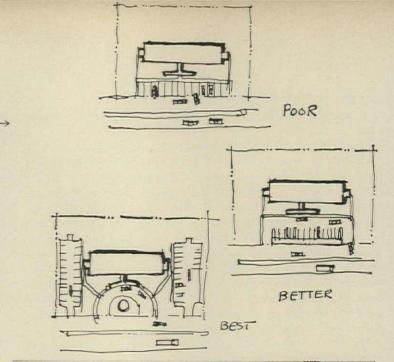
. . . on providing other recreational facilities

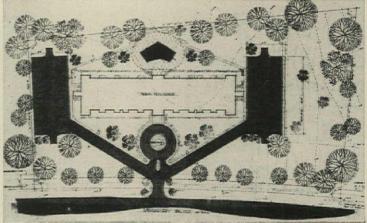
"The young-in-heart like the *idea* of tennis or badminton . . . children want a vacant lot and a basketball court . . . and everyone must have space for a barbecue grill on his balcony or patio."

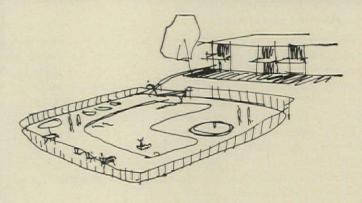
. . . on designing the front elevation

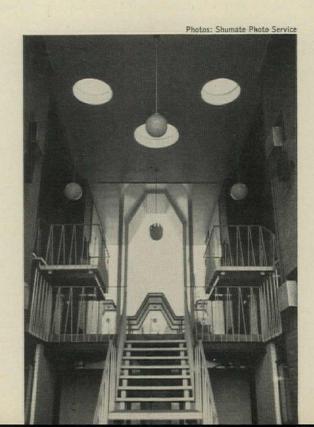
"The front entrance is the place to use exciting forms—arches or canopies or folded-plate roofs—and strong colors. Set off the entry with landscaping, with lighting, with a fountain, a circular drive. For the rest: the simpler, the cheaper and (usually) the better.

In houses, strong horizontal lines create a long, low look. But most apartments are long, low shapes to begin with, and strong vertical lines often offer a welcome (and decorative) break-up of the wall. And they can often give the building a sense of refinement."









. . . on window placement

"Windows should be lined up in strong vertical rows instead of—emphasizing horizontal groupings. This is an economical way to use windows and—again—emphasizes vertical lines. I like double-hung windows running floor to ceiling—except that second-story windows should stop 18" from the floor as a safety measure."

. . . on exterior lighting

"You can use on-the-wall lights directed up and down to accent vertical lines—and pull the eye up to the building. Lighting thrown up against the building sometimes makes it look like a funeral home, makes it look commercial."

. . . and on designing to satisfy the client's dream

"Many people who want to build an apartment come to the architect with a kind of dream—they have a picture in their minds of a building that exudes charm and refinement and tradition. They want a stage setting.

"It is the architect's responsibility to translate this stage setting into today's reality.

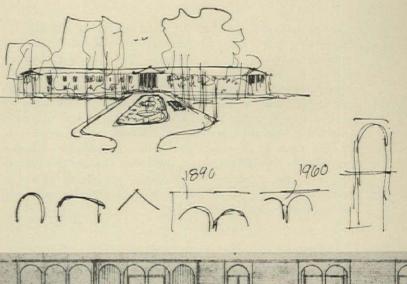
"In one of our projects [see below] I tried to create charm and refinement and a sense of tradition using contemporary ideas. For example, we used a long series of arches—we could have used vaults or folded plates—but arches are less of a cliche today. We ran the top of the arches close to the roof line—somehow this looks 1963 while a lower arch looks 1890—or maybe 90 A.D. We made the arches 4' wide—after looking at them 5' wide, 6' wide, and 8' wide. The narrow width gave the building a feeling of height—and the height gave the building a feeling of refinement.

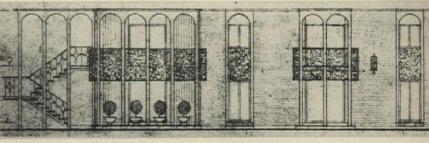
"How to handle the balconies of the upper floors? Balcony railings were strong horizontal lines that broke up the tallness of the arches. After many sketches, we decided on a wrought-iron grille set behind the columns.

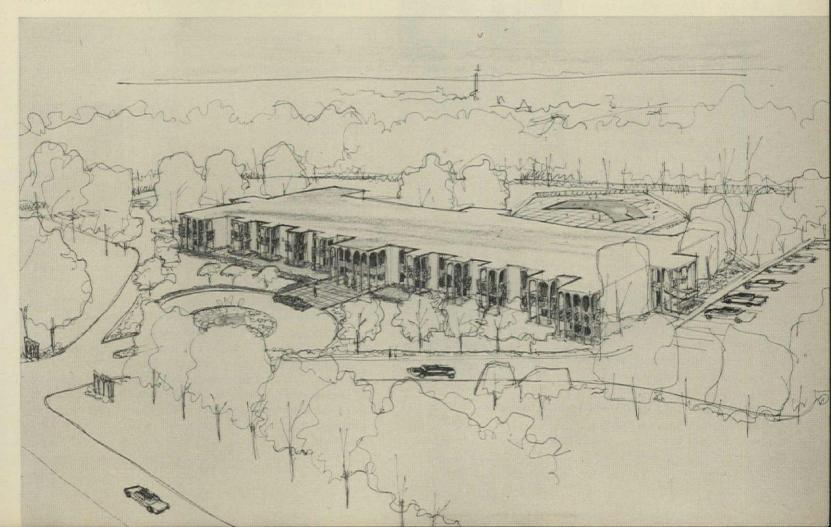
"All this created, I think, a kind of emotional functionalism—the decoration, the extra 5% of design that makes the difference between an apartment that rents well and one that does not.

"You don't have time to train clients or tenants in architecture. You must design so they appreciate at once what you are trying to do."









18 ideas for merchandising new apartments

As the rental boom tops out, successful apartment builders, like homebuilders before them, are learning new tricks of merchandising in an increasingly renter's market. Some of their ideas are right out of homebuilding's selling book: the furnished model apartment, the trained sales staff, post-sale selling to keep buyers or, in their case, renters - happy. And some of their ideas are new - and well worth attention not only by other apartment builders but also by homebuilders. Samples: strategies to woo and win goodwill of community leaders in advance, rifle-shot direct mail or regional magazine advertising. Out of the merchandising progams of dozens of successful apartments, House & Home's editors have picked some of the most workable, profitable, and borrowable ideas. For example:

1. Scaled floor plans help prospects arrange furniture

For prospects who wonder how their furniture will fit into a new apartment, Penn Towers in Philadelphia provides floor plans drawn to exact scale and large enough for the tenant or his decorator to measure in all pieces of furniture. Penn Towers also includes a same-scale ruler with each plan.

2. Ads in national magazines pinpoint a regional market

This month, Dworman Associates will advertise their 385-unit Mandalay Shores apartments, Clearwater, Fla., in the midwest editions of LIFE and Look magazines. The full-page ads will be directed at midwesterners who may be thinking of moving to Florida. At the same time, Dworman will buy newspaper ads in 15 midwest cities. Dworman decided on the regional campaign after finding that the bulk of families moving into West Florida were from a handful of midwestern states. The firm reached this conclusion by



analyzing guest registries in its model apartments and by checking which out-of-state newspapers had the largest circulation in Pinellas County. Cost of the advertising campaign: \$100,000.

3. Pay-as-you-go furnishings appeal to young marrieds

To minimize the cash outlay by new tenants, Newark, N.J.'s Colonnade Park offers to furnish the apartment with the buyer's choice of furniture and let him amortize the cost in equal payments added to the rental. At the end of the lease, the tenant owns the new furniture. Newlyweds, with little furniture of their own, are especially attracted to the idea. Rental Agent Ben Lafiosca says it is a "tremendous help" in getting tenants.

4. It pays to act fast when tenants complain

Management Specialist Robert Harrison of Los Angeles cautions owners never to stall over a tenant's complaint. "If it is legitimate,

take care of it fast. If it's not, and your're not going to do anything about it, tell him so and tell him why. If you don't, he'll be sore and you'll have made an enemy." And New York's Webb & Knapp says: "Get the service man up in minutes, if possible, even if the actual repair must be put off until later. Give the impression that you are taking immediate action on their complaint."

5. Big furniture dramatizes big rooms

Model-house decorators sometimes use small scale furniture to make rooms look larger. But Sutton Place apartments in Baltimore takes the opposite approach to show off an 181/2'x 111/2' bedroom (right). A kingsized (78" wide) bed, plus a desk and chair grouping, provides dramatic proof of the



generous dimensions and gives the room the look and feel of a luxurious suite.

6. How to get growing families to move up instead of out

To encourage tenants to move into bigger apartments, and to free faster-renting small units for childless couples or single tenants, Colonnade Park in Newark, N.J., offers a month's free rent to any family moving into a bigger suite after the birth of a baby. In three years, more than 35 families have taken advantage of the offer. For one family with twins, the management threw in a second month's free rent.

7. No view from your model apartment? You can make one

Sometimes the biggest appeal of an apartment is the panorama seen from the windows. Builder Marvin Gilman, in Baltimore, built his

model on the ground floor but uses a photomural of the nighttime city mounted at the edge of a simulated balcony (right) to create the illusion of overlooking Baltimore. A hidden fan provides "a gentle evening breeze" to add to the feeling of living high in the sky. Dworman Associates, in their Clear-



water, Fla., building, put their model on the ninth floor, instead of the first, so they could impress all prospective tenants with a view of the countryside not possible from the more conventional ground-floor location.

8. Furniture ad gets apartment builder low ad rate

New York newspapers (before their strike) carried full-page ads that, instead of touting Webb & Knapp's new 1,500-unit Lincoln Towers apartments, showed furniture offered by Macy's. The ads were part of an unusual promotional tie-in between the builders and the department store, which furnished seven Lincoln Towers model apartments. They included the Macy's logo and simply mentioned that the furniture "can be seen" at Lincoln Towers. As a result, the ad carried Macy's lower retail rate instead of the

HOUSE & HOME

national real estate ad rate. Webb & Knapp also listed the price of each piece of furniture in the Lincoln Towers brochure. Results? The builders were pleased because the promotion brought more than 25,00 visitors to their project. Macy's was also pleased: "We're very happy. Given the same set of circumstances — and the fine cooperation of Webb & Knapp—we would do it again."

9. Paint-chip folder helps prevent decorating problems

New tenants at Baltimore's Sutton Place apartments are handed a card of available paint choices (right), with true-color paint chips, and told that they and/or their decorator can "custom-style your own apartment." After picking out the



colors for each room, the tenant signs the card and returns it to the rental office, where it serves both as a check on the painter and as a protection against misunderstandings about what colors were wanted. The painting contractor liked the idea so well he paid for the folders.

10. One model building houses a variety of units

General Builders' new project in Beacon, N.Y., includes both for-rent apartments and for-sale townhouses. Instead of setting up models in the separate areas of the 240-acre tract, General concentrated its sales and rental effort in a single building (right) that included three different sizes of apartments and two



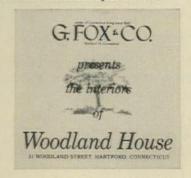
townhouses. The exhibit building was sited at the far end of the project so visitors would drive through (and be impressed by) the wooded rolling land. When the project is sold out and rented up, the building will become an extra rental unit.

11. Homeowning rental prospects get sales help

To would-be tenants who have a house they must sell, Renting Agent Richard Block of Imperial Square Apartments, Hempstead, N.Y., offers the services of a 70-broker Long Island network. Block takes no commission from the homeowner if one of the brokers sells the house nor from the real estate agent for providing the listing.

12. Department store shows builder's model apartments

Two months before the model apartments were ready at Woodland House in Hartford, Conn., sample layouts were set up in the furniture department of G. Fox & Co., one of New England's largest department stores. Rental agents were permitted to staff the display, keeping their pitch in a low key. In return, the store plans to station furniture specialists in the model



apartments in the project when they are ready. The store also prepared a brochure (above) on the furnishings in the models and mailed it out to a selected top-drawer group of their customers. The builder will play up furnishings in his ads; the store will talk about the apartments in its separate campaign.

13. Direct-mail is beamed at personnel departments

As soon as the promotional brochures were ready for Woodland House, they were mailed to personnel managers of 100 top corporations in the area. Follow-up phone calls by the rental agent, Tumblebrook Realty, brought some 30 invitations to come out and make full presentations to the personnel departments. The same brochures were also direct-mailed to families in top bracket neighborhoods. No action was called for in the initial letter but a follow-up mailing to the same families when the apartments are ready will suggest a visit or inquiry.

14. Free breakfast is served in social center

The heart of The Shores apartments at Corona del Mar, Calif. is the swimming pool and clubhouse (right). There, every morning, all tenants can have a free continental breakfast, courtesy of the management. This service helps tenants (many of whom are new to Southern



California) to get acquainted and promotes a one-big-happy-family feeling so important in resort-area living.

15. Model apartment is reopened for a second run

Because the furnished model apartment is almost standard in Los Angeles, and vital to successful renting. Builder Don Freeburg reopens and furnishes a model every time the vacancies in his 95-unit project reach 10%.

16. Scale models give prospects a bird's-eye view

Even the best of renderings or floor plans fall short of illustrating the appeal of some buildings and locations. Builder J. George Wright had a bird's-eye view scale model of the buildings and site of his Villa d'Azur apartments at Torrance, Calif., made by Model-Maker Jack Eddington. The model was used both as a guide to develop the ocean-front property to best advantage and as a visual sales tool in the lobby of the sales office. Wright gives the model credit for helping sell 32 of his 87 expensive (\$23,950 up) cooperative apartments.

17. Built-in-advance model catches the renting peak

Norfolk's Community Builders did not expect to complete their first building by Labor Day—the peak of the renting season in most southern cities. So they duplicated a two-bedroom apartment in a house (right) on the project site. Located at a prominent corner for high



visibility, the model was landscaped, fenced, and spotlighted at night. Because they had a model ready by Labor Day, the builders filled their apartments as they were completed and avoided the problem of empty new apartments with their "skeleton-at-the-feast" look.

18. Private closing offices put reticent renters at ease

Dworman Associates (building in six U.S. cities in 1963) always provides private closing offices to get financial information from prospective tenants. Vice President Larry August explains: "People don't like to give confidential economic data in a public area. We even decorated an office as a den to create a feeling of comfort and ease while signing the leases."



Part II of a eight-part series

Upheaval in the marketplace

Housing, mired in high-level doldrums, faces twin challenges of too much investment money and new competition nibbling at its customers. The upshot: a churning, risky market

An analysis written in collaboration with Economist Miles L. Colean

"I worry every time I take a ride on a new apartment building," says Thomas Schira of Cleveland's Park View Federal S&L. "A lot depends on their location. The older ones, the three-story walkups will bug out."

"Every big complainer I've seen had only his own mistakes to blame," says Vice President Thomas C. Shaw of Shaw, Brichler & Coleman, St. Louis realty brokers. "Too many apartments here never should have been built."

"I don't want to be exposed with too many houses [in the wake of the Presidential anti-bias edict]," says Builder Herman Sarkowsky of Tacoma, "so I am not going to build ahead of sales in 1963."

These views, culled from a fresh sampling among industry leaders in 12 cities by House & Home editors and correspondents, typify the hopes, worries and problems of housing professionals in the new year. For housing in 1963 is indeed a churned up market. Opinion and rumor outrun fact. The facts themselves are often obscure. So alertness and imagination may win but boldness has more than the normal chance of coming a cropper. It is a market where total figures mean little, where the local situation is the compelling fact — but where accurate knowledge of local markets is often hard to come by. Above all, 1963's housing market is overlain with the emotional influence of the anti-bias order.

For the last few months, perhaps a year, both housing and the overall U.S. economy have been moving chiefly sidewise. In postwar years, it has been rare for the two to perform in tandem. But, as Mortgage Banker Dale Thompson says, underlying influences are changing. Who could have foreseen, even two years ago, that 1963 would bring:

- Ample supplies of mortgage money pressing for investment outlets.
- S&Ls given important new powers to make apartment loans.
- Serious worry (some of it in high quarters) about overbuilding and over financing of income property.
- Builders scrambling for specialized markets (e.g. renewal, housing for the aged, nursing homes, offices) to keep volume up.

Such a market in upheaval imposes on builders and mortgage lenders more burden of analysis, more risk of misjudgment than at any time since World War II. On the next five pages: a closeup look at housing's many-sided markets — and their prospects.

The one-family house market: slipping and sluggish

To put it mildly, the last three years have been dull for home-building. Construction of new, private, non-farm, single-family homes has sagged 21% from its 1959 peak of 1,211,700. The drop was abrupt and the recovery has been minimal. Starts sagged to 972,300 in 1960 and to 946,400 in 1961. Last year they reached only 960,000.

There is not much chance that this year will be any better for one-family homes. Ahead—perhaps by 1965—one-family starts should recover to the 1-million mark, and keep rising. But today across the U. S. sales are generally sluggish. Items:

In Denver, sales of new homes are virtually at a standstill and the second largest builder in town, Hutchinson Homes (600 units in 1962), has cut prices slightly and may trim even more.

The 11-county southern California area had a record housing year in 1962: 160,000 starts (11% of the private non-farm U. S. total) but one half of it was rental (vs. only 44% in 1961).

Phoenix experienced a slight drop in one-family starts last year, and stiffening competition has produced sellathons, price cutting on close-outs, and one builder even included furniture at cost.

In Kansas City, builders talk of sagging sales, narrowing profit margins and bargain-hunting buyers who demand and sometimes get price cuts or more extras. "Until 2½ years ago," says one builder, "we thought we had to make 10% to 12% profit to stay alive. Now builders are glad to get 5%."

Population trends: no lift for housing yet

The annual rate of new-family formation has crept back from its 1958 trough. But it will be the mid-sixties before this controversial yardstick of housing demand has picked up long enough to produce the next population explosion of children—which should indeed touch off a huge new demand for housing.

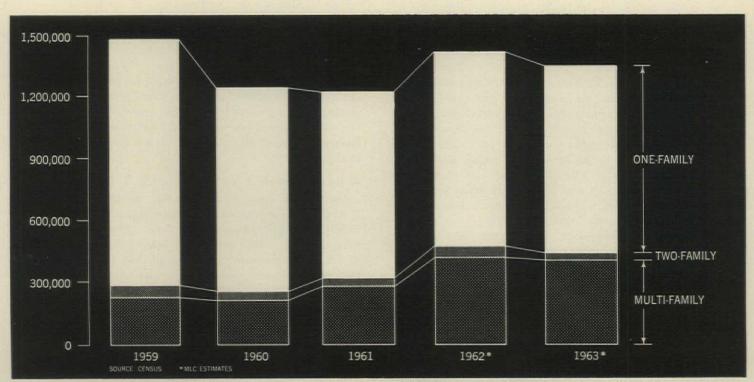
Meanwhile, the age mix of U. S. population is working against demand for one-family homes. Age groups are the best yardsticks we have for breaking the housing market into its components—e.g. bachelors, couples, and widows who need and want different kinds of accommodation. The big market for one-family homes is the 25- to 44-year old group. It grew only 4.7% between 1955 and 1960, and it will shrink 0.6% between 1960 and 1965 (see graph, p. 112) despite a 6.6% increase expected in the total population.

The trading-up process—No. 2 source of demand for one-family homes—has been hindered by the rising costs of feeding, clothing, and educating larger families and by the unhappy combination of stabilizing or declining value of existing homes and the still-rising cost of building new ones. To state it another way, more and more homeowners feel locked into their existing homes now that inflation no longer guarantees them a profit if they sell.

The rising foreclosure rate for the last two years has also dampened the one-family house market, especially in cities like Miami and parts of west Texas which have experienced hundreds of vacant abandoned homes.

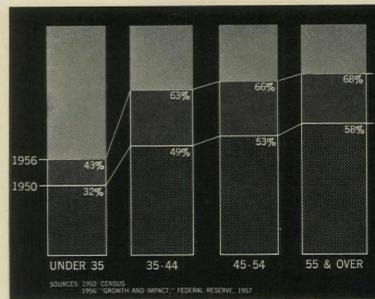
None of these underlying influences will give housing much of a lift by changing for the better this year.

Another hobble is the hard-to-measure impact of the Presidential order on equal opportunity in housing. Its immediate effect is to dissuade an unknown and unknowable number of potential buyers from immediate decisions to buy and to produce a corresponding slowdown in builder decisions to option land and (more importantly) to build anything ahead of actual sales. As one Baltimore builder says: "Integrated housing just isn't accepted in Baltimore suburbs, so I can't take a chance with a big FHA project." He is cutting his plans from 300 to 150 homes.



HOUSING STARTS should reach 1,350,000 units this year for private nonfarm units, a drop of 65,000 units (41/2%) from their 1962 level. One-family homes already off 20% from their 1959 crest, will probably fall another

40,000 units (4%) to 920,000 lowest since 1946. Multi-family starts are expected to dip a slight 2% to 400,000 units, which is still a remarkably high level, almost twice as high as production during 1960.



HOMEOWNERSHIP grows more common as people grow older. Latest available figures (through 1956) show dramatic gains among the group (35-44 years old) which constitutes the big market for one-family homes. Among households whose head is 55 or older, homeownership gained 10% (from 58% to 68%) but analysts figure chances are fairly slim that the ratio will go much higher in years ahead. Households under 35 lean toward renting.

Mobile homes: are they stealing markets?

Homebuilders who have fretted more and more over this question in the recent profit-pinched years have new reason to worry. Mobile homes shipped from factory to dealers soared 25% last year to 113,000 units. That is almost as many dwelling units (mobile homes are largely immobile, in fact, because their owners rarely move them) as the home manufacturing industry builds. If you include mobile homes in the universe of housing starts (the government doesn't), they would account for about 7½% of housing. And they have hovered close to that mark or higher for the last seven years.

Mobile homes, produced by 226 plants and marketed through some 6,500 retail dealers, have most of the advantages of factory production but few of the disadvantages of local erection (e.g. codes, realty taxes, and zoning plus archaic distribution systems, labor practices) that boost the cost-to-consumers of more traditional forms of housing. Yet at least a few banks and s&Ls are offering mortgage loans up to 25 years on mobile homes. Since 1955, FhA has been willing to insure loans on trailer parks. (It has actually insured only nine loans in the seven years. They cover 2,107 trailer spaces, for a total of only \$3.1 million. But half of this volume came last year.)

Today, the land problems of mobile-home developers are easing as more and more cities are willing to zone land in residential areas for mobile-home parks. Pushing for acceptance among thought-leaders, the Mobile Homes Manufacturers' Assn. buys space in magazines aimed at editors to insist that trailer parks today are a handsome community asset. In California, more senior citizens live in mobile homes than any other kind of housing.

FHA's shrinking share of the market

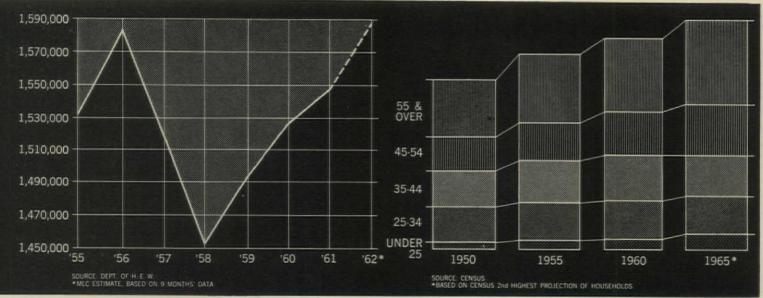
While trailers gain, the Federal Housing Administration—depression-born insurance agency that spawned both the merchant builder and the national mortgage market—continues to slip toward disuse. In 1958, FHA accounted for 26% of private nonfarm housing starts. By last year, its share had slipped to 18.9% (va accounted for another 8%). This upheaval looks even more striking if you consider also that FHA does two-thirds of its business in the moderate-priced-house field (\$12,000 to \$14,000), according to its own statistical chief, Alan Thornton. Both above and below this belt, FHA's share of new housing falls away rapidly to almost zero. Another startling flip-flop: 75% of FHA apartments are now high-rise; only 25% are walkups. That is a complete reversal from the situation from 1947 to 1952 when 78% of the FHA apartments were walkups.

The causes, of course, are well known. FHA procedure is a cumbrous and time-consuming ritual which gets more complex year by year. And conventional mortgage loans, since 1958, have been moving strongly toward more competitive loan-to-value ratios. FHA's decline forces borrowers to depend more on local sources of financing, often at higher rates and too often involving second mortgages.

A view of the next few years

For the run a little longer than just this year, housing's hesitation looms as a temporary thing. Market pressures will rise rapidly as family formation increases, as family incomes continue to swell (in 1961 non-farm families had a median income of \$5,924, up 26% from 1955) and as older homes are scrapped. Disruption of house production because of the federal anti-bias edict seems likely to be short-lived in most parts of the nation, largely because the effective Negro demand for new homes is small enough so it is unlikely to produce any abrupt change in suburban (or urban) residential patterns. And with broader choice, the non-white population itself will add to the ranks of potential buyers.

Even so, it seems unlikely that the next wave of house building —perhaps starting in five or six years—will repeat the sprawl of detached houses that was the trademark of the postwar housing



MARRIAGES, the key ingredient of that controversial but basic underpinning of housing demand, household formation—hit a trough in 1958, but are bounding back strongly as the crop of World War II babies grow up, gets through college, and begins raising families of its own. This year, HOUSE & HOME estimates, marriages will total 1,587,000—a mark higher than anything in the last seven years.

AGE DISTRIBUTION of U.S. households shows the big homebuying group (35-44 years old) will actually shrink from 1960 to 1965 while the big rental market group (under 25 years) will increase substantially (from 2,550,000 to 3,635,000). The 25-34 year-old bracket is also part of the big one-family house market, and it will shrink slightly from 1960 to 1965. These figures are reliable. All these people are now living.

boom. Building costs—and even more so, land costs—are too high. And the first postwar housing surge has covered much of the easy-commuting distances with subdivisions. The trend toward

more compact developments, dominated by variations on row houses, is already clearly discernible. Satellite cities, too, are coming into vogue—notably in the fast growth areas of the West.

The six-year-old apartment boom: is it topping out?

Last year apartment starts soared 40% from a year earlier to a record 410,000 units. Rental property thus accounted for 29% of private non-farm housing starts—compared to a mere 12% five years ago.

Not only are apartments booming. So are most other kinds of income-producing property (e.g., motels, hotels, shopping centers, office buildings, eateries, and drinkeries).

But lately the great uneasiness has arisen: Will the new spree of apartment building turn into a binge and lead to a hangover? You hear worried talk about the possibility from many a banker these days, from not a few economists, and even from a few builders. The apprehension is shared by the Federal Reserve Board which, fearful that the entire real-estate credit structure may be weakening, has quietly begun digging into the problem. The dilemma of the mortgage lender is particularly crucial. For the first time in more than a decade, he is under pressure to invest a surfeit of money; but if there is serious overbuilding it is he rather than the builder who must pick up the pieces and live with the mess. Yet mark these words of caution by Economist James C. Downs of Chicago: "Mortgage agencies always make the biggest loans on the most generous terms just when they shouldn't make them. Why? Competition, not logic, rules finance. With a dawning surplus of income property, we are creating income property faster than ever in our history. As a result, we see declining profits, higher vacancy rates-symptoms of an apparently invisible surplus."

Few should be more aware of this than the lately burned

syndicate investors, many of whom are finding that promoters are unable to deliver the 10% return they promised (see News).

Statistics on vacancies shed an equivocal light on such apprehensions: Rental vacancies as measured by Census declined slightly last year (from 7.7% to 7.3% of all rental units and from 6.9% to 6.6% of rental units in metropolitan areas). Vacancies in FHA-financed apartments hovered around 5.5%, but this does not include vacancies in buildings taken over by FHA (and the agency's portfolio of foreclosed rental property is growing). Vacancies in professionally managed apartments, as compiled by the Institute of Real Estate Management, average just under one half the FHA rate. But this does not include buildings in operation for less than one year.

None of these estimates penetrate the main cause for uneasiness: the impact of more than 100,000 units soon to come on the market, many of them probably financed on what may prove to be over-optimistic estimates of income.

A concentrated market

The national outlook is complicated by the heavy concentration of rental construction in a handful of cities. Nearly 36% of apartments go up in New York and Los Angeles*. And the top five rental cities (including also Chicago, San Francisco, and Washington) account for 52% of the total market. The top 16 cities account for 72% of rental housing.

^{*}Based on 1961 permits for private structures for five-or-more families.

UPHEAVAL IN THE MARKETPLACE continued

In many of the key cities, signs of softening demand are clearly visible. In New York City, where apartments account for nearly 20% of the U.S. total, a new zoning ordinance (see News) lets builders crowd the land less and so trims prospective income for many an apartment-site. Before the new code became effective late in 1961, builders filed plans for some 150,000 rental units—a three-year supply. So many of these are under construction or just completed that rent-controlled New York has a temporary glut of new (mostly luxury) apartments. To fill them up, operators offer three or sometimes four months free rent. Last year, New York builders filed plans for only 6,751 rental units. If you consider the U.S. rental market minus the New York bulge, both the boom and the signs of overbuilding shrink somewhat.

Yet the worries are there. In the Los Angeles metropolitan area (Los Angeles and Orange counties), 61% of last year's record 110,000 starts were apartments (vs. 55% in 1961, 51% in 1960, and 48% in 1959). In Los Angeles County alone, multiple dwellings apparently accounted for 67% of last year's starts. Few analysts think this level of rental boom can be sustained. "We have got a serious vacancy problem now—I would say about 10% in the metropolitan area—and it's been getting steadily worse since 1959," says Vice President Robert Harrison of Beaumont Co. "I have seen some very good newer buildings in places like Gardena and El Segundo with vacancies from 15% to 18%. We are seeing a lot of rent cutting in Orange County. Two-bedroom units supposed to rent for \$175 a month to make a building pay are going at \$135 to \$145 just to get them filled up. But at those prices the owners have trouble paying off the loan."

In sixth-ranking Denver, rents are dropping—\$5 a month is typical—in the wake of a rental binge that saw apartments account for 49% of the area's starts in 1961. Poor statistics led many an otherwise astute lender astray. Figures gathered by the Denver Board of Realtors showed that vacancy rates, which had ranged from 1.5% to 4% in recent years, climbed to 8% last spring. But when Western Federal Savings & Loan made its own survey, it found 18% vacancies, mostly in outlying areas. "The more dense the population, the lower the vacancy rate," reports Edward Lana, senior appraiser for Western Federal. Lenders have now clamped down and one savings-and-loan man figures current vacancies at about 15%. A few developments have gone under financially. One new 200-unit building in the suburbs is in receivership. Cherry Creek Towers (see News) still has a 30% vacancy in its 104 units 18 months after completion.

In 14th-ranking Cleveland, a FHA official predicts: "We are not far from being overbuilt in medium-income and luxury apartments." Concessions like one month's free rent are on the rise but the bulk of vacancies are concentrated in close-to-downtown Negro sections and areas in racial transition or in line for it.

In the San Francisco Bay area, a month's free rent is common on the east side of the bay (but not in San Francisco itself).

Only in fifth-ranking Washington, D. C., where rental housing climbed from 52% of starts in 1961 to 67% last year (in the metropolitan area), are vacancies remaining so low that most analysts predict the boom will continue unabated. FHA's vacancy rate in Washington is only 1.5%, fourth lowest in its programs. Only Burlington, Vt.; Providence, R. I.; and San Juan, Puerto Rico, have lower FHA vacancy rates

Concessions to lure investors?

One reason rent concessions are popular with apartment sponsors, so some analysts contend, is that they are chiefly interested

in filling their building with tenants, then selling it to an unwary investor. "They date the lease Jan. 1 and show \$200-a-month rental," says Los Angeles' Robert Harrison. "They let the tenant live there until March before collecting rent. When the lease is up the tenant, who doesn't want to pay \$200, usually moves out. The builder figures he has a year to dump the building." In such cases, adds Past NAHB President Thomas P. Coogan, "investors, not apartment sponsors, are gambling."

Perils of paper-thin equity

One of the Fed's main concerns is how much vacancy today's new apartments can withstand before sponsors default on their mortgages. It is a pertinent question, since much—if not most—of the current rental boom is financed on thin equities and spurred by the promise of fast tax write-off. "We see many examples today of builders and architects getting together," reports Harrison. "They find an angel to put up the money for the land. Then they take their plan, get a loan. With the proceeds, they pay off the angel and build. The architect takes a piece of the property instead of a fee and the builder leaves his profit in. So they wind up with a building which cost them not a cent of their own cash."

Another new trick builders use to minimize their investment is generous financing terms by appliance makers (some of whom are unhappy about it). Say a builder is installing \$600-per-unit worth of refrigerator, stove, and dishwasher. He pays one-third down. The manufacturer carries him two to five years for the balance. Meanwhile, the builder is collecting rent and accumulating a cash flow based on the borrowed money.

Some lenders now lean against the thin-equity trend by requiring apartment builders to achieve, say, 75% occupancy before they will close the permanent loan. Often the deal calls for a bigger mortgage when the sponsor reaches 90% occupancy. Mortgage Banker Lon Worth Crow of Miami, for instance, says he will go only to a 66% apartment loan without requiring pre-leasing.

Future for the rental boom?

On balance, the apartment building boom seems to be at its peak now. But the chances are 1963 will see almost as many new rental units started as last year. If there is any serious drop in apartment building, it is not likely to occur before next year. Any glut of vacant apartments should be short-lived. For one thing, much of the visible oversupply is in fast growing areas of the West. For another, for all its recent drama, today's apartment boom is still relatively puny compared to the last great wave of apartment building in the 1920s. Notes a recent survey by the Federal Reserve Bank of Philadelphia: "From the 1920 low to the 1927 peak, 1.3 million apartment units were begun. Since 1956, when the present boom got underway, only 1.2 million units have been started. Today, however, the total population is almost twice as large as it was in the 1920s, and 70% of the population lives in urban areas compared to 50% then." Moreover, the boom of the 1920s was overstimulated by mortgage bond houses which financed buildings as an adjunct to producing securities. By comparison, today's financing at its fanciest is conservative. In the 1920s, the boom continued several years despite a declining rate of family formation. Today, we are at the start of an upsurge in family formation. And a big part of it is World War II babies now swelling the ranks of the age group from 20 to 24, which is a prime market for apartments. Rising land prices, the rising number of one-person households, and continuing urbanization will also strengthen the future demand for co-ops, rentals and condominiums.

Lures of specialized housing markets: untapped small demand

It is characteristic of building cycles that, as normal markets wear thin, builders reach for novel types of activity and novel financing methods to maintain volume. Often these days, a new, federally-subsidized program offers a special lure. For instance:

- 1. Housing for the elderly, the glamor girl of special markets, now has special programs in four agencies, the Farmers Home Administration, Federal Housing Administration, Hhfa, and Pha. All are beamed at a big, politically powerful, and supposedly supplicant group of the population. In total these operations accounted for about 16,000 starts during 1962. For the entrepreneur-builder (as contrasted with the contract builder), only one Fha operation (Sec. 231) provides any real opportunity; it produced 7,500 starts last year. Thus, housing for the elderly bulks small in the national picture; it has more significance in Florida and the Southwest. But these areas may encounter the most problems over the anti-bias order, so the programs may lose some of their luster.
- 2. Middle-income housing. The Federal Housing Administration offers a number of alluring formulas for low- and middle-income housing and housing for families displaced by public improvements, including one [Sec. 221 (d) (3)] which offers 100% financing for up to 40 years at 3½% interest. These programs, however, are so complicated as to type of ownership, type of occupancy, and procedural mysteries as to discourage all but the hardiest. Those willing and knowledgeable enough to find their way through the administrative forms, may, like those who have plucked success from the nettles of urban renewal, find these programs a source of hard-won profit. These programs accounted for about 25,000 starts last year.
- **3.** Rural housing. The Farmers Home Administration offers direct 4% loans for 33 years covering the entire construction cost of houses built on the borrower's land. This may be a nonfarm plot in a rural area (any unincorporated area or any community of no more than 2,500 population). Some builders and prefabricators are finding this a small bonanza, to which the supposed restriction of credit to needy applicants offers no obstacle. A builder in Lubbock, Tex., for example, advertises ranch houses priced at \$16,500 for which the Farmers Home Administration financing is available. Moreover, since the lot must be owned by the borrower, the anti-bias order is not considered to be applicable to the builder, who apparently may discriminate among potential customers as he pleases. Last year, the FHA made some \$46.3 million of such loans. An even bigger supply of Treasury money is available this year.
- **4.** Nursing homes, financed under Fha Sec. 232, provided structures accommodating about 6,000 beds during 1962 and absorbed about \$27.5 million of mortgage funds, or the equivalent in dollar volume of about 2,000 average-sized, Fha-insured, single-family house loans. Not much more than this may be expected for 1963.

Taken together, these special government programs, for all their toll in administrative cost and effort, promise only a minor diversion. They have small potential for taking up any slack in total residential activity. And they may themselves suffer some setback in the months just ahead. The lesson to be learned from this experience should be that, while government can easily in-

terfere with and create distractions from normal residential activity, only in such instances as the original FHA and the Federal Home Loan Bank System has it made a significant contribution to the enlargement of markets.

Vacation homes: a rainbow on the horizon

This specialized market offers a better prospect, notably because more and more families can afford a vacation or weekend house as a retreat from the rising density of the city. Several analysts call the vacation-house market California's biggest untapped housing market-and one of vast potential. Figures on how much vacation housing is built now in a year are only educated estimates, usually ranging from 75,000 units (NAHB) up to 100,000 units. Financing depends heavily on conventional mortgages but more and more lenders are willing to make them, particularly because of the high income and good credit standing of the typical borrower. In a few cases, the Farmers Home Administration has financed a vacation house. FHA and VA will underwrite only housing intended for year-round use, but FHA has recently recognized that new expressways have expanded commuting distance from some metropolitan areas to include their onetime resort fringes.

One glamor area of two and three years ago—the shell house—is fading. Among the causes: over-expansion of producing organizations, overselling, high-cost financing, a high rate of defaults, and a dwindling public enthusiasm for obligatory sweat equity.

Diversification: non-housing markets beckon

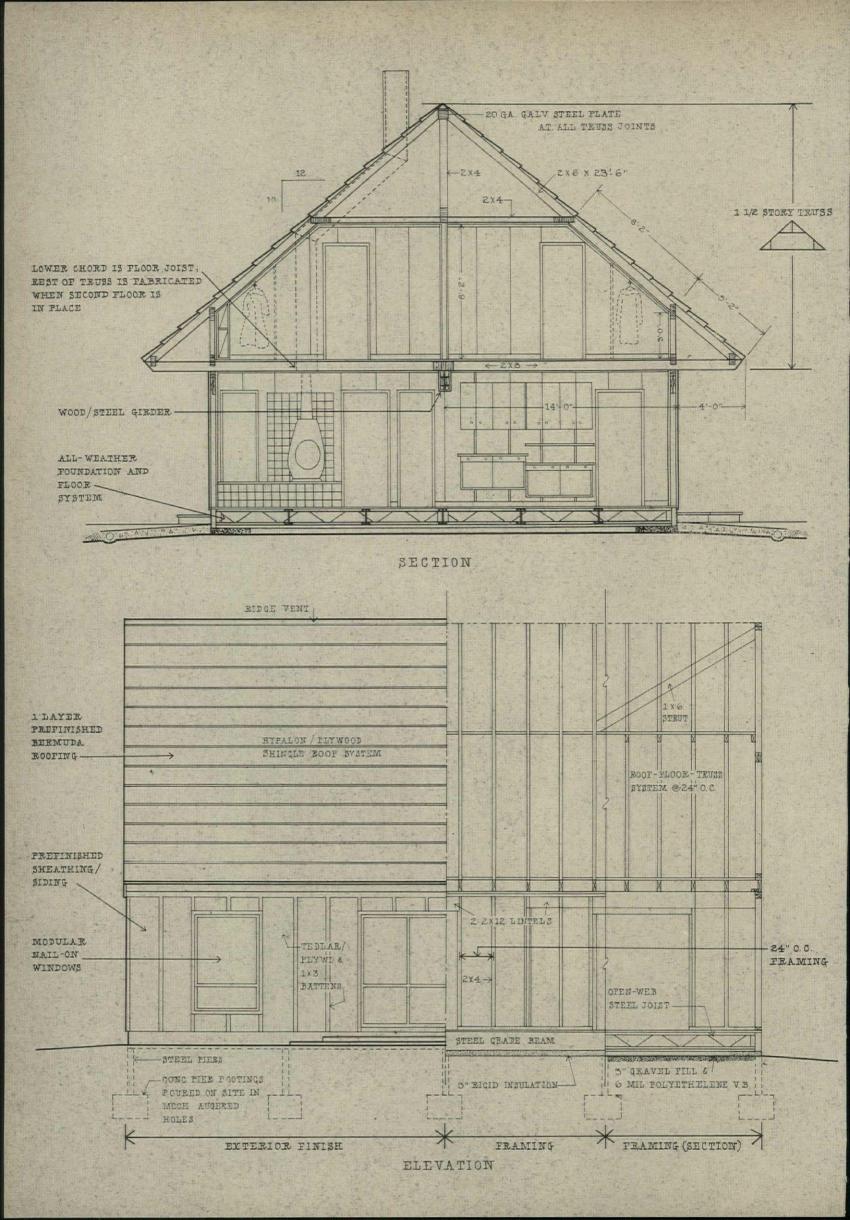
More and more profit-hungry homebuilders are turning to non-housing light-construction markets to maintain their volume: motels, small offices, gasoline stations, neighborhood shopping centers. Nationally, none of these markets is in line for expansion this year, but local opportunities abound. Fischer & Frichtel, St. Louis builders, have built a seminary, a church addition, and a parochial school. Joseph Eichler of San Francisco and Joseph Meyerhoff & Sons of Baltimore are doing shopping centers. Charles K. Cheezem of St. Petersburg is involved in commercial and industrial work.

All this spells more competition for everybody. And it is not confined to building. Many realty brokers who formerly specialized in residential deals are moving into commercial property or management, land development, appraising, or counseling, says NAREB.

A year of adjustment

The building industry must telescope into calendar 1963 adjustments not only in the type of building and the volume of activity, but also in deep-seated social prejudices. This is a lot to confront an industry in a period in which the overall economy promises to lend it only mild support.

At least, housing will not find itself short of credit for either interim or long-term financing at terms which on the whole will be slightly more favorable than last year's. Moreover, it can count on rapidly expanding demand in the years just ahead. For the longer run, housing could soon achieve long-sustained prosperity if it can meet its own internal problems of cost and market judgment and if its customers can be brought to accept the idea of a market open to all on equal terms.



Ed Mervis



RESEARCH HOUSE has prefinished board-and-batten sheathing-siding, new Bermuda roof system of prefinished plywood sections.

NAHB's fifth research house is its best yet. It is a thoroughly practical and broadly useful study of two of homebuilding's biggest problems: building in winter, and cutting down finishing costs. It is an . . .

All-weather house that can be built right now

NAHB President W. Evans (Bucky) Buchanan, who built the house in his Colony North subdivision in Rockville, Md., insisted that it be designed to use products and systems that builders could use today. He held out against experiments that would benefit chiefly researchers in labs.

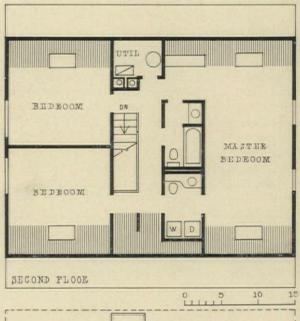
As a result, the only thing radical about this house is that it can be built in the dead of winter on almost any site. This is not to say it is a conventional house, for the designers (the staff of NAHB's research and technology division) made imaginative use of brand-new materials and devised new systems for using standard materials.

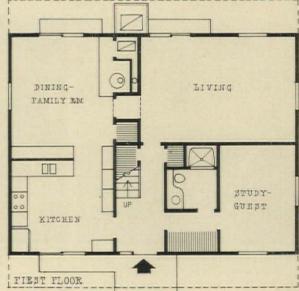
For example, three new (but commercially practical) ideas make possible year-round building: 1) a new steel-framed foundation that can be built in frozen ground by four men in less than half a day, 2) sheathing-siding prefinished with a material so tough it carries a 15-year guarantee, and 3) a new prefinished roof that can be placed by four men in less than six hours. (For details see following four pages.)

Significantly, the house was built under the Building Officials Conference of America model code (Sec. 108.4 of the BOCA Code, 1960 edition, gives code sanction for the house) and was insured by FHA (under its experimental housing program, Sec. 233 of the 1961 Housing Act.) NAHB's four earlier research houses were all "blue-sky" projects that did not fit even experimental sections of model codes. Builder Buchanan credits Rockville town officials "for their great cooperation in helping the project through code bodies and planning boards."

Because some of the materials used are so new, and because the construction was unfamiliar, on-site construction took extra time. So real costs on the house are not known. But one allimportant cost was nailed down: The all-weather foundationfloor system can be built for less than \$1.50 a sq. ft. (Some other systems involve costs ranging to more than \$3 a sq. ft.)

SECTIONS show (top) how the big 11/2-story truss rests over bearing walls. Bottom chord supports second floor, truss is assembled on it. Steel foundation (left) is pier-supported at 15 points. Bar joists carry first floor.





FLOOR PLAN of the center-hall, 11/2-story house is a spacious 1,900 sq ft. Bedroom closets are in eave space. Bedrooms need no cross ventilation because house is air conditioned.

A steel-wood slab and a prefinished shell make winter building practical

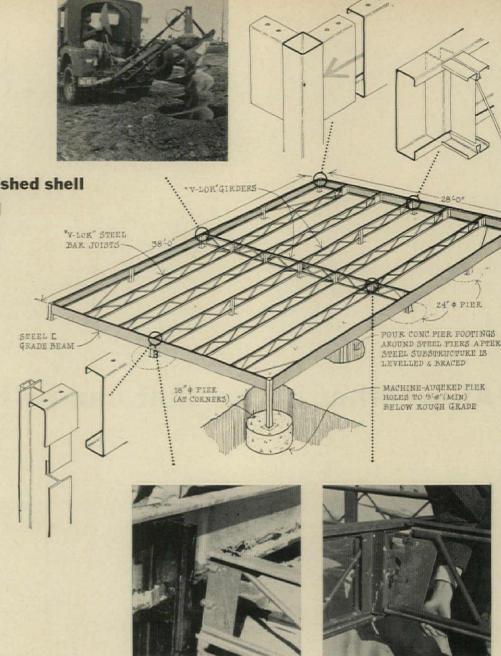
Far and away the most significant feature of the house is the floor and foundation system. It is, in effect, a slab, which can be built, according to current estimates, for less than \$1.50 per sq. ft. in any climate. And according to Bill Stacey, NAHB's project manager on the house, its cost will drop considerably when all the steel components are in production.

The bar joists and laminated floor boards used are already on the market. U.S. Steel (which developed the floor system) and NAHB have plans to test the system in almost 100 areas this year. If all works out well, the steel C-channels and posts will be on the market late this year.

In building the foundation, the only concession to weather was that the top soil under the house was scraped off before frost. The pier holes could be augered out at any time, but it is more costly to scrape away topsoil needed elsewhere for land-scapings if it is frozen. Pier holes are sunk below the frost level so the pad of concrete can set in 45F to 50F soil.

When the wood slab is finished, it is used as a platform for framing and sheathing (with Tedlar-covered plywood) the tilt-up walls. Tedlar is a virtually inert polyvinyl fluoride film. U.S. Plywood is guaranteeing this finish on their siding-sheathing products for 15 years.

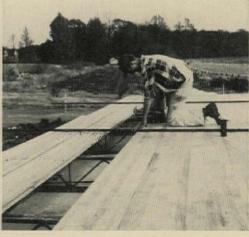
The roofing, shown opposite, was made for the research house by Dupont.



Steel floor frame—made up of interlocked and bolted posts, C-beams, and bar joists and girders—is assembled and suspended over augered holes. Frame is blocked up to exact level before concrete is poured in augered holes, which extend below frost line (3'8" minimum). Even in dead of winter, the auger will cut through frost, and warmer earth below prevents concrete from freezing.



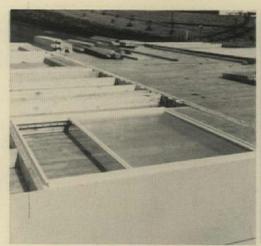


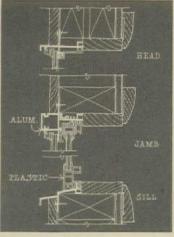


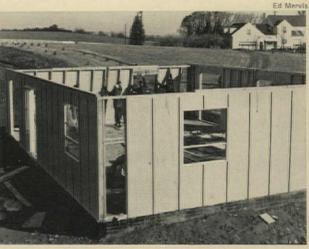
Floor system is completed by spreading a vapor barrier under the finished steel floor frame, and placing foamed-polystyrene perimeter insulation over that (photo left), tucking glass-fiber batt into C-beams (center) and tarring and backfilling the outside steel face halfway up the C-beam. Then (right) 1" x 12" laminated oak flooring is set in an all-weather epoxy bead on each bar joist and held with

one masonry nail per joist per board. Plumbers' clamps (long pipes on the floor) pull the boards up tight for nailing and glue set. The glue prevents the board from clattering on the joists under footfalls. Epoxy is a two-part adhesive that comes in one squeeze tube with both parts lightly sealed from each other. Epoxy is mixed simply by squeezing the tube. Four-man crew can install foundation and floor in half a day.

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Tilt-up frame walls are assembled on the wood slab from precut, palletized lumber. All lintels over openings in side bearing walls are doubled 2x12s with 3/8" plywood spacers between. Nail-on aluminum and plastic windows (detail, center) are then fixed in openings. There is no through conduction in this window section, and windows are modular—jamb studs are 48" center-to-center. Then the Tedlar-coated

plywood siding is fastened to studs on 24" centers, and battens are blind-nailed to cover stud-nailing (the batten blind nail is pointed on both ends; it is set in the batten and then the batten is driven home with a mallet). Result: no nails mar the exterior finish. Note, in photo right where crew is tilting up the last wall, that the siding has been walked on during construction, but that there is no damage to the finish.



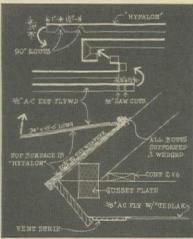


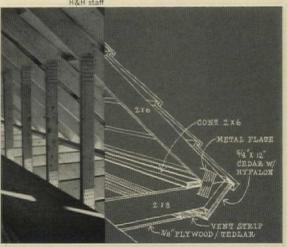


Second floor serves as truss jig. When first floor bearing walls and wood-steel beam (see p. 121) are up, the second floor joists, are placed. These become the lower 2x8 chord of the story-and-a-half truss. Then 1"x12" laminated oak floor boards are installed and a jig for the upper members of the truss is laid out at one end of the floor. The 2x6 and 2x4 members of the rest of the truss are fabricated on the

spot with metal plates and nails (photo left). Each truss is built on top of the last. At the other end of the floor, a gable-end jig (center) is marked out, and gable ends are fabricated with a siding-sheathing of smooth cedar shingles laminated to backer boards. Trusses are tilted into place (right) and fastened to bottom chords with metal plates. Kneewall 2x4s (see below) are placed after trusses are up.







Roofing takes four men only six hours. The big 10' long plywood Bermuda shingle, above and center, is prefinished roofing and sheathing combined in one. Work starts at the eave line, where toe of first shingle, prenailed to a starting strip (bottom detail in center), is nailed to the top truss chords. The shingle is then folded 180° back over the starting strip, against the truss. The toe of the second shingle

is set in to the turned-up-rear lip of the first (see detail)—and the process is repeated. Edges and ends of the big shingles are sealed with a pressure-sensitive Hypalon tape.

The shingles are prefinished with Hypalon, a synthetic rubber film 10 mils thick. Weather resistance is excellent: Approximate erosion rate is only 1/10 of a mil per year.

Inside the house, everything is designed to cut installation and finishing time

Item: The plastic bath components and the prefinished kitchen cabinet system (shown on this page) are both easy to install, both factory-prefinished.

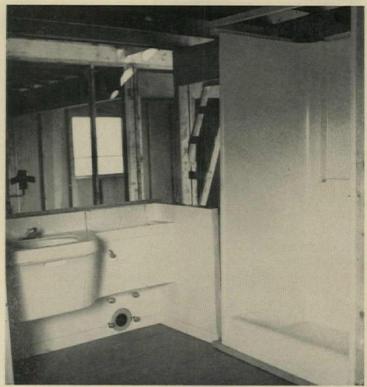
Item: The plumbing waste and vent lines are ABS plastic, and the hot- and cold-water supply are high-temperature vinyl. The pipe was cut to length quickly with a regular copper-pipe cutter, and all connections were made with solvent welds. The only metal pipe used: the gas line.

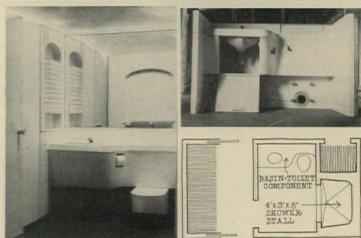
Item: Two separate furnaces and two central air conditioners—one each upstairs and downstairs—were used for zoned heating and cooling. Part of the extra cost of two units is offset by eliminating most ductwork. Studies will be made to see if the rest of the extra cost is justified by lower operating costs and/or increased comfort.

Item: Every wall in the house is prefinished: gypsum board prefinished with vinyl, prefinished plywood, reinforced plastic. Floors in all bath areas are covered with an epoxy-bonded tile overlayment.

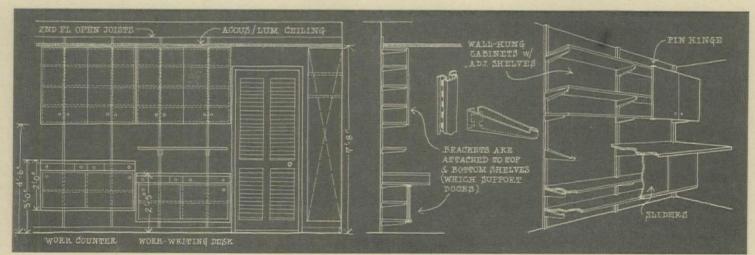
Item: The house has more luminous ceiling area than it does drywall ceiling area (panels are used in hallways, the family room, and dining room as well as in kitchen and baths). This eliminates most taping and painting. These special ceilings are simply hung in place on aluminum tees.

The electric wiring, shown opposite, is quickly surface-mounted after the rest of the house is finished.





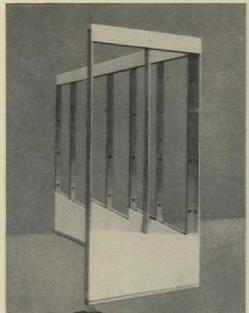
Molded plastic bathroom components, formed of glass-fiber-reinforced polyester, are used to cut finishing time. At top is the wain-scot-high, basin-toilet component—an experimental unit that supports a wall-hung toilet (see photo of model, lower left) and encloses the toilet tank in a molded pocket. Space below the basin is a laundry hamper. The one-piece shower stall is already on the market.

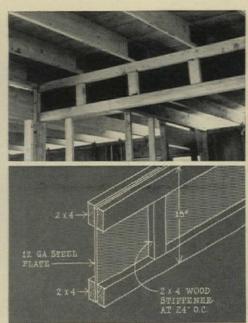


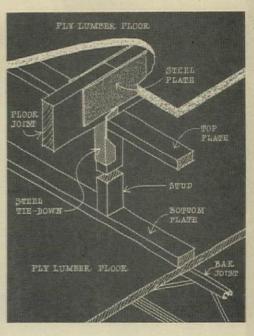
Wall-hung kitchen cabinets are made of shelves on movable brackets. To install, metal strips are nailed to the wall; then the shelves and brackets are locked into the strips. Wall cabinet doors are pin-

hinged, attached to top and bottom shelves. Base cabinet doors are sliders, drop into tracks on shelf fronts. Counter is tile, edge-bonded and glued to backer board with epoxy adhesive.

Gus Frank



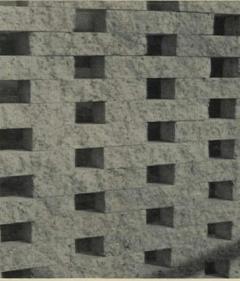


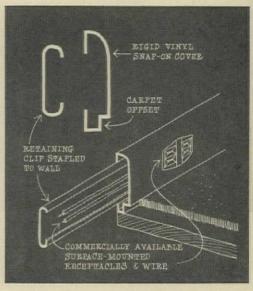


Steel is used in interior framing—as studs (left), in the composite beam (center) which supports the mid-point of second floor joists over the opening between the kitchen and family room, and in framing connectors. The cutaway photo above shows how drywall is glued—in the factory—to 26-gauge galvanized studs in non-loadbearing walls. Nails are used only at top and bottom, can be covered by mold-

ings. The wood-steel beam (center) is 14' long, cost only \$14 in material, \$3.50 in labor. It weighs 178 lbs., has carried 22,680 lbs.—3.2 times design load—before it started crushing at the supports. Continuous 2x4 flanges and 2x4 stiffeners are nailed to 14-gauge steel sheet with hardened masonry nails. Detail (right) shows how metal connectors are used to tie bearing wall into second-floor joists.







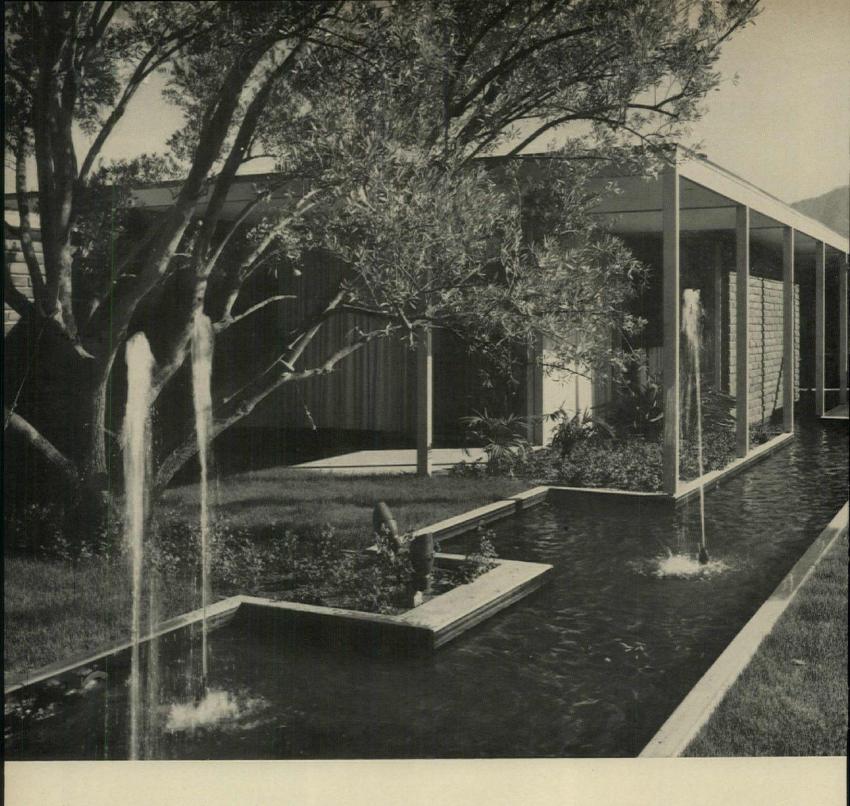
Three other new ideas that save time: 1) The non-warping, dimensionally stable door (left) can be installed in 20 minutes—it comes prehung, primed, and weatherstripped. Steel faced, and insulated with foam, the door needs no storm sash or screen, and adjacent window sash (part of prebuilt unit) provides ventilation. 2) Perforated outdoor privacy screens (center) and solid garage curtain wall panels

are prefabricated in 4'x4' sections of split block masonry bonded with an epoxy-based adhesive. 3) Wiring baseboard and retaining clip (right) are vinyl, can be installed using only a hand saw, mitre box, staple gun and base plug cutout. Estimated cost of baseboard, receptacles every 10', wire, and switches in the house is 50¢ per foot. The system can be installed after the walls are finished.

These people and manufacturers contributed to the research house

The Board of Trustees of the NAHB Research Institute, Robert Schmitt, chairman; NAHB's Ralph Johnson, John King, Bill Stacey, Bruce Fast, and their research lab staffers, Hugh Angleton, James Coleville, Delos Snodgross; Bucky Buchanan, president of NAHB and W. Evans Buchanan Co.; his executive vice president, Nathan Siegel; his construction superintendent, David Griffin; Ernest Thompson of the Marbon Chemical Div. of Borg Warner; Fred Gottschalk of Potlatch Forest Industries; Robert Montgomery of U.S. Steel; Walter Scheiber, city manager of Rockville, Md., and John Gray, director of public works in Rockville. Participating manufacturers include American-

Standard, B.F. Goodrich Chemical, Caradco, Douglas Fir Plywood Assn., Dow Chemical, DuPont, Emerson Electric, Fiberesin, General Electric, Georgia-Pacific, H-Brace, Johnson Plastic, Kentile, Kewanee, Macomber, Manhattan-Raybestos, Mannesmann-Easton Plastic Products, Marbon Chemical Div. of Borg Warner, Metalbestos Div. of William Wallace, National Concrete Masonry Assn., NuTone, Owens-Corning Fiberglas, Plasticon, Potlatch Forest Industries, Rheem Manufacturing, Schlage Lock, Stanley Works, Strawberry Bank Craftsmen, Tile Council of America, Timber Engineering, U. S. Gypsum, and U. S. Steel.



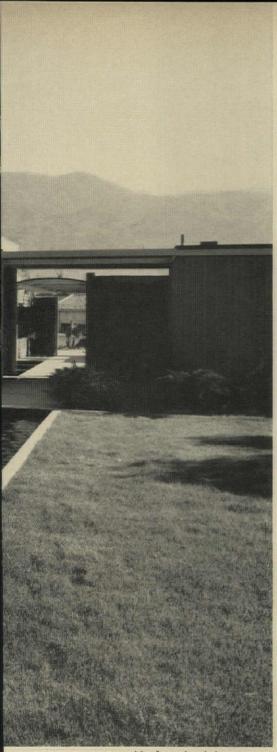
AIA award winner: a sprawling oasis in the desert

This \$157,000 custom house in La Quinta, Calif. (21 miles southeast of Palm Springs) capitalizes on its site in three ways: 1) It gets a maximum of indoor-outdoor living (and privacy) out of a relatively small (½ acre), odd-shaped lot; 2) it takes full advantage of a spectacular view—a golf course immediately to the east and a range of mountains beyond; and 3) while its low, sprawling silhouette and brick walls echo the desert setting, its pools and lush landscaping provide a welcome contrast with the sere surroundings of the desert.

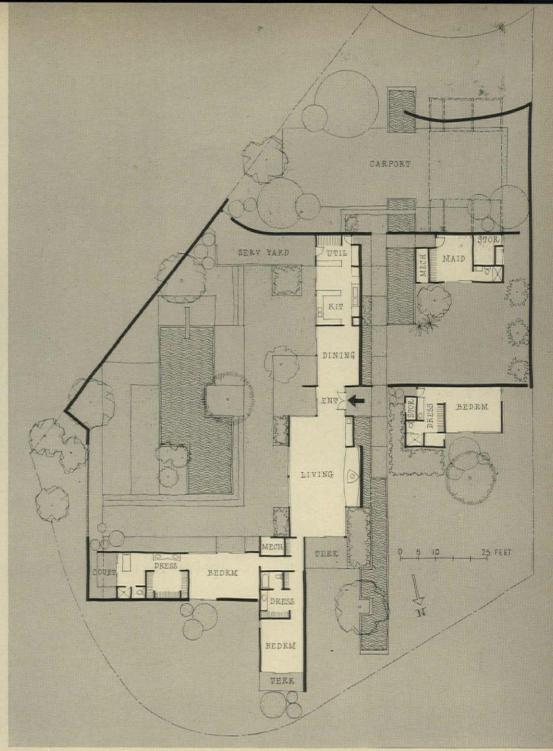
Architect William F. Cody has incorporated several unusual structural features in his design. The house is of curtain-wall construction. Tubular steel frames support

the roof, and the walls stop far enough below the header to leave space for clerestory windows. The interior and exterior wall surfaces are adobe brick. Between them is a $2\frac{1}{2}$ " layer of reinforced concrete, which provides stability and gives the structure lateral strength for earthquake protection. The roof over the living area is made of reinforced concrete vaults 2" thick, spanning 10', and joined along their edges with epoxy adhesive. The roof is surfaced with an epoxy coating.

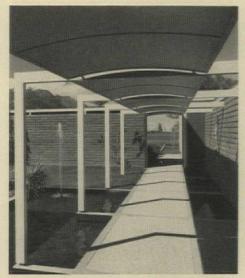
The house won honorable mention in Class C (custom houses over 2,800 sq. ft.) of the 1962 Homes For Better Living Program sponsored by the AIA, HOUSE & HOME, and LIFE.



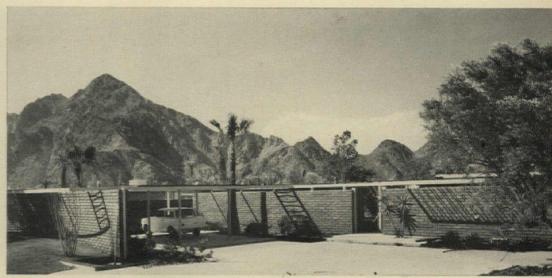
FORMAL POOL with fountains helps separate living wing, left, from guest bedroom, right. Walk beyond pool leads to carport and street.



PLAN shows how 3,400-sq. ft. house almost fills pie-shaped lot. Walls around rear terrace make it integral part of living area. Guest and maid's wings are separate from house but connected to it by covered walks.

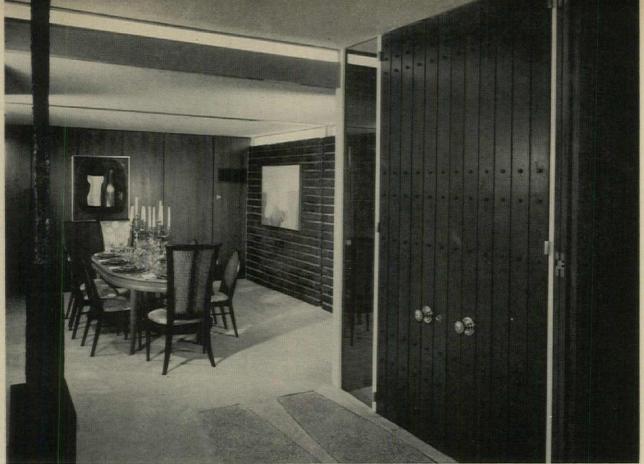


WALK from carport to front entrance is flanked by pools and roofed with curved aluminum sections hung from steel frames.

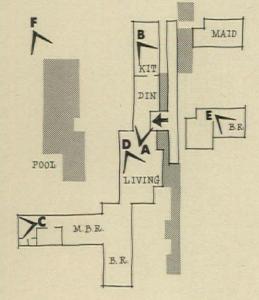


STREET ELEVATION shows dramatic contrast of long, low silhouette and mountains beyond. Steel frame, higher than adobe curtain walls, leaves space for clerestories. Doorway, right, leads to entry walk.

To see the interior, turn the page.



FRONT ENTRANCE (A) has solid-core doors faced on both sides with oak planking. Floor design is made of raised "islands" of terrazzo set in holes in the carpet. Dining room, left, has veneered rear wall.

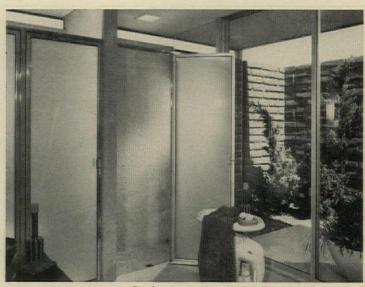


Inside, textured materials enrich each room

Basic textures carried through the house are adobe brick on walls and acoustical plaster sprayed on ceilings and many partitions. These materials unify the interior design and also provide a background for other finishes: wood paneling in the dining room, mosaic tile in the baths and kitchen, and bright terrazzo and carpeting on the floors. Since the swimming-pool terrace (right) is an integral part of the living area, the terrazzo and the tile are echoed there, and additional texture is provided by vertical redwood walls and decorative masonry screens. Builder: Michael W. Heathman, Palm Springs. Landscape designer: John N. Vogley, San Francisco.



KITCHEN (B) has countertops and backsplashes of mosaic tile, cabinet facings of white laminate and walnut veneer. Food preparation island, at right, is on casters, can be rolled to any part of the room.



MASTER BATHROOM (C) has compartmented toilet and shower and sunken tub. It opens to private court through sliding glass doors at right. Floors and walls are mosaic tile; and tile floor extends past doors into court.



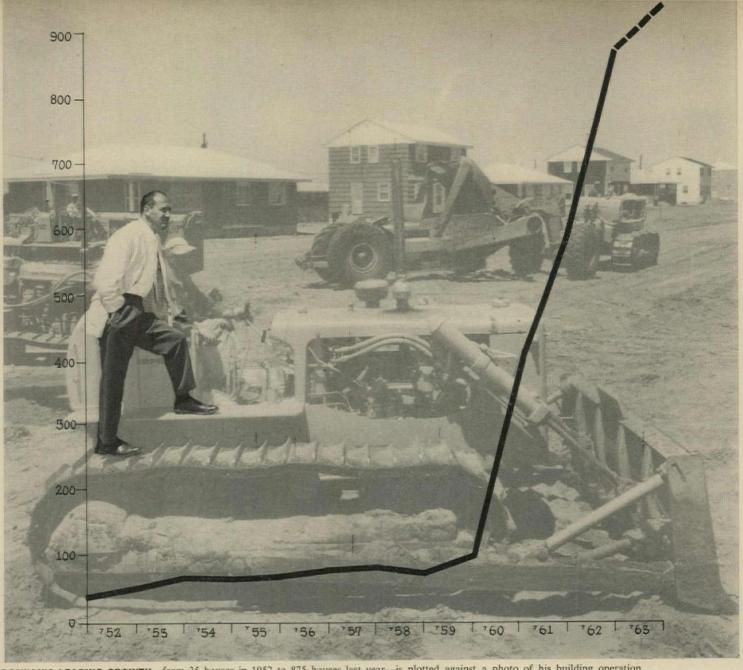
LIVING ROOM (D) has ceiling formed by exposed underside of concrete vault roof. Steel girders, topped by blocking, carry vaults which have clear span of 10'. Ceiling height is 10' except over fireplace at left.



GUEST BEDROOM (E) in separate west wing opens to rear garden. Wall at left is of the same adobe brick as the exterior walls. Far wall and ceiling have finish of sprayed-on acoustical plaster.

SWIMMING POOL (F) and terrace are enclosed by house and walls. Masonry screen at left is made of thin-wall blocks held together with epoxy glue.





DONNAY'S LEAPING GROWTH-from 35 houses in 1952 to 875 houses last year-is plotted against a photo of his building operation.

How to plot a strong growth pattern



BROAD RANGE OF HOUSES in Donnay's Brookdale Estates includes split-level, split-entry, one-story, and two-story models ranging in price from \$16,250 to \$25,000.

Minneapolis Builder Vern Donnay learned the building business by laying block, swinging a hammer, and selling his own houses. Since 1952, when he and his wife built and sold his first 35 houses, he has shown a sales increase every year but one (see growth chart above).

In last year's tough market, Donnay scored a whopping 69% sales increase, jumped from 580 to 875 houses, and became Minnesota's biggest-as well as its fastest growing-builder.

Like many other builders, Donnay owes some of his early success to the easy market of the early '50s, and to adroit land buying. But his steady continued growth is chiefly the result of his ability to build efficiently and offer a good house for the

Over the years, Donnay has offered houses in a wider and wider price range (now \$11,650 to \$25,000), a wider choice

of models (now 15 including split-levels, split-entries, one- and two-stories-most with two baths and fully equipped kitchens). Last year Donnay stole the march on his competitors by offering refrigerator-freezer, range and oven, clothes washer and drier, garbage disposer, and dishwasher in all houses, down to the \$11,650 model. His newest community has a country club, civic center, a tennis club, ball fields, and a swimming pool.

Donnay has been able to produce more house for the money because he staffed and equipped his company with the right people and the right facilities-at the right time. He has cut his per-square-foot building cost almost 20% in the last five years; made an estimated gross profit in 1962 of 10% on \$10,000,000 in sales. For Donnay's advice on staffing and equipping a building operation to get steady growth, begin at right.

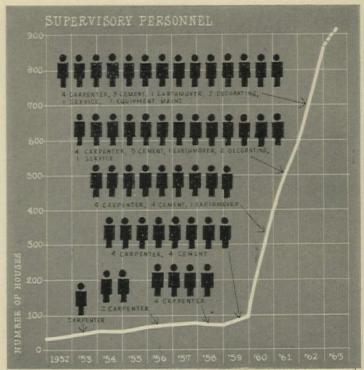
"Start by looking for good supervisors—you can't grow without them"

Most small-volume builders are so badly understaffed that, Donnay argues, they cannot grow bigger. He hired his first foreman when he was building 50 houses a year, now feels a builder should have a good foreman before he builds 15 houses a year.

But Donnay warns that builders should increase volume *before* hiring more supervisory people. When a second foreman is needed, he suggests that one foreman concentrate on indoor work, the other on outdoor supervisory tasks to smooth coordination with subcontractors and to increase efficiency through specialization.

When a builder builds 150 houses a year, he needs at least a third foreman and a construction superintendent to supervise the overall building operation (see below). In 1959—at a 100-house-per-year volume — Donnay began adding supervisors to take responsibility for work he had previously subcontracted (see chart).

Donnay's chief advice on building a supervisory staff: "You don't need many supervisors — but you need good ones. Give them authority — and watch their performance so you know which ones can grow with you."



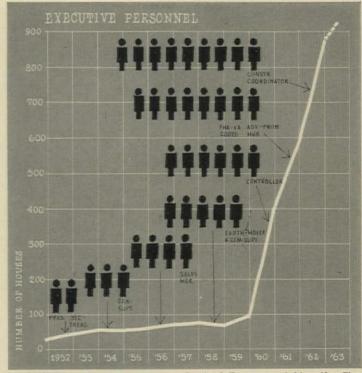
SUPERVISORY STAFF has grown from one foreman, whom Donnay hired in 1953, to 14 foremen who supervise men employed in six categories.

"Then start delegating your management jobs-but in the right order"

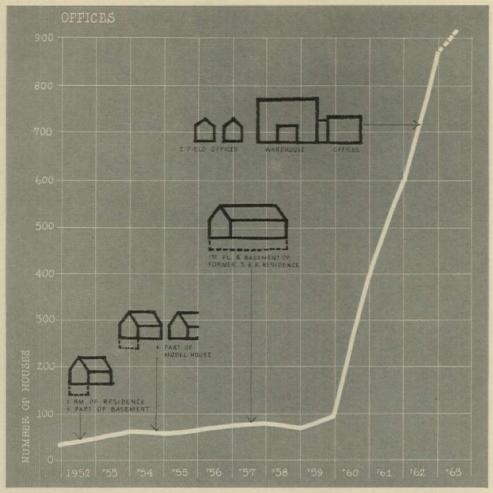
"You can grow for a while doing everything yourself," says Donnay, "but as soon as you can afford to, it pays to hire executives to back you up." The chart at right shows the volume at which Donnay filled seven key executive positions. Like many merchant builders, he first hired a general superintendent. If he had to do it again, Donnay would have hired a marketing executive sooner than he did (at a 75-house-per-year production).

What do you look for in an executive staff? Men to whom you can delegate authority and responsibility, of course. But also, says Donnay, "You must get people who can shower you with ideas. And you've got to listen to them." Donnay holds staff meetings with his top executives and with the sales staff. He works with different combinations of executives on different problems: On design, for example, he works with his FHA-VA man (an ex-sales manager), his construction coordinator, and his wife (who decorates the model houses). On land buying, he works with his controller and his land development man.

The only operating job Donnay has not delegated: working with zoning boards.



EXECUTIVE PERSONNEL once consisted of Donnay and his wife. Chart shows volume at which he hired each of seven key management men.



OFFICE SPACE for Donnay's operation outgrew his home in 1953, outgrew a separate model

house in 1962. His new office building (photos right) was completed this year.

"Keep office functions centralized under one roof"

"But don't be in a hurry to build yourself a fancy office building," advises Donnay.

He worked out of his own home (one room plus the basement) until his volume reached 70 houses a year. At that point (see chart) he converted a 24'x36', three-bedroom house into an office. Only last year, when his volume was above 600 houses and he knew that he intended "to keep growing and to expand his business to provide all of the services connected with housing," did he build the big office and warehouse building shown in the photos at right.

Until a builder reaches about 100 sales a year, Donnay believes he can—efficiently and without loss of prestige—run the business from his home, with one bookkeeper as the chief office employee "and use a CPA once a month or more." What kind of office machinery does he need? An adding machine and a typewriter.

He thinks a builder should move into a separate building—"probably a model house that is converted into an office"—once he has reached a 100 house-a-year volume. Chief reason for the move: At this volume, you need space for office machinery to control your operation, and

the people who run them. (The most important office machine to add: a duplicating machine, "particularly if you build FHA and VA. Because you'll need to duplicate everything you can think of.")

Why do you need a central office? Donnay thinks there is a danger in having people spread out in various office spaces—some downtown, some at the building site, some at your house. "You cannot control and coordinate as effectively when you are spread out," he points out. "When you build a big volume of houses, you have to know everything that's going on, and you have to be able to move fast. A properly staffed and equipped central office is vital to good communication."

Donnay also lists these additional (if intangible) advantages of an attractive office: 1) It helps attract and keep the more intelligent office employees. 2) People tend to get more accomplished in pleasant surroundings (Donnay's office space is air conditioned; has piped-in music and a lunchroom). 3) The public can be brought to pleasant rooms for closings. And 4) staff rooms and offices provide a sense of importance and purpose to management and employees.



H&H staff

DONNAY'S OFFICE has 4,000 sq. ft. of office space, 6,000 sq. ft. of warehouse space. It is masonry, faces a major thoroughfare.

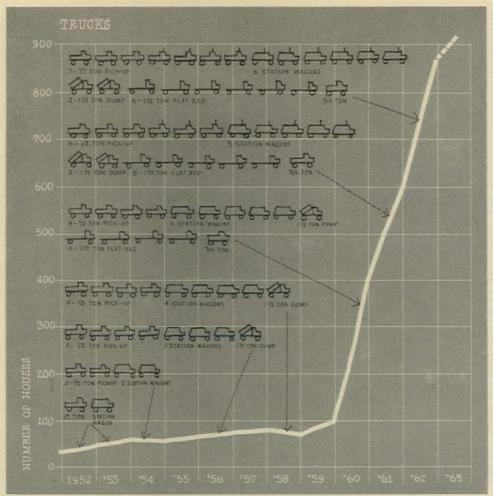


OFFICE STAFF of 13 people works in well lighted, air-conditioned space with clean, modern furniture.



CONFERENCE ROOM is used for management meetings. This is the weekly executive-committee meeting.

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TRUCK AND CAR FLEET has grown from one pick-up truck and station wagon to 22 vehicles,

including dump and flat-bed trucks—many of them equipped with two-way radios.

"Give supervisors vehicles equipped with two-way radios"

"If you give your supervisor transportation—a car or a truck that he can drive to check more houses in a shorter time—he will do a better job for you," says Donnay.

"Perhaps most important, his own vehicle gives him a sense of responsibility and authority. But there are also costsaving advantages: 1) Foremen and superintendents can supervise a wider area, with less wasted time. "If many workmen lose ten minutes a day from lack of supervision, it adds up to a serious loss every week."

2) Foremen can use their vehicles as mobile warehouses, delivering easily pilfered materials to jobs only as needed. 3) The vehicles let supervisors answer service or emergency calls (received by two-way radio) more quickly.

Donnay now provides vehicles for all his supervisory personnel (chart above), and believes this makes sense for as few as 25 to 35 houses a year.

What kind of car? Pick-up trucks for foremen, two-door sedans for supervisors ("they're cheaper than station wagons, but can still be used to carry materials as well as men").

Two years ago Donnay started to equip supervisors' vehicles with two-way radios. And almost everyone on his staff now thinks that it is the single best moneysaving device for a big-volume building operation.

Says Donnay: "We don't waste time and paper seeing that written requisitions are carried out. When we ask for things to be done over the radio, they are generally done within the hour-people give immediate attention to a problem." Says his general superintendent: "The two-way radio system is like a roundtable. When someone raises a problem, we can call all the people involved and get things straightened out quickly and with minimum lost motion." Says a customer relations man: "The radio system expedites change orders. When a customer changes his mind, we can take action within minutes-so nothing gets done that has to be redone. And this also keeps the customer happy; we can make a change without it costing much or any money. In this sense, the radio system helps us build referral sales."

Donnay bought and installed his elaborate \$30,000 radio system when he was producing 400 houses a year, but he thinks it would have paid off at a much lower volume.



SERVICE MAN has a twoway radio hookup, can quickly dispatch field men to handle problems.



RADIO-EQUIPPED TRUCKS keep foremen in touch with the general office and with each other.

Photos: H&H staff

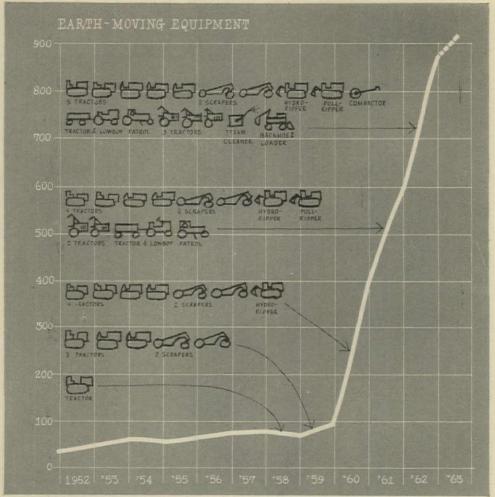


VEHICLES in Donnay's 22-unit fleet range from two-door sedans and station wagons to heavyduty, special-body trucks.



GAS TANK at warehouse fuels the fleet of vehicles and is a big cost-saver, Donnay says.

continued



EARTHMOVING MACHINERY bought by Donnay since 1958 is now a \$400,000 investment. He

also rents some equipment, but says: "It's cheaper to own your own."

"The sooner you buy earthmoving equipment, the better"

Donnay, who has bought \$400,000 worth of earthmoving equipment since 1958, thinks he waited too long before he started buying. "If I had to do it all over again, I would buy a small bulldozer when I was building only 50 houses a year. A dozer pays for itself in no time because you can find enough work — digging basements, backfilling, rough and finish grading, clearing land of brush and small trees—to run its tracks off."

Once a builder tops 100 houses a year, Donnay thinks he should add a bigger dozer and scraper. "This equipment will let you spread around topsoil and do everything except the deep cuts and the major cutting and filling jobs."

Builders who do over 500 houses a year should, Donnay says, do all their own earthmoving: "Why make someone else a millionaire? Once you build 500 houses a year, you have to move a lot of earth. This is steady work—it's costly, but its profitable. And it's one of the best ways to cut down the high cost of land—if you do your own earthmoving, you cut your costs by at least the amount of the subcontractor's profit."

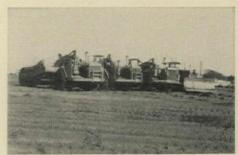
"When you build big volume, owning your own equipment not only saves you money, but makes you money," says Donnay. It saves him money because: 1) Since the earthmoving operation is under his control (and not a subcontractor's), he can deploy his work force and machines more efficiently and more economically. "We never have men standing around an undug basement or carpenters struggling around a foundation that needs backfilling." 2) "By using the latest and best equipment, we can move earth more economically than anyone else in the area." And 3) Donnay has the equipment to finish-grade -just as soon as the ground thaws-around houses completed and sold during the winter. And the faster he does the finish grading, the faster he can recapture (and put to work) the money he must put in escrow to guarantee completion.

Donnay's equipment also makes money: During the five busy months of the year, his machines operate double shifts, six days a week. So he sometimes has spare capacity and can bid on outside jobs.

A side (and sales) benefit: Donnay keeps his communities looking attractive while they are under construction by continuously patrol-grading the roads until they are paved.



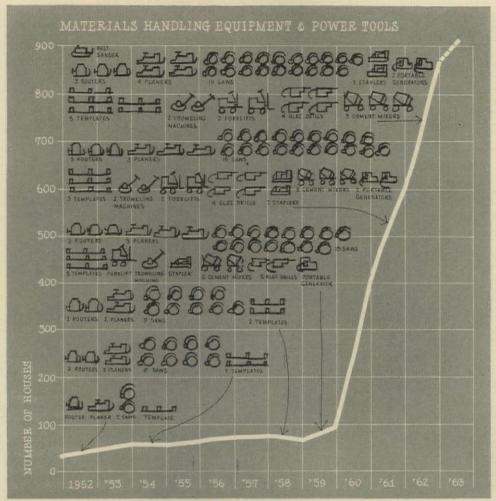
BIG BULLDOZERS carve out basement excavations. Power shovel is not needed since soil is sandy.



MACHINERY LINEUP shows only a few of the scrapers and bulldozers in Donnay's huge earthmoving fleet.



DOZER AND SCRAPER combinations like this allow Donnay to handle all the cut-and-fill operations in his subdivisions.



POWER-TOOL INVENTORY has grown steadily in number and types of units—now includes handling

equipment, power generators, and cement mixers as well as portable tools.

"Put power tools into the hands of everyone you can"

Donnay estimates "conservatively" that he saves between \$100 and \$150 in each \$1,000 worth of carpenter labor by equipping his men with power tools. "I would advise all builders—regardless of size—to buy power tools even before they think they need them." His main reason: "You can't grow by producing houses uneconomically—and that is what you are doing when your men use hand tools and handcraft methods."

A good starting point for the small builder: "Get as many 8" portable power saws as you can afford." The minimum type and number of tools needed by a 50-house-a-year builder, according to Donnay: several power saws, electric drills and a router, a planer and template for mortising doors and jambs, plus two or three hand staplers.

Donnay makes three thought-provoking comments on the use of power equipment:

1. They promote economics beyond the immediate savings—because the men keep finding new ways to use them. Donnay cites several cases in point: He bought stapling guns for his crews to put up batt insulation, but the guns are now also used to put building paper around windows and

to put down roof felt. He first bought a high forklift truck (photo right) to hoist prebuilt soffits and gable ends to the top of two-story houses—soon found it made sense to use the forklift to hoist shingles, gable ends, and soffits to the top of one-story houses as well. And when he found a two-man crew had cut the time for sidewall sheathing from a full day to two hours by using a pneumatic nailer, he decided to buy two more nailers to apply plywood roof sheathing and subflooring.

2. The economies of power tools are less obvious (but no less important) to smaller-volume builders. "When a big builder sees a big crew of carpenters at work, he figures each is costing him money if they are not properly equipped. And he seldom loses time buying them all the tools they can use. But smaller operators don't multiply their losses when they see a smaller work force working at less than top efficiency."

3. Changes in your building techniques will affect the kind and number of power tools you buy. Donnay points out: "We don't need as many portable saws since we switched to plywood subfloors and roofs, but need more pneumatic nailers."

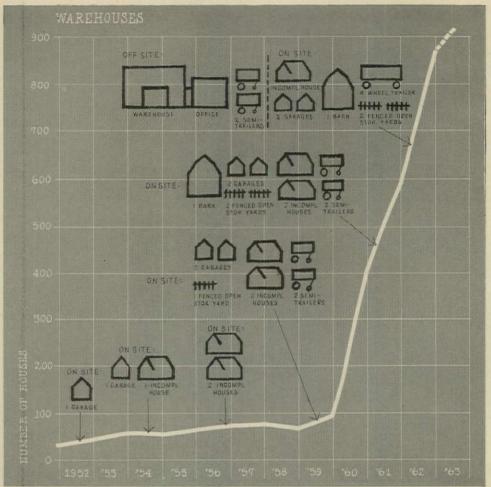


FORKLIFT TRUCK hoists prebuilt gable end to the top of a two-story house, cuts the in-place cost about 25%, says Donnay.



POWER NAILER reduced Donnay's costs so drastically on sidewall sheathing he ordered two more to nail plywood on decks and roofs.

continued



FOR WAREHOUSING Donnay first used a garage, then shifted to model houses, fenced yards, and

trailers. Last year he centralized most storage in one big off-site warehouse.

"Warehouse materials only when you build in volume"

Small-volume builders are better off buying materials as they need them, but bigvolume builders should warehouse as much as possible, says Donnay. The big saving in efficient warehousing is "not so much the saving of volume buying as the saving of a faster, smoother building schedule."

"A small-volume builder should keep any materials that he warehouses close to his own house—in the basement or garage," Donnay suggests. And he should maintain some kind of control: "At a minimum, require a written requisition for everything that goes into a house. Then when you get purchase orders for two front-door locks for the same house, you know someone is stealing from you."

As a builder grows and starts to warehouse items, Donnay suggests that he buy semi-trailers and park them at his construction site. "A good used trailer will cost from \$800 to \$1,000, but it can pay for itself very quickly," says he. And, it has a big advantage over a shed or garage: It's easy to move to the next job site. One caution: "Put one man in charge, give him a key, and let him disburse all materials."

Donnay thinks a big central warehouse like his own (photos, right) can pay for itself only at a volume of 300 houses a year. Donnay's warehouse pays off for him, he says, because at his volume: 1) There is no one supplier who can take care of his needs as well as Donnay himself can on most purchases. 2) He can buy most materials cheaper than any other supplier. And 3) the inventory of materials is directly under his control, which assures delivery and eliminates time and money losses in the building operation. Donnay warehouses enough material for 60 days' production "in good weather."

What does Donnay inventory? 1) rough hardware including nails, roof flashing louvers, venting ducts, steel floor bridging, basement windows, anchor bolts, staples; 2) finish hardware including aluminum siding, aluminum shutters, aluminum thresholds, bronze weatherstripping, electric can openers, all door hardware, paints and paint supplies, vent fans and hoods, shower doors, steel closet rods.

Donnay shies away from storing materials that require special handling or storing—like insulation, gypsumboard or lumber. He just began to warehouse roof shingles, composition sheathing, and asbestos siding.

—EDWARD BIRKNER



CENTRAL WAREHOUSE for Donnay's roughand-finish hardware storage is behind his general office. Trailers (left) are used as storage vans.



CLOSE CONTROL is kept on inventory to prevent stock shortages and delays in the building operation.



WIDE AISLES between storage racks permit quick removal of bulky items like aluminum siding.







NO

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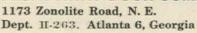
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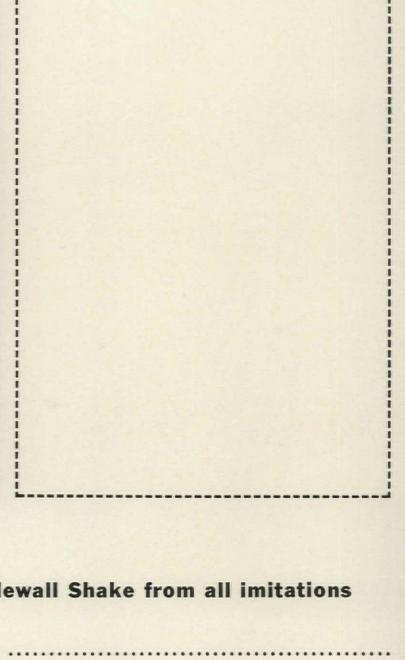
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- 2 Look for rich, long-lasting color. Cedar takes factory-applied color beautifully and there are dozens to choose from.
- [3] Look for bold texture. The deep, strong striations and "feel" of Red Cedar cannot be matched by imitation materials.
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PROTOTYPE STEEL HOUSE is a modified Techbuilt. It is 28' (instead of the normal 24') wide because of greater spans possible with steel.

Interlocking steel panels double as skin and structure

BEDROOM DE BEDROOM DN BEDROOM

DINING HEATER EM

LIVING DN P

LOWER FLOOR

PLAN offers 2,250 sq. ft. of living space—four bedrooms, 2½ baths, upstairs study, downstairs family room—built around two-story utility core.

The panels are made of sheet steel shaped so it can serve both as skin and structure. And because all panel joints either interlock or lap, on-site bolting is minimized.

The house was designed by Architect Carl Koch; it is a joint project of Techbuilt and Armco Steel Corp., which supplied the panels. It (and at least one other model now on the drawing board) will be offered by Techbuilt as a package this spring. Price is as yet un-

determined, but the Eastrock Construction Co. of Yorktown Heights, N.Y., is offering this prototype model for \$29,500 without land or carport.

Significantly, it was the panels themselves rather than the house package that aroused the greatest builder interest at the NAHB convention in December, and Armco plans to market the panels as separate components later on this year.



FINISHED SHELL uses 11½ tons of steel—some 9½ tons more than an average conventional house—which explains Armco's market interest in the

system. But gypsum ceilings and walls, wood floors and trim, and two brick fireplaces avoid any cold or industrial feeling inside the house.

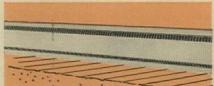
To see how the steel shell is bolted together, see p. 139

UPPER FLOOR



HUNTER ELECTRIC HEAT comes in all types and sizes

WHATEVER the need—in location, power, size, shape or price—Hunter has the ideal electric heater to fit. Choose from a "supermarket" of modern units, engineered for easy installation, effective performance, economical power use and assured safety.



Convection Baseboard in two series—economy Heatliner (above) and deluxe Heatmaster—features exclusive new patented heat exchanger.



Bathroom Trio Ceiling Unit heats, lights and ventilates. Produces 4950 BTU/H. Similar units available to heat and ventilate or heat only.



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Portable Convection Baseboard is 52" long, yet weighs only 16 pounds. Features built-in thermostat, 6-foot cord, handy carrying handle.

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Here is how the shell of the steel house is bolted together in the field:



FLOOR PANELS are 16" wide, 3" deep, have interlocking edges, are made of 20-gauge galvanized steel. Channels serve as heating ducts.



for erection of walls. Floor panels run across house (28'), have maximum clear span of 10½'.



SPECIAL SILL MEMBERS anchor the floor panels, right, and wall panels, left. Note interlocking edges on both panels.



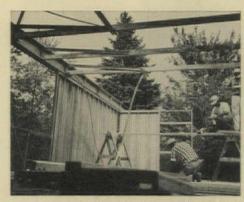
WALL PANELS are 16" wide, 3" deep, up to 16' long, weigh up to 90 lbs. Material is 22-gauge steel with integrally colored acrylic finish.



WINDOW FRAME PANEL is bolted to solid panel. Ten-foot cantilevered header, left, is bolted to tops of panels, carries roof overhang.



FRAME SECTIONS are designed to receive single or insulating glass, operating sash, or solid sandwich panels with foam insulation.



TIE BEAMS attach to header on either side of second floor. Short angled members, left, keep header from twisting under roof load.



ROOF PANELS are 24" wide, 2" deep, 29' long. Maximum span is 17'. Truss section in center is part of roof-framing system.



ROOF IS BOLTED to continuous header. Panel is 22-gauge steel with 2-mil aluminum coating on both sides, so no additional finish is needed.



ROOF FRAMING includes both lateral and longitudinal trusses. System is complicated and has many small pieces, will probably be redesigned.



RIDGE SECTION has rib peaks every 2' for architectural interest. Raised section in center is ridge vent (soffit is also vented).



SOFFIT is supported by eave strip, right, and header, left. Section is 16"-wide channel, similar to floor section but lighter.

Technology continued on p. 142



WHY BUILDERS SAVE 3 MAN HOURS OR MORE

Quality Andersen Windows cost no more installed than so-called cheaper windows

With the Andersen Strutwall . . . the complete windowand-wall component . . . you can add Andersen quality at no premium in cost.

It's because Strutwalls are so fast and easy to install. They're delivered as a complete modular unit. There's no framing-up window openings. No shimming under sills. No plumbing of windows. No exterior casings required. No packing of insulation around window openings.

All you do is cut two side struts to length, tip Strutwall in place, and nail it in.

Compare this easy installation to the time-consuming steps to install "cheaper" windows and you know why hundreds of Strutwall users are cutting installation time and cost in half!

"Andersen Strutwalls cut 36 hours of labor costs out of our homes," says Grant Skinner, Skinner and LaPrise, Wallaceburg, Ontario. "\$20 per opening is a big saving . . . and we get it with Andersen Strutwalls," says Jack Akre of Dakota Lumber & Builders, Inc.

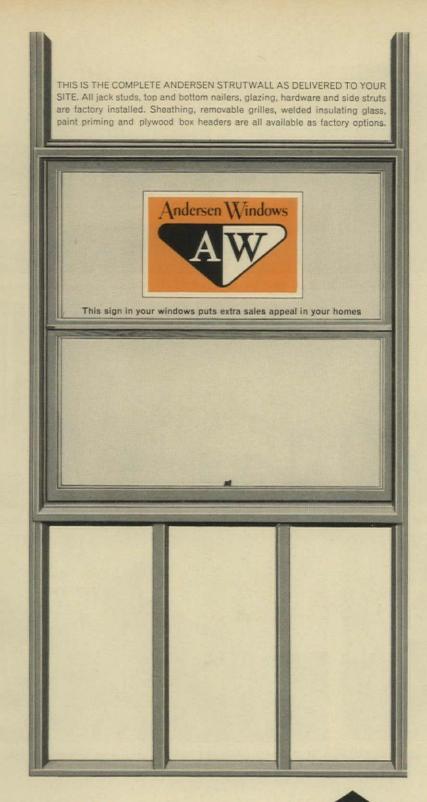
"Our total savings with Strutwalls exceeds 30 hours each day," says Ed Ryan, Pittsburgh project builder. "Material savings are also big."

Need more reasons for building with Andersen Windows? How about these:

☐ Fuel savings—a good selling point—homeowners can save 15% or more on heating and air conditioning costs with Andersen Windows. It's because they're extra weathertight... up to 6 times tighter than ordinary windows. Double sealed—with tension weatherstripping and a double contact between sash and frame.

☐ Selling power of the Andersen name—your prospects know Andersen Windows through continuing advertising in Life, Better Homes & Gardens, American Home, House Beautiful, and House & Garden. They recognize the Andersen name on your windows as





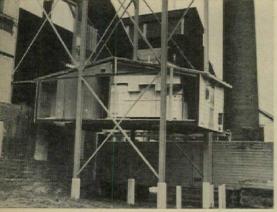
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one good sign of the quality throughout the house. With America's "brand-name" windows in *your* homes, you have an immediate selling advantage.

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Isn't it time you added Andersen Windows for more sales appeal in your homes? Call your distributor or dealer right away for complete facts about time-saving Andersen Windows. Or, send coupon for a time-and-motion study which shows how much time you can save.

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House sections leave factory at 6:30 A.M. and are trucked to site where I-beam foundation and front steps await them . . .







... 20-ton crane starts placing first of three sections on foundation at 8 A.M. Jacks push sections together on beams . . .







... Last section swings in at 10:30 A.M. Asbestos-cement skirt is attached, utilities hooked up. House is finished at 2 P.M.

Steel space frames give sectional house normal look



FORERUNNER HOUSE had wood space frames extending beyond side walls.

Like its space-frame forerunner (photo at left, H&H, Sept.) this experimental house was 90% completed in the Newark, Ohio, factory of Builder-designer John Slayter. And like the forerunner, it is made up of transverse sections, so it can be extended to any length simply by adding sections. But unlike the forerunner, in which the exposed wood space frames produced an unconventional look, this house has hidden steel frames and thus looks conventional and marketable. As the photos above show, the house can be ready for occupancy six hours after it reaches the site.

Use of steel, instead of wood, space frames cuts the floor-section depth from 36" to 8", the wall-section depth from 48" to 6" (steel is ten times as stiff as wood).

Non-loadbearing interior partitions are made

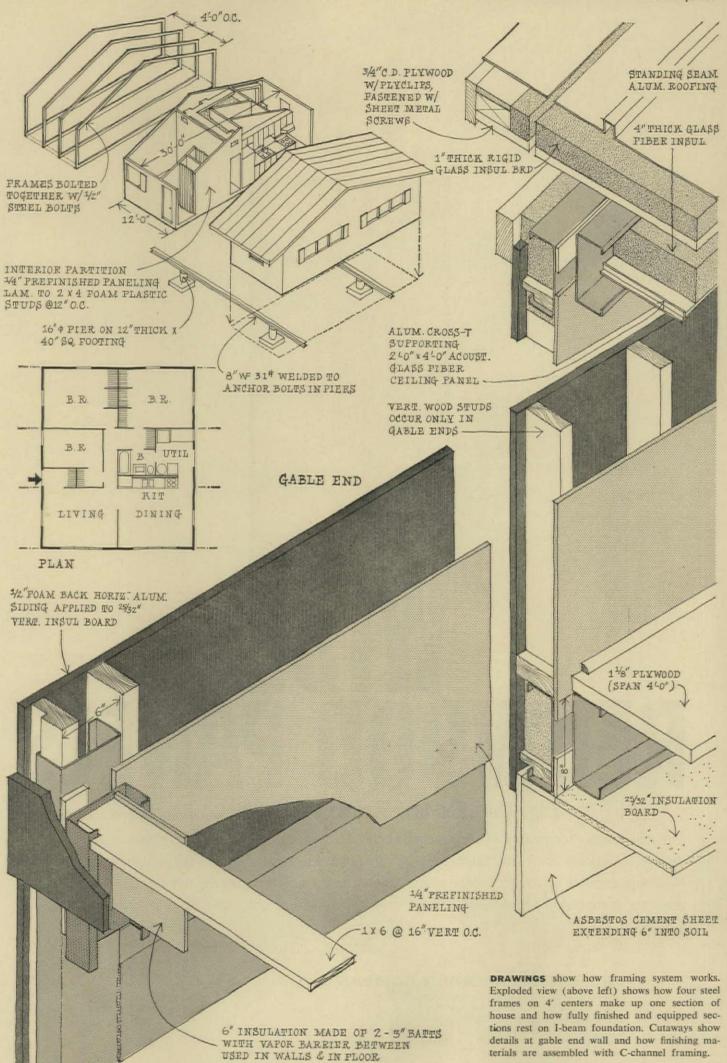
of prefinished paneling glued to strips of foamed polystrene 12" o.c. Slip joints connect partitions to the ceiling so the steel frames can deflect without imposing load. Between the steel frames and the exterior skin is an uninterrupted thermal break. And a thermal break is provided between the frames and the I-beam foundation rails by high-density, neoprene-coated pads of glass fiber.

Builder-designer Slayter says he has no immediate plans for marketing the 1,150 sq. ft. house. He estimates the price—based on a volume of ten units a week—at \$12,000 on the buyer's lot within 100 miles of the factory. Price would include heat-pump heating and cooling, nylon carpet, acoustical ceilings, and \$500 of site work for the foundation and water and sewer line trenches.

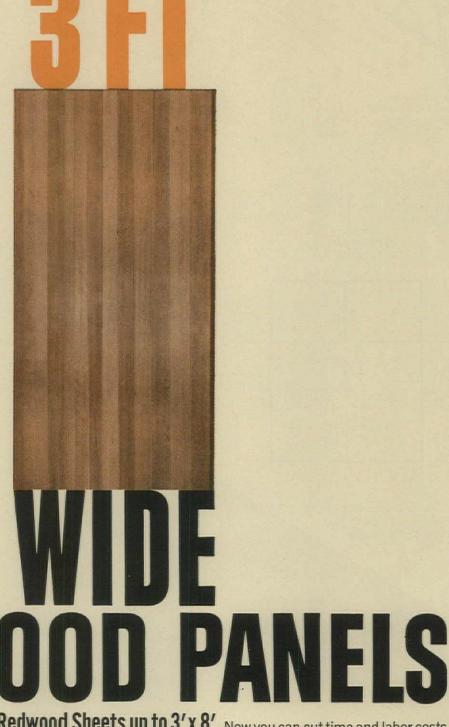
142 HOUSE & HOME



starts on p. 137



Technology continued on p. 148



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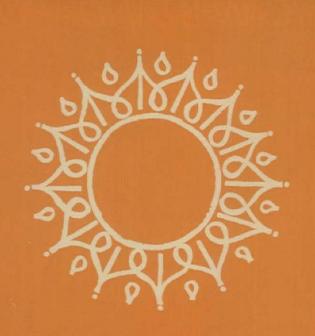


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For more information, see your plumbing contractor or write American-Standard, Plumbing and Heating Division, 40 West 40th Street, New York 18, N. Y.





PRIME COATING: Upson Soffits are supplied factory-primed to save you a step in finishing.

VENTING: Upson Soffits are available with pre-cut vents and 8mesh screening—saves two more steps.

PRE-CUT: Upson Soffits are all pre-cut in choices of six widths, two lengths and thicknesses—saves you more steps.

FOR ONCE, QUALITY COSTS YOU LESS

The Upson Soffit System eliminates four basic steps in construction of soffits, porch and car-port ceilings. You save labor and time costs on prime coating, venting and screening, and pre-cutting—all of which are completed at the factory.

Here are examples of Upson Soffit versatility . . .



Typical soffit installation on lookouts, with blocking at the wall and rabbeted fascia.



Use of J-molding eliminates blocking and provides clean, finished look.



Installation on rafters
...J-molding eliminates blocking and
cove on house side;
can also be used on
outside edge in place
of fascia groove,



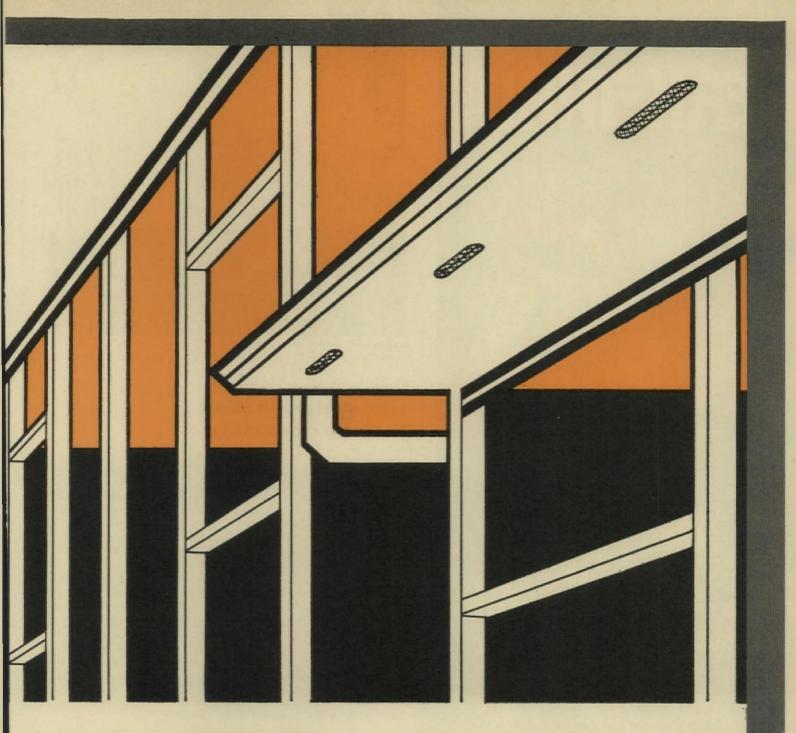
J-molding used on rake soffit to eliminate blocking and trim on house side.



H-molding at joints eliminates costly fitting and blocking. Panels available in 12". 16". 24". 36", on 48" widths, 8' and 12' lengths.



J-molding slips on either or both long edges to replace blocking.



Upson All-Weather (water proofed) Soffits come in sizes that fit almost all standard building requirements. (Special sizes are available on request.) Factory-cut vents and factory-applied screens meet or surpass FHA requirements for condensation control.

Installation of Upson Soffits is fast, easy. All you do is: set up framing, a simple method for providing soffit edge support; complete joining with J-molding on long edges and H-molding on ends; then simply nail soffits into place; finally apply your choice of house paint to factory-primed soffit. That's all there is to it! Result: a quality job with 27% of your labor costs saved! For more information, fill out and mail in the coupon. Upson Soffits are available primed and plain, vented and unvented. The Upson Company, Upson Point, Lockport, New York.



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on two bases. Stairwell is in one base, mechanical equipment in other.

Light steel prefab adapts to diverse commercial uses

The prototype model (above), designed and built by Modubilt Corp. of New York City, capitalizes on commercial building products and systems already on the market. And, Modubilt believes, this is one of the first uses of high-rise curtain-wall construction in what is basically a one-story building.

The building's clear span permits any sort of interior arrangement. And the off-the-ground design shown here is particularly suitable for a gas station, with the pump islands underneath and the office, sales room, and rest rooms above, or as a unit in an expandible motel with parking space below. Other possible uses: for offices and dormitories. Costs, depending on the type of use, range from \$13 to \$18 a sq. ft.

Building's curtain wall is a Fenestra panel-and-clip system in which top and bottom sections are prefinished steel with 3" of glass-fiber insulation. Bar-joist framing of floor and roof can be used with gypsum, vermiculite, concrete, steel, or wood decking. Steel framing members are bolted.

Here is how the building goes together



10 A.M.: Steel I-beam frame is erected on two foundations.



NOON: Last bar joist for roof deck is bolted into position.



NEXT DAY: All curtain wall panels are locked into place.



Whole job takes four weeks.

New products start on p. 151

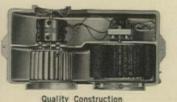


The Vapor-Wheel is a power humidifier that provides positive action all winter . . . humidity rate is adjustable from 3 to 11 gallons per day. This is how the thoroughly tested V-11 Vapor-Wheel works: Air is drawn into the unit by a powerful pressure type blower unit and forced thru a saturated media on the Vapor-Wheel. This moisture laden air is then forced into the heating duct system and carried throughout the house. The media is attached to a drum which constantly rotates thru a bath of water. This assures maximum air saturation with no lime dust. Media can be removed and washed or, if necessary, economically replaced. The unit's attractive fiberglas case contains the finest quality parts and workmanship. The V-11 easily installs and

operates on any and all furnaces . . . even gravity types. See your











HOME COMFORT PRODUCTS DIVISION THE LAU BLOWER COMPANY

2027 Home Avenue

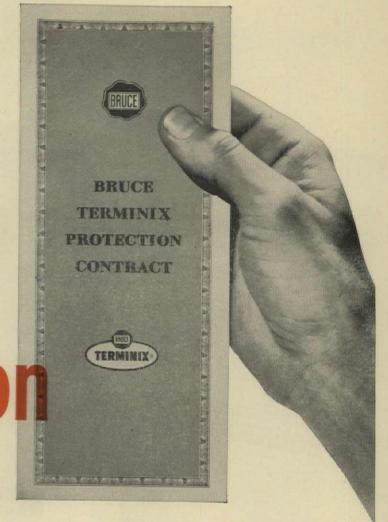
Lau Distributor for complete details.

Dayton 7, Ohio



NEW SALES AID FOR BUILDERS

\$5000 termite damage protection



Bruce-Terminix gives fast, low-cost protection plus a \$5000 guarantee against termite damage

Today, more than ever before, people are aware of termites and recognize the need for reliable protection against their costly attack.

You can capitalize on this by having your homes protected by the world's largest termite control organization. Having safeguarded over 350,000 homes and buildings, Bruce-Terminix can provide the most effective termite protection methods for any type of construction.

Terminix relieves you of complaints and responsibility for termite attack through a guarantee against termite damage up to \$5000. Renewable from year to year at the owner's option, this service also provides periodic reinspections and treating when necessary. Performance is guaranteed by the Bruce Company and insured by Sun Insurance Office, Ltd.

Look in your phone book under Bruce-Terminix or Terminix and call your local company. You'll find their advice helpful and dependable on any problem involving termite protection for new or old homes.

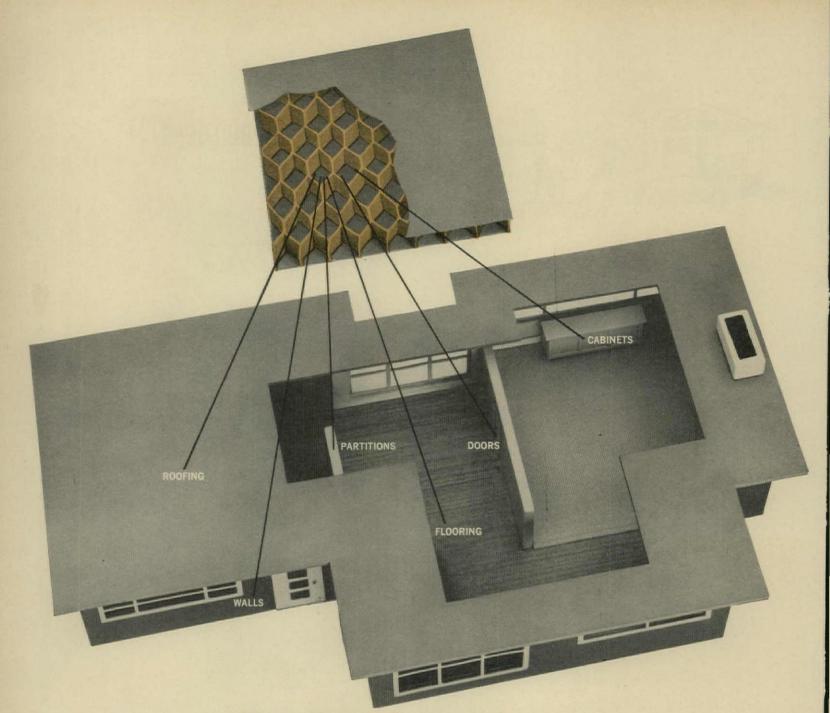
TERMINIX DIVISION, E. L. BRUCE CO. Incorporated P. O. Box 397-AI, Memphis 1, Tenn.

Protection without treatment for qualified termite-free structures

Treatment as required for infested structures



THE NATION-WIDE TERMITE PROTECTION SERVICE



The Honeycomb house

Union HONEYCOMB is becoming increasingly popular as an inner core for pre-fabricated components — from floors to roofs. Read why.

What's really behind the trend to honeycome cores for prefabricated components? Design simplicity is one reason. You save hours of on-site assembly time. Lightweight plus high strength is another reason. Union Honey-Comb cores weigh .095 to .187 lbs. per board foot. Yet they have corresponding crushing strengths of from 33 to 170 p.s.i! This lightweight means easy fabrication, handling and erection. And minimum shipping and labor costs.

The cores can be bonded to almost any facing material—metal, wood, asbestos, gypsum, plastic, fibreglass—even marble.

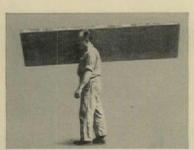
Impregnated HONEYCOMB cores also deaden sound, resist moisture and temperature extremes. The fuel contribution of HONEYCOMB in panels also is exception-

ally low. The cells eliminate flue lines parallel to facings—prevent spread of fire inside panels.

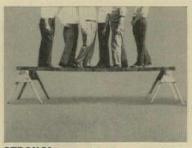
Write for details about Union HONEYCOMB'S unique structural advantages and economies.



HONEYCOMB CORES
Union Bag-Camp Paper Corp., 233 B'way, N.Y. 7, N.Y.



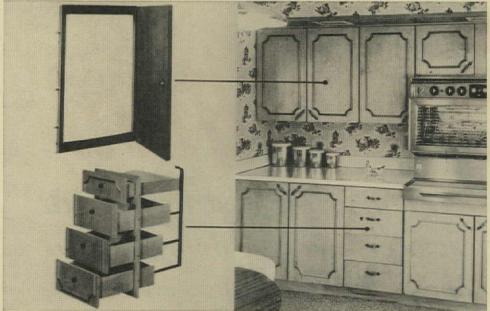
LIGHTWEIGHT! Union HONEYCOMB cores weigh only .095 to .187 lbs. a board foot. This extreme lightweight speeds fabrication, handling and assembly—minimizes shipping and labor costs.



STRONG! On a weight-for-weight basis, Union HONEYCOMB is the strongest sandwich core material known. HONEYCOMB can meet a wide range of specifications required in building pre-fab components.

Union Bag-Camp Paper Corporation, Dept. HH-163, 233 Broadway, New York 7, N. Y.
Send me your free, illustrated booklet on the uses and advantages of Union HONEY- COMB cores.
I am interested in Union HONEYCOMB cores for doors walls partitions floors
Miscellaneous uses (specify)
Name
Title
Company
Address
CityZoneState

Kitchens and laundries



Cabinet door fronts and drawers are factory-made to attach to job-built cabinet boxes. The system, called Uni-front, combines the benefits of factory fabrication and finish with the economies of site fabrication. Doors are shipped attached to frames by hinges, and with friction latches. Pulls are attached at

the site. Units come in several heights and in widths of 12", 14", 15", 16", 18", 21", and 24". Fillers, cabinet sides, oven enclosures, lazy susans, door overlays, and soffit treatments are also available. Belwood Industries, Ackerman, Miss.

For details, check No. 1 on coupon, p. 183



Pull-down shelves come out and down within easy reach by a simple spring action. Manufacturer supplies hardware only for manual or electrically operated HI-lo units. Hardware can be adjusted to handle any load. Stebbins Hardware Corp., Houston.

For details, check No. 2 on coupon, p. 183



Bar sink has gooseneck faucet, drain and strainer, two open bottle wells, and an ice bucket with a maple cutting-board cover. Stainless steel sink is only 13" wide, installs without additional framing. Zeigler-Harris Corp., San Fernando, Calif.

For details, check No. 3 on coupon, p. 183



Instant hot water tap supplies near-boiling water (150F to 190F) for instant coffee, soups, etc., eliminating need for stove-top heating. Instant-Hot has flexible tubing so heating unit can be mounted up to 18" from the tap. National Disposer, Medina, Ohio.

For details, check No. 4 on coupon, p. 183



Disposer-well sink made of enameled cast iron has single-handle faucet and spray. Two dishwashing basins have off-center waste outlets with pop-up drains controlled from the sink ledge. Unit is 42"x21", in white and ten colors. Borg-Warner, Mansfield, Ohio.

For details, check No. 5 on coupon, p. 183



Washer with simplified controls only requires housewife to set controls at hot, warm, or cold and at normal or slow speed, then push starter. Other features: five fresh water rinses, safety spin, sediment remover, and lint filter. Borg-Warner, Chicago.

For details, check No. 6 on coupon, p. 183



Automatic hood turns on when range is on. When range is off, fan continues until heat, smoke, and cooking odor are cleared. Separate button gives option of manual control. Thermomatic comes in stainless steel or copper finishes. Emerson Electric, St. Louis.

For details, check No. 7 on coupon, p. 183



Washer with semiconductor controls is being test marketed to determine consumer acceptance. Semiconductors make possible infinitely variable (rather than step-by-step) control of speed settings with no loss of power. Whirlpool, Benton Harbor, Mich.

For details, check No. 8 on coupon, p. 183

New products continued on p. 155



The new low-cost home with a sweeping new floor plan for added livability . . . 3 extralarge bedrooms · Double size closets · Mammoth storage area

Here is a home the large share of your customers want. Increased area in nearly every room gives added living comfort. Only Inland Homes could bring you this exclusive styling—inside and out—at such low cost. Find out why dollar for dollar there's nothing to equal the bonus value built into the Thunderbird. Contact John H. Thornton, Vice President—Sales, Department H-2, (Phone 773-7550) Piqua, Ohio.



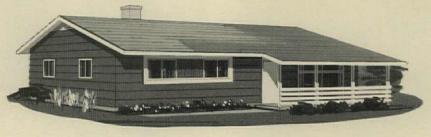


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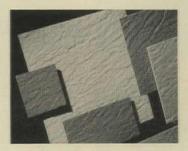
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12 distinctive designs in Colonial, Contemporary, Ranch, French Provincial / 1 or 2-car garage / or flat or trussed roof carport / wood kitchen cabinets / double bowl sink / pre-hung flush passage doors / double wall construction / cedar shakes factory applied over impregnated sheathing / or horizontal siding.

Flooring







Vinyl asbestos tile in three textured styles are part of Kentile's 1963 line: Mosaic (above left) in seven colors with contrasting grout; Woodgrain (above) in antique elm and antique beach. Both in 9"x9"x1/16" size. Flagstone (left), in five colors, comes packaged in six random sizes that fit together. Kentile, New York City.



Epoxy-resin flooring will not indent from stiletto heels. Epo-Chem is said to cost less than natural floors and wear longer. Special edge grout makes joints almost invisible. Epo-Chem comes in two textured styles, Chem-Brick and Chem Slate. In 4'x4' sheets, about 1 lb. per sq. ft. Chemtronics, Columbus, Ohio. For details, check No. 10 on p. 183



Luxury vinyl tile (left) has vinyl granules and metallics suspended at various levels in a clear matrix. The tiles, called Rochelle, come in 12 colors, in 9" and 12" squares, 1/8" thick. Sabrina, a lower-priced solid vinyl (right), comes in six off-white tones to look like marble. Armstrong Cork, Lancaster. Pa.

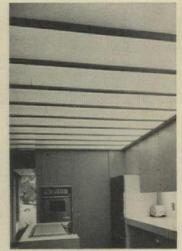
For details, check No. 11 on p. 183

Ceilings



Aluminum luminous ceiling supplies wall to wall lighting for any ceiling size. Ceilings come pre-assembled in areas up to 4'x8'; hangers are provided to suspend the pre-assembled frame. Diffuser paneling will cover non-modular areas. Fiberglass acoustic panels are available if less light is wanted. Pace Setter Products, Houston.

For details, check No. 12 on p. 183



Light transmitting panels, called Styrocel, use a large-cell plastic foam. The foam has both light-transmitting and insulation properties. Either plastic or glass can be used as skins for the panels. Cells range 3/8" to 1/2" in diameter. In panels 1" thick, light transmission is about 65%, the K factor is .48 to .52. Dow Chemical Co., Midland, Mich.

For details, check No. 13 on p. 183



Acoustical ceiling installs quickly in Insulite's Fastile Ceiling System. Metal furring strips,



12" o.c., are nailed to joists at right angles. Tiles slip into furring strips, and each tile locks the preceding tile in place (left). Then the plastic cove molding snaps into clips on the metal strip at room edge. Neither tile nor molding require nailing or stapling. Prefinished tiles are 12" x 12". Insulite Div., Minnesota & Ontario Paper Co., Minneapolis. For details, check No. 14 on p. 183

Vinyl-coated ceiling tile is ideal for kitchen, bath, and playroom areas. Dirt, dust, and cooking grease will not penetrate the surface, which is easy to wipe off. The vinyl is fused to the tile to prevent flaking and peeling. Nu-Wood smooth-surface, cellulosefiber tiles are prefinished in white only. They have t&g flange joints, are 12"x12"x½". Wood Conversion Co., St. Paul.

For details, check No. 15 on p. 183

Ceiling block of prefinished hardboard comes in new Gold Lace and Gold Nugget patterns. The blocks have t&g edges, install with metal clips and a wallboard adhesive. Each block is 16" square, ½" thick. Marlite ceiling blocks have a baked plastic surface that resists heat, grease, and moisture, needs no painting or refinishing. Marsh Wall Products Inc.. Dover, Ohio.

For details, check No. 16 on p. 183

Vaulted ceiling panels of fiberglass are designed for lobbies, offices, and other areas where high-style acoustical ceilings are needed. The textured vault panel has a rippled surface on its concave side. The inverted vault panel is installed with its vault side facing down. Both have a painted white surface, are 2' square, about 2" deep. Johns-Manville, New York City.

For details, check No. 17 on p. 183

Acoustical ceiling, made of woodfiber, is treated with a permanent fireproofing chemical which impregnates every fiber so that the ceiling tiles and insulating board will not burn. Pyrotect is rated "noncombustible" by the National Fire Protection Association. The tiles are 12"x12". Retail prices start at about 21¢ per sq. ft. Simpson Timber Co., Seattle.

For details, check No. 18 on p. 183

New products continued on p. 159

Alan E. "JANITROL GIVES US THE FINE Brockbank" WE NEED TO PLEASE OUR



Nationally known Salt Lake City
builder cites complete
heating-cooling line, quality,
instant availability from top-notch
local dealer and consumer
acceptance as key reasons
he features Janitrol in his homes.



"The wide range of interior and exterior designs we offer keeps our projects distinctive and appealing," says Mr. Brockbank. "It also calls for a heating-cooling line with plenty of range in capacities, sizes and installation flexibility. Janitrol meets our requirements perfectly, and the quality of workmanship in Janitrol products is in harmony with the fine quality we put in our homes. The Jed L. Ashton Company represents Janitrol in our area and does the installing. They're always on schedule and their service is terrific. Janitrol saves us money on almost every job because it's so easy to install and adjust. That's important to any builder who wants profitable sales."

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sell homes...save you money on installation...and eliminate the nagging headache of call-backs that drain away profit and aggravate your customers. The new Janitrol heating and air conditioning line includes upflow and downflow models in an amazing variety of heating and cooling capacities to meet all your needs from small homes and individual apartment units to roof top combination units for your single-story commercial building.

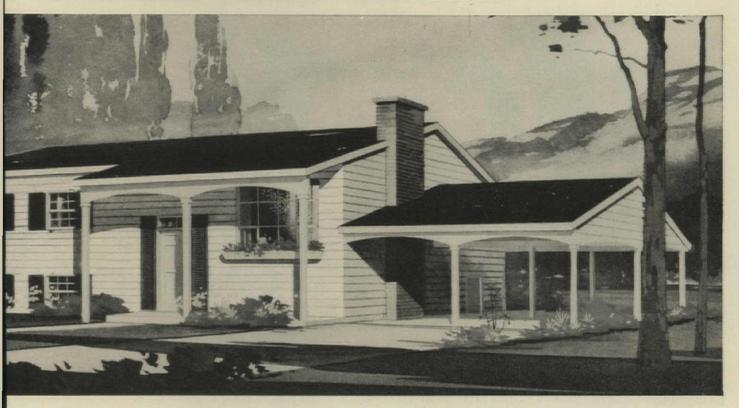
Mail the coupon today for complete details on how you can get more sales impact for your homes, no matter what price range you build in, with quality Janitrol heating and cooling equipment... the brand your buyers are already sold on!





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The MARK V . . . Popular style in Alan E. Brockbank's Lifetime Homes selection in the Greenbrae Addition, Salt Lake City.

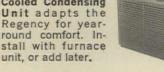


New Janitrol Regency . . first gas-fired furnace with a lifetime warranty!

Features exclusive Ultra-Thermex Heat Exchanger warranted for life. Put this powerful persuader in your homes for easier selling. Perm-Adjust burner automatically propor-Adjust burner automatically propor-tions fuel-air mixture. Cabinet is compactly designed, richly styled. Optional accessories include two-stage flame control, Minneapolis-Honeywell electronic air cleaner, deodorizer filter and automatic humidifier.

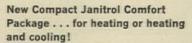


Custom-matched Air-Cooled Condensing Unit adapts the Regency for year-round comfort. Install with furnace



New Janitrol 19 and 20 Series **Upflow Gas-Fired Furnaces!**

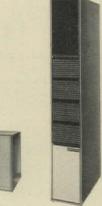
Bring you superior quality and remarkable economy in heating for single and multi-family dwellings. Compact, quiet, dependable. 10-year warranted Super-Thermex Heat Exchanger.



Designed, built and priced especially for the apartment and small home market. Compact, but with sufficient air capacity to deliver two full tons of cooling. Companion

air cooled cooling unit in 16,000 and 24,000 Btu./hr. capacities. A. R. I.

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JANITROL DIVISION . Midland-Ross Corporation . Columbus 16, Ohio

GENTLEMEN: Please rush complete information on new Janitrol line and the potent Janitrol Model Home Merchandising Plan.

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can drive hundreds of staples or nails per minute (up to to 2" long).

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portable...lightweight...operated by one hand from any position...operator can wear gloves in cold weather.

completely pneumatic . . . operates on as little as 40 p.s.i. pressure.

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accurate, consistent drive for all applications, such as countersinking into hardest woods... critical surface control for working with fiberboard, gypsum sheeting, and other easily fractured materials... guaranteed top production, fine workmanship, minimum worker fatigue.

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Heating and air conditioning



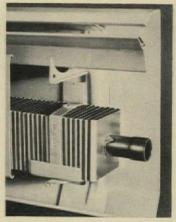
Built-in wall heater has a fan for forced air distribution, operates on 120-volts, has adjustable brackets for mounting between studs without blocking. List price: \$22.95 with manual switch, \$25.95 with thermostat. Nutone Inc., Cincinnati.

For details, check No. 19 on p. 183



Power humidifier for warmair systems has 10-gallon-per-day capacity. Model HU-350 atomizes water with spinning disc powered by 1/75-h.p. motor. Unit needs cleaning only once a year. With automatic humidistat. American-Standard, New York City.

For details, check No. 20 on p. 183



Noiseless baseboard has fin tube supported by wrap-around polypropylene cradle. This prevents metal-to-metal contact between fins and hanger, eliminates expansion and contraction noises. In ¾" and 1" sizes. Slant/Fin Radiator, Richmond Hill, N.Y. For details, check No. 21 on p. 183



Compact ceiling heater for kitchens and baths is 12½" in diameter. The radiant electric unit has a fan for better air distribution. In two sizes: 1,250 watts or 660 watts (some codes permit 660-w. unit on general-purpose circuits). G.E., Louisville.

For details, check No. 22 on p. 183



Baseboard diffuser is chrome plated to harmonize with trim, appliances, and fixtures found in kitchens and baths. Series 71-18 units are 18" long, can accommodate air flow from a 6" round pipe or equivalent. Lima Register Co., Lima, Ohio.

For details, check No. 23 on p. 183

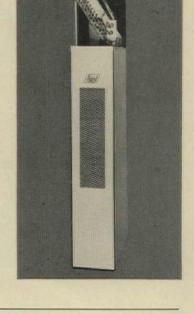


Radiant panels of specially coated glass measure 2'x4'x1" thick, are rated at 500 watts, 240 or 120 volts, and 1,706 BTUH. One panel heats an area of 50 sq. ft., says maker. Panels list for \$29.95. Corning Glass Works, Corning, N.Y.

For details, check No. 24 on p. 183



Mfg., Bryan, Ohio.



Low-price warm air furnace

has finned hollow drum of alloy steel as primary heating surface with wrap-around radiator as secondary surface. These oil-fired models have heating capacities from 105,000 to 189,000 BTUH. American Furnace Co., St. Louis. For details, check No. 26 on p. 183

Electric baseboard is available in lengths from 4' to 10', rated at 1,000 to 2,500 watts at 240 volts. Heat exchanger glides on rails to eliminate expansion and contraction noises. Each section has separate safety thermal cutout. Hunter Div., Robbins & Myers, Memphis. For details, check No. 30 on p. 183

Infra-red heater radiates warmth to people on porches, patios, or pool-sides. Radiant quartz element reaches maximum output in seconds. Units range from 500 to 2,000 watts, from 19½" to 33" long. Lau Blower Co., Indianapolis.

For details, check No. 27 on p. 183

Gas air conditioner for central installation now comes in a small version with 34,000 BTUH cooling capacity and heating input of 90,000 BTUH. Variable input control permits setting cooling between 2 and 2.8 tons, and cutting heating output by 50%. Arkla Industries, Little Rock. For details, check No. 31 on p. 183

Window air conditioner has built-in gas heater with 20,000 BTUH input capacity. Cooling capacity of 115-v. model is 8,500 BTUH; of 230-v. model, 9,400 BTUH. Heating section of Dyna-Temp vents to outdoors. Suburban Appliance, Morristown, N. J. For details, check No. 28 on p. 183

For details, check No. 25 on p. 183

Gas furnace with 12"-wide cabinet for apartments comes in 50,000 and 80,000 BTUH models. Matching cooling coils and condensers are available. Furnace features seven-stage heat exchanger and aluminized steel burner. Wright Mfg. Div., Midland Ross Corp., Phoenix. For details, check No. 32 on p. 183

Electronic air cleaner is now made in small "compact line" for home installation. Seventeen models are offered with capacities ranging from 800 to 9,600 cfm in both vertical and horizontal flow models. Electro-Air Cleaner Co., McKees Rocks, Pa. For details, check No. 29 on p. 183

Casement air conditioner fits window openings 16" to 40" wide without alteration. Model K-401 is rated 4,000 BTUH; Model K-501 is rated 5,500 BTUH. Both are installed by removing bottom pane from casement sash, slipping unit in place. Kelvinator Div., American Motors, Detroit. For details, check No. 33 on p. 183

New products continued on p. 162

ALERT BUILDERS DISCOVER "A GOLD-MINE" AT N.A.H.B.!

YES! In most cases
Jones paneling is comparable
in costs to dry-wall
construction . . .
sometimes less.

YES! It's prefinished and ready to install . . directly over studs if you wish. YES! It's available nationwide at 16¢ per sq. ft. YES! Prefinished moulding and trim is also available to match your orders of Jones Paneling.

YES! In addition to paneling, Jones can supply Philippine Mahogany Lumber.



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POTENTIAL GOLD-MINE OF PROFITS FOR '63

GENUINE WALNUT, CHERRY, BIRCH. Selected from the choicest hardwoods, each 4' x 8' panel is carefully dried and milled to a superb quality. The natural phenomena of burls, knots, swirls, grains and textures are retained for added interest.

Each panel is Custom hand V-grooved and hand-striped with a non-fading, non-chipping color dye. These prefinished panels offer unsurpassed charm to any priced home. Ideal for business and institutional buildings too.

LAKESHORE PRINT SERIES Lakeshore Print panels are available in a wide variety of flawless true-wood grains. The clear, smooth, lifetime prefinished surface reflects the deep etched authentic pattern. Available in Walnut, Cherry, Winter Teak, Rosewood and Oak; plus 8 new designs for '63. The 4' x 8' panels are ready for installation, V-grooved or plain. The nine separate production processes assure you of exceptionally high quality and uniform finish throughout.

LAKESHORE TROPICAL-COLOR MAHOGANY . . .

Genuine Philippine Mahogany adds a touch of luxury and quality to any room. The Jones Vinl-Tone factory finished surface captures and permanently seals-in the distinctive colors of the Far-East, producing a panel that belies its low cost. The V-grooves are shadow-toned in a contrasting color. Five different colors are available. Dove Grey, Natural, Tusk Ivory, Charcoal and Frosted Ramin.

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• PREFINISHED MOULDINGS TO MATCH THE COMPLETE LINE OF JONES PREFINISHED WALL PANELS!

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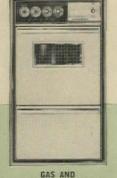
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Ranges



Whirlpool gas stack-on is 39 wide to fit with standard-width cabinets. Mark 39 has radiant-heat broiler and slide-out range top with three regular and one thermostatically controlled burner. Whirlpool, Benton Harbor, Mich. For details, check No. 34 on p. 183



Jenn-Air ovens have a built-in hood and vent fan to eliminate smoke and odors within the oven itself. Matching range also has a built-in hood and fan. Oven door and range are of brushed stainless steel. Jenn-Air, Indianapolis. For details, check No. 36 on p. 183



Kelvinator slide-in electric ranges come in 30" and 20" models. Ranges install either flushto-counter with polished side-trim molding or overlapping the counter with backsplash trim molding. Kelvinator, Detroit.

For details, check No. 38 on p. 183



General Electric range is a 30" free-standing unit designed to look built-in. It has an eve-level and a lower oven, and four surface units. Americana also has a builtin hood with top or rear vent. G.E., Louisville.

For details, check No. 35 on p. 183



O'Keefe & Merritt 30" Electric Contempo has eye-level oven with variable-speed-control broiler. Range top burners have infinitely variable controls. Metal or wood base cabinets are also available. O'Keefe & Merritt, Los Angeles. For details, check No. 37 on p. 183

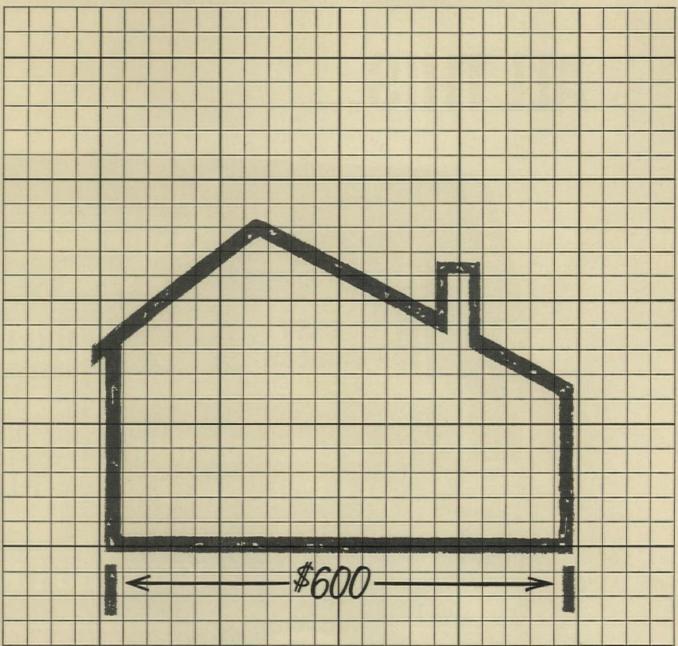


Hotpoint Town and Country range is a low-price 24" drop-in unit. Control panel adjusts front to back, slides on counter-top to fit backsplash location. Model RF19D has four surface burners. Hotpoint, Chicago.

For details, check No. 39 on p. 183

Publications start on p. 167

What builders need, builders get from Chrysler Airtemp



WHOLE-HOUSE AIR CONDITIONING FOR LESS THAN \$600!

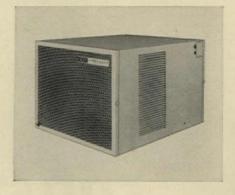
With Chrysler Airtemp's Model 1140, you can provide each new home you build with 33,000 BTUH of cooling capacity—enough to cool 2,200 square feet of living space—for less than an average fireplace costs!

This compact, low-cost unit was especially engineered by Chrysler to help you sell more homes faster. Useless weight, bulk and fancy frills are eliminated. Model 1140 can be used with any conventional forced warm air furnace located near an outside wall. The 1140 features permanently lubricated bearings, a 24-volt control panel, choice

of constant or automatic fan operation. It can be installed in an attic or crawl space, on a roof top or slab outside.

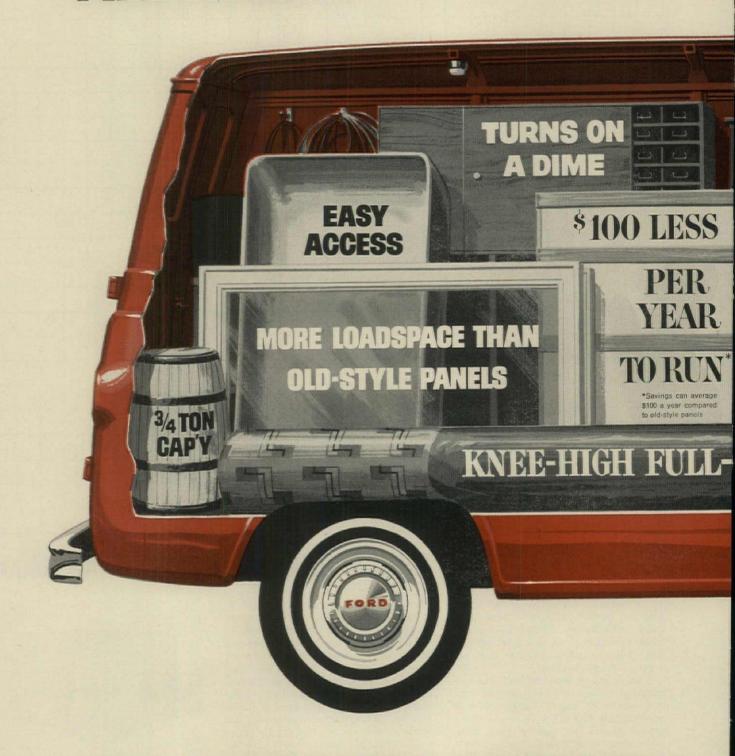
space, on a roof top or slab outside.

Chrysler Airtemp has also pioneered in gas and oil-fired furnaces for more than a quarter of a century. The complete line includes efficient, economical furnaces and air-conditioning equipment for every size and type of home. For full information, call your Chrysler Airtemp distributor—today! Or write to Chrysler Corporation, Airtemp Division, Department BU-63, Post Office Box 1037, Dayton 1, Ohio.





ALL THIS ...

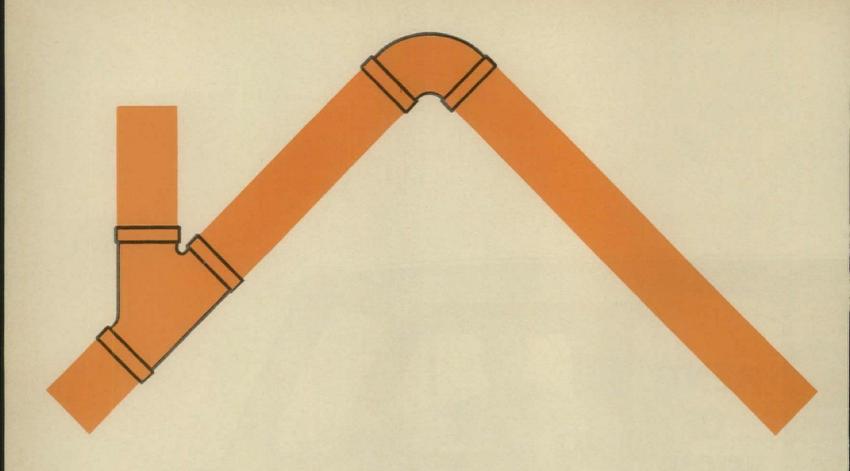


FOR \$126 TO \$394 LESS*!

*Based on a comparison of latest available manufacturers' suggested retail prices of popular conventional ½-ton panels



'63 FORD ECONOLINE VAN



Copper costs no more—often less—than rustable piping. Specify it for drainage, water, heating and you build in: better resale value (home buyers appreciate the quality of copper)... lower maintenance (no costly trouble due to rust)... more usable floor space (3" copper stack installs in standard-width partition). Send for illustrated brochure "Why It Pays to Specify Copper." Write Anaconda American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ontario.

62-1383

All-copper plumbing gives home buyers extra value at no extra cost to you

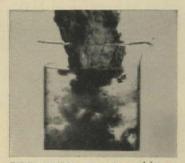


Leading Wholesalers Stock Anaconda Products

PUBLICATIONS



Brochure shows one-step, spray-on grass and erosion-control system



FIBER MULCH separates and is suspended to form a slurry in water.



MULCH AND SEED interlock to form a blanket on the ground.

In photos like those shown, and detailed text, a 4-page brochure describes a new system of planting large areas at minimum cost. The method was developed for roadside planting, but has been successfully used to install lawns in sloping subdivisions.

Seed, fertilizer, water, and a cellulose fiber mulch (called Turfiber) are sprayed on hydraulically. Two or three men can hydraulically seed, fertilize, and mulch an acre in less than one hour. Cost of materials: about \$60 per acre.

Many thousands of acres, under a wide range of climate conditions, have been successfully treated. The system has also been accepted by the U.S. Forest Service, the U.S. Corps of Engineers, the National Park Service, and the Soil Conservation Service. International Paper Co., Mobile. For copy, check No. P1 on p. 183

Paint sample guide shows color harmony

Each of its 139 pages is a different paint color. And each page has a cutout so the color can be viewed next to an actual sample of carpet. (The guide contains eight carpet samples selected to represent today's most popular floor covering colors.) Each large paint color sample also has six small harmonizing paint color samples pasted on its face. For more information write, J. A. Magee, National Lead Co., 111 Broadway, New York City 6.



Publications continued on p. 171



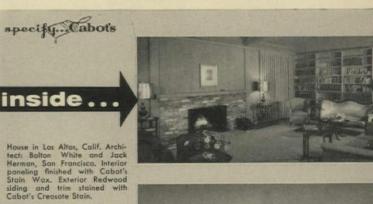
Don't put off having this convenience in your office! Rotolite, the biggest name in "compact" whiteprinters, offers the lowest prices in the world. Five different wall hanging models. Choose the one best suited for you. Only one inexpensive lamp to replace. Lowest maintenance cost. Prices start at \$129.50, complete with tube developer.

Rotolite Expeediters-fastest diazo lamp gives top speed. Dial control speed adjustments.

Rotolite Thermomatic—new amazing, heated ammonia diazo developer. Automatic, No venting.

MAIL THIS COUPON FOR FAST REPLY

ROTOLITE SALES CORPORATION, Stirling, N. J. Phone Millington 7-1040 Gentlemen: Please send complete information. Address City..... State.....







FINISHES REDWOOD

Enhance natural beauty of redwood

Easy to apply . . . economical too

For exteriors: Your choice of finishes - clear, natural, gloss, driftwood

or stains in 35 distinctive colors.

Stain, wax and seal in one easy operation with Cabot's Stain Wax. For Interiors:

FREE COLOR CARD BROCHURE

SAMUEL CABOT INC. 230 S. Terminal Trust Bidg., Boston 10, Mass. Please send your "Redwood Staining" Brochure

"NO DOUBT ABOUT IT...

RCA WHIRLPOOL appliances helped us





Model SKU-65

168

offer you the most complete

selection ever. New Con-

noisseur ranges . . . popular

built-in ovens and cook-

tops...set-in or free-standing models. All available in gas or electric models.

selection of single-door re-

frigerators or double-door

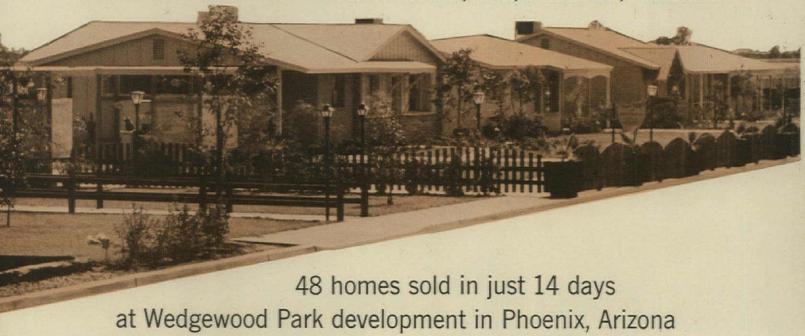
refrigerator-freezers. All

fit flush with side cabinets

for that built-in look.

in our kitchens really speed up home sales!"

... SAYS KAUFMAN AND BROAD HOMES, INC., PHOENIX, ARIZONA



Providing home buyers with quality features usually found in higher-priced homes is the basic success formula of these two young builders. Features like full landscaping, covered patios and kitchens that not only look bright and modern but offer prospects the easy-to-live-with convenience of new RCA WHIRLPOOL appliances. Like other builders, they have discovered the benefits of one-source ordering for a full line of gas or electric appliances that can increase your discounts . . . decrease your paper work. Common gas-electric cutouts permit fast substitution without revision cost. Call your RCA WHIRLPOOL distributor and join up . . . it's easier to sell homes with RCA WHIRLPOOL appliances than sell against them . . . call him today!

Your greatest asset is our quality performance!



Here are President Eli Broad and Executive Vice President Donald Kaufman planning future developments. They started building on a small scale in Michigan in 1957. Today they have successful subdivisions in Phoenix, Arizona, Detroit, Michigan and also in California. During '62 they built over 1650 homes, and are looking forward to a healthy increase in 1963.

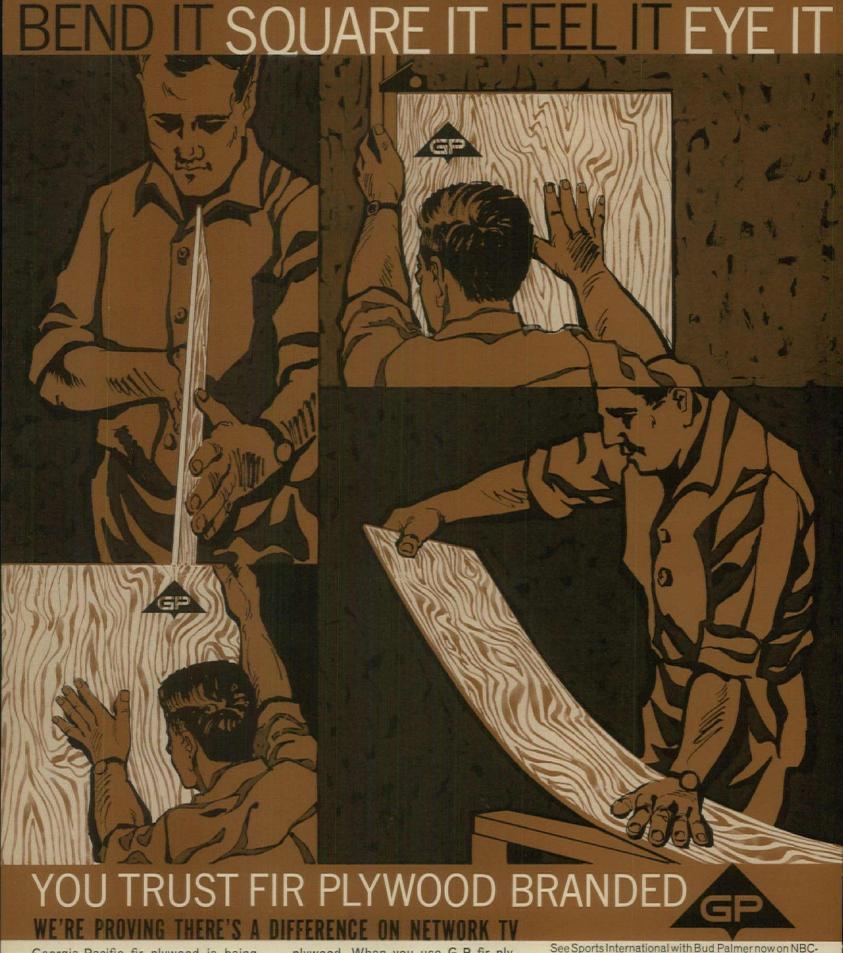


CONFIDENCE
MEMBER OF
BRAND
NAMES
FOUNDATION, INC.
SATISFACTION

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

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

Use of trademarks (6) and RCA authorized by trademark owner Radio Corporation of America



Georgia-Pacific fir plywood is being pre-sold to potential new home buyers and remodelers . . . to your customers . . . by Georgia-Pacific's sponsorship of major network sports programs!

This is important to you because the millions of people who have seen G-P fir plywood tested on TV trust the brand G-P as the mark of quality for

plywood. When you use G-P fir plywood you bolster your customer's confidence in you ... and help to assure his satisfaction with the finished job.

Take advantage of the public's acceptance of G-P fir plywood by using it... and by featuring the plywood with the "vital plus" in your advertising, promotions and displays.

See Sports International with Bud Palmer now on NBC-TV; see P.G.A. Golf Tournament next July on CBS-TV; a major football show to be announced for fall.



PUBLICATIONS

start on p. 167



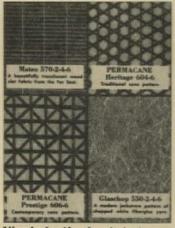
Early American lighting styles are shown in a new 12-page catalog. Line includes more than 40 fixtures of white hobnail and cranberry glass, reproductions of antique copper and brass, John C. Virden Co., Cleveland.

For copy, check No. P2 on p. 183

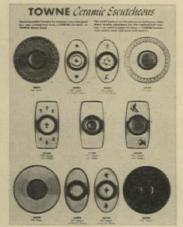


Total comfort system booklet describes matched components for heating, cooling, air cleaning, circulating, humidifying, and controlling. Eight-page booklet and promotional material. Westinghouse, Staunton, Va.

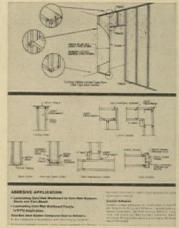
For copy, check No. P3 on p. 183



Vinyl plastic sheets in decorative patterns (above) are reproduced in color and shown in various interior applications in four pages. Panlam patterns come .06", .04", and .02" thick. Polyplastex United, Union, N. J. For copy, check No. P4 on p. 183



Door and drawer hardware: decorative doorknobs, escutcheons, switchplates, and drawer pulls of ceramic, brass, and marble. Eight pages of items like ceramic escutcheons shown above. Yale & Towne, New York City. For copy, check No. P5 on p. 183

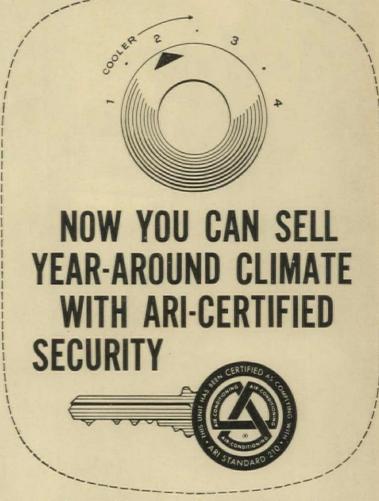


Drywall partition systems: 8 pages of plans and specs for solid gypsum core drywall partitions (above), semi-hollow gypsum stud drywall partitions, and gypsum wallboard steel stud drywall partitions. Celotex, Chicago. For copy, check No. P6 on p. 183



Asbestos-cement pipe: Eightpage booklet covers handling, assembly, fittings, pumping, and maintenance. Design data and specs. Suggestions on where to use air relief and drain valves. Johns-Manville, New York City. For copy, check No. P7 on p. 183

Publications continued on p. 177



Alert builders know that central air conditioning sells houses—in the north as well as the south. They also know that the ARI Seal of Certification sells prospects on the builder's reliability.

All equipment bearing the Seal is rated in uniformly-accurate British Thermal Units per hour. ARI engineers check manufacturers' specifications. Units are picked at random and tested by the Electrical Testing Laboratories, Inc., New York City. If a unit fails to deliver the cooling capacity claimed for it, the manufacturer must either lower his claims, raise cooling capacity to meet his claims, or take the equipment off the market. Manufacturers who make over 90 per cent of all central air conditioning equipment support this industry-wide program.

Let the Seal sell for you. And if you would like advice on how to offer the prestige of central airconditioning in all your new homes, write ARI for the new, free booklet, "The Big Breakthrough in Central Air Conditioning." Write, too, for the free ARI Directory of Certified Air-Conditioners.







Exclusive Appeal

Only Roper makes the exclusive 30" Gas Charm! A complete compact cooking center. The new Charm packs today's . . . and tomorrow's most-wanted features into its sleek-styled 30"!



Added Profits

New ease and economy of installation bring extra profits when you feature Roper Counter Built-In ranges. King-sized ovens with "free-standing" capacity, combined with smart, built-in style and unexcelled Roper quality highlight this line!



Versatility

Double-ovens, single-ovens, colors, fuels, sizes, features . . . you name it, Roper has it! There's a Roper oven and companion cook top to compliment any style, any price home. Regardless of which Roper built-ins you select, you're assured of reliable Roper quality!



Reputation

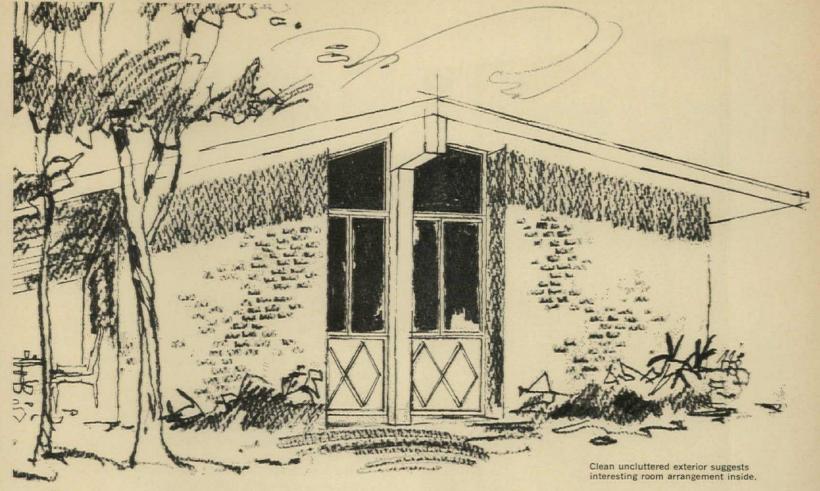
Add the dividend of Roper's reputation for quality and performance. When prospects see Roper in your homes, they know the name, and the quality image that comes to mind is immediately associated with your homes.

Tip the sales scale in your favor in '63...add Roper.

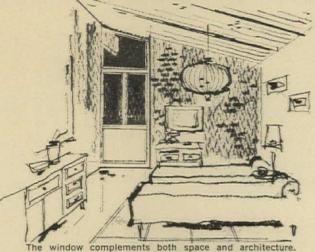
- Since 1885, America's smart homemakers have relied on ...



GEO. D. ROPER CORPORATION KANKAKEE, ILLINOIS



Creative Window Planning



The window complements both space and architecture. Casement windows combined with fixed glass and color panels below provide excellent design interest.



Malta 2N5 Casement Windows are ideally suited for designs of this type.

from an architect's sketch pad

"The window is a dominant design element for both interior and exterior planning. It is primarily responsible for valuable first impressions your prospective home buyer receives; it is equally responsible for effective furniture placement, privacy, light and ventilation within the home.

"In the example above, the conventional placement of windows for two bedrooms has been avoided by the centering of a single element that services both rooms. Drama has been added with glass to the roof line. Inside, there is ample space for all bedroom furniture, excellent ventilation and privacy."

MALTA wood windows... focal point of good design!

For new and original sales appeal, Malta Wood Windows offer the greatest bargain any builder could want: the warmth of wood, quality Ponderosa Pine, a quality appeal for home buyers. Malta has the line and the design to help you convert the ordinary into exciting new areas of interest. Score better appearance points on the outside — new heights of good taste within each room.

And the Malta Quality Label expresses your good judgment. Use Malta Windows with confidence; recommend them with pride. Your prospects will sense the difference. Send for Malta's Idea Kit and Catalog of window types and ask about the Vinaline — newest concept in windows!

Fast becoming FIRST in creative window design

THE MALTA MANUFACTURING COMPANY

120 MILL STREET, GAHANNA, OHIO . PLANT FACILITIES: MALTA, OHIO





This door's fit to be hung

It was precut at our Algoma plant to exact dimensions for a particular opening. It was premachined for a certain set of hardware. And it was prefinished exactly as specified.

The door arrived on the job—with other Weldwood® premachined and prefinished doors—properly protected and indentified, ready for installation of hardware and hanging. This kind of service maintains schedules—eliminates delays caused by the weather and errors in on-the-job workmanship. It assures proper operation—prevents costly callbacks for adjustments.

Best of all, you can fill complete door schedules with Weldwood Doors. There are doors for every need, interior and exterior, fire doors, acoustical doors, special-purpose doors. There are engineered constructions for every requirement. These doors come in a variety of faces—selected hardwood veneers, Permagard®, plastics and Duraply® (the best surface for paint). They all have the backing of a single, responsible manufacturer, United States Plywood. Send in the coupon for complete information about Weldwood Doors

ing services.

WELDWOOD

and Weldwood factory machining and finish-

DOORS

Products of United States Plywood

United States Plywood, Dept. HH 2-63 55 West 44th Street, New York 36, N. Y.

Please send me your 23-page Weldwood Door catalog.

NAME.....

FIRM....

ADDRESS

CITY......ZONE....STATE.....

House offers today's sales

closer: "Trouble-free"

More and more builders are realizing that it pays to build a trouble-free house. And one of the best ways of assuring buyers they are getting that kind of house is to use—and promote—nationally advertised brand name building products.

Such products have been tried and tested for top performance, low-cost maintenance enduring value. Buyers of trouble-free houses are satisfied buyers who recommend you to their friends.

Brand Names Foundation



437 Fifth Avenue, New York, N.Y.

HERE'S A POINT OF DIFFERENCE

Here's a glamorous plus that captures the imagination of any housewife...marks your houses as more modern, more luxurious.

And Magivac is not only a strong merchandising tool . . . it is profitable in itself.

One mass builder is roughing in wall tubing and low voltage switching wiring for less than \$65 per house, then offering the power unit and attachments — at a proper profit — as an optional extra.

Behind Magivac there stands an established and respected company. The John E. Mitchell Company has been manufacturing fine machinery since 1905. Has a AAA-1 financial rating. Was one of the most honored plants in the nation for war production efficiency. Stands as number one in the world in its two other fields of endeavor.

This is the next great merchandising item in building. The idea is right. The time is right. And now the product, the program, the profit, and the back-up are right.

Clip the coupon and mail it today.

that will help:

*SELL HOUSES

*FILL APARTMENTS

Magivac

BUILT-IN CLEANING SYSTEM

PROMOTIONAL AIDS









SOME DISTRIBUTORSHIPS OPEN INQUIRY IS INVITED

Magivac

A PRODUCT OF

JOHN E. MITCHELL COMPANY

3800 COMMERCE

DALLAS, TEXAS

Manufacturers of Fine Machinery Since 1905

John E. Mitchell Co.
3800 Commerce St.
Dallas, Texas

Gentlemen: I am interested in MagiVac:
As a builder of homes
apartments

Name
Title

Firm name

Address

City
State

Go together... fast, low-cost construction and Wolmanized pressure-treated lumber. Hammer it. Saw it. Glue it. Paint it. It's clean, odorless, fiber-fixed, non-corrosive to metal. Works like ordinary wood . . . prevents termite and decay destruction. Protection lasts a lifetime, cost is only pennies more per board foot. Just what homeowners like to hear. Tell them, too, that behind each board foot branded "Wolmanized" are the vast technical resources of Koppers . . . resources with research in depth that has made the name "Wolmanized" synonymous with "leader." Specify Wolmanized lumber wherever vital wood members are subject to ground, water or masonry contact, or within reach of termites. Write for brochure "Safeguard Building Dollars." Wolman Preservative

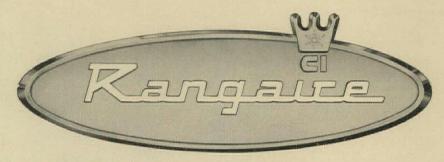
Dept., Koppers Company, Inc., 795 Koppers Building, Pittsburgh 19, Pa.

Wolmanized

PRESSURE-TREATED LUMBER



PRESSURE-TREATED LUMBER



New Rangaire Development in Central Air Conditioning

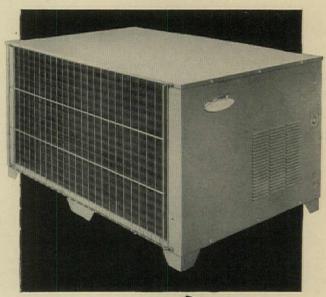
means more builders than ever before can add the powerful sales appeal of Rangaire all-year air conditioning to any home or apartment... and with an added margin of profit!

Now, install the *finest* air conditioning system available in every home or apartment you build and make a greater profit too. The new Rangaire QUICK-CONNECT system is completely precharged and sealed at the factory, assuring you a faster, cleaner installation at lower cost.

Rangaire's new QUICK-CONNECT design provides complete flexibility for even the most difficult installation . . . remote, rooftop or thru-wall for homes or multi-story apartments—comes with up-flow, down-flow or horizontal furnace.

Your buyer will be happier too. Nationally advertised Rangaire QUICK-CONNECT features a unique refrigerant metering device and is factory balanced to provide peak efficiency and maximum operating economy under all weather conditions.

Any way you look at it, Rangaire saves you money or increases your profit. Let us send you full details. Just fill out and return the coupon below.





Rangaire QUICK-CONNECT



MAIL
THIS
COUPON
TODAY!



Rangaire Corporation
Cobell Industries Division
Cleburne, Texas

Please send me full details on the new Rangaire QUICK-CONNECT system.

Name

Address

City____State___

PUBLICATIONS

start on p. 167

For copy of free literature, check the indicated number on the coupon, page 183.

Technical literature

engineered laminated structures. 24-page design manual covers curved, tapered, and straight beams; trusses; arches; purlins; Aframes; etc. Koppers Co., Peshtigo, Wis. (Check No. P8)

kitchen-bath-utility cores. 36 pages. Shows how to fit new LuReCo core (H&H, Oct., p. 143) to various floor plans. Working drawings and research data for four different cores: \$25. For book or drawings, write Raymon Harrell, Lumber Dealers Research Council, 1200 18th St., Washington 6.

ALUMINUM STRUCTURES AND FRAMING. 26 pages. Application, architectural details, structural properties, load data, economy tables, specs. Functional Structures Inc., Des Plaines, Ill. (Check No. P9)

ELASTOMERIC ADHESIVES, COATINGS, SEALERS. 12 pages. Properties and uses. Minnesota Mining & Mfg., St. Paul. (Check No. P10)

USE OF STEEL FRAME SHORING. Safety factors, live loads, timber stresses, and recommended erection procedures. Steel Scaffolding & Shoring Institute, Cleveland. (Check No. P11)

VERSATILITY IN WOOD ROOF TRUSSES. 8 pages. Describes design with drawings. Timber Engineering Co., Washington. (Check No. P12)

EXPANSION JOINT SELECTION. Thermal expansion coefficients of concrete. Diagrams showing what type joint to use where. W.R. Meadows Inc., Elgin, Ill. (Check No. P13)

GAS VENTS. 4 pages. Safety features of doublewall gas vents. Gas Vent Institute, Chicago. (Check No. P14)

ELECTRIC HEAT CONTROL CENTER for motels. 4 pages. Specs, operation, installation with diagrams. Minneapolis-Honeywell Regulator Co., Minneapolis. (Check No. P15)

EXPANDED POLYSTYRENE INSULATION. 8 pages. Application details for perimeter foundations, floors, walls, and roofs. Also for application as a plaster base and for freezer rooms, UniCrest Div., United Cork Cos., Kearny, N.J. (Check No. P16)

Catalogs

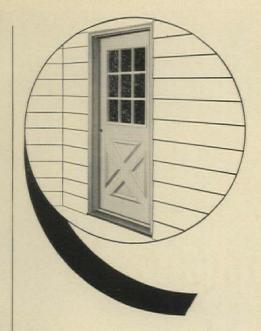
HOODS AND VENT FANS, 20 pages. Models, specs, and accessories. Miami-Carey, Middletown, Ohio. (Check No. P17)

NAILS. 76 pages. Points, heads, shanks, finishes, coatings, gauges, selection, special applications, and packaging. Also tacks, brads, and staples. Colorado Fuel & Iron Corp., Denver. (Check No. P18)

CABINETS AND ACCESSORIES of wood and steel for kitchens and baths. 16 pages. Models, diagrams, and price list. Standard Steel Cabinet Co., Chicago. (Check No. P19)

POWER TOOLS AND ACCESSORIES. 16 pages. Drills, circular and sabre saws, and belt and pad sanders. American-Lincoln Corp., Toledo. (Check No. P20)

Catalogs continued on p. 182



not a single call-back



on Pease Ever Strait Doors

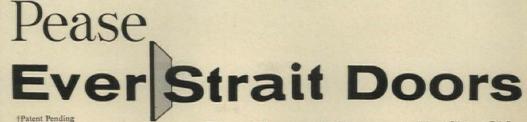
says Paul R. Bickford of Hampton Homes, Inc., Hampton, Va.

Tired of replacing warped doors at nearly double the cost of initial installation? From beginning to end, the Ever-Strait† exterior Door by Pease is the "perfect solution." That's why Paul Bickford, busy President of Hampton Homes, Inc., claims:

"In our very humid climate, warped exterior doors have long been one of the builder's most serious problems. Pease Ever-Strait Door assemblies were the perfect solution. We have not had a single call-back on these doors, plus the fact that they are a true component part. Our installation time at job site was approximately twenty minutes, and we haven't had to touch them since they were installed."

Pease Ever-Strait doors come in 24 striking designs. From the original flush model to designs incorporating molded trim and glazed light inserts, each Ever-Strait Door is your low cost answer to quality and warp-free service. Why? Pease exclusive Ever-Strait design sandwiches a rigid Koppers Dylite†† foam core between two steel panels for top strength and insulation. This also results in a substantial sound and "feel" yet at only one-third the weight of conventional doors. Ever-Strait Doors come complete as Pease-fit units—primed and prehung in a weather-stripped frame. Remember, to lower your costs, use Pease Ever-Strait Doors. For informative brochure, write:

Some Distributorships available—inquiries invited.



Pease Woodwork Company . Hamilton, Ohio



While the natural-finished posts and beam set off this pleasant dining area from the living room beyond, the wood floor and ceiling convey a charming unified effect. Wood brings new freedom to dining room design.

The more WOOD in the dining area, the more sales appeal in the house



Varied grain figurations and color tones make this random-width paneling discreetly decorative. Overhead, a contrasting effect highlights the wood ceiling and structural supports. It all complements the wood furniture.

Even in a modern house, it pays to respect tradition. Home-buyers *expect* to find wood in the dining area, where it is such a traditional good companion to good food. Just as dining room furniture is almost invariably wood . . . so is wood's beauty welcomed in the floor, on adjacent walls and ceilings. Its endless variety of grains, tones, and finishes permits the perfect choice for dining rooms of any style or size. Its natural warmth and serenity, its suitability for the most formal or informal repasts, make the generous use of wood in this area a sales-clinching *plus* for the house.

Wood adds visible value . . . as well as hidden soundness . . . to any part of any architectural plan. The basic economy of wood, in every phase of residential construction, enables you to build not only the best homes but also the best-selling homes in your community. For more information on building better homes of wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION Wood Information Center, 1619 Massachusetts Avenue, N.W., Washington 6, D.C.

nlma

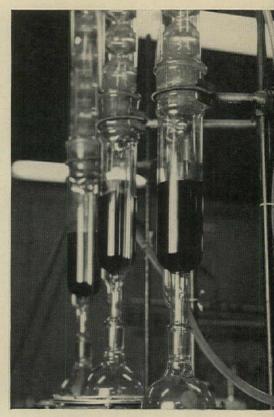
It's built to sell when it's built of Wood



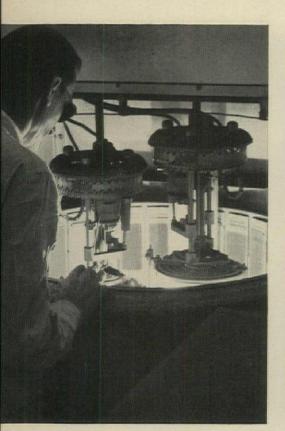
Here, wood frames a garden view through windows and sliding glass doors. The strip ceiling gives continuity to the roof overhang. Wood makes the adjacent snack and service counter as attractive as it is convenient.

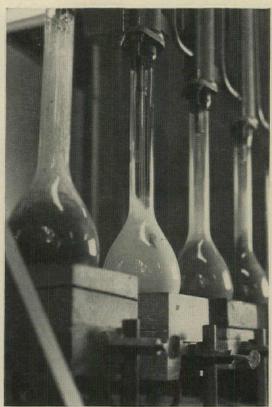
RESEARCH PART OF OUR PRODUCT





Skilled hands-inquiring minds-newest techniques-all united







at Certain-teed in an unceasing search for better products for America's greatest industry.

WHAT'S COMING NEXT FROM CERTAIN-TEED? We have pioneered many processes and techniques to produce outstanding roofing and siding products: superior felt base from fresh wood fibers, asphalt saturation through the exclusive Millerizing process, automatic controls for uniform granule application, the Walton device for color blending, a packaging machine to protect roofing products. For continued leadership look to Certain-teed Products Corporation, Ardmore/Pa. Plants and offices throughout the United States



SUPERIOR PRODUCTS through CREATIVE RESEARCH



The Overlook, one of six models, has four bedrooms, three full baths and recreation room. Outside, a balcony, covered porch and patio make the most of the wooded, rugged terrain. All homes at Carderock Springs were designed by Keyes, Lethbridge & Condon, A.I.A.

In Bethesda, Maryland, this house sells for \$34,500

("...and features like concealed telephone wiring help sell it," says Edmund J. Bennett)

"Customers know we've thought of everything when they find our homes have the convenience of concealed telephone wiring," says Mr. Edmund J. Bennett, president of Bennett and Matthews Construction Company, developers of Carderock Springs, a growing community on about 170 acres in Bethesda, Maryland.

"Beauty is the outstanding advantage of concealed telephone wiring. Our salesmen point out how flexible it makes decorating. Today's home buyers certainly are conscious of the advantages of

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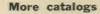
* * *

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



BELL TELEPHONE SYSTEM

start on p. 167



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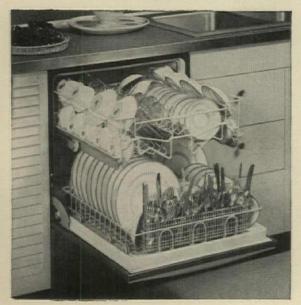


COMPACT 30" RANGE LOOKS BUILT-IN BUT INSTALLS WITH A SCREWDRIVER. Just leave a space in a cabinet or between cabinets for the Compact 30" and ease it in. A screwdriver is all you need and this handsome but inexpensive range is ready to beguile the most blase prospect. Choose the finish that matches or comple-

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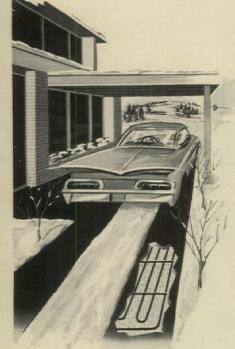
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