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Roundup:

Money outlook: tight despite FHA rate boost

Don't count on the 5¾% FHA interest rate to bring out much new money for mortgages. Mortgage men are convinced they will see little increase in the supply of money until sometime next year. Their chief hope is that a higher rate will stop some lenders from taking their money out of the mortgage market in favor of more lucrative investments.

A ½% rate boost will *not* mean an automatic 4 point cut in discounts either (see p 63). The price of money is rising so fast in this worst money pinch since 1933 that lenders are grumbling that the 93-94 (or lower) prices they now pay are too big, produce too small a yield. Look for the price on 5¾% FHAs to settle at 94½-96½ (outside the East Coast). But later this fall the price may well go lower. Prices on 5¼% loans may hit 90 or lower. So VA, with its politically frozen 5¼% rate, will again be left in the outfield.

Home week crowds surprise even builders

Despite tight money, demand for homes across the US continues strong. And many experts predict it will remain strong through next year. Huge turnouts during National Home Week in September—and resulting sales—astonished even builders. Some samples: Minneapolis had 130,000 lookers on opening Sunday. In San Diego, with 41 builders taking part vs the 25 of last year, Parade of Homes crowds were up 35% from 1958. A check of 10 builders showed 83 sales on opening weekend. Even in Pittsburgh and Buffalo, where the steel strike is hurting most, crowds and sales at the parades were good. Reports were also favorable from New Orleans, Kansas City, Denver, Little Rock, Seattle, and Richmond, Va.

Forecasters see 1960 as slower, but still good year

First forecasts of the pace of housing next year are coming in. They cluster around 1.2 million starts—which would make 1960 the sixth best for housing in history.

Managing Director Ken Heisler of the Natl League of Insured Savings Assns. predicts "about 1.2 million" starts. Chairman Melvin Baker of Natl Gypsum foresees a "slight decline" from an expected 1.3 million starts this year. Treasurer Walter Hoadley Jr of the Armstrong Cork predicts a 10 to 15% drop from this year, which would mean 1.15 to 1.2 million starts. Value-Line Investment survey looks for a drop to 1.15 million. All agree with Hoadley that scarcer money and rising interest rates are real brakes on next year's production. Hoadley contends construction is tending to become more stable than is generally recognized. Says he: "New building and especially new home construction . . . fluctuate more narrowly between a politically acceptable floor and a tight money ceiling."

Is pinch-penny Congress cheating FHA home buyers?

Congress should restore FHA's former power to spend up to 35% of its premium receipts for operating expenses.

FHA Commissioner Julian Zimmerman made this argument the focus of his talk at a Waldorf-Astoria Hotel dinner last month honoring FHA's 25th anniversary. Said he: "If we are not permitted to use enough of our income to provide the service everyone agrees is proper, we are not dealing honestly with the income from the insurance premiums."

FHA operated under a percentage spending ceiling for a few months in 1949 and 1950. Then Congress recaptured power to impose a flat dollar ceiling on how much of its income FHA can spend. Since, the agency has been able to spend only from 23 to 28% of its money, and runs into repeated crises for lack of staff.

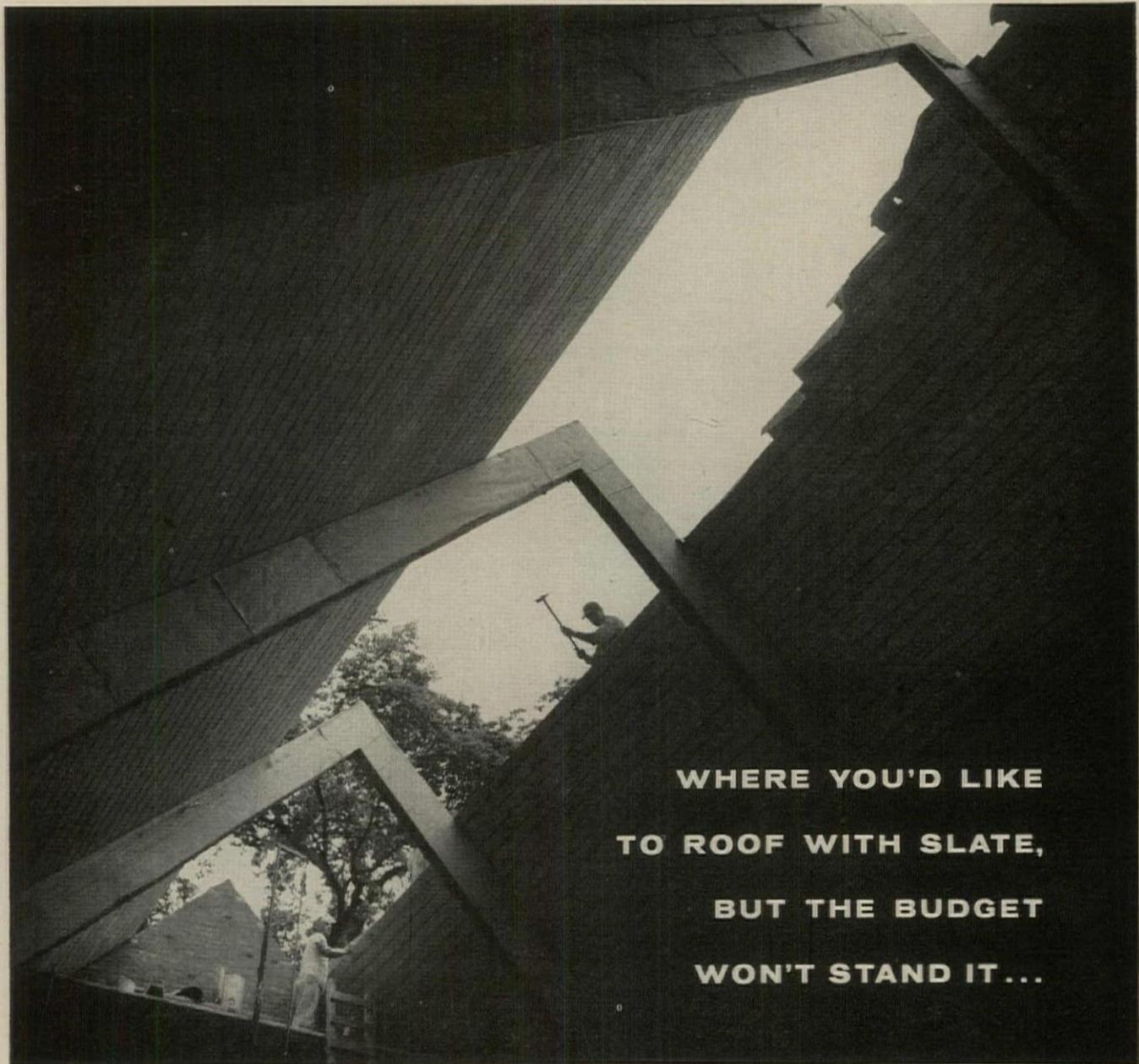
WASHINGTON INSIDE: FHA, which has always looked down its nose at second mortgages, is mulling a plan to insure such junior liens in special cases, notably major home rehabilitation projects. If an older home has a very small first mortgage, odds are it would be cheaper to finance improvement through an insured 4 or 4½% second mortgage than through Title I or Sec 203 refinancing. But the scheme would require new legislation. FHA Commissioner Julian Zimmerman is studying the plan because he does not like the high price of Title I repair loans—currently discounted at 5% per year which means about 9.7% interest.

FHA has been asked to gather data on second mortgage home financing for Rep. Albert Rains' House housing subcommittee. The committee plans to hold hearings before Congress reconvenes. Rains also wants to investigate tight mortgage money, and he may hold hearings on FHA's proposed plan to insure land purchase loans. Capitol Hill buzzes that the White House may soon loosen its grip on part of the \$100 million in VA direct loan money voted by Congress in July. There is a backlog of 55,000 applications. VAides say they hope VHMCP can cope with many of them.

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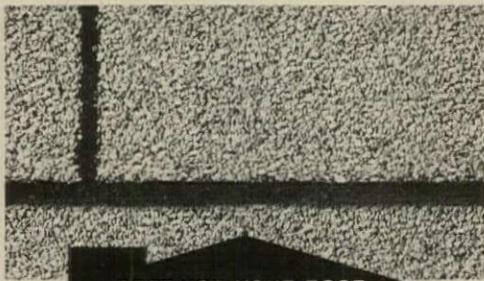
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How the new housing law will help the industry

'Third-try' act opens new bonanza opportunities in FHA co-ops, eases rental and renewal housing

Administration withholds lower FHA down payments, higher FNMA limits—things builders wanted most

The third-try housing bill, which became the Housing Act of 1959 with President Eisenhower's signature Sept 23, gives the private housing industry its biggest package of legislative favors in years.

But to the dismay of a sizeable segment of the industry the Administration has decided to withhold two helps builders wanted most. They are:

- **Lower down payments on FHA-insured homes.** Explains FHA Commissioner Julian Zimmerman: "Based on the continuing high level of activity in the industry this further stimulus is not needed at this time."

- **Higher Fanny May limits.** The law lets Fanny May lift the ceiling on FHA-VA loans it buys in its secondary market program from \$15,000 to \$20,000. It also lets Fanny May make advance commitments on existing houses. The Administration fears these changes would increase purchases so much that FNMA would have to sell more debentures in the short-term money market this fall than now planned. This could interfere with the Treasury's upcoming refinancing of \$4 billion of the government debt. So both provisions have been shelved temporarily.

The pill was extra bitter because builders had thought they had finally won the long uphill battle. When President Eisenhower vetoed the second bill Sept 4 the Senate immediately moved to override amid warnings from Democratic leaders that it was this bill or none. The effort failed by five votes of the necessary two-thirds majority, 58-36. After first grumbling there would be no further legislation, the Democratic leaders pushed a third bill through—with advance assurance of Ike's approval. It made only three changes from the second bill (*see table next page*).

The Administration acted promptly to put most of the important new aids into effect—except for the two listed above. FHA's biggest move was boosting the maximum interest rate on its 1- to 4-family home program from 5¼% to 5¾%—an overdue recognition that prices in the nation's money market had left FHA's rate up to 7 or 8 points below the yield lenders demand to make loans at all. (But some builders opposed the increase because it means higher monthly mortgage payments, thus squeezes some home buyers out of the market. Said NAHB President Carl Mitnick: "This is no answer to the problem.")

FHA has long had statutory power to boost interest rates on the house program to 6%. But it waited until Eisenhower had signed the new law because its insuring authority was so nearly exhausted. FHA simultaneously boosted interest ceilings on five other programs (*see p 63*) as the new law permits. Most important: rates on Sec 213 management co-ops and 207 rentals go from 4½% to 5¼%; Sec 213 sales projects go from 5 to 5¾%.

The major changes in detail—and what they should mean to housing:

Fanny May: The new \$20,000 limit under the secondary market program would make a big slice of formerly ineligible loans saleable to FNMA. The law also lets FNMA lift the limit on loans purchased in the special assistance programs from \$15,000 to \$17,500.

Though these boosts have been delayed, FNMA President J. Stanley Baughman made it clear that when the Treasury gets past its refinancing hurdle "we'll take another look at the situation." He adds: "We recommended it (the higher limit) ourselves. We're not against it. It's just that in this situation today we didn't want to add chaos in the money market."

Fanny May finances its secondary market operation by borrowing from the Treasury and public up to 10 times its capital and surplus. When its debt to the Treasury gets up to \$100 or \$150 million, it customarily floats a debenture issue in the private market.

The new law also requires FNMA to extend special assistance commitments issued before Aug 27, 1958, on the same terms as the original commitments, where hardship and circumstances beyond the control of the builder can be shown. The aim of Congress is frankly to bail out builders who would otherwise be forced to get new takeouts for Sec 221 and Program 10 housing at discounts so big they might lose money.

Fanny May is also given full discretion in setting both fees and prices on special support programs.

Trade-ins: Realtors and builders now can get the same loan-to-value ratio mortgage as an owner-occupant under FHA Secs 203 and 220—provided 15% of the mortgage amount is held in escrow to reduce the mortgage if the property is not sold in 18 months. This eliminates double closing costs on houses

taken in trade. It should give trading—a key to bigger markets—an important boost.

FHA co-operatives (Sec 213) get such a big shot in the arm some experts think this small program (only 56,269 units in nine years) may at last begin to produce housing in quantity. Maximum mortgages are boosted from \$12.5 to \$20 million. Mortgage limits per room and per unit are boosted in line with today's higher costs (and also eliminate preference for veterans):

	OLD LAW		NEW LAW	
	per room	per unit	per room	per unit
Gard type, non vet.	\$2,250	\$8,100	\$2,500	\$9,000
Gard type, veteran.	2,375	8,550	2,500	9,000
Elev type, non vet.	2,700	8,400	3,000	9,400
Elev type, veteran.	2,850	8,900	3,000	9,400
High cost area inc.	1,000	—	1,250	—

Maximum loan-to-replacement-cost ratio is boosted from 85% to 90% for investor-sponsored co-ops and from 90% (or 95% if half of co-operators were vets) to 97% for all others. Interest ceilings were upped from an almost unworkable 5% to 5¾% for sales-type co-ops and from 4½% to 5¼% for management type co-ops.

Community facilities can now be included in sales-type co-ops. Congress made it clear this *does* not mean just streets or utilities; it *does* mean parks and play areas. Both community and commercial facilities now can be included in 213 mortgages by investor-sponsored co-ops. For the first time, FHA can insure a co-op loan on existing property; but only management co-ops are eligible and the new loan ratios will be applied to appraised value, not replacement cost. Sec 213 still has a 40-year mortgage, which helps qualify more buyers. And the law authorizes Fanny May another \$25 million to buy co-op loans under special support (ie at subsidized prices). Of the \$25 million, half is earmarked for consumer-sponsored co-ops, half for builder co-ops.

FHA rental housing (Sec 207) also gets a major lift, but not quite so big a one as Sec 213. Maximum mortgages go up from \$12.5 to \$20 million. As with 213, per-unit and per-room mortgage limits are boosted—high enough to let builders put up much better apartments (*see p 184*):

	OLD LAW		NEW LAW	
	per room	per unit*	per room	per unit*
Garden type	\$2,250	\$8,100	\$2,500	\$9,000
Elevator type	2,700	8,400	3,000	9,400
High cost area inc.	1,000	—	1,250	—

*if under 4 rooms

Lifting the interest ceiling from 4½% to 5¼% should make 207s sell close enough to par again so the number of projects stymied by deep discounts will dwindle.

FHA insurance authorization, which was close to exhaustion, gets an \$8 billion increase. In deference to President Eisenhower's complaint in his second housing bill veto, Congress removed an Oct 1, 1960 deadline after which any of the \$8 billion unused would lapse. But the law prohibits FHA from using its stopgap agreements to insure in the future. FHA has some \$5 billion in ATIs outstanding. It will have to use most of the \$8 billion to convert these to regular commitments. So FHA is bound to run out of gas next year anyway. This guarantees it

will be held hostage again by Congressional elements who believe in more, not less government interference with private housing markets.

Savings & loans get permission to make *land purchase & development loans* for "primarily residential use." Such loans are limited to 5% of withdrawable accounts. And they may be made only by federal S&Ls whose general reserves, surplus and undivided profits come to more than 5% of withdrawable accounts.

Federal S&Ls also get permission to buy *participations in conventional mortgages* on 1- to 4-family houses without regard to the normal 50 mi radius restrictions. But only 20% of each S&L's assets may go into such loans. Moreover, not more than 30% of each S&L's assets may go into participations plus other loans which exceed the \$35,000-per-loan and 50-mi radius ceilings. FHA and VA participations, however, are exempt from these restrictions.

FHA urban renewal (Sec 220), which has produced only 15,817 units since it went on the books in 1954, is sweetened again. Maximum mortgages for one- and two-family homes go up (as for Sec 203) to \$22,500, and \$25,000, respectively. The limit for three-family homes jumps from \$27,000 to \$30,000. For rental projects, maximum mortgages and dollar limits per room and per unit go up to the new 207 levels. For the first time, exterior land improvements (as defined by FHA) may be included in mortgages without being computed under per room or per unit cost limits. (Some renewal sponsors have complained that they cannot afford the extra cost of landscaping.) Most significant of all, 220 mortgages may now include "such non-dwelling facilities as FHA deems adequate to serve the project and other housing in the neighborhood." Actually, this legalizes what FHA has already done at least once: Webb & Knapp's Town Center project in

Washington, D.C. is 35% commercial. Since Fanny May has some \$221 million of special assistance money left for 220 loans (the President has another \$222 million) this means many a builder should be able to build a shopping center as part of a renewal development and sell the mortgage to the government at close to par.

Relocation housing (FHA Sec 221) gets a whopping 20% boost in mortgage limits for high-cost areas. This is aimed at making the program work north of the Ohio and east of the Mississippi Rivers while holding down prices in the South and West. As a result, FHA is refining its high cost area allowances to tie them to local construction costs. The changes:

	OLD LAW		NEW LAW	
	normal areas	high-cost areas	normal areas	high-cost areas
1-family ...	\$9,000	\$10,000	\$9,000	\$12,000
2-family ...	no provision		18,000	20,000
3-family ...	no provision		25,000	27,500
4-family ...	no provision		32,000	35,000

A new 221 rental program is set up for profit-expectant sponsors. They may get loans up to 90% of replacement cost for new construction and 90% of appraised value for rehabilitated property. Commercial and community facilities may be included. But the deal is subject to FHA rent control and Davis-Bacon prevailing wage rules, which dulls its glamor. *Nonprofit 221 rental projects* become eligible for 100%-of-replacement-cost loans on new construction. And they remain eligible for 100%-of-appraised-value loans on rehabilitated property.

Displacees in the environs of a community with a workable program to fight slums become eligible for 221 housing. And 221 housing can now be built in the environs of such communities. This amendment is aimed at making families uprooted by highway building eligible as displacees, even if their town has no official anti-slum program. Af-

FHA poised to put CAP on nationwide basis

FHA was ready in mid-September to extend its Certified Agency Program to an almost-national basis.

The two-year old program, on trial in 21 of FHA's 75 insuring offices, lets authorized local lenders, dealers and realtors take over the loan processing and construction inspection normally handled by FHA staffers. But it is confined to towns of 20,000 population or less which are located at least 50 mi from an insuring office or 30 mi from an appraisal station. Up to June 30 CAP had accounted for loans on 2,516 new and 17,706 existing homes.

A new FHA order was to give 49 more local FHA directors power to start CAP in their districts as soon as they can hold required industry conferences. Five offices were to be excluded: New York City (which handles only multi-family projects), Rhode Island, Alaska, Hawaii and Puerto Rico. In the Jamaica, Long Island FHA office, two upstate New York counties will become eligible: Putnam and Orange. Superior, Wisc. will be an exception to the 20,000 population ceiling, because it is so far from the Milwaukee office. In Denver, the one major city included in the first CAP experiment, FHA has retrenched. Now it will limit the program to existing houses only there.

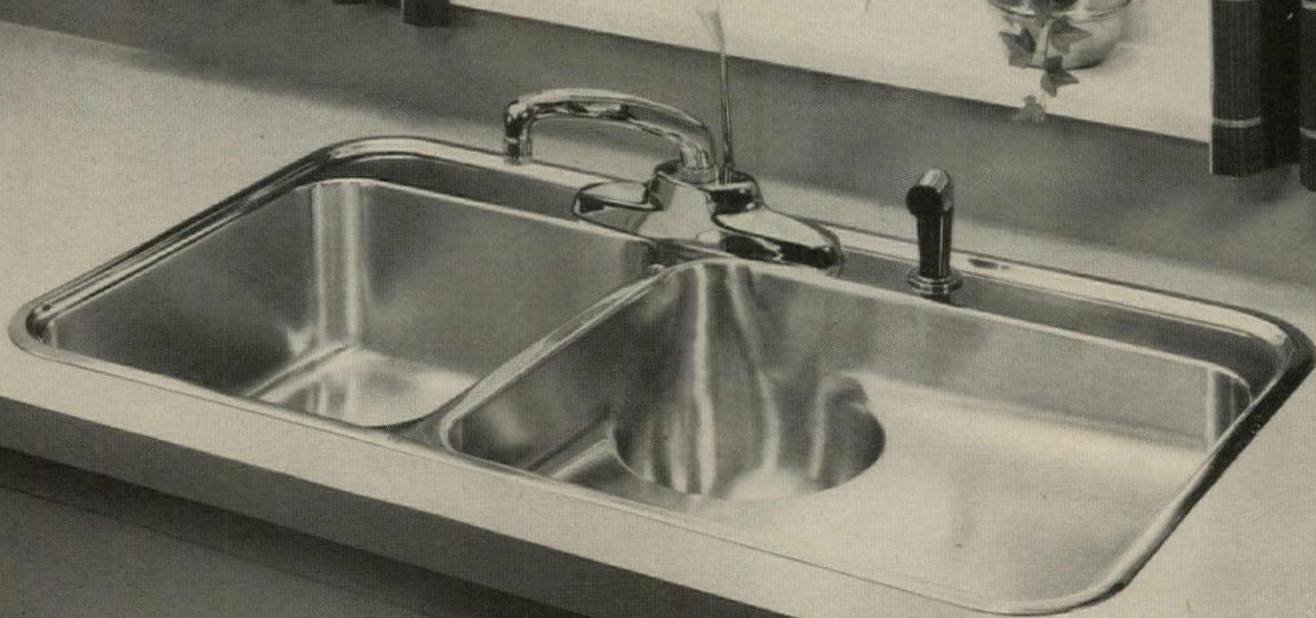
affected localities must still consent to have 221 housing built inside their borders. This means the program will not help big cities decant their overcrowded ghettos into unwilling suburbs.

Program extensions: the Voluntary Home Mortgage Credit Program gets a two-year lease on life, to Oct 1, 1961. FHA Title I repair loans get only a one-year extension, to Oct 1, 1960. The latter deadline helps guarantee another catch-all housing bill next year, with FHA again hostage for the same con-

continued on p 51

HOW IKE, CONGRESS COMPROMISED THE MAJOR ISSUES

Administration proposal	Congress (First try)	Ike veto (First)	Congress (Second try)	Ike veto (Second)	Congress (Final bill)
Urban renewal: \$1.55 billion over six years	\$900 million for two-year program	"Excessive" and "discriminatory against smaller cities"	\$650 million for one year; \$100 million for small cities	"Considerably exceeds Administration recommendation"	\$650 million for a two-year program
Public housing: none	45,000 units for one year plus 100,000 for future years	"Not needed" and too costly	37,000 units with no time limit	"Would cost taxpayers hundreds of millions of dollars . . ."	No change
FHA 203(b) financing terms: no proposal	Lower down payments; increase of maximum loan period to 35 years	"Underwriting provisions of questionable soundness"	35-year loan provision deleted	None	No change
FHA insuring authority: removal of any limit	\$5 billion more to June 30, 1959; \$5 billion for new fiscal year	"Needless limitations"	\$8 billion more with Oct 1, 1960, cutoff	Could have "serious disruptive effects on building industry"	Cutoff date deleted
FNMA special assistance loans: no proposal	Require par purchase	"Would drive private credit from . . . where . . . urgently needed"	Par purchase requirement deleted	None	No change
FNMA warehousing loans: no proposal	Short term loans to builders on pledged FHA-VA mortgages	"Substitutes public for private financing"	Deleted	None	No change
College classroom loans: no proposal	\$62.5 million in revolving fund at subsidized interest rate	"Spending that is entirely unnecessary"	\$50 million made subject to appropriation	"Federal aid to education in a highly objectionable form"	Deleted
College housing loans: \$200 million	\$300 million	"Increased authorization"	\$250 million	None	No change
Direct loans for elderly housing: no proposal	\$50 million at subsidized interest rates, subject to appropriation	"Needs can be adequately met by private funds"	No change	"Certain to cost huge sums in the future"	No change



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Denver, 888 Logan, sleek structure with 87 Lyoncraft sinks. Architects: W. C. Muchow and Nat S. Sachter. Builder: Al Cohen.



Birmingham, Mich., Glenn Wood Terrace, 21-unit terrace apartments. Architect: Alden Paul Eroh. Builder: Kassabian Builders.



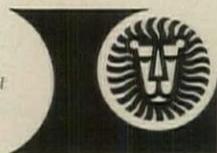
Chestnut Hill, Mass., Hammond House, equipped with 48 Lyoncraft sinks. Architect: Arthur Manaselian Associates. Builder: Hammond Construction Co.



South Redondo Beach, Calif., Eden Rock, 58-unit apartment-hotel. Architect: Starkman & Kreisel Associates. Builder: Carl Braverman Co.

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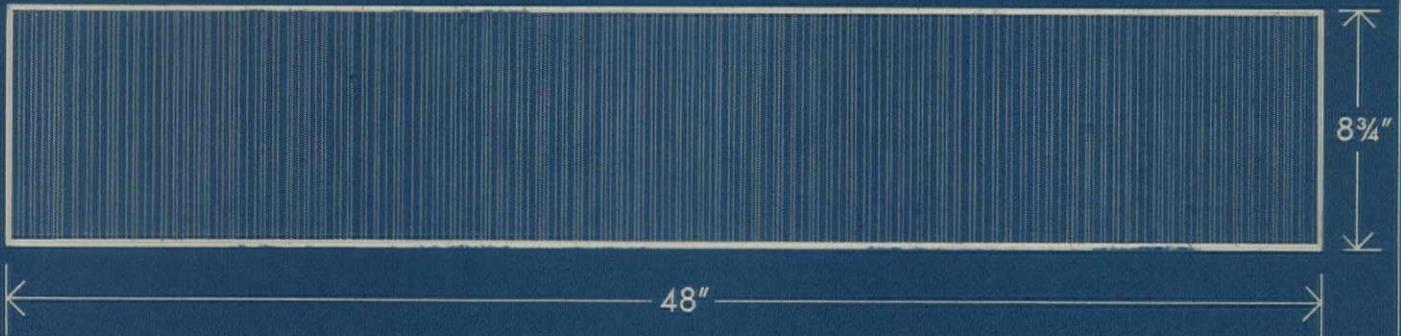
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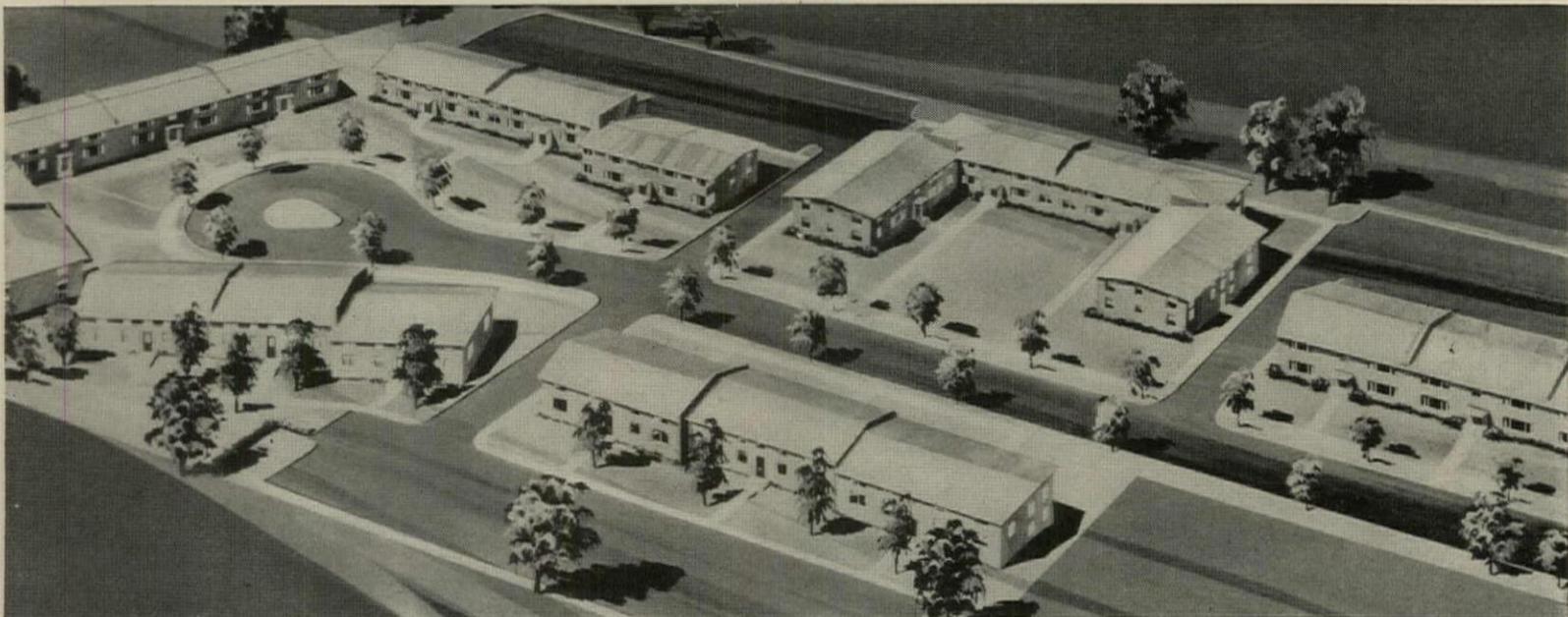
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ROANOKE PARK, a 96-unit garden apartment project in Kansas City, Mo., is being occupied as quickly as buildings are completed. Big attraction has been an individual tenant-controlled

American-Standard furnace in each apartment. Heating contractor Sam Rapschutz of Quality Furnace Co. estimates that heating costs per tenant will average only \$45-\$50 a season.



Read what developer-builder Howard W. Swan says:

“We’re really sold on individual apartment furnaces...and so are our tenants”

Howard Swan, a man who’s been in the construction business for 35 years, is a strong booster for separate, tenant-controlled furnaces in every apartment of a development. He installed 200 furnaces in one project a year ago . . . and his latest development, Roanoke Park garden apartments, will contain 96 American-Standard furnaces.

He gives many reasons for preferring individual heating units. As a builder, he doesn’t have to put in complex piping or ductwork, or sacrifice basement space for heating equipment. As a landlord, he can completely forget about heating costs, since each tenant pays for his own fuel. And, of course, there’s no such thing as a tenant complaining, “There’s not enough heat.” (No more worries, either, about the possibility of a single breakdown that would leave

the entire building without heat.) “Naturally, we’re price-conscious, and we think individual furnaces are more economical than central heating,” says Howard Swan. “And, in this case, we’re also pleasing our tenants.”

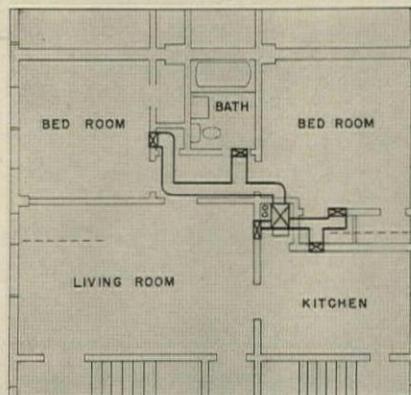
Why did Howard Swan select American-Standard? Simple—he wanted a top-quality warm-air heating unit at a competitive price, and American-Standard filled the bill on both counts.

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Plan of two-bedroom apartment shows warm air registers in bedroom, living room, kitchen and bath. Thermostat is located in living room. Ductwork, built into wall space between rooms and corridors, is roughed in before plasterers arrive.



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troverial programs that triggered the legislative fight this year.

Trailer court mortgage limits go up from \$1,000 to \$1,500 per space and from \$300,000 to \$500,000 per mortgage—a far bigger cost limit boost than any other housing program won this year. From now on, FHA may make a charge in lieu of insurance premium where a mortgage is assigned to FHA to avoid foreclosure (this applies to all other sections of FHA, too).

Other provisions of the new law which affect private housing:

VA inspections during construction may now be accepted by FHA on sales housing (as a basis for full loan-to-value applications). A reciprocal provision was already in the VA statute.

Low-priced sale housing under FHA Sec 203 (i) gets a new maximum mortgage limit of \$9,000. But FHA Commissioner Zimmerman (who notes: "We opposed this increase in the first place") has found a way to keep most 203 (i) programs under the old \$8,000 ceiling where he insists it is needed most. FHA has permissive power to grant lenders an extra ½% service charge on these small loans (for a new total cost to the buyer now of 6¾%). Zimmerman says he will still allow this ½% extra charge on loans of \$8,000 and under but not on any which are bigger. The restriction also applies to 203 (b) where FHA can also allow the ½% extra charge.

The new law also makes existing houses eligible under 203 (i) but only for 90% loans vs the 97% for new units.

Insurance cancellation: FHA now may cancel insurance on 1- to 4-family housing, at the request of both mortgagor and mortgagee, without the technical necessity of paying off the mortgage and refinancing it with accompanying duplicate closing costs. The law provides FHA must make an "appropriate" charge for thus converting an FHA loan into a conventional one.

Nursing homes: a new Sec 232 permits FHA insurance on nursing homes in new or acquired property up to \$12.5 million or 75% of value at interest up to 6% (plus insurance premium). FHA will set the maturity. State agencies must attest a need for the home and approve its operation.

Military housing: FHA Title VIII is extended

to Oct 1, 1961. Loans are boosted from 25 to 30 years. Non-dwelling facilities to serve occupants can now be included in FHA-insured mortgages. Wherry Act projects acquired by the Pentagon may now pay a reduced FHA insurance premium. Construction workers must be paid time-and-a-half for overtime.

From now on, the Defense Dept must buy Sec 207 rental projects (as was already required for Wherry projects) which lie at or near bases where an FHA Sec 803 project is being built. The Pentagon is forbidden to declare existing 207s "substandard" for military occupants. In condemning Wherry projects, Defense must put up a deposit not less than the total equity of the owner.

Servicemen's housing (Sec 222) gets higher maximum mortgages: from \$17,100 to \$20,000.

Defense housing: a new FHA Sec 810 calls for up to 5,000 units of either single- or multi-family projects for defense-impacted areas. Defense must certify the need. FHA insurance goes on an "acceptable risk" basis—reminiscent of the ill-fated Title VI. Properties must be held for rent five years unless released sooner by Defense. Maximum mortgage is \$5 million or 90% of value of completed project. Multi-family projects carry a \$2,500 per room limit (\$9,000 per unit for small units). Single-family projects have limits like Sec 203. Interest, premiums and maturities follow Secs 203 and 207. Prevailing wages must be paid during construction.

Housing the aged: a new FHA Sec 231 replaces the former Sec 207 housing-for-the-aged provisions. For nonprofit sponsors, it provides for 100% of replacement-cost loans for new construction and 100% of value for existing property. For profit-expectant sponsors, it permits 90% of cost or value, respectively. Interest ceiling is 5½%. Maturity is at FHA discretion. Maximum mortgage is \$12.5 million, except \$50 million for public or quasi-public agencies. Loans are also limited to \$9,000 per unit for garden-type structures and \$9,400 for elevator structures, subject to a boost of \$1,250 in high-cost areas. Davis-Bacon wage rules apply. FHA Commissioner Zimmerman warns that regulations to put this program into effect may not be issued for some time.

Direct loans for the aged: HHFA gets authorization (but no money) to make direct loans for "housing and related facilities" for elderly persons (over 62) where private funds on the same terms are not available. Interest rate is set by Congress at 2¾% or ¼% more than the aver-

age rate on all outstanding interest-bearing Treasury obligations when the loan is made, whichever is higher. Currently, this would make the rate 3¼%—a clear case of subsidized interest since the Treasury cannot now borrow this cheaply. The law authorizes a \$50 million appropriation for the program; but Congress voted no funds this year. This program was not sought by private housers. It remained in the law despite vigorous Presidential veto objections.

Foreclosures: FHA can now extend the time for curing a default on a mortgage of 1- to 4-family property and, to forestall foreclosure, take an assignment of the mortgage. But a Senate banking committee report makes it clear this proviso "is not intended to be used merely to assist a mortgagee in disposing of a difficult case." Rather, it is "to be used only in hardship cases involving deserving mortgagors."

Lanham Act housing: Fanny May now is empowered to buy some \$170 million worth of mortgages held by the Public Housing Administration on World War 2 Lanham Act units. FNMA President Stanley Baughman says he plans to switch the servicing on these loans (some 14,000 units) from PHA to local mortgage bankers "because we think this is a job for private enterprise."

Lower down payments: the new schedule—when and if it is put into effect—would call for 3% down of the first \$13,500 FHA valuation (no change), 10% between \$13,500 and \$18,000 (a big cut), and 30% above \$18,000. With the maximum loan on one-family houses boosted from \$20,000 to \$22,500, the down payment on an \$18,000 house would drop from \$1,400 to \$900 and on a \$25,000 house from \$5,000 to \$3,000.

In two of the most controversial areas, the new law makes these changes—some of which have been little reported in the nation's press but have a big potential impact:

Urban renewal: Buyers and developers of cleared land now must make full disclosure of their organizations, financing arrangements, development cost, rentals and sales prices and estimated profits. This resulted from airing of New York City's renewal mess (see p 85). Renewal land may now be sold for public housing at the same written-down price it is offered to private buyers (thus giving public housing an extra subsidy). Losses

continued on p 54

WHY EISENHOWER VETOED THE SECOND HOUSING BILL

Here, with only preamble omitted, is what President Eisenhower wrote the Senate in rejecting S. 2539:

On July 7, I returned an earlier housing bill, S. 57, to the Senate and set forth in an accompanying message of disapproval many of that bill's objectionable features. Although some of these features have been removed in S. 2539, and some partially corrected, in its most important provisions S. 2539 represents little over-all improvement over S. 57. In one respect—the setting of an expiration date next fall on the new loan insurance authorization of the FHA, with potentially serious disruptive effects on the building industry—S. 2539 is worse than the earlier housing bill.

Clearly this bill, like its predecessor, goes too far. It calls for the spending of more than 1¾ billion of taxpayers' dollars for housing and related programs over and above the vast expenditures to which the federal government is already committed for these purposes. The history of the bill indicates that the Congress intends it to be a one-year bill. So regarded, S. 2539 calls for federal spending at virtually the same rate as that provided for by S. 57—a rate far in excess of my recommendations to the Congress.

At a time when critical national needs heavily burden federal finances, this bill would start two new programs, certain to cost huge sums in the future, under which taxpayers'

money would be loaned, at subsidized interest rates, for purposes that could be better met by other methods.

One new program would have the federal government make direct loans to colleges for classrooms and related facilities and equipment by methods that would tend to displace the investment of private funds in these projects. This is federal aid to education in a highly objectionable form.

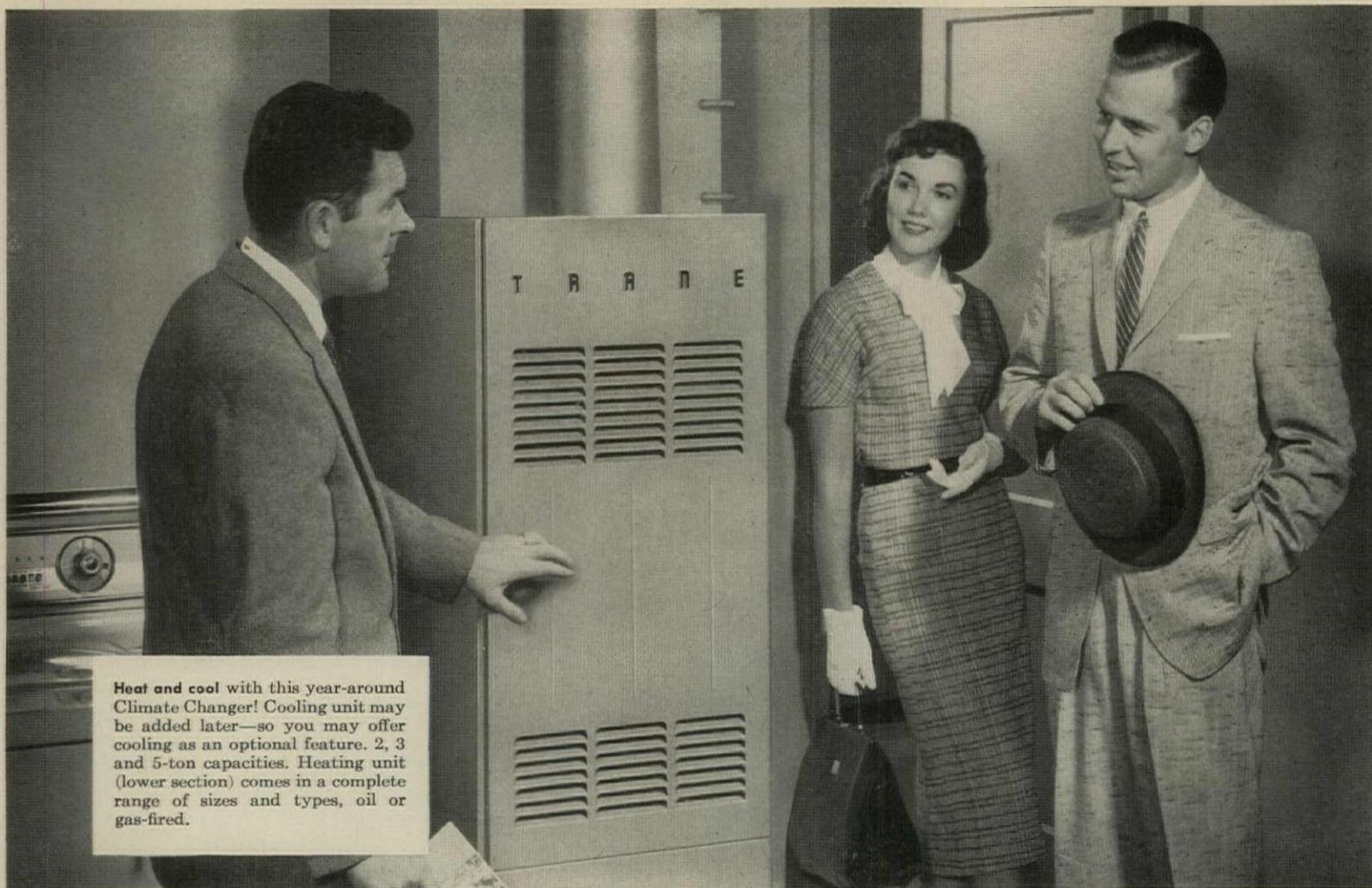
The other new program would have the federal government make direct loans for housing for elderly persons despite the fact that a program is already in operation and working well, at no cost to the taxpayer, and under which private loans for this same purpose are guaranteed by the federal government.

Among its other objectionable features, this bill would authorize 37,000 new units of public housing while many thousands of previously authorized units have not been completed or occupied. These, too, would be subsidized, on a basis that would cost the taxpayer many hundreds of millions of dollars over the next forty years. The bill would also authorize \$650 million of federal grants to cities for urban renewal projects. This sum considerably exceeds the first-year amount recommended by the Administration for these purposes.

This is not the kind of housing legislation that is needed at this time. It does not help the housing industry for the federal government to adopt methods that in these times would increase inflationary pressures in our economy and thereby discourage the thrift on which home financing is heavily dependent. Nor does it make sense to purport to assist any group of citizens, least of all elderly persons living on fixed retirement incomes, by legislation that tends further to increase the cost of living.

There is still time for the Congress to enact a sound housing bill, and I once again urge that it do so. These things can be and ought to be done: 1) remove the ceiling on FHA mortgage insurance authority; 2) extend the FHA program for insurance of property improvement loans; 3) enact reasonable authorizations for urban renewal grants and college housing loans and adjust the interest rate on the latter; 4) extend the voluntary home mortgage credit program; and 5) adjust the statutory interest rate ceilings governing mortgages insured under FHA's regular rental and cooperative housing programs.

(For text of the first veto, see Aug News, p 47.)



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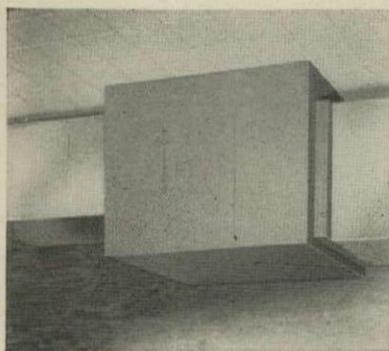
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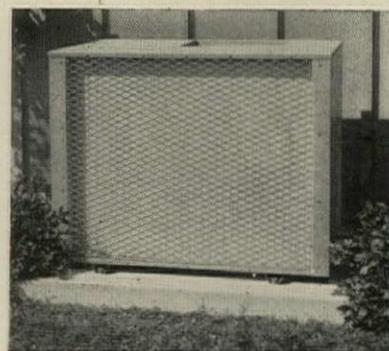
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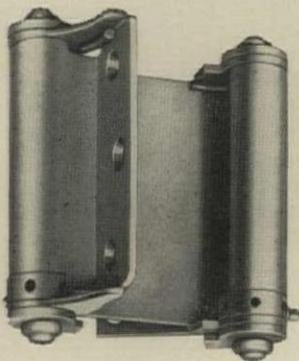
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due to tax exemption on public housing may be accepted as part of a locality's contribution to urban renewal. This gives the community an extra credit in figuring how much taxpayers must pay to buy up slums.

More basic, urban renewal is now set to drift farther away from its original housing orientation. Now, up to 20% (formerly 10%) of total US grants may go for *renewing nonresidential areas* for nonresidential purposes—under certain limitations.

Federal relocation payments are now authorized where displacement results from any governmental activity in a renewal area, including highway building or rehabilitation.

Hotels and other transient facilities are now prohibited in redevelopment plans unless their need is demonstrated independently.

Appropriate public improvements serving a renewal project may now be counted as part of the locality's share of land write-down costs if they are started up to three years before the final grant contract for the renewal project is signed with the US.

Public housing: Existing limits on incomes of occupants are removed. Now, local authorities may set rent and income limits, subject to weaker federal control. The traditional "gap" between public housing rents and

rents in available private accommodations is sliced from 20% to 5% for displaced persons. Since more and more displacees are heading for public housing, this should expand public housing's empire while vacancies in cheap quarters (not all of them truly "decent") rise.

Looking back, what was all the shouting about; who won and who lost?

In January, every sign suggested Democrats—fresh from an overwhelming election victory in November—could legislate about as they chose on "welfare" issues. They had a topheavy majority of 30 seats in the Senate and 130 in the House.

But their housing bills—Rep. Albert Rains' \$3 billion measure and Sen John Sparkman's more modest one, for instance—ran headlong into the surprising popular appeal of President Eisenhower's decision to fight to impose fiscal conservatism on Congress. The squabbles (and the two vetoes) were not over issues vital to most private housers—even though the Administration objected strongly to 35-year FHA loans (which Congress eliminated) and to lower FHA down payments (which remain in the law, but inactively). The ruckus was over whether any more public housing is needed at all, over Treasury

subsidized interest rates for loans, over having college classrooms in a housing bill at all, and—most of all—over backdoor spending, notably how much of it the nation can afford for renewal.

The Democrats first whittled their big spending bills. Then they decided to try waiting until dwindling FHA insuring authority might build up pressure for the White House to accept a compromise. Then they cut some more and ran into a veto which the Senate sustained by nine votes. On the second-try, they trimmed again, but the veto (same general grounds) was upheld by five votes. After his two vehement vetoes, the President signed the final bill into law without comment.

In all, the new law is a big victory for NAHB, which looked for a time as if it might have outsmarted itself by not supporting the Herlong compromise bill and averting the president's first veto (*Aug, News*). In the end, sticking with the Democrats down the line, NAHB got all it had been seeking from Congress for a year and a half. (So, incidentally, did most other housing trade groups whose political alignment hewed closer to the Administration.) Says NAHB President Carl Mitnick: "Final passage of the legislation . . . testifies to the soundness of our strategy."

SEGREGATION:

Civil rights report raps 'laxity' in federal agencies

A crackdown by federal housing agencies on builders who violate local and state laws against racial bias has been urged by the US Commission on Civil Rights.

Among six housing recommendations in the commission's first report, product of two years study, is one to have FHA and VA set up their own fact-finding machinery with power to withhold all federal benefits from builders who appear guilty, pending the outcome of often drawn-out local inquiries.

The commission says such a setup would give teeth to present policies of not doing business with builders who violate local anti-bias laws, but which are often applied after the fact, when the housing has already been sold on a segregated basis. In some states this could mean that a builder refusing to sell government-insured housing in a development could lose commitments for future construction, or be unable to get new ones.

The report to the President and Congress is frankly preliminary. The commission's primary charge was to study voting bias; schools and housing were added later. And the report admits that racial discrimination in housing needs a lot more study. It raises a lot of questions, answers only a few.

One answer that most private housers will dispute is the commission's sweeping (perhaps unintentionally so) assertion that a "national housing crisis" involving a shortage of low-price housing for everyone, is at the root of minority housing problems.

"Slums and blighted areas are plaguing every city that the commission has studied," it says. "Most lower-income Americans in most cities lack adequate opportunity to live outside these substandard areas." And later: "For decent homes in good neighborhoods to be available for all Americans, two things must happen: the housing shortage for all lower-income Americans must be relieved, and equality of opportunity to good housing must be secured for colored Americans.

In its other answers, the commission reflects the fears of some witnesses at its hearings in New York, Atlanta, Chicago and Washington (*March, News et seq*) that a doctrinate application of civil rights policy to federal housing programs could result in political hamstringing by segregationists in Congress, or locally.

"For the most part," the commission says, "federal housing programs depend on either city and state initiative or private initiative, or a combination of these." And except for a crackdown on private builders, it is careful in its remaining recommendations to urge action only in general terms.

This gingerly approach sometimes gives the report a ring reminiscent of the long-dead "separate but equal" doctrine, as when it says: "What is at issue is not the imposition of any residential pattern of racial integration. Rather it is the right of every American to equal opportunity for decent housing." Without explaining how the two can go together, the commission urges:

1. Biracial commissions should be set up in every city or state with a substantial non-white population. They should study and investigate racial problems in housing and attempt to solve them through mediation and conciliation.

2. President Eisenhower should issue an executive order "stating the constitutional objective of equal opportunity in housing, directing all federal agencies to shape their policies and practices to make the maximum contribution to this goal." If the commission was extended (it was), the President should ask it to propose plans to end discrimination in all federally-assisted housing.

3. HHF Administrator Mason should "give

high priority to . . . gearing . . . his constituent housing agencies to the attainment of equal opportunity in housing."

4. PHA should act "to encourage the selection of sites on open land in good areas outside the present centers of racial concentration" so as to stop new housing projects—interracial in theory—from turning out heavily Negro occupied. For the same reason, PHA should "encourage smaller projects that fit better into residential neighborhoods . . ."

5. URA should "take positive steps to assure that in the preparation of overall community 'workable programs' . . . spokesmen for minority groups are in fact included among the citizens whose participation is required." Reason: slum clearance is sometimes attacked as Negro clearance, and amid restricted housing opportunities nonwhites displaced by urban renewal face extra relocation problems.

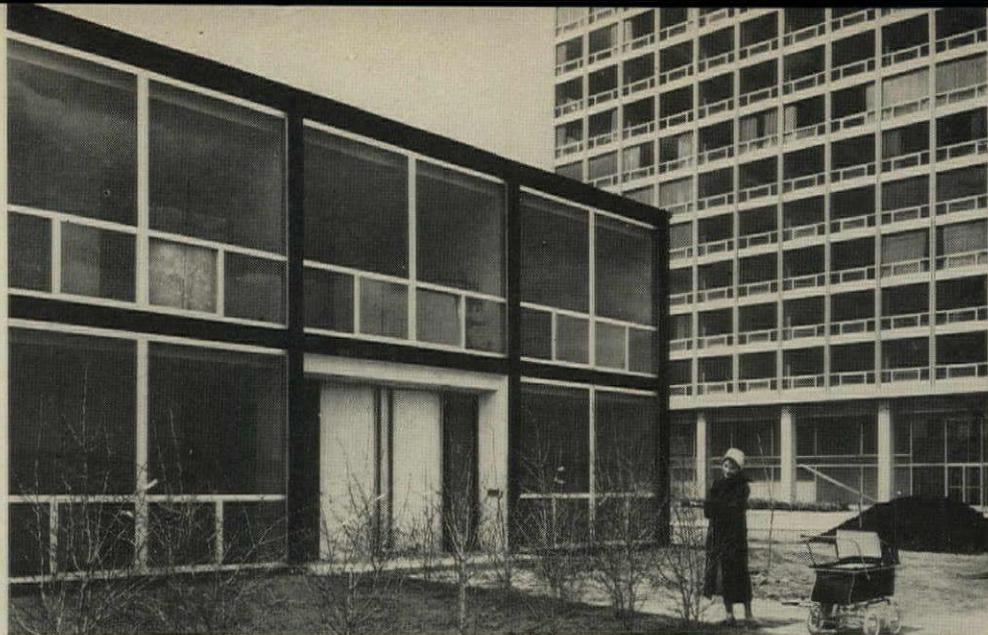
One sharp dissent came from Commissioner John S. Battle, former governor of Virginia, and Commissioner Doyle E. Carlton, former governor of Florida. (Battle also objected to "the nature and tenor of the [entire] report . . . an argument in advocacy of preconceived ideas in the field of race relations.") Said the two dissidents: "In dealing with housing, we must face realities and recognize the fact that no one pattern will serve the country as a whole . . . The repeated expressions (in it), 'freedom of choice', 'open market', 'open housing' and 'scatterization' suggest a fixed program of mixing the races anywhere and everywhere regardless of the wishes of either race . . . The result would be dissension, strife and even violence evident in sections where you would least expect it."

In a grudging compromise between Southerners who would do no more and Northerners who would do no less on civil rights in this session of Congress, the commission's life has been extended for two more years.

HOUSING CAMERA:

Vacancy problems hit renewal project in former ghetto area

Vacancy problems in low-level co-op units of Detroit's Gratiot redevelopment project pinpoint a growing national renewal headache: resistance of whites and well-heeled Negroes to move into an island of upper-bracket housing still surrounded by slum ghetto, while former residents cannot meet the new prices. Only 36 of 63 low-level units completed are sold (2 to Negroes), while 315 of 340 units in the more withdrawn apartment tower are rented (10 to Negroes). This pattern also reflects reluctance of families to live where children may have to attend school with slum dwellers: only 5% of tower tenants have children; against 25% of family-size co-op dwellers. The problem should ease in time as the city goes ahead with highway and other clearance plans to eradicate surrounding slums. Tower apartment rents range from



George Sweets

\$90/mo for efficiencies to \$325 for two-bedroom units. Co-ops sell for \$21,000 to \$33,000. Archi-

tect was Ludwig Mies van der Rohe; builder, the late Herbert Greenwald.



Alfred Monner
Los Angeles Times

Public housers buy 608s

FHA has found a new—and apparently less painful—way to shed itself of bankrupt 608 projects: sell them to local public housing authorities.

It has just closed a deal for sale of 102 units in three projects in Portland, Ore. like the one pictured above. Price: \$450,000. The units will not add to Portland's public housing total. They replace the run-down Hudson House temporary project, built during World War 2 for a 2- to 4-year life. Two bedroom units which rented for \$85 as a privately-run 608 will now rent for \$25. Tenancy will be interracial.

In Miami, the housing authority has paid \$2 million for the 345-unit Larchmont Gardens 608 project. It will spend another \$700,000 to remodel the units for public housing tenants—but still estimates total cost per unit of only \$9,000 vs the \$14,000 it would cost to build new units.

The authority has one thorny problem. Larchmont Gardens has a swimming pool—an unheard of luxury for public housing. The pool has been offered—free—to the local YMCA.



Landslides wreck another two Los Angeles homes

Two-thirds of the new homes in the City of Los Angeles are now being built on hillside lots—and all of them are potential victims of destruction by landslides.

So says General Manager Gilbert E. Morris of the city building department. For the two \$50,000 homes in Pacific Palisades pictured above, the odds ran out in August. Their sudden nocturnal collapse was variously blamed on water seepage and on grading for hillside home sites lower down.

"The only way to avoid home damage from slides is to quit building and subdividing on hills," says Morris. "Southern California rests on thousands of earthquake faults."

Moreover, the hills fringing Los Angeles are composed of stratified earth and rock, interleaved with shale layers. These are firm if dry, but slippery when wet. Homebuilding in the heights, with subsequent seepage of lawn water and septic tank fluids, turns the shale layers into lubricants for strata above—which are often tilted seaward.

Despite the danger, Californians still like hill sites and lenders are happy to finance them. Morris notes that less risk is involved since the city adopted its unique 1955 grading ordinance. This requires all cuts and fills be made according to code specifications aimed at preventing slides. Since its adoption, says Morris, only two or three of nearly 50,000 new home-sites have suffered slide damage.

Worst slide in the LA area came in 1956 at Portuguese Bend near San Pedro. It gradually destroyed 145 homes, has resulted in more than \$20 million in law suits. Homeowners who built on leased sites are suing the developer. The developer and other homeowners are suing the county. They contend the slide resulted from a road building project.

There is no legal precedent for such suits in California. But this year in Pittsburgh 11 homeowners whose backyards slid away have won \$150,000 from Builders Felice Perri & Sons. The court held that fill was improperly dumped in the yards. As a result it slipped.



Doug Kennedy

Builders use supermarket to sell homes in Miami, call results good

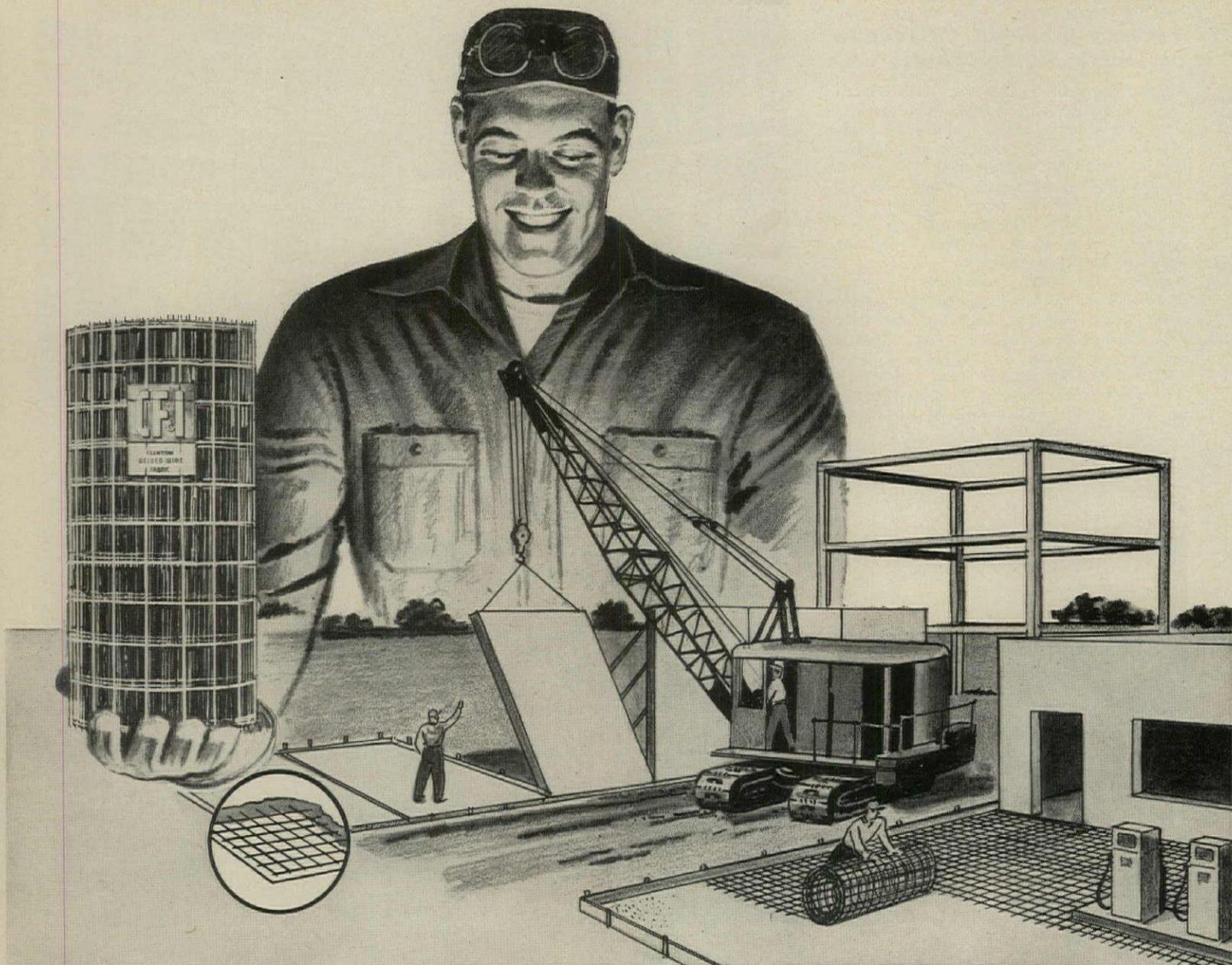
Homebuyers can buy a home at a supermarket in Miami now. Several build-on-your-lot builders have put up models outside big markets, give the store owner \$100 on each sale made.

Killian-Craft Homes, which opened this two-

bedroom, one-bath home outside Miami's big Stevens Market in June, says it has taken 150 orders, has had 30 of them approved for mortgages by a local S&L with 15 already under construction. If the buyer has his own lot he

needs no other cash. The Killian homes are complete houses—not shells. Prices run \$6,450 for a 920 sq ft two bedroom model and \$7,450 for a 1,130 sq ft three bedroom home.

NEWS continued on p 58



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THE BEST COMMUNITIES OF TOMORROW ARE BUILT WITH BEST TODAY!

Housing glut hits Alabama; builders ask why

Magic City View Co.

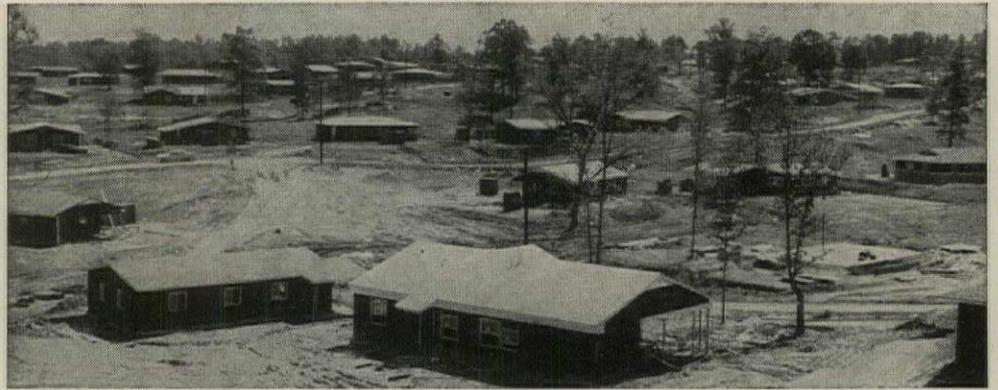
A glut of low and middle-priced housing, apparently produced by overbuilding in FHA's Sec 221 low-price relocation housing program, has hit Alabama. Hundreds of houses are standing unsold in what are normally some of the state's most active local markets.

Builders blame the trouble on poor market estimates by the state FHA office and the manner in which Sec 221 commitments (which are eligible for Fanny May purchase at subsidized prices) were handed out.

A close look at the situation by HOUSE & HOME correspondents in Alabama has also uncovered a background of profitable land deals by prominent GOPolitical figures. Did buying land at the right price from the right people affect any official judgments? Here are the available facts:

1. Builders Folmar & Flinn of Montgomery, who were aiming at 1959 production of 2,900 homes, report themselves faced with 1,438 unsold units in Mobile, Birmingham, Gadsden and Huntsville. More than 900 of these are FHA 221s. Although State FHA Director Charles B. Holliman, a Republican appointee, refuses to give exact figures, comparison of Folmar & Flinn's own reports with a summary of Sec 221 operations from FHA in Washington indicate the firm has built about one-third of all the 221 starts so far okayed by the Alabama FHA office.

2. What their competitors can't figure out is how FHA could have allowed so many more units to be built than the market could absorb—especially since Sec 221 units are supposed to be based on need. Nor can they



UNFINISHED HOUSES (AT \$14,750) STAND UNSOLD IN BIRMINGHAM

Indicated price according to tax stamps, was \$635,000, in six transactions, during 1957-58. Court records show Mostellar assembled the site from individual owners during the same period in nine transactions with an indicated total cost of \$288,000.

Partners James Folmar, 42, and Harry Flinn Jr., 37, formed their partnership in Montgomery, Ala. in 1946, got their start in low-price multiple-unit housing, and have dabbled in commercial building as well as single-family developments. A company report claims a total of \$100 million in construction for the firm since its beginning, with '58 volume amounting to \$10 million.

Company officials vigorously deny any improper dealings in their land purchases. Says Emory Folmar, brother of James and an officer of the company: "We never check who the ultimate owner is . . . we make our land purchases on the basis of what we can develop the land for and make a profit. We eventually found the Vardamans owned that land at Chapel Hill, but it was the location we wanted, and that's why we bought it." As for Sec 221, it's simply a matter of F&F's willingness to get in where others weren't. "We built too many houses." He points out that in Decatur last year the firm built 118

Sec 221 units, and sold them all. This year, with a national steel strike idling thousands in Birmingham and Gadsden, sales have slowed. "We are having to tighten our belt a little bit. We have slowed down and we are not going to build anymore until we sell these," he adds. The company has also been plagued in Gadsden by pickets from local building trades unions, objecting to the company's open-shop and use of imported nails and other steel products.

Likewise, State Director Holliman denies any favoritism to Folmar & Flinn. "No builder with a reasonable program has been turned down by this office; if he has the financial strength, ability and know-how to get into this program.

"Market demand has warranted what commitments this office has issued under Alabama's expanding economy and expanding population. There is a need for the houses that have been built." As for market surveys to back him up, says Holliman: "In some instances we call on a market analyst . . . but our chief underwriter and chief appraiser and others in our office are usually well informed so that they can make a determination without going into an extensive survey."

NEWS continued on p 63

ALABAMA SALES PROBLEM

Folmar & Flinn's own breakdown of their unsold inventory:

City	FHA 221		FHA 203 AND VA	
	sold	unsold*	sold	unsold*
Birmingham	none	38	202	
Gadsden	32	286	none	
Huntsville	35	207	450	50
Mobile	450	500	500	200
Pensacola (Fla.)	none		300	

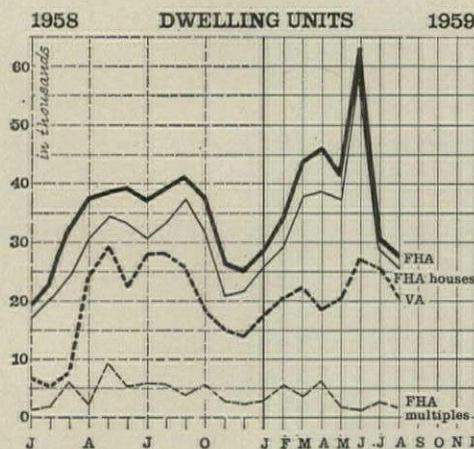
*includes all stages of construction

figure out why so many have been built by a single firm. They point out that builders of Sec 221 housing need not absorb deep discounts (as much as 6-7 points in the South). So they can either: 1) offer more house for the same price as builders of non-subsidized housing, or 2) make a bigger profit per house.

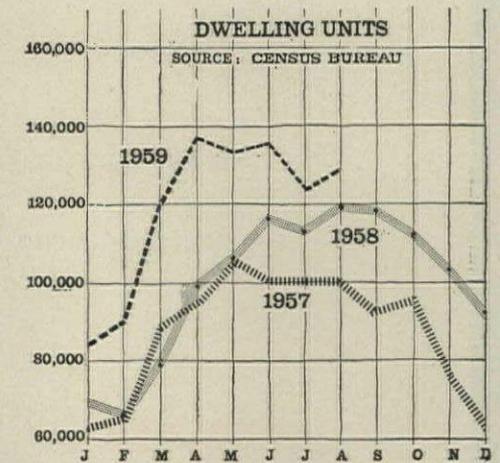
3. How F&F got some of their land:

On May 8, 1959, Urban Land Corp, a Folmar & Flinn corporation, bought the site for F&F's 160-acre Chapel Hill development in Birmingham from Claude O. Vardaman, Republican state chairman and his wife. Vardaman is a registered lobbyist for Alabama Power Co and state patronage boss. Tax stamps affixed to the deed indicate the price was \$365,000. Only a year earlier, Vardaman's wife and Carl B. Thomas, a Huntsville real estate developer, had bought the land for \$30,000 cash and a \$135,000 mortgage. Thomas later bowed out for what tax stamps indicate was a payment of \$15,000.

In another case, Urban Land Corp bought the site of F&F's 250-acre Hillsdale Heights development in Mobile from Republican National Committeeman Marvin Mostellar, members of his family and Carl Thomas.



HOUSING STARTS in August inched up to 129,000 from the 126,000 of July. But public starts of 4,200, up from 1,500 in July, accounted for most of the gain. Private starts of 124,800 were up 300 from July but the seasonally adjusted annual rate slipped from 1.35 million to 1.34 million—still an unusually high rate. Starts for the first eight months total 973,400 (947,000 private and 26,400 public) up 26% from the first eight months of last year. Seasonally adjusted, private starts for the first three-quarters are at a 1.379 million-a-year clip.



FHA APPLICATIONS on new units slipped another 12% in August to 27,800—lowest level of the year. This is down a whopping 29% from August 1958. New home applications of 25,625 are off 11.6% from July and off 23.8% from August a year ago. Project applications of 2,175 are down 16% from July, down 63.8% from August last year. Tightening mortgage money also shows up in VA appraisal requests on new units of 21,233, down 18.5% from July and off 25.6% from August of 1958. FHA is still up 11% and VA 11.2% for the first eight months.

MORTGAGE MARKET:

FHA rate up to 5³/₄%; lenders ask more yield

FHA at last has boosted its interest rate ceiling on home loans to 5³/₄%—the first change in two years.

The widely expected move came Sept 23 (the same day the President signed the 1959 Housing Act) as the tightest mortgage squeeze in decades had shoved discounts on the old 5¹/₄% loans as high as 7 to 8 points.

The new rate will not mean a discount drop of the 4 points which approximate the 1/2% boost. Mortgage bankers and investors, in New York for the MBA convention when the increase was announced, agreed that builders and lenders probably will split the added yield. Thus the new price on FHA 5³/₄% loans outside the East Coast is expected to settle around 94¹/₂-96¹/₂. Investors who have been insisting on a 5³/₄% yield (after servicing) will now be pushing for 6%.

The higher yield demand also promises to push the discounts on 5¹/₄% loans down to 90¹/₂-92¹/₂. This deep discount—which may get bigger—would tend to paralyze the VA home loan business with its Congressionally-frozen 5¹/₄% rate.

The new 5³/₄% rate apparently will not bring out a substantial volume of new money before next year. Says Atlanta Mortgage Banker Bob Tharpe: "The best we can hope for is that it will stop some money from running out on us."

Besides the boost in the rate on the big Sec 203 house program, FHA Commissioner Julian Zimmerman made all rate changes permitted by the new Housing Act. The complete list:

SECTION	PROGRAM	INTEREST RATE	
		Old	New
203	Homes	5 ¹ / ₄ %	5 ³ / ₄ %
207	Rental housing	4 ¹ / ₂	5 ¹ / ₄
213	Management co-op	4 ¹ / ₂	5 ¹ / ₄
213	Sales-type co-op	5	5 ³ / ₄
220	Urban renewal homes	5 ¹ / ₄	5 ³ / ₄
220	Urban renewal project	5	5 ¹ / ₄
221	Relocation homes	5 ¹ / ₄	5 ³ / ₄
221	Relocation project	5	5 ¹ / ₄

For builder or lender?

Zimmerman said he hoped higher rates would eliminate or substantially reduce discounts. He scowled when told that some investors were already quoting 3¹/₂ to 5¹/₂ point discounts on 5³/₄% paper—only 2 points off from the old 5¹/₄% discounts. "Investors will subject themselves to severe criticism if they continue to charge these large discounts despite the interest rate increase," he warned.

But Kansas City Mortgage Banker Dale Thompson demurs: "The primary purpose of a rate increase is not to cut builders' discounts. It's to attract more money into mortgage investment by making a higher yield possible. Unless investors can get a higher yield than they've been getting there's no reason to expect they'll buy more loans, than they were."

Whether the rate boost attracts any more money or not, the primary market for FHA loans seems likely to remain Fanny May. Though no price schedule was announced on 5³/₄% loans when the FHA rate was boosted, there were clear hints from FNMA that the prices would be 96¹/₂-98 net to the builder. This would reflect another 1 point cut from the yield level of the old 5¹/₄% price list. New prices on 5¹/₄s would be 92¹/₂-94 (net to builder).

Added to a 1/2 cut in August and a 1¹/₂ point cut in mid-September, Fanny May prices would be reduced 3 points in only six weeks. Yet offerings continued to mount. In the first week after the 1¹/₂ point cut volume of offerings reached \$30 million. FNMA President J. Stanley Baughman pre-

dicts his agency will be buying at least \$100 million in FHAs and VAs for the rest of 1959.

If the mortgage fraternity thought the boost in the FHA rate was overdue, the opinion was not unanimous. NAHB President Carl Mitnick, speaking at the MBA convention, pointed out that the higher rate with its consequent higher monthly payments, will disqualify many prospective homebuyers for lack of income. He added: "I'm against interest rate increases. They don't do any good. This is no answer to the problem."

Builders had to grapple with other aspects of tightening money in September. Besides rising discounts and scarcer supply (for both immediates and futures), September brought these developments:

- Savings & loans in key cities like Chicago Los Angeles and Philadelphia failed to show expected gains in savings. They have tightened up on conventional loans. Interest rates are up to 6% nearly everywhere; they are 6.5% or more in many cities in the South and West.
- Cost of construction loans and mortgage warehousing went up in tandem after commercial banks boosted their prime lending rate to 5%. Here also availability of money is very limited.
- Financing of used homes through FHA is growing harder in cities like Baltimore, Detroit and Washington because of steep discounts. Owners, who are considering purchase of new homes in many cases, are balking.

Trend to standbys

With advance commitments hard to get, some mortgage bankers in the South and West are turning to standbys. These cost a builder 1 point non-refundable fee, one reason some mortgage men like San Francisco's Raymond Lapin advise builders to take their chances on the market and forego standbys.

Higher interest on warehousing means even bigger discounts for builders—discounts that aren't reflected in market quotations. With a 5% prime rate, most banks are charging mortgage bankers 5³/₄% on money they lend on warehoused FHA-VA loans. Mortgage companies like to be earning 1/2% more on their loans than they are paying the bank. Instead they now lose 1/2% with 5¹/₄ loans

plus the cost of servicing, only break even on 5³/₄s. Says Mortgage Banker Robert S. Irving of Philadelphia: "The economics of mortgage banking demand that we make a profit on warehousing. When it is a loss instead we must charge the builder more for his commitments."

The prime rate boost, coupled with the subsequent increase in the Fed's rediscount rate to 4%, have pushed the cost of construction loans to 6¹/₂% plus 1¹/₂-or 2-point fees in the South, Midwest and West. Marginal builders have trouble getting interim loans at all. Few banks are lending to new customers.

Outlook for easing

A few mortgage men hopefully forecast more money—but no cheaper money—by late this fall. But most look for no improvement until next year and some, like Executive Vice President Donald McGregor of T. J. Bettes, predict that the price of money will go up even more this fall.

Housing may well be the chief victim of what economists are calling the worst US money crisis since the bank holiday of 1933. A revitalized economy, bouncing back from last year's recession, is making heavier-than-ever demands for long term investment funds. But growth of the supply of investable funds has not kept pace with demand as more personal savings are either 1) put into the stock market and short term US notes or 2) spent instead of deposited in a savings institution.

Chief hope for more mortgage money at cheaper rates lies in more savings. Two things may help prompt more individuals to put money back into savings banks and S&Ls: 1) a sharp dip in the stock market in September may have been serious enough to scare some small investors out of stock speculation and back to the safety of insured deposits; 2) New York City savings banks are boosting the rate on savings from 3¹/₄ to 3¹/₂% and 3) the steel strike, more than two months old, raises the threat of slower economic expansion, a prospect which usually causes more families to save more, spend less.

MORTGAGE BRIEFS

S&L holding companies (cont)

A two year freeze on holding companies buying any more savings and loan associations has been pushed through Congress. It is a case of slamming the barn door on the horse as he flees.

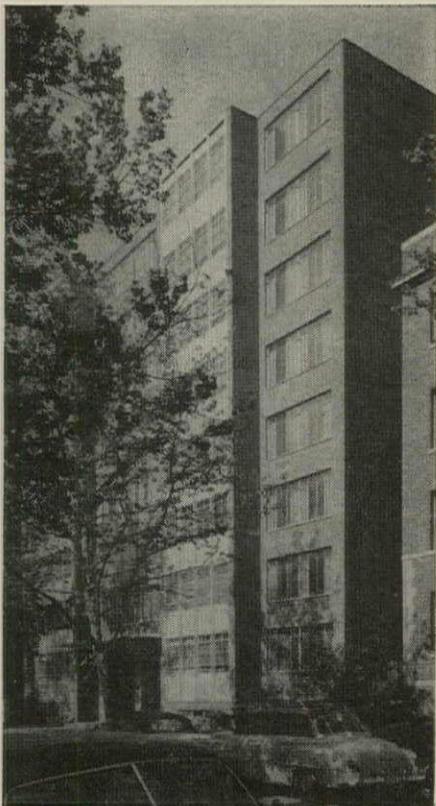
When legislators first considered such a ban two years ago at the request of the Home Loan Bank Board there were only two holding companies, controlling six S&Ls. Now there are ten; three more are being organized. Together they control 30 S&Ls and have been negotiating to buy more. All the S&Ls are stock companies.*

Leaders of the two S&L leagues backed
continued on p 66

*Only 13 states permit stock S&Ls—a latter-day offshoot of the original S&L idea of neighbors banding together in mutually-owned cooperatives to finance their own shelter. Bulk of stock S&Ls are concentrated in four states: California, 154; Texas, 93; Ohio, 91; Kansas, 38. Colorado has 21, Illinois 12. These states have less than 10 each: Arizona, Idaho, Indiana, Nevada, Utah, Virginia, Washington.



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"Added value without adding cost"

Dave Fox, national award-winning builder and Chairman of NAHB merchandising committee: "The program was especially helpful in showing builders how the unique advantages of aluminum building products could add value and sales appeal without increasing the cost."



"Kaiser Aluminum's help was tops"

Herb DeShong, executive officer of the Home Builders Association of Dallas County: "We welcomed Kaiser Aluminum's program because it was designed to help the whole home building industry sell more new homes by encouraging families to buy."



"Sincere assistance"

Bill Gaynier, President of the Home Builders Association of Dallas County and developer of one of five POH sites: "We were especially impressed with the flexibility of Kaiser Aluminum's program and its earnest efforts to help us sell more homes."

"Enjoyed the additional impact"

Bill Knighton, Chairman of Dallas County Parade of Homes: "Builders enjoyed the additional public impact from the unprecedented crowd that flocked to our Parade of Homes this year."



Professional builders in Dallas County attracted a record throng of 172,965 to their 1959 Parade of Homes... with the help of a unique local Kaiser Aluminum program based on the theme: "Buy A New Home Now—Your Best Investment In The Future."

For professional builders from coast to coast, the success scored in Dallas (as in New Orleans, Hartford, Kansas City, Minneapolis and San Diego) is a meaningful forerunner of things to come.

In these six cities, builder programs benefited from the most powerful home selling support ever offered by an aluminum producer... a concentrated local campaign from Kaiser Aluminum that the builders themselves helped design!

Spearheaded by special local TV commercials on "Maverick" (the Emmy Award ABC-TV show), each campaign was backed by a complete line-up of supporting promotion: newspaper, radio, outdoor posters, car cards, lawn signs, literature.

The hard-selling theme: "Buy A New Home Now — Your Best Investment In The Future!"

Here was the kind of support builders said they wanted... support that encouraged each builder to use only those aluminum products that do a better job at installed cost equal to or less than other materials. Here was fully-integrated support builders could really use!

This six-market pilot program is only the beginning of Kaiser Aluminum's support for the professional home builder... helping to introduce better products, improved techniques, increased home values. Watch this publication for more news for professional home builders... coming soon from Kaiser Aluminum.



THE BRIGHT STAR OF METALS

Kaiser Aluminum & Chemical Sales, Inc.
1924 Broadway, Oakland 12, California

See "MAVERICK" • Sunday Evenings, ABC-TV Network
Consult your local TV listing

the ban. They say an S&L should be a local business with local management by local businessmen, uncontrolled by faraway interests. They also fear that holding companies would use S&Ls to promote and benefit the parent company's interest, rather than the depositors'. They are sure any abuses would jeopardize the network of laws controlling S&Ls—laws created for mutual institutions.

Representatives of 10 holding companies testified that holding companies control such a small part of the S&L business there is no threat of monopoly, thus no need for restrictions.

Over these objections Congress voted to:

- Ban acquisitions until May 31, 1961 and call for a report from the HLBB by May 31, 1960 recommending further action.
- Prohibit the Federal S&L Insurance Corp from insuring deposits of more than one S&L owned by one holding company.
- Let a holding company complete any purchase already pledged legally but also require that it be resold within one year.
- Instruct the HLBB to go to court to force a holding company to divest itself of any S&L bought in violation of the law. (The law sets 10% of stock ownership as the point at which a holding company is considered to have control.)
- Prohibit any S&L controlled by a holding company from investing money in any other business owned by the parent company.

Congress asks HLBB to recommend in its 1960 report whether holding companies should be required to divest themselves of all but one of the S&Ls they control, even though bought before the law was passed.

75% loans for banks

Congress has given commercial banks the right to make 75% conventional loans.

But the boost (from the longtime limit of 66⅔%) will probably mean little more mortgage activity by banks. Says Dr Kurt Flexner, director of the American Bankers' Assn mortgage division: "This will just let banks remain competitive in this era of steadily rising loan-to-value ratios. The 66⅔% limit was set when loans were not amortized. This is an unrealistic limit for an amortized loan."

A 50% non-amortized loan is no better than a 75% amortized mortgage, Flexner contends.

FNMA stock bill delayed

Builders and mortgage bankers will have to wait 'til next year for tax relief on Fanny May stock losses.

IRS ruled last year that the loss on FNMA stock—averaging 50¢ on the dollar—can be deducted only as a capital loss, not as a cost of doing business. Mortgage bankers seldom have capital losses, are in effect taxed on a dollar for which they receive only 50¢.

The House passed in September a bill by Rep. Frank Ikard (D. Tex.) which would let FNMA stockholders deduct as a business expense the losses met in selling the stock. But the Senate did not act on the bill before Congress adjourned.

The House bill has one feature the industry finds disappointing. It does not make the tax break retroactive. Industry spokesmen insist that IRS' original ruling was in error, thus a correction should go back to 1954 when they were first required to take in stock 2% of the purchase price of any FHA-VA loan sold to FNMA. They now hope to get retroactivity restored as an amendment in the Senate.

A look at tomorrow's mortgage company as one expert sees it

(This is another exclusive HOUSE & HOME analysis of the developing revolution in the housing industry—its causes and effects—and the people who are leading it.)

By John Senning

Will this be the mortgage banking company of the future?

- A nationwide operation with offices in most major market areas, created by the merger of some of today's hardiest—but still local—originator-servicers.
- A company so strong and rich it will make all of its own commitments, selling investors either 1) participating shares in loans or 2) debentures backed by its own assets and mortgage portfolio.

This is *not* a blue-sky dream. It's in line with Planner Burnham Kelly's forecast of an industrialized housing business—a forecast already showing signs of coming true (*June, News et seq*). Now, Frank Flynn, one of the mortgage banking industry's more astute thinkers, spells out this view of the future in specifics.

What makes his discourse notable is the fact that the firm he heads, National Homes Acceptance Corp. is coming close to a prototype of a national mortgage company. It now has offices in Lafayette, Ind., Detroit, Saginaw, Marietta, and Paducah. When National bought out seven other prefabbers (*Sept H&H*), Flynn announced plans for new offices in Orlando, Atlanta and Martinsville, Va. And this is only a start, he says.

Needed: bigger yields

Bigness must come inevitably to the mortgage business, Flynn insists, because size is the only way to cut overhead costs. And it is overhead that has historically put mortgages at a disadvantage when competing with other investments.

"We have to reduce the cost of handling mortgages, both on the part of the originator-servicer and the investor," Flynn exclaims. "The only way the investor can cut his expenses is to give more and more responsibility to the servicing agent. And this means the agent must have substantial financial responsibility. The investor will no longer rely on a small company only because the owner is an old-timer or well respected."

Flynn expects lenders to require that servicers be equipped to take over inspections and appraisals. "We will also have to warrant title, warrant that the taxes are paid, that hazard insurance is adequate and paid. And in event of default we will handle the perfecting of the claim. In turn we will have to cut costs substantially to make these concessions possible. We will have to operate on a big volume basis, be electronically equipped and operate on a smaller margin."

With size will come wealth. And this, says Flynn, will open the way for the new mortgage banking companies to sell securities backed by the mortgages instead of selling the mortgages themselves.

Mortgage Corp of America, formed earlier this year by three East Coast mortgage banking companies, has taken the first step (*May News*). It has implemented FHA's two-year-old regulation allowing sale of participating shares in FHA loans.



BUCKLEY, COLESTOCK & FLYNN

Now National Acceptance is planning its own participation plan, to start probably within the next year. "Eventually," adds Flynn, "I think our company will be handling a sizeable volume of business on the basis of debt obligations on real estate loans made on any terms we want to set. We won't have to stick to FHA or VA, because we have the parent company standing behind any debentures we may sell."

National Homes has already placed privately two debenture issues—\$7 million in the spring of 1958 and \$22 million the following fall. Both raised money for land purchase and development loans to builders.

Flynn speaks of the future with a little regret. When National asked him to set up the mortgage company in 1947 it was for only one reason: to help National sell more homes, not to build up a profitable subsidiary business. Indeed, National's standing policy is still to encourage its dealers to look for financing locally first. And Flynn wistfully comments he wishes it could stay this way.

"It's simpler," he explains. "We don't have offices in most cities. And the local originator is more flexible, probably better able to help the dealer with his local problems and processing."

Despite such diffidence toward growth, Acceptance has originated \$600 million in FHA and VA loans, now services about \$419 million—making it the third largest servicer in the U.S.* It has financed as little as 25% of National's house production in years of easy money and as much as 80% in years when money was hard to get.

Faster growth ahead

Flynn concedes this pattern of growth is likely to change. National Acceptance will grow faster than ever as a result of the parent company's expansion. And even the percentage of prefab production it finances will probably grow. Instead of a last recourse for dealers, Acceptance is likely to become more and more the primary source of mortgage money. One reason: National Acceptance has yet to turn down a dealer's request for financing, and it usually demands less discount than

* The biggest: T. J. Bettes & Co. of Houston, servicing \$1.1 billion and Western Mortgage of Los Angeles, servicing \$585 million. National Acceptance originates loans *only* on National homes (and now National's subsidiaries).

other lenders; it asks no commitment fee.

National Acceptance has a lot of investors—300 lenders of all sizes and types, ranging from the biggest savings banks and life companies to some small midwest banks which buy no more than two or three loans a year. Flynn is also dealing with pension funds, has sold \$35 million to both privately and bank-administered funds. He has deals pending with state retirement funds as well.

But the savings banks are still the biggest market. And they've been good to National. "We've got enough commitments right now to handle \$40 million worth of our 1960 production. That would be about 40%."

Year's lead time

The toughest part of Frank Flynn's job is crystal gazing. He must guess what the mortgage market will be a full year ahead. He has to get commitments that far in advance because of the lead time demanded by a prefab producer. Explains Flynn: "We are convinced a steady volume of production is a key factor in the success of any building operation." And this requires a steady flow of mortgage money.

He's been successful as a seer—but not 100%. "We have never been out of mortgage money for our dealers. But we have been caught in a rising market. One deal cost us \$500,000."

It cost heavily because National has delivered at the commitment price without renegotiation, even in a rising market. But it also will dig into its own pocket to boost the price to its builder-dealers to current market levels.

Acceptance also has construction money for its dealers—with a \$40 million line of credit from four big banks. It pays a rate fixed once a year and tied to the prime rate. It charges builders a flat 6%, no points.

Size creates an executive personnel problem—and this has been the stopper for several expansion-minded companies. But Flynn has not let it stop National: he trains his own. Today, he has 156 employes including a staff of executives all of whom have been with him for five to nine years. His key men: Executive Vice Presidents Robert Buckley and Paul Colestock. Both are lawyers. Buckley directs servicing and processing; Colestock handles marketing, public relations and dealer relations.

Flynn, now a craggy, beetle-browed 47, was once an office boy for FHA in Des Moines. He worked his way through law school, became an FHA legal clerk in 1935 and rose to assistant director. After three years as vice president of the Percy Wilson Mortgage Co in Chicago and three years in the Navy, he became loan supervisor of the Equitable Life Insurance Co of Iowa. In April 1947, when he was about to leave Equitable for a new job in Texas, Flynn was contacted by National's President Jim Price, was asked to set up the acceptance corporation. He accepted.

In those early days, he recalls: "I did everything. I was even out collecting delinquent payments."

Flynn is something of a maverick in the mortgage business. He's a Democrat (like the Price brothers) and opposes the Federal Reserve's tight money policy. He insists it does nothing to combat the real cause of inflation which is, he contends, the wage-price spiral. His comment: "Until they do something about this [spiral] they aren't going to lick inflation. They'll just make it tougher for the building industry." *NEWS continued on p 71*

MORTGAGE MARKET QUOTATIONS—new construction only

(Sale by originating mortgagee, who retains servicing.) As reported to HOUSE & HOME the week ending Sept. 11 '59.

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

FNMA prices		Minimum Down*		Minimum Down*		10% or more down	
Spec	Scdry	30 year		20-25 year		20-25 year	
Asst	Mkt	Immed	Fut	Immed	Fut	Immed	Fut
"	"						
96	94	93-95 ^b	92 1/2-93 1/2 ^b	93-95 ^b	92 1/2-93 1/2 ^b	96 1/2	"
96	95	par-101	par-101	par-101	par-101	par-101	par-101
—	—	93-93 1/2	93	93-93 1/2	93	"	"
96	94	95 1/2-96	95-96	96-97	95-96	95 1/2-97	95 1/2-97
96	94	95-96 1/2	94	95-95 1/2	95-95 1/2	97	95-96
96	93 1/2	94-96 ^b	92 1/2-94 1/2	95-96 ^b	"	95 1/2-96 ^b	"
96	93 1/2	95-95 1/2	95	95 1/2-96	95 1/2	96-96 1/2	96
96	94	94-95	94-95 ^b	"	"	"	"
96	94	93 1/2 ^b	"	"	"	95-95 1/2	95-95 1/2
96	93 1/2	93 ^b	"	"	"	96-97 ^d	96-97 ^d
96	94 1/2	96	95	96	95	97 1/2	97
96	95	96 ^c	96 ^c	96 ^c	96 ^c	96 ^c	96 ^c
96	93 1/2	94-95	92-94 ^b	94-95	92-94 ^b	95-96	"
96	94 1/2	96 1/2-97	"	96 1/2-97	"	97 1/2	"
96	93 1/2	93 1/2 ^b	92-93	"	"	94 1/2-95 ^d	"
96	94	93 1/2-95 1/2	92 1/2-95	94-96	93-95 1/2	95 1/2-96	95-96 1/2
96	94 1/2	94 ^b	"	94 ^b	"	96	95

*3% down of first \$13,500; 15% of next \$2,500; 30% of balance.
 SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks, Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach, vice pres, Draper & Kramer, Inc; Cleveland, William T. Doyle, vice pres, Jay F. Zook Inc; Denver, C. H. Bacon, vice pres, Mortgage Investment Co; Detroit, Stanley Earp, pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T. J. Bettes & Co; Jacksonville, John W. Yates, vice pres, Stockton, Whately, Davin & Co; Los Angeles, Robert E. Morgan, vice pres, The Colwell Co; Newark, William F. Haas, vice pres, 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, W. A. Clarke Mortgage Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, DC, Hector Hollister, vice pres, Frederick W. Berens Inc.

VA 5 1/4s

City	30 year no to 2% down		25 year 5% down		20-25 year 10% down or more		Conventional Interest Rates
	Immed	Fut	Immed	Fut	Immed	Fut	
Atlanta	93-95 ^b	92 1/2-93 1/2 ^b	93-95 ^b	92 1/2-93 1/2 ^b	96 1/2	"	5 3/4-6
Boston local	par-101	par-101	par-101	par-101	par-101	par-101	5 1/4
out-of-st	93-93 1/2	93	93-93 1/2	93	"	"	—
Chicago	95 1/2-96	95-96	96	95 1/2	95 1/2-97	95 1/2-97	5 3/4-6
Cleveland	94-95	94-95	"	"	"	"	5 3/4-6
Denver	94-96 ^b	92 1/2-94 1/2	94-96 ^b	"	95 1/2-96	"	5 3/4-6 1/2
Detroit	95-95 1/2	95	95 1/2	95 1/2	95 1/2-96	96	6-6 1/2
Houston	94-95	94-95 ^b	"	"	"	"	6-6 1/2
Jacksonville	93 1/2 ^b	"	"	"	"	"	6-6 1/4
Los Angeles	93 ^b	"	"	"	"	"	6-6.6
Newark	94	"	96	95	97 1/2	97	5 3/4-6
New York	96 ^c	96 ^c	96 ^c	96 ^c	96 ^c	96 ^c	5 3/4-6
Okla City	94-95	92-94 ^b	94-95	92-94 ^b	95-96	"	6-6 1/2
Philadelphia	96-96 1/2	"	96-96 1/2	"	97	"	5 3/4-6
San Fran	93 1/2 ^b	92-93	"	"	"	"	6-7.2
St Louis	"	"	"	"	"	"	5 1/2-6
Wash. DC	94 ^b	"	94 ^b	"	96	95	6

- ▶ 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 small 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—very limited activity, c—6% going rate, d—top price in spread paid only by insurance companies buying on quota, e—includes construction loans, x—FNMA pays 1/2 point more for loans with 10% down or more, y—FNMA net price after 1/2 point purchase and marketing fee, plus 2% stock purchase figured at sale for 50¢ on the \$1, z—price after 3/4 point purchasing and marketing fee, plus 3/4 point commitment fee; applies only to VA and FHA mortgage of \$13,500 or less committed under FNMA Program 10.

NEW YORK WHOLESALE MORTGAGE MARKET

VA and FHA 5 1/4s	VA 4 3/4s	FHA 5 1/4 spot loans
Immediates: 91-94	Immediates: 88-89	(On homes of varying age and condition)
Futures: 90 1/2-93 1/2	Futures: no activity	Immediates: 89-92

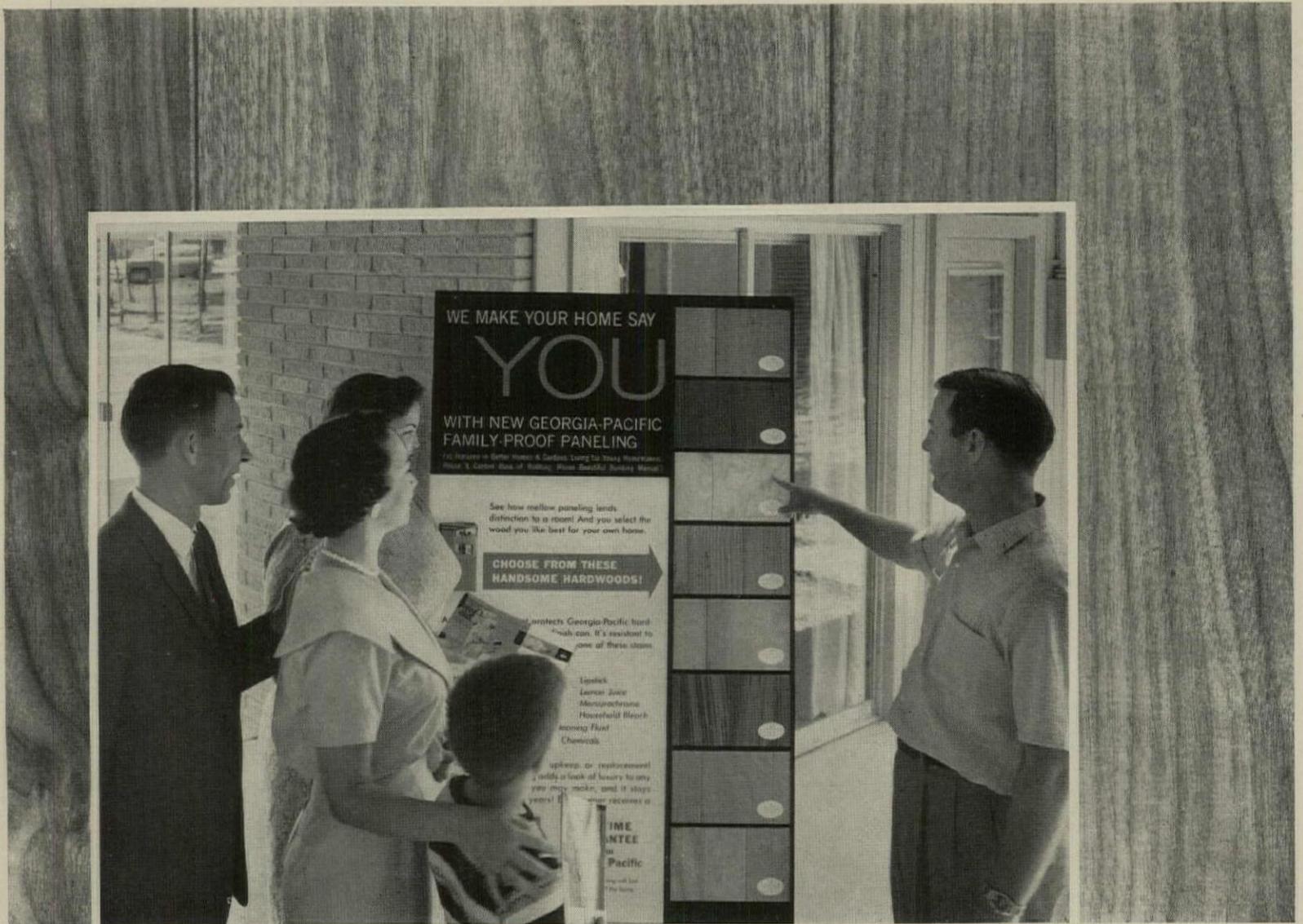
Prices for out-of-state loans, as reported the week ending Sept. 18, by Thomas P. Coogan, president, Housing Securities Inc.

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

FNMA STOCK

	Aug. 10	Sept. 14	Month's low	Month's high
Bid	57 1/2	56 1/2	56 1/2	61
Asked	59 1/2	58 1/2	58 1/2	63

Quotations supplied by C. F. Childs & Co.



THESE BUILDERS SAY GEORGIA-PACIFIC 'FAMILY-PROOF' PANELING HELPS SELL THEIR HOMES

Builders across the country agree:

JOHN PHILIP ENTERPRISES, ANDOVER, MASS.: '... public got a warm, pleasant atmosphere from this Georgia-Pacific "Family-Proof" paneling. It's easy and clean to work with and install.'

C. C. McDONALD, JR., BRIARWOOD, MISS.: 'The public is very interested in G-P "Family-Proof" hardwood paneling... and we're enthused about it, too.'

APPLE VALLEY, INC., GRAND RAPIDS, MICHIGAN: 'Public loved the "Family-Proof" G-P paneled room and commented on it more than any other feature.'

LANE REALTY CO., FOREST HILLS, NEW YORK (Agent for Hymen Rosen & Sons): 'People were very impressed by the "Family-Proof" paneling and showed great interest in it. We expect to sell homes to these interested people.'

Families across the country are buying homes with this GEORGIA-PACIFIC "Family-Proof" paneling, and here's what they like about it:

- The wide choice of warm, distinctive grains and colors — 8 in all.
- The chance to custom-fit their home to their own taste and personality.
- The modern practicality of "Family-Proof" finish that resists marring, scuffing, staining—backed by a GEORGIA-PACIFIC Lifetime Guarantee.
- The luxury of genuine hardwood paneling at modest cost.

See the Georgia-Pacific exhibit in NRLDA show—booth #1034



GEORGIA-PACIFIC
Dept. HH1059, Equitable Building, Portland, Oregon
Please send me details on how Georgia-Pacific can help me sell more homes.

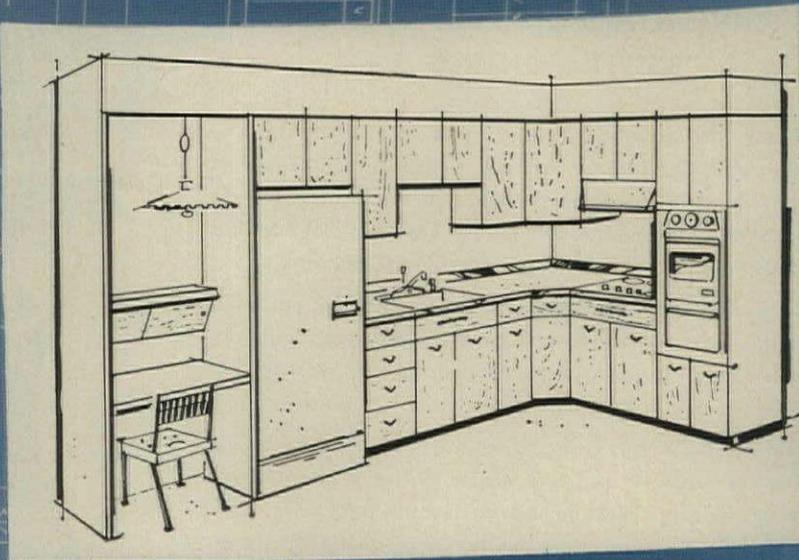
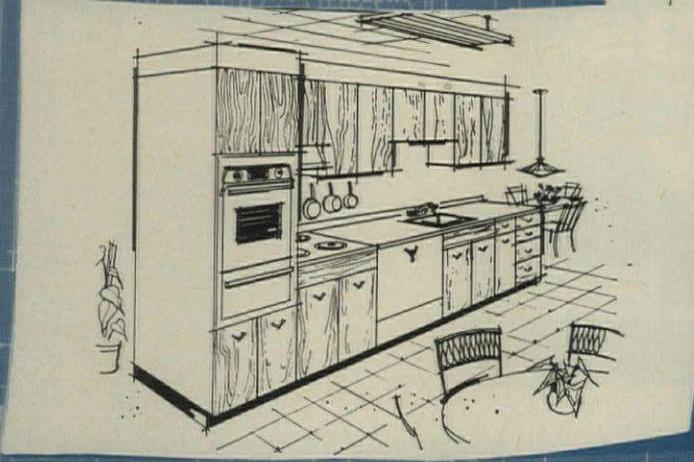
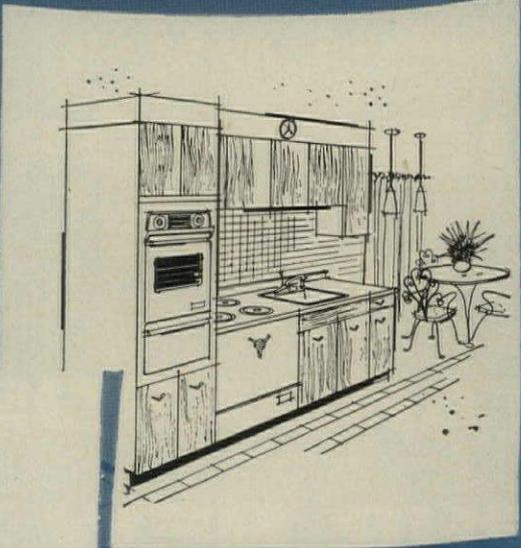
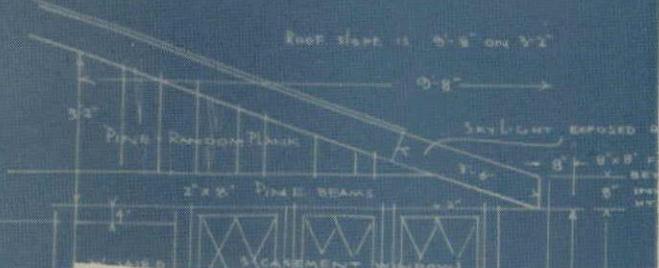
Name _____

Address _____

City _____ Zone _____ State _____

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"Packaged Kitchens" by Youngstown Kitchens

You'll be amazed how much more value you can offer in your model apartment kitchens...if you let us "package" your kitchens for you. Experienced building experts are ready to work from your plans, rough sketches or budget specifications to create a quality kitchen for you. "Packages" can be

prepared almost overnight from the world's largest selection of kitchen components. Styles include new mar and stain-resistant laminates in our Woodcharm line. Contact your Youngstown Kitchens distributor now and see the new book of "Packaged Kitchen" suggestions.

Be sure to see Youngstown Kitchens new mar-resistant laminates.



AMERICAN-Standard
YOUNGSTOWN KITCHENS DIVISION

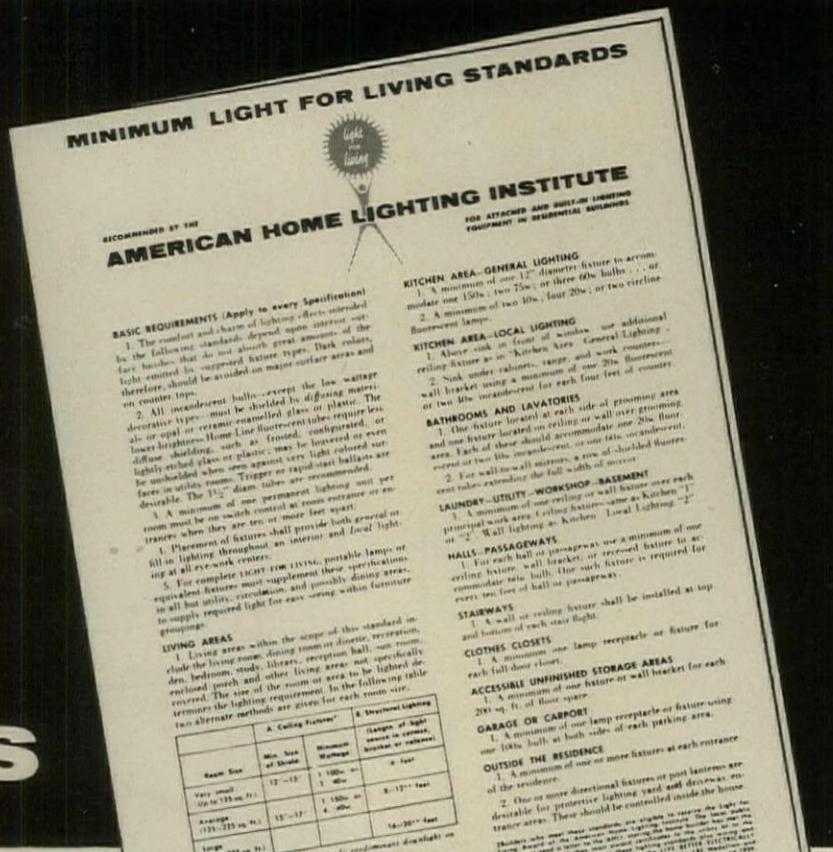
American-Standard, Youngstown Kitchens Division
Builder Dept. HH109, Warren, Ohio.

Please send me full details on your "Packaged Kitchen" plans for apartment builders.

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Firm Name _____
Address _____
City _____ State _____

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"LIGHT FOR LIVING" STANDARDS SPUR NEW HOME SALES



INSTITUTE ANNOUNCES REVISED EDITION TO MEET GROWING HOME BUYER DEMAND FOR BETTER LIGHTING

From all over the country, builders and architects report—"People are demanding better lighting in new homes." Demand for lighting information has skyrocketed in the past year. To meet this demand, the American Home Lighting Institute has developed its revised *Minimum Light for Living Standards*.

Here, on one page, builders and architects can find out what fixtures belong where. No more mystery about good lighting! Everything is spelled out for quick, easy, sales-building application.

Homes offering *Light for Living* give the buyer most for his money. They're easier to sell and easier to live in than homes that skimp on lighting. With millions of people becoming light-conscious, the builder who lights his home by the AHLI standards will cash in on a national trend. Visit the showroom of your electrical distributor to see a wide variety of attractive fixtures to meet any budget.



WRITE FOR YOUR FREE COPY TODAY

Don't be in the dark about lighting any longer! Fill in and mail the return coupon today. Your FREE copy of the *Minimum Light for Living Standards* will be sent to you by return mail . . . no obligation.

TIE IN WITH \$100,000 LIGHTING CONTEST THIS FALL!

Home lighting will get its biggest push this fall when *Live Better Electrically* and the Edison Electric Institute launch giant promotions.

Full-page ads in *LIFE*, *SATURDAY EVENING POST*, and *LOOK* will urge consumers to enter the \$100,000 *Light for Living* contest.

Millions of home-seekers will be shown the latest fixture trends. They'll be told to watch for good lighting in every home they inspect.

CASH IN on this major promotion. Light your home by AHLI standards!

American Home Lighting Institute, Inc.
 360 North Michigan Avenue
 Chicago 1, Illinois

Please send me one free set of *Light for Living* standards.

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 STREET _____
 CITY _____ ZONE _____ STATE _____

BY: (Individual) _____

What is AHLI?

The American Home Lighting Institute is a national trade association of manufacturers and distributors of home lighting fixtures.

- Manufacturer members are:**
 EMERSON-IMPERIAL LIGHTING COMPANY • ESTY MANUFACTURING CO. • H. A. FRAMBURG & COMPANY • GLOBE LIGHTING PRODUCTS, INC. • HALCOLITE COMPANY, INC. • INTERNATIONAL LIGHTING FIXTURE CO. • JAY LIGHTING MANUFACTURING CO., INC. • JERYL LIGHTING PRODUCTS, INC. • KOOKA LIGHTING CO., INC. • LEADER LAMP MFG. CO. • LIGHTOLIER • LINCOLN LIGHTING PRODUCTS, INC. • PRESCOLITE MANUFACTURING CORPORATION • PROGRESS MANUFACTURING COMPANY, INC. • PROJECT FIXTURE MFG. CORP. • JOHN C. VIRDEN COMPANY.

AMERICAN HOME LIGHTING INSTITUTE
 360 NORTH MICHIGAN AVENUE • CHICAGO 1, ILLINOIS

TIME—Walter Bennett



CORRIDOR HUDDLE of lawmakers and building trades officials helped produce a compromise on union's plea for exemption from new labor law's secondary boycott ban. Sen John Kennedy (*facing camera*), chairman of the Senate-House conference on the bill, was unable to get exemption into bill but has promised building trades leaders it will be taken up early in the 1960 session. Sen Thomas Kuchel (*back to camera with hand upraised*) supports the measure. Others in this impromptu meeting outside the conference room: Richard Gray (*at right smoking cigar*), president of the AFL-CIO Building Trades Dept, and Lewis Sherwon (*far right*), attorney for the International Brotherhood of Electrical Workers.

LABOR:

New law means less trouble for housing

Housing gains much, loses almost nothing of importance in the nation's new labor reform law.

Builders now have new protection against secondary boycotts and organizational picketing plus access to state courts when the Natl Labor Relations Board won't take jurisdiction over a labor dispute.

These benefits far outweigh three much-publicized sops tossed to the building trades during the Senate-House conference on the bill.

These are the key points in the law for builders:

Secondary boycott loopholes in the Taft-Hartley Act are plugged. Up to now, a single picket could shut down a job. NLRB and the courts did not construe the wording of Taft-Hartley, which bans only "concerted action", as applying to a lone picket. The new law extends the secondary boycott ban to *any* action taken to induce employes of another employer to stop doing business with the strikers' employer.

The T-H Act *did* ban inducement of employes of another employer from working. But it did *not* prevent the striking employes from threatening or coercing another employer directly. The new law does.

Organizational picketing, uncontrolled under Taft-Hartley, is now banned when 1) an employer has already lawfully recognized another union; 2) an NLRB election has been held in the preceding 12 months or 3) picketing has been carried on for 30 days or less and no recognition election has been asked.

This provision is particularly important in homebuilding's non-union areas. It means, in effect, that if a builders' employes do not want a union the builder has a way to force union pickets away from the job.

State courts can take jurisdiction over labor disputes which NLRB holds are outside its jurisdiction. This eliminates a no-man's land in labor relations. Federal courts have held that labor-management relations are under NLRB control only, ruling that states cannot take jurisdiction. This has left some disputes with no legal recourse since NLRB has rejected them as not involved in interstate commerce.

Now they can go into state courts, which is good news for builders. In general, they are likely to get much more sympathy from usually conservative state judges than they will from NLRB.

Building trades, at first flush, seemed to win a major victory in this new labor law. But a close look makes the gains seem hollow. Here's what they get:

Pre-hire agreements are legalized. Unions and building employers can make collective bargaining agreements without an NLRB election. They can require a builder to notify the union of a need for workers. Actually this change simply legalizes a practice which has been the rule in the building industry for years. It could have been challenged under Taft-Hartley but never was.

The Senate-House conference specifically points out that the pre-hire provision *has no effect* on NLRB's 1958 decision banning union-run hiring halls which are not open to non-union men.

With this in mind, Congress also legalized contracts requiring non-union tradesmen to join the union within seven days—instead of 30—after they are hired.

The hot cargo ban in the new law exempts the building trades—but only for on-site work, nothing off-site. Thus a union may negotiate a contract in which a builder agrees not to hire non-union sub-contractors. But if the builder does hire non-union subs anyway the union cannot stop the job. This would be an illegal secondary boycott. All it can do is file a civil suit for violation of contract.

One that got away

The building trades gladly would have traded all of these sections for one which everyone agreed was of critical import: exemption of the building trades from the secondary boycott ban. This would have let them picket building sites and close a whole job even though the grievance might be with just one of the several subcontractors working there.

This exemption was bitterly opposed by

both NAHB and AGC. But it came within a parliamentarian's whisker of being part of the law. Had it become law, it would have given building trades a powerful weapon to: 1) force union builders to be directly responsible for the labor relations of each of its subs or run the constant risk of a job shutdown and 2) start an intensive organizing drive in non-union areas.

The fight over this exemption threatened briefly to destroy all other compromises reached in the Senate-House conference on the bill. Sen John Kennedy (D, Mass), conference chairman, insisted the exemption be included, threatened to take the fight to the Senate floor. He probably would have won—particularly after Secy of Labor Mitchell reiterated his support.

But opponents got a ruling from the House parliamentarian that since the exemption was in neither the original Senate nor House bill he would uphold a point of order if this scheme came to the House for approval.

The conferees quickly reached a compromise then, giving the building trades the pre-hire and hot cargo exemptions instead.

Another fight in '60

The secondary boycott exemption for building trades is far from dead—and this is the most ominous news builders get from the long labor battle.

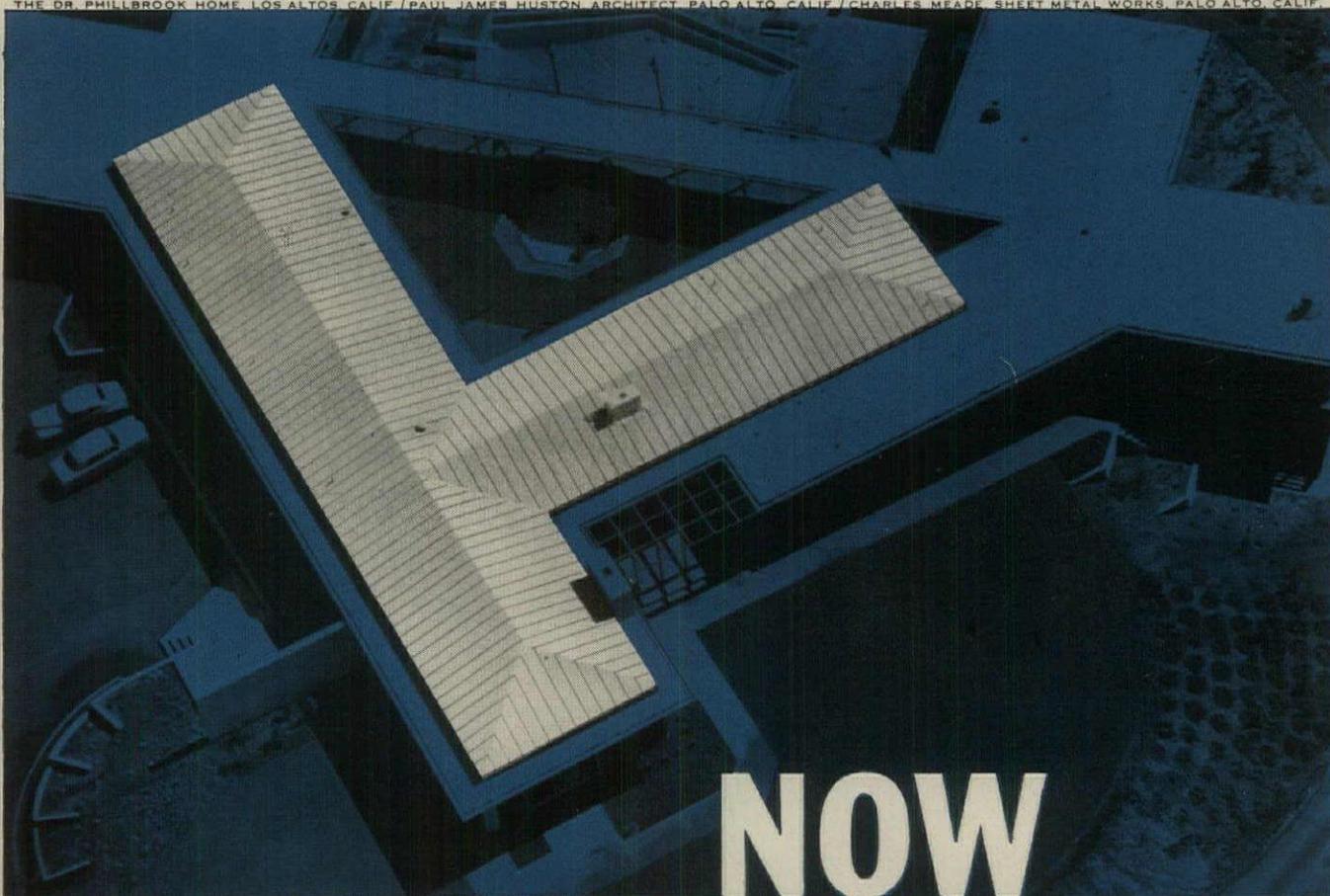
Kennedy announced after the final compromise that majority and minority leaders in both houses had agreed to schedule legislation on the exemption for early next session. There is little doubt it will pass in the Senate. It has been enacted there twice before.

But NAHB and AGC labor men predict that the bill will be bottled up in the House labor committee despite the support of the Administration and Democratic leadership.

The reform sections of the new labor law are aimed at stopping union corruption, as uncovered by the Senate rackets investigating committee. They guarantee union members democratic rights within their unions and impose stiff controls on the union financial operations. The Secretary of Labor gets power to investigate complaints. Major violations are subject to fines up to \$10,000 or 20 years in prison.

NEWS continued on p 75

THE DR. PHILLBROOK HOME, LOS ALTOS, CALIF. / PAUL JAMES HUSTON ARCHITECT, PALO ALTO, CALIF. / CHARLES MEADE SHEET METAL WORKS, PALO ALTO, CALIF.



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It can be formed into many contemporary designs

It can be custom colored

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WHAT IS FOLLANSBEE TERNE?

As a word, terne means three. As a metal, Follansbee TERNE is the combination of three metals—steel, lead and tin. More properly, it is copper-bearing cold-rolled strip steel with a lead-tin coating. The coating is an alloy of 4 parts lead to one part tin. This makes TERNE's surface perfect for painting and soldering. Since TERNE is basically steel, its coefficient of expansion is lower than any other roofing metal; it is fire-proof, weathertight, windproof, and will last more than a lifetime.

You can form it—and it will never crack

**You can paint it immediately—
no special treatment is needed**

FOLLANSBEE

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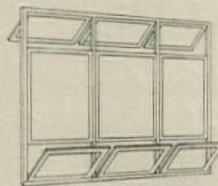
SEND TODAY FOR ADDITIONAL INFORMATION & YOUR FREE COPY OF STANDARD SPECIFICATIONS FOR FOLLANSBEE SEAMLESS TERNE ROOFING

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Insure maximum comfort for your customers with Qualitybilt 4-Way Windows. Plan hundreds of delightful, eye-catching window arrangements that put walls of light and cool, refreshing summer breezes in just the right places . . . or lock snug and draft-free to defy the most chilling winter winds. You can do this with the wide range of sizes of the two basic units . . . Two-Sash and Single Sash. Use them singly or in imaginative combinations . . . as Awning, Hopper, Casement, or Fixed Units. Create hundreds of other attractive arrangements with standard Picture Units. And get this amazing flexibility at the most economical prices!



Qualitybilt 4-Way Windows are completely weatherstripped, with a variety of glass, hardware, and operators. Accurately machined of Ponderosa Pine, toxic treated to last a housetime. For the complete story write for illustrated catalog and name of nearest distributor!

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Entrances • Doors • Frames • Sash • Blinds • Casements • Glider Windows • Sliding Doors • Screens
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I'll never borrow another nickel!

"... for anything but a Midwest House. Why should I? Midwest financing experts help me get consumer and construction money through their own mortgage company. FHA, VA, or conventional. You name it. They know the ropes. With Midwest handling the paperwork, I can spend more time building *more* Midwest Houses ... to make *more* money for myself!" Midwest Houses, Inc., Mansfield 5, Ohio.

MIDWEST HOUSES

DON'T BUILD ANOTHER HOUSE until you check into Midwest's complete *Profil-Builder* program: site selection, architectural service, market evaluation, construction and consumer financing, plot planning, time-table expediting, construction coordination, sales promotion, advertising preparation, model home management, Urban Renewal assistance. Over 50 models in a variety of styles, priced from \$10,000 to \$30,000.

News

MATERIALS & PRICES:

Transit lumber shipments hit again by ICC

Transit lumber shipments, a widely denounced but widely used means of slowing lumber on its way to market in order to give wholesalers time to sell it, have suffered their second slap in a year from the ICC. Latest move is a ban on 15-day free demurrage offered by seven rail lines. Earlier, the ICC ordered (and a US District Court upheld it) rail lines to stop giving slowpoke service to shippers requesting it. But the first order was stayed pending an appeal. Old hands see the same fate for the new order. In any case, they say, transit shippers will still be able to route their lumber the long way around through Canada and evade the orders.

ICC also has granted railroads permission to cut rates on paint and varnish so they can compete better with truckers.

Electrical manufacturers to reorganize

The big, sprawling National Electrical Manufacturers Assn, which in 33 years grew from a handful of wire, motor and insulator makers to 539 companies in 65 semi-autonomous product sections, next month considers its first major reorganization. Planning Chairman W. C. Wichman, boss of GE's Hotpoint Div, will recommend to the Atlantic City convention that the manufacturers regroup into eight divisions, with "mutual problems and interests." Official reason for the change is "to meet the big things we all expect in the 60s." But insiders add that NEMA's Topsy-like growth has been no help in serving the mushrooming industry it represents, and that the reorganization gleam in NEMA's eye has been fanned since it got a new managing director, ex-lawyer Joseph F. Miller, four years ago.

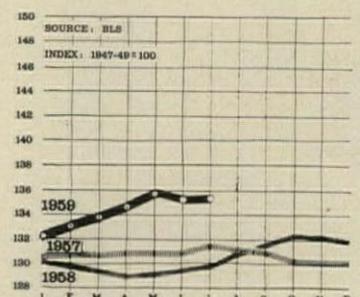
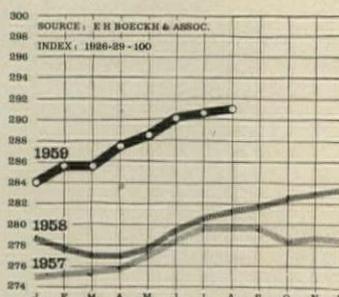
Ruberoid gets into resilient flooring

Ruberoid Co, \$62 million producer of asphalt and asbestos building materials, is making a strong bid in resilient flooring with acquisition of the \$13 million Mastic Tile Corp of America, major producer of floor tile. The price, subject to stockholder ratification, is \$12 million in Ruberoid stock. Ruberoid expects the merger to boost its sales this year by \$35 million, to nearly \$125 million. Among Mastic's assets are four tile plants and a 40% interest in the newly-organized Cumberland Chemical Corp, producer of raw materials for vinyl tile which is scheduled to start production early next year.

New moves at Crane

Insiders are beginning to see hints of a new plumbing empire in Thomas M. Evans' stormy shakeup of Chicago's big plumbing and fixture firm, Crane Co. After severe cutbacks that eliminated six vice presidents, laid off 2,000 employees, closed down 43 company-owned wholesale outlets, (*June, News et seq*) Crane has now bought at least 20,000 shares of Briggs Mfg Co, Michigan fixture firm, is reportedly shopping for a total of 100,000 or nearly 10% of Briggs stock. Crane has also announced plans to lay out \$11.5 million for Chapman Valve Mfg Co of Indian Orchard, Mass. Meanwhile, it is seeking tenants or buyers for 11 acres of plant space at its Chicago works, and has put sites of some closed branches on the market. As usual, Yaleman Evans, 49, who has made a spectacular success of reviving faltering corporations and who has merged most of them into his H. K. Porter Co of Pittsburgh, kept mum about his plans.

NEWS continued on p 85



MATERIALS PRICES inched up to 134.4 in August, according to BLS' preliminary figures, up .1 point from July's 134.3 but still down from the May-June peak of 135.8.

RESIDENTIAL BUILDING COSTS edged up to 291 on Boeckh's index in August, from July's 290.6. "Labor rate boosts," explains Col E. H. Boeckh. "Materials didn't change."

For modern living



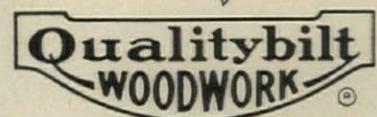
**So many reasons she'll prefer
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Here is the finest and most complete casement line available. It's easy to plan hundreds of eye-catching arrangements with Qualitybilt's full range of two widths, five heights, plus picture window combinations . . . in one light, divided light, or the new, work-saving removable inserts. Qualitybilt's superb craftsmanship and low maintenance features include precision hardware . . . feather-touch worm and gear operators, extension hinges for easy inside cleaning, and pick-up action locks. All wood parts are preservative and toxic treated . . . and each window is completely weatherstripped to seal snug and draft-free without effort. Investigate Qualitybilt Casement Windows TODAY!



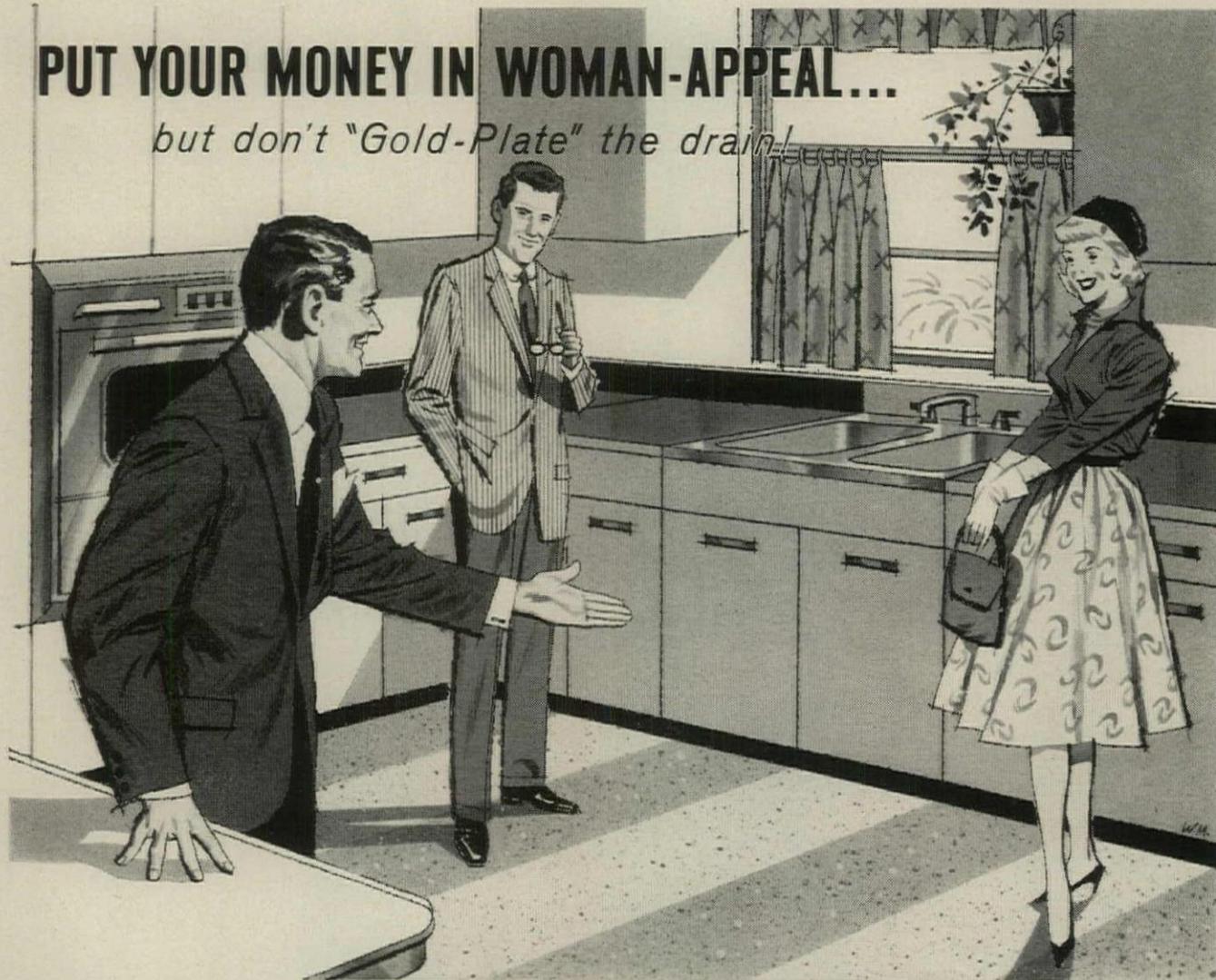
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PUT YOUR MONEY IN WOMAN-APPEAL...

but don't "Gold-Plate" the drain!



Specify Republic Steel Pipe for maximum economy in waste line service

Never underestimate woman-power where satisfaction with a home is concerned. To provide greater family happiness in the final analysis, discerning building contractors concentrate on modern conveniences that have automatic appeal for the ladies. And they make this possible by insisting on sound economies in the selection of basic materials.

One of these economies is the choice of Republic Steel Pipe for waste lines. The low initial cost of steel pipe provides extra funds that can be diverted to woman-pleasing, family-pleasing features. In addition to its low initial cost, steel pipe is always readily available . . . at prices that are little subject to fluctuation.

Material shortages, with consequent work stop-

pages, are avoided—as are unforeseen price rises, that can cut into profits. Moreover, a single grade of steel meets all requirements, saving inventory costs and eliminating the risk of installing the wrong grade.

Further savings accrue because steel pipe provides excellent workability. Reputable plumbing contractors everywhere know how to make fast, economical installations, good for the life of the building.

These factors, added together, enable you to provide greater buyer-satisfaction at lower cost through Republic Steel Pipe. Get further details now by consulting your Republic Pipe Distributor. Or write Republic Steel Corporation, Dept. HO-7391, 1441 Republic Building, Cleveland 1, Ohio.

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World's Widest Range of Standard Steels and Steel Products

Yours For Better Living - Electrically

**THIS HOME IS EQUIPPED WITH
SQUARE D CIRCUIT BREAKERS**

+ YOU'LL NEVER HAVE TO CHANGE A FUSE!



This simple Circuit Breaker Demonstration will help you sell homes!

There's nothing complicated about it. The demonstration equipment (which we furnish) is light and compact. You can set it up on a moment's notice. There's nothing technical or involved about the demonstration itself. Yet, in a couple of minutes, it dramatizes a very important "plus" value you are providing in your homes. Attractive display cards, tags and literature add further impact to this convincing demonstration.

Today's home buyers are "housepower" conscious. Electrical equipment and appliances now are being provided and promoted as an integral part of the home. It takes adequate wiring to provide for these "built-in" electrical features and others that will be added later on.

When you install **QO** "qwik-open" circuit breakers in your homes, you're providing far more than just adequate wiring. You're providing con-

venience. There are no fuses to replace. Even a child can restore service, quickly and safely.

You're providing modern protection against overloads and "shorts." And you're providing room for extra circuits needed in the future.

You put a proven selling feature to work for you when you install **QO**—finest breaker ever built!

COMPLETE PACKAGE NOW READY
Square D has a "packaged" plan (which includes the demonstration equipment and printed pieces shown above) that helps sell homes. If you're interested, clip this panel, attach it to your letterhead and mail it to S. C. Hunt, Square D Company, 1601 Mercer Road, Lexington, Kentucky.



SQUARE D COMPANY

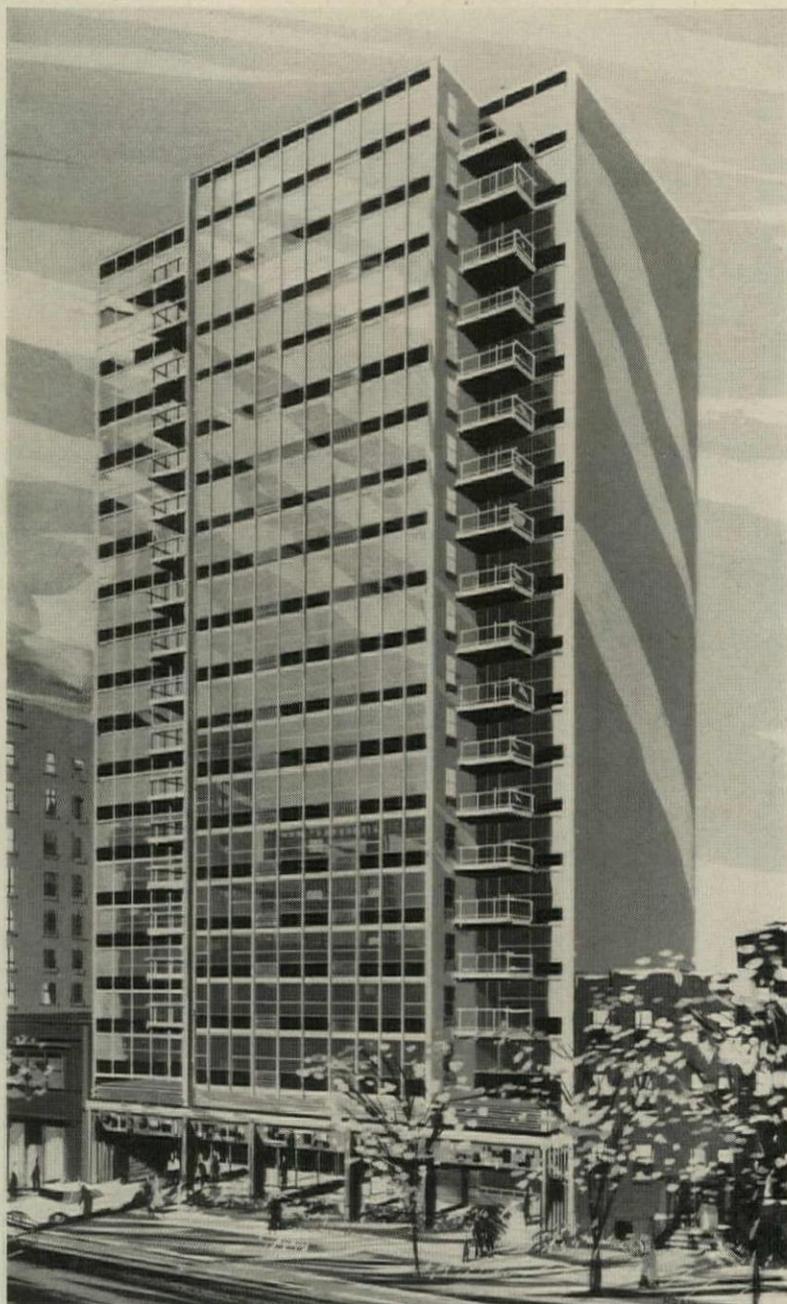
—wherever electricity is distributed and controlled

Magnificent 30 East Elm features Distinctive Bathroom Fixtures in Color by Universal-Rundle

Universal-Rundle bathroom fixtures have been chosen for the new 30 East Elm Apartment, a magnificent 20-story building in colored steel and glass accented with granite, stone and marble. 30 East Elm is just one-half block from Chicago's Fashionable Mile . . . the heart of Chicago's Gold Coast . . . designed with every advanced feature for gracious, prestige town living.

All over the country, new trend Universal-Rundle bathroom fixtures, the world's finest, are being installed in apartment houses, motels, hotels and office buildings. U/R fixtures have the finest in style, the newest in convenience, lasting loveliness, with gleaming, super-hard surfaces in color-matched vitreous china . . . the result of over 58 years of design leadership.

More and more builders, architects and engineers are specifying U/R fixtures. We invite you to write for your free copy of the full-line U/R catalog. Universal-Rundle Corporation, 584 River Road, New Castle, Pennsylvania.



30 East Elm Apartment • 30 East Elm Street • Chicago, Illinois
Leonard H. Lawrence and associates, owners

L. R. Solomon & Associates, J. D. Cordwell, architects and engineers

Lloyds Builders, Inc., general contractor

Economy Plumbing & Heating Co., Inc., plumbing contractor

Roberts Supply Co., plumbing wholesaler

Typical 30 East Elm bathroom with U/R fixtures
in distinctive Desert Tan or Mist Gray.

The Meade—one-piece vitreous enameled cast iron recess tub . . . full 5 ft. length plus modern apron, wide seat panel and recessed soap dish.

The Cathleen—vitreous china lavatory with deep basin, anti-splash rim, concealed overflow drain and twin integral soap dishes.

The Conquest—vitreous china closet bowl designed to complement the graceful lines of modern bathrooms. Positive, maintenance-free operation.



Universal Rundle

MAKER OF THE WORLD'S FINEST PLUMBING FIXTURES

Plants in Camden, New Jersey; Milwaukee, Wisconsin; New Castle, Pennsylvania; Redlands, California; Hondo, Texas

URBAN RENEWAL:

Lone lawyer pioneers a new way to fight blockbusting racket

Blockbusting real estate speculators in Chicago are beginning to feel the effects of one-man crusade by a lawyer who makes up in righteous indignation what he lacks in legal grounds to win cases against them.

The attorney is Mark J. Satter, 44, a craggy, greying general practitioner whose blood pressure rises when he considers how some speculators panic whites in changing neighborhoods into selling low, then turn around and sell high to house-hungry Negroes from the city's ghetto. Often the high price prompts buyers to illegal conver-

Edward DeLuga



ATTORNEY SATTER

Jousting at dishonorable profit

sions or overcrowding to meet their payments.

But what really riles Satter is the extra wrinkle used by some speculators to wring extra profits from the traffic in housing misery. This, he says, is the generally accepted device of contract sale perverted for "dishonorable profit" because mortgage money is seldom available to Negroes. In one recent and typical case Satter opposed the eviction of a Negro family who paid \$1,000 down, and \$105 monthly for three years, then found they couldn't get a mortgage to pay the \$10,800 balance of the \$13,500 purchase price, in accordance with the contract. Satter found that the specu-

lator had bought the house from whites for only \$9,000 less than two weeks before the sale, subsequently sold out to another investor who sought the eviction. A lower court turned down Satter's plea that the contract was a "fantastic source of dishonorable profit" and part of "a game by which Negroes are cheated" because they could not get a mortgage. So Satter appealed. The seller caved in and agreed to continue the monthly payments. In "several dozen" such cases, says Satter, he has yet to lose.

Satter says speculators are exacting "\$1 million a day" in excessive profits from Chicago Negroes. But in court they waver at the possibility that justice, not law, will guide the judge. "These boys are thieves and they settle fast," he says. A life long Chicagoan and himself owner of property in mixed neighborhoods, Satter has been spending more and more time lately in his campaign against blockbusting, and particularly unscrupulous contract sales. He cites one property which shows five sales in a single year, on which the seller has recovered 2½ times the purchase price without losing his equity.

Such sales are perfectly legal. And the properties are often genuinely undesirable mortgage risks. But this strikes Satter as less important than the human distress involved. His efforts in the courts, and writing in community and legal journals, have begun to draw some press and civic attention in Chicago. While lenders tend to bridle at his charge that their failure to make funds available to Negroes but willingness to lend to speculators is the root of the racket, most agree that his cause has worthwhile aspects. And in attacking blockbusting in general, Satter is backed up by Chicago's housing and urban renewal consultant, D. E. Macklemann, who characterizes it as "scare sales [that] quickly break of the cohesiveness of the community and lead to premature movement and deterioration of the social and physical structure of the neighborhood."

In Satter's fight, other cities facing the disruptive forces of blockbusting may find some hints on how to meet them.

New York picks a new doctor to treat its ailing renewal setup

"This city is going to hell."

That pungent assessment of New York's growing slum crisis comes from J. (for Joseph) Anthony Panuch (pronounced panic), 59, a wiry and outspoken lawyer with a reputation for cutting red tape. Last month Panuch set about trying to make sense of the city's scandal-tainted, dissension-rocked, balkanized programs for fighting blight. It is a measure of the crisis that Panuch, a Republican, has been handed the job of prescribing for a Democratic city government. Whether, when the prescription is written in February, the patient will be able to swallow it, is another question.

New Yorkers last month had a good chance to see one aspect of the hell Panuch spoke of. Teen violence, which has taken 40 lives since January 1, erupted in four street gang murders in eight days.

On one occasion, a boy was knifed and a girl shot to death by a youthful rifleman who took aim in the flickering glare of a gasoline bomb thrown by a companion. On another, two youths staggered bleeding

New York Times



ORGANIZER PANUCH

Bitter medicine for a sick city

out of a lower West Side playground where they had been sitting with their girls when they were set upon and stabbed by a Harlem gang that had never seen them before. Both died on doorsteps across the street.

In the subsequent furor, city and state officials mapped a new tough line against teen violence. More than 1,000 police were added to the city's force. A work camp program for young hoodlums was hastily begun. Judges began slapping heavy sentences on youthful offenders. But neither the official pronouncements, nor press reports that carried the story across the nation touched on what has long been recognized as an underlying cause: slums and New York's record of failure in its multi-million dollar effort to stem their growth.

It is mere coincidence that New York has 7,000 teen gang members and also 7,000 acres of slums. But there is no coincidence in the growth of the one problem along with the growth of the other. Despite of vast expenditure of city and federal funds (at a ratio of \$2 federal for every \$1 city) since New York's clearance program was organized in 1949, slums have grown 17%.

Panuch, who has been organizational con-

NEWS continued on p 88

Can Chicago tax profit out of slums?

A dramatic overhaul of property assessment methods in Chicago promises to go a long way toward taxing the profits out of slums.

Under the new procedure, which has been in the works for years but is just getting under way with Cook County's quadrennial reassessment, slum properties will be valued on income instead of physical condition. Thus the tax bite will be based on the fruits of illegal conversion and other blight-producing practices instead of the dilapidated condition of the structure.

Edward Siejz, deputy assessor of Cook County, estimates the 1960 tax bill for a typical slum will be quadrupled under the new system. A special investigator assigned to the project is reporting on some 20 buildings a day, says Siejz. And when the county adopts an annual reassessment program for a fourth of its structures each year, in 1961, the program will hit full stride.

The new method, born of Chicago's pioneer slum fight, is the first sign of a tilt toward tax theories which say that local real estate taxes should be based on current benefits of land use rather than the market value of the improvements. It is being implemented just as two new and as yet untried state laws tending the same way are added to the city's anti-slum arsenal.

One law provides that in condemnation proceedings to acquire land for redevelopment, juries shall disregard inflated income figures created by abuse of the buildings, and instead consider only the real value, and also the cost of bringing the structure into conformance with building and housing laws, in setting its acquisition price. The other law provides that the city may obtain a court order against the owner of any building in a renewal area, to force him to bring it up to renewal standards for the area.

A Pledge of Quality

BECAUSE we agree with HOUSE & HOME and the many quality professionals in the housing industry who support this magazine's continuing campaign for better quality in building products and for "The Quality House," and

BECAUSE we believe that the homebuyer is entitled to both quality and service from every product in his home, that the acceptance of quality will benefit the entire housing industry, that eventually all housing industry professionals will recognize its practical economy, as the developers of Loma Palisades have done and we share their pride, and

BECAUSE we support the SLIDING GLASS DOOR AND WINDOW INSTITUTE in its constant national effort to establish higher standards for the doors and windows produced by our own industry in terms of resistance to air and water infiltration, greater structural strength, and trouble-free performance,

WE PLEDGE our allegiance in this drive for quality, joining thousands of others in the housing industry who recognize how much HOUSE & HOME's campaign has already done for them, and

WE PLEDGE our further efforts to alert more and more builders, architects, MORTGAGE LENDERS, dealers, and realtors to the importance of quality and the fact that cheapness often proves to be most expensive. To these aims and this purpose,

WE PLEDGE our products, our entire facilities, and our personnel.



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THE ALL-NEW

Mustang

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PACKAGE PRICE INCLUDES

-  12 Colonial, Contemporary, French Provincial, Ranch and New Orleans Colonial designs.
-  Attached Garage.
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-  2" x 4" construction throughout.
-  Also includes exterior wall sections with doors and windows installed, architectural trim, gables, roof trusses and sheathing, roofing, hardware, interior partitions, interior trim, insulation . . . and much more.

MASS MARKET SALES!

Build the new Mustang with an attached garage. At a cost, until now, of a garageless house. Designed to build at a total direct cost of \$6540 . . . overhead, profit and mortgage financing costs to be added.

MODEL HOME FINANCING!

Round-up sales with a Mustang Model Home. Complete Model Home construction financing through Inland Mortgage Corporation at no cost to builder-dealers.

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HOMES**



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Manufacturer of America's Finest Homes

NEW...

low cost sewage plant furnished ready-to-run, on a "single responsibility" basis

Here at last—"Suburbia," a sewage treatment plant installed in your new sub-division and ready-to-run within 90 days! What's more, you deal with just *one* company from start to completion—*one* source of responsibility for furnishing and installation.

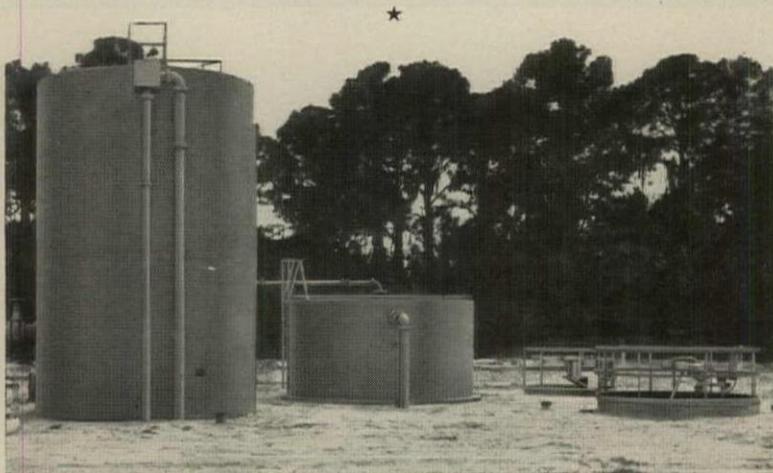
Individually planned and installed under the direction of your consulting engineer, "Suburbia" can handle populations of from 250 to over 2,500. Units conform to requirements of your State Department of Health; can be used permanently or as an interim measure (and then be re-erected elsewhere).

"Suburbia" is so simple that unskilled help can operate it; yet, with minimum maintenance, units produce no objectionable odor or bacteria-laden foam. Best of all, "Suburbia" involves less initial and operating capital than any other type of sewage treatment plant.

Let us show you how to buy community sewage treatment at sensible cost—and have it installed quickly, efficiently, without adding the confusion of multiple contracts. "Suburbia" is furnished and installed on a turnkey basis only, by . . .

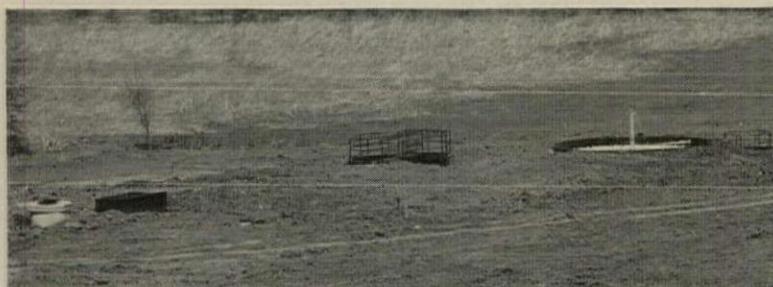
MUNICIPAL SERVICE COMPANY

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TYPICAL SOUTHERN-STATES INSTALLATION can go above-ground. Costs drop when tanks need not be buried, true of most of the South. This installation serves 118 homes (41,600 gallons per day) in the Debra Heights Development, St. Petersburg, Florida.

TYPICAL NORTHERN INSTALLATION goes below-grade to take advantage of residual ground-warmth during colder winters. This one serves 58 homes (20,100 gallons per day) at the Nike-Hercules Base, Lonejack, Missouri. Other installations range as far north as Michigan.



sultant to the State Dept, US military governor in Germany, and several private firms, was named to draw a new master plan for the anti-slum programs after the record drew fire from HHFA, (which doles out the federal government's two-thirds share of the cost of the program) then a promise of congressional investigation this fall. In his job he will have to grapple with:

Personalities: With the fierceness of an eagle at the nest, autocratic, eagle-bald Robert Moses, 70, longtime public servant who numbers chairmanship of the Slum Clearance Committee among his nine city and state posts, has defended his own unique Title I theories and the venality of some aides, against all critics. On the theory (disputed almost daily by New York's booming private construction) that capital for residential redevelopment is hard to find, Moses long ago adopted the practice of inviting sponsors to choose their own sites, then turning the sites over with slums intact for clearance by the sponsor. Secrecy about selection of sponsors and sites alike, plus cases in which sponsors milked the slums for a profit, then defaulted, have shaken public confidence if not in Moses, in his committee. Charges that other sponsors have not fulfilled their obligations to relocate tenants, and lack of an overall plan that has forced some relocatees to move a second time have created headaches. So did the committee approval of a former associate of Mobster Frank Costello as a sponsor, though its vice-chairman, Banker Thomas J. Shanahan (who is also widely known as Tammany Hall's chief fund raiser) knew of his background. Along with this sensation of the summer came word that Shanahan's bank had made a sizeable loan to another sponsor, and accepted a sizeable deposit from another. Moses' reaction was to say that irresponsible mud-slinging had made the private, middle-income rental portion of the Title I program a "dead duck," for lack of sponsors. Moses' new and formidable opponent, Plan Commission Chairman James Felt (whose Urban Renewal Board is beginning a \$100 million renewal project on the upper West Side as an alternative to Moses' bulldozer approach), has long urged an end to secrecy and a change in sponsor selection procedures, but with little success.

And in spite of Mayor Robert Wagner's avowed intention of "reining in" on Moses, the autocratic but so far scandal-proof chairman continues to do much as he likes. Whether he will cooperate with Panuch in a job that might spell the end of his authority in this area is questionable.

Politics: Critics have traced what they believe to be a pattern of political connection through many slum clearance sponsorships, and in a recent series the *New York Times* reported many developers say privately this is why they do not take part in Title I programs. Among those who have been involved are a city marshal, the former campaign manager for City Council President Rudolph Halley, a New York assemblyman, a former New York Supreme Court Justice. Latest furor is over a project at Soundview in the Bronx, an area of single family homes which residents (who pay ground rent to the land owner) say contains no substandard dwellings, but which was found to be held in the name of a secretary in the law office of Mayor Wagner's former campaign manager. Bought for \$500,000, the property has been appraised for acquisition (by an active Democrat) at more than \$1 million.

Besides the suspicions of cozy dealing which such connections raise, there is a conviction in some quarters that it is to Tammany Hall's interest to preserve slums where the ignorant and destitute huddle, dependent on a political machine for city services which should be their right.

Graft: Grand jury indictments of building department aides earlier this year for taking bribes to overlook slum violations (*News, Feb*) and evidence that the practice continued in spite of a reorganization aimed at killing it, drew HHFA criticism that the city was not living up to its "workable program" pledge that it was truly trying to stop new slums from forming. But the best evidence was offered by Deputy Building Commissioner Harold Birns, a former assistant district attorney hired to clean up the department.

In a series of spot inspections conducted with Manhattan Borough President Hulan Jack, Birns announced that in nine buildings he had discovered 1,000 violations. He suggested that community groups report on bad conditions for crash attention by the building department. This strikes some renewal experts as an abject confession that the men charged with enforcing laws on decent housing are unable to do their job.

Surveying his monumental job, Panuch says mildly, "From what I have seen after talking to city leaders for the past few weeks I must admit that the enormity of the problem is nearly overwhelming." If he solves it, a good many are betting that the solution will involve a graceful reshuffling to let the city eliminate a good many sources of criticism without losing political face.

CLOSEUP: Jim Walter, biggest shell house builder, buys a bank

James Willis Walter, 36, of Tampa, Florida, is a pleasant-faced man who firmly believes that the soft sell is the only way to do business.

This belief, coupled with a keen management sense, has served him so well that in the sometimes scorned field of shell house building it has taken him just 12 years to reach 12,000 houses a year, second in unit volume only to National Homes (42,000) in the nation. And he has done it so quietly that it wasn't until last month, when he plunked down \$4 million cash for a majority interest in the First National Bank of St. Petersburg, that he emerged to public view as one of the nation's biggest builders and a major home financier.

The Jim Walter Corp is currently selling through 75 branches in 16 southern states, from the East Coast through Arizona and Oklahoma. It expects to net about \$2.8 million this year on sales of \$24 million (National expects \$100 million sales), and owns about \$50 million in mortgages on houses it has sold.

Friendly persuasion

A good many people are wondering how Jim Walter got so big without being noticed before. The answer is partly that he *has* been noticed—at least in investment circles—partly that his diffused, localized growth is not the kind to attract attention, and mainly that most of the growth has been in the five years since Jim Walter Corp was formed. In that period, the company increased sales 20-fold, profits almost 40-fold.

"Everybody is a salesman," he says. "There are two kinds. One is the high-pressure type. Usually the people he sells end up wondering if they've been cheated. The other . . . gets to know and like his customer, and lets the customer sell himself. This is the way I try to operate." The view goes a long way toward explaining Walter's substantial success in a field too often infested by suede-shoe types.

Walter started home building in 1946, when he spotted a house, to be moved from the builder's lot, listed for sale at \$1,095 in a Tampa paper. He bought the house, resold it a few days later for a good profit. When he went back to talk to the builder, the man was busy on another house. By the time Walter left that day, they were partners, each putting up \$800.

Eager response

"We ran a little ad in the paper, 4" wide and 5" deep. The first day we sold 27 houses. We had three house models then. The Jim Walter Corp has 45 now," he says.

As the business grew, Walter first bought out his partner, and in 1953 sold 15% interest each to former Navy buddy J. O. Alston, and brother-in-law Arnold Saraw, who are executive vice president and secretary-treasurer, respectively. In 1955 the company took a step that has since become a distinct trend in home building, and offered stock to the public.

Despite its growth, the operation retains principles which Walter adopted early, and which hold the keys to his success.

Jim Walter homes, which sell for \$995 to \$2,895, are built only on the owner's lot, which he must hold free and clear if he wants a mortgage. Walter has thus freed him-

self of the headaches of land development and avoids the negative sales aspects of shell houses in tracts, since his houses are on scattered individual lots. Amazingly, prices on some models have remained the same since 1955.

The company builds only shells—frame structures completely finished on the outside, but with only finished floors, and partition studding (no plumbing, wiring or heating) on the interior. Plan variations and extras like carpets are available at extra cost. By thus simplifying and standardizing, Walter keeps close control of materials and costs. Framing and sheathing lumber is bought locally, but hardware, shingles and millwork are ordered from the company's central purchasing subsidiary. All are figured precisely enough so

George Sweers



FLORIDA BUILDER WALTER
"Houses by the thousands . . ."

one supervisor says, "When you get finished building a Jim Walter house all you should have left over is a pile of sawdust."

Walter controls labor costs by having his houses built by any of 400 independent carpenter teams who work for the company on a contract basis at a set fee per house.

Advertising, a \$700,000 per year item, is all local, in newspapers, radio and TV. But his four-color Sunday layouts outshine those of many a big conventional builder, and he has joined in local promotions with such big fixup purveyors as Sears, Roebuck.

Some 10% of Walter's houses are sold for cash. The rest are financed by the company in an operation that rivals its building in importance. Down payments vary depending on customer credit, may be nothing at all, but average \$70 per house. In addition, Walter takes a first mortgage on the lot, the shell, and the permanent improvements the buyer must make to make his house livable. Terms range from 48 to 72 months, depend-

Douglas Doubleday



\$2,295 ISLANDER MODEL
". . . built for the millions."

ing on the price of the house, and interest is 5-6%. Some mortgages, guaranteed by a subsidiary, are resold to investors, but the bulk are held by the company. Walter, in fact, catches most of the sideline profits of his operation, handling title, fire and credit life insurance as well as the mortgages.

Competent customers

Who buys Walter's houses? Not, he says, the ambitious but impecunious who might falter in the finishing and leave a blighted eyesore on the landscape. "The bulk of our customers are people who work with their hands," he says. Among them are machinists and other craftsmen, mechanics, skilled factory workers. Their low equities don't bother Walter, who sees to it that each is checked for ability to finish the house, and financial soundness. "They have a lot of sweat equity," he says. As evidence of their solidity, he cites a delinquency rate of less than 1%, and says he hasn't seen more than a half-dozen houses go unfinished since he's been in business. More important, by making the customer do almost as much work for him as he does for the customer, Walter is in the position of financing a product that appreciates over the life of the loan. The company has never lost money reselling a repossessed house.

Such an operation requires plenty of money and plenty of credit, and Walter has both. Following a policy of ploughing the lion's share of profits back into expansion, he this year opened some 23 new branches, at an average cost of \$20-25,000 apiece, and paid for them out of income. He has open and unsecured lines of credit with nearly a dozen of the nation's most sophisticated commercial banks. Some \$24 million of the company's \$40.4 million capital comes from notes payable to banks and others.

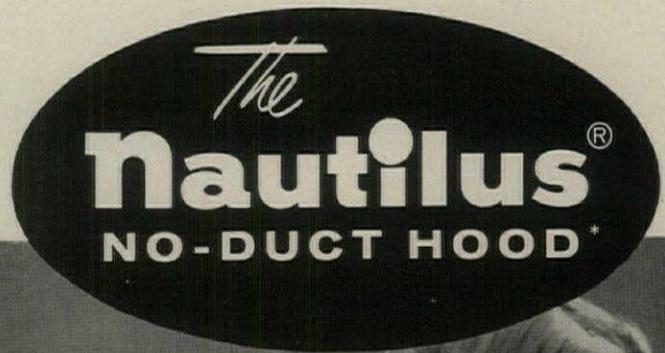
Luck and timing

Personally, Walter is a cheerful, cigar-smoking, carefully tailored six-footer who likes fishing and hunting, golfing and boating, but finds that he has little time to spare for them from his business, which he visits in all its sprawling corners by piloted lightplane, and his family. He lives in a substantial Colonial brick home on Golfview Ave in Tampa with his wife, Monica, and their two sons, aged 10 and 12. He has served on the board of the Tampa Chamber of Commerce, but describes his other civic interests by saying: "I've been a donater."

Delaware-born, Walter has lived in Florida since he was six months old. His father, now 80, operated a citrus and produce business in Plant City, Fla. and later in Tampa. During and after high school, Walter drove trucks for his father and helped at the plant. In 1942 he joined the Navy, spent two years as a storekeeper on the destroyer SS Newcombe in the Pacific campaign. On the day he returned to the US in 1945, his ship was hit by five Kamikaze suicide planes. "I've always considered myself lucky . . . being at the right place at the right time," says Walter. In 1946 he returned to Tampa and his father's business. Then he spotted that house for sale, and began his mushrooming career in building and finance.

Today, one of the Jim Walter Corp's sub-
continued on p 93

End cooking odors in your apartments...



**Purifies Kitchen Air...
Without Vents or Ducts!**

UNTIL now there has been no real answer to the problem of cooking odors, grease and smoke in apartments. Proper venting to the outside is either too costly . . . or impossible, because of kitchen layouts. The solution: the NAUTILUS NO-DUCT RANGE HOOD AND FAN.

With the NAUTILUS you have none of the problems or expense of ducts, carpentry, masonry or wiring. A completely new kind of range hood, the NAUTILUS uses a special Activated Charcoal Filter (plus a grease filter) that removes all odors, smoke, grease . . . recirculates clean, pure air. This solves a real problem in apartment house living—the exposure of tenants to second-hand cooking

*Patent Pending

odors. Stale traces of what may have been a culinary triumph for one are often plainly objectionable to others. Apartments need the NAUTILUS!

Easily, quickly installed (with a screwdriver and 6 screws), the NAUTILUS NO-DUCT HOOD attaches under cabinets or on the wall—fits any range, any kitchen layout.

- Eliminates cooking fumes, odors, grease and smoke. Even strong odors like fish and cabbage disappear!
- Modern design—quiet operation! Handy push-button controls operate fan and enclosed fluorescent light!
- Complete range of sizes and finishes.

Get all the facts mail coupon today!

HH-10

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FABULOUS NEW NAUTILUS NO-DUCT HOOD!**

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Show 'em quality...

Berry makes it easy

The easiest-going garage door on the market makes it easy for you to pull more traffic and roll up more sales . . . with dynamic promotional pieces specially designed for builders. Everything you need—Berry gives you . . . from wall banners to hang tags to literature . . . and for free! And every striking, colorful piece puts impact behind the quality story you tell—the full five-year guarantee; rustproof, peelproof Paintlok steel; complete weatherstripping. This is the quality that has made Berry the world's largest manufacturer of residential garage doors. You get competitive pricing in a complete line of one-piece and sectional models. Put it to work for you . . . along with the complete package of Berry merchandising aids. See your supplier or write: Berry Door Corp., 2400 E. Lincoln, Birmingham, Michigan. In Canada: Berry Door Co., Limited, Wingham, Ontario.

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STEEL DOORS





This dining room is quiet because the decorator baffle in the Built-In *Thinline* is engineered to absorb sound.

It also directs air upward to allow tenants of York River House complete flexibility in placing furniture.

Operator of New York luxury apartments switches to General Electric Thinline air conditioning

"Our tenants demand air conditioning but they don't want grille-work marring the walls," says Rubin Garfinkel, partner in Kessler-Wohl Associates.

"That's why we are buying General Electric Built-In *Thinlines*—the room air conditioner with the decorator baffle." Kessler-Wohl Associates are operators of several luxury apartment buildings in New York and other Eastern cities.

"Our new building—York River House—will be air conditioned by Built-In *Thinlines*. When the baffle is painted or papered to blend with the walls, the air conditioner almost disappears.

"Tenants respect the General Electric name, too. It means that our air conditioning system is reliable."

A General Electric *Thinline* air conditioning system can be tailored to any cooling and installation needs. Units are available in models of up to 16,000 BTU* capacity. See your General Electric dealer for the full story. General Electric Company, Room Air Conditioner Department, Appliance Park, Louisville 1, Kentucky.

*Cooling capacities are tested and rated in compliance with NEMA Standards Pub. No. CN1-1958, and are stated in terms of British Thermal Units.

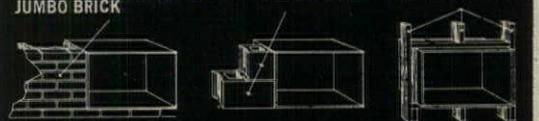


Plush York River House on New York's East River is completely air conditioned by 750 General Electric Built-In *Thinline* room Air Conditioners.

6 COURSES OF STANDARD BRICK OR 5 COURSES OF JUMBO BRICK

2 BUILDING BLOCKS HIGH

DESIGNED TO FIT BETWEEN STUDS



Designed for builders—the Built-In *Thinline's* aluminum case is exactly as high as two building blocks with mortar, six courses of standard brick or five courses of jumbo brick. Case fits between studs.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

subsidiaries is MAC Corp, a small loan company with 16 Florida and 5 Georgia offices. In addition, Walter has a 70% personal interest in the Industrial Savings Bank of Tampa. He says that in buying control of the First National of St. Petersburg, his firm was merely looking for a "high-grade investment in the best part of Florida."

"Personally, I haven't any dream of empire, of conquest," he says. "I have no plan to buy a chain of banks or anything like that. All the corporation's banking interest in the future will be concentrated in this bank." As a director, Walter expects to offer ideas, "but I will not dictate." He joined in the selection of William G. DeWitt, 60, vice president of New York's Chemical Corn Exchange Bank, to fill the vacant post of president. But, he says, the investment is just that, "not to further our house building business, nor to borrow from."

As for the house-building business, al-

though Walter finds that three out of five buyers are acquiring their first unrented shelter through him, he also detects a new trend. About 2-3% of his buyers are buying a second house—for farm, vacation lodge, or similar use. Walter shells have been used as offices, church school classrooms, motel units, and dance halls. Some sit on stilts over the Gulf of Mexico; others perch on mountain ledges. In a field with 20 to 30 competitors, Walter believes that he has well over half the shell market. But, he says, "I don't think we've dented the construction business. We can double in size, at least, before we make a dent."

That he plans to move in that direction seems certain as Jim Walter draws plans for more branch offices, and a near-future bow in California.

"Homes by the thousands," he says with a twinkle, "built for the millions. I guess that about describes our goal."

firms, has been appointed to the California state park commission by Gov **Edmund G. Brown**. **James F. Neville**, 52, former real estate officer for the Navy Dept and onetime FHA zone commissioner, heads NAHB's new rental housing department. **Leland B. Ross**, widely-known executive of the Corpus Christi HBA since 1953, has resigned to become assistant to Builder **R. O. Woodson**. **Pat O'Donovan**, manager of the construction industries department of the Los Angeles Chamber of Commerce, succeeds **George Prussell** as executive vice president of the Los Angeles HBA. **Alexander Paulsen**, 48, president of the Long Island HBA, has been named a vice president of General Builders Corp, developers of Lindenwood Village, Queens, NY, giant Sec 213 project.

DIED: Ragnar A. Hummel, 72, retired former president ('41-'52) and chairman ('52-'58) of the Lone Star Cement Corp, and board chairman ('53-'55) of the Portland Cement Assn, in Milwaukee, Wis., Aug 6; **Edward Eagle Brown**, 74, former president ('34-'35) of the First National Bank of Chicago and chairman since '45 after a long illness in Chicago, Aug 24; **Robert K. Walker**, 70, pioneer land developer in the Los Angeles area and president of Walker & Lee Inc, one of the nation's largest residential real estate firms, of cancer, in Los Angeles, Sept 10; **Ralph C. Sutro**, 85, founder and president of one of Los Angeles' largest and oldest ('21) mortgage banking houses, which bore his name, Sept 12.

PEOPLE: Kreutz heads Natl. S&L League

Oscar R. Kreutz, 61, who for 10 years ('43-'53) was manager of the National League of Insured Savings Assns, has been elected league president for 1960.

Kreutz left his league post to become executive vice president of the First Federal Savings & Loan Assn of St Petersburg, Fla,

which he now heads as president and chairman. Under his guidance, the institution has grown from assets of \$48.9 million to \$204 million. Kreutz helped to establish the Federal Home Loan Bank system in the 1930's, and from '41 to '43 was general manager of the Federal S&L Insurance Corp.



KREUTZ

The other half of a strong top-level team is new vice-president **Gerrit Vander Ende**, 58, president and chairman of the \$228 million Pacific First Federal Savings & Loan Assn since 1948. He is former ('46-'48) president of the Federal Home Loan Bank of San Francisco, and is now chairman of the Tacoma (Wash.) Housing Authority.

The new officers will succeed League President **James E. Bent** of Hartford, Conn and Vice President **F. Marion Donahue** of San Francisco, on Jan. 1.

Woodrow, H&B American Co agree to disagree on merger

Builder **Willard Woodrow** and H&B American Corp have called off the deal that made Woodrow Construction Co an H&B subsidiary.

H&B bought the company only last June paid Woodrow 175,000 shares of stock, made him president of the subsidiary construction company and gave him a place on the board. (*July, News*). H&B wanted diversification. Woodrow wanted the corporate size that would help finance nationwide expansion.

Both sides blame the rift on policy disagreements. Says Woodrow: "We couldn't agree on how to operate the business, on its management or on terms of expansion. We agreed it would be easier to end the relation-

ship quickly rather than go on. It was obvious the arrangement wouldn't work out."

Woodrow, now building in Miami, Los Angeles and Waldorf, Md., adds that he still sees advantages in public ownership of a business, may eventually try it again "but in a different way."

Western Mortgage Corp of Los Angeles, second largest mortgage company in the US, has been bought by Industrialist **H. Leslie Hoffman**.

Hoffman, founder and president of Hoffman Electronics Corp of LA, bought out all eight stockholders—including Western's founder, **Morgan Adams**. He made the deal to diversify his investments. Price was not disclosed. **Jack Irvine**, Western's president for 15 years, remains in that job.

Western, founded in 1927, originates and services exclusively for the Metropolitan Life Insurance Co. Its servicing portfolio now totals \$585 million, is exceeded only by the \$1.1 billion of T. J. Bettes.

BUILDERS: San Francisco Builder-lawyer **Alfred J. Stern**, 52, president of Stern & Price, one of the Bay Area's big homebuilding



APARTMENT EMPIRE is being forged by youthful **John E. Marqusee**, 32, (left) and partner **L. William Kay 2d**, 32. They got into housing only seven years ago. In last three months, they and other associates have bought \$29 million worth of rental property (2,200 units) in & around Philadelphia and New York, including \$15 million purchase of Levitt House, built in 1958 by Builder **Alfred Levitt** after he broke up his family partnership with brother **William J.**

Marqusee, who is vice president of NY State Builders' Assn, predicts a boom in apartments. "Land is getting just as scarce in the suburbs as in the city," he says.

CANADA:

Lawyer David Walker named housing chief

Canada has a new government housing boss. He is **David James Walker**, 54, a wealthy Toronto lawyer who quit five Bay Street directorships to become Minister of Public Works. He succeeds Foreign Minister **Howard Green**, who has held both jobs since last summer.

Walker is largely an unknown in housing. About his only contact with the industry so far: local political campaigning for public housing (Toronto's \$26,000-a-unit Regent Park low rent high-rise apartments are in his home town of Rose-dale).

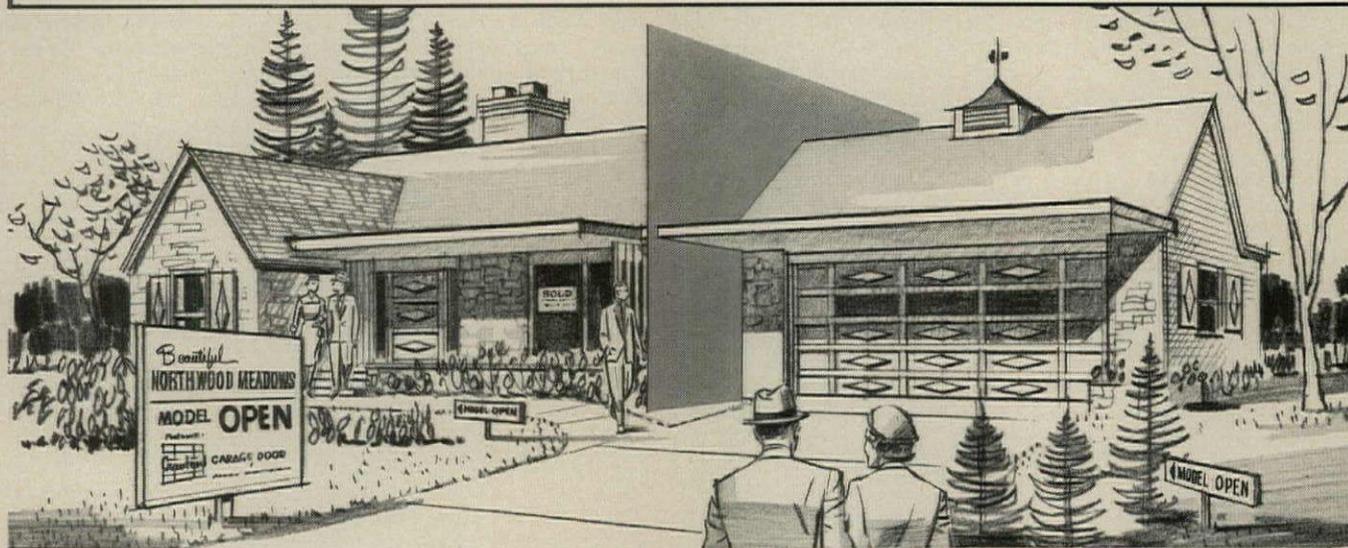
In his law practice, which specialized in accident litigation, Walker got nicknamed "Tiger." The reasons showed up last year when he led questioning of witnesses during a public accounts committee probe into waste in construction of the National Printing Bureau. He was accused of McCarthyism by Liberal opposition MPs, got headline play all across Canada. "You think that was a fight," he scoffs. "Why, that was just a little picnic."

The new minister is a long-time friend and champion of Prime Minister **John Diefenbaker**. He nominated him in his first unsuccessful bid for Tory party leadership in 1942, was his campaign manager at the 1948 convention. Because Dief keeps a close rein on his cabinet, steps in to make many important announcements himself which would normally be made by individual ministers, builders are happy about Walker's close tie to the PM.



WALKER

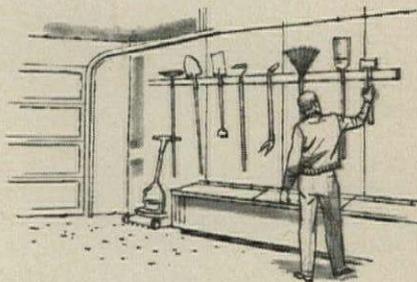
TO HELP YOU SELL THE HOMES YOU BUILD



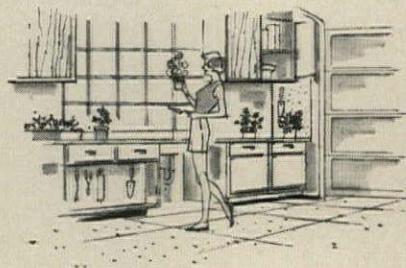
Is a garage really necessary?

Remove the garage portion of the house illustrated and what's left? . . . a house that *looks* small and doesn't reflect the quality the builder has built into it. Point is, that in a competitive market, wherein the "blue chips" go to the builder who offers the most home for the dollar invested, a garage is a sense (and money)-making proposition. An attached garage adds impressive size to a prospect's-eye view of a home . . . an effect, incidentally, that is *not* created by a carport. And why

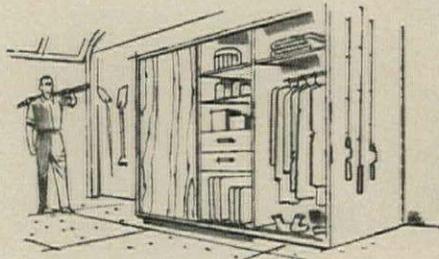
on the wings of this comment "We like the house but there just isn't enough storage space." Storage space at the expense of living space? Never! So, add it in the garage where building costs are 50% less.



a carport, anyway, when the addition of a back wall and a Crawford door will make a full-fledged garage out of most carports, with small additional cost?



How about expansion space for a hobby center . . . a workbench, a flower and plant center . . . or perhaps a recreation area for the kids? Again, a garage provides the answer.



Consider, too, all the other sales advantages that a garage offers. Pilfer-proof, out-of-the-weather storage for automobile, lawn tools, bicycles and family (miscellany) which should be housed. Then there's the matter of *storage space* . . . and how often a sale goes out the window

Add it all up and we think you'll agree . . . inclusion of a garage with the homes you build, gives you a powerful selling edge over garageless or carport competition. And while you're adding, add on a Crawford sectional, upward acting door . . . a distinctive, home-enhancing door with wife-pleasing operating ease . . . a *quality* door (at the right price) that marks *you* as the builder who offers the most home for the money.



CRAWFORD DOOR CO.
215-20263 HOOVER ROAD • DETROIT 5, MICHIGAN

Get ALL the facts before you specify any appliance

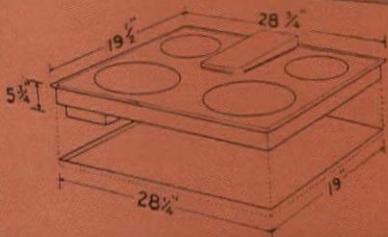
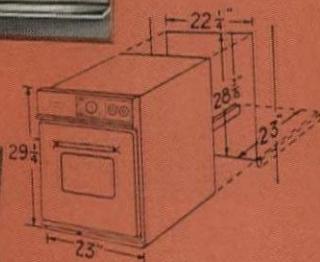
NEW BUILT-INS SAVE SPACE,
CUT INSTALLATION COSTS



Model RJ35-A



Model RU35-A



Hotpoint

PRODUCT FACTS

5th of a series

TEAR OUT AND SAVE FOR
FUTURE REFERENCE

**New Oven Fits in 24" Cabinet
Width, Has New Lift-Off Door
For Easier Cleaning**

Hotpoint's new oven saves you money three ways. First, you add deluxe sales appeal to your kitchen at a moderate cost. Second, the oven fits into a 24" cabinet, yet offers capacity comparable to other brands which demand a 27" or larger cabinet — you save on cabinet costs and add extra living space. And Hotpoint's new up-front terminal block means quicker installation.

**Surface Section
Has Integral Pushbuttons,
Fits 30" Cabinet**

Now you can offer the pushbutton convenience of Calrod® Recipe Heat units in a standard 30" cabinet. One installation takes care of everything — there's no separate control panel to mount and wire. Can be installed with control panel in front or in rear. Hotpoint's squared mounting frame and quick connections reduce cut-out and installation time.

Available in Sunburst Yellow, Turquoise, Coral Pink, Copper Brown, Satin Metallic Finish, and Classic White.

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To receive copies of all the Hotpoint Product Facts series write today to:
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WATER HEATERS • FOOD FREEZERS • AIR CONDITIONERS

Announcing for 1960 NEW FORD

CERTIFIED GAS SAVINGS! CERTIFIED DURABILITY! CERTIFIED RELIABILITY!

New style! New models! New features! And never before could you be so *sure* of savings!

To give you this confidence, independent experts* tested the '60 Ford Trucks in the three major areas of operating economy. The result . . . Certified Economy!

Certified gas savings! Tests certified by America's foremost independent automotive research organization confirm the gas savings

of the 1960 Ford 6-cylinder engine . . . the same engine that beat all competitive sixes in Economy Showdown U.S.A.!

Certified durability! Certified results on tests of key truck parts show definite durability benefits. For instance, half-ton pickup frames showed an increase of 23.6% in torsional rigidity; two-ton models showed an increase of 20% in brake-lining life.

Certified reliability! Typical of the many reliability tests was a "shake-test" on the wiring harness for heavy-duty engines. Certified results showed a twofold increase in Ford reliability.

This is Certified Economy . . . and it adds new weight to the evidence that Ford Trucks Cost Less!

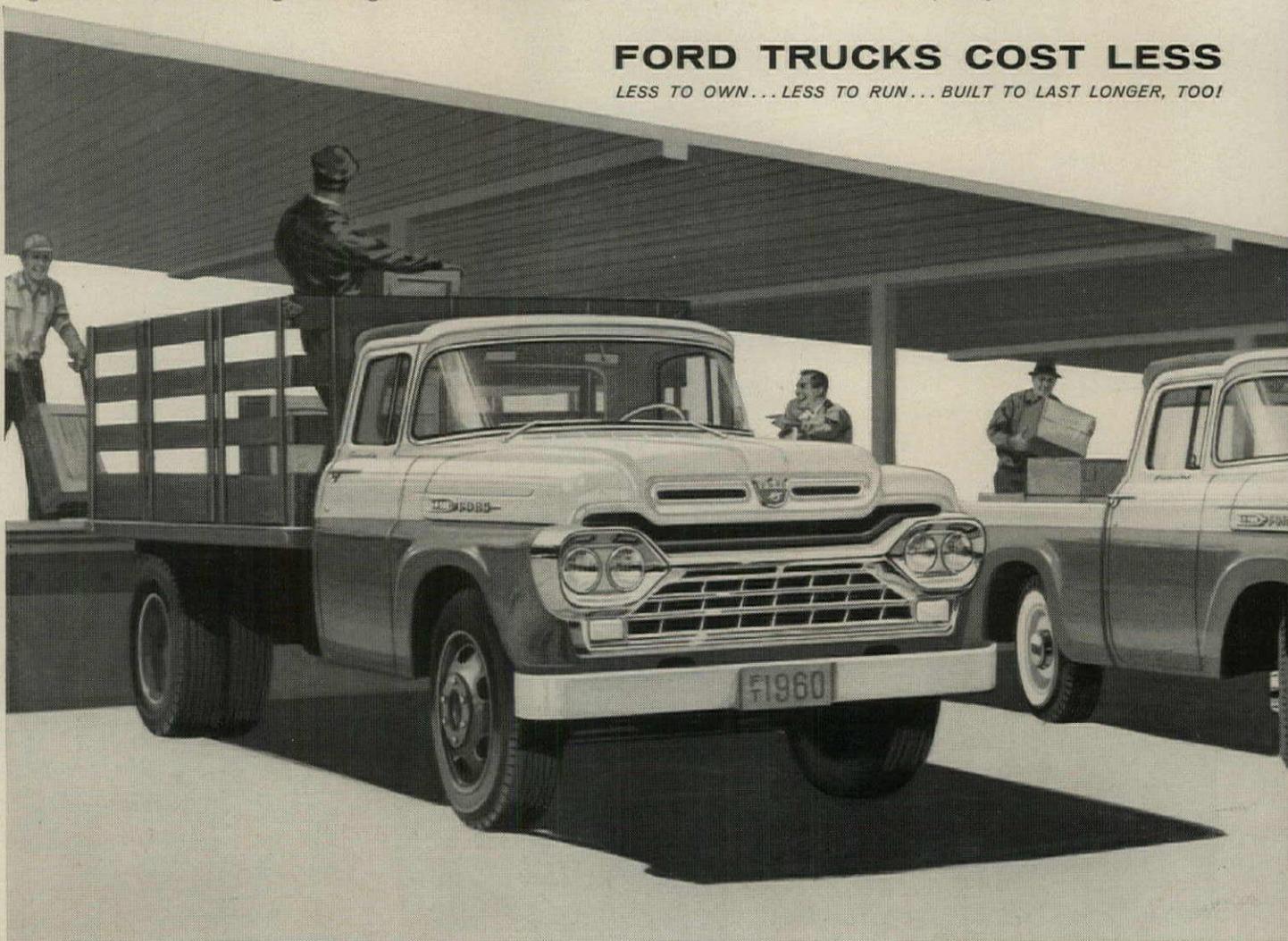
But there's more . . . much more in 1960 Ford Trucks. New *toughness* with stronger frames . . . new *capacity* with huskier axles . . . new *brakes*, new *cab comfort*, new *riding smoothness*, new *handling ease!*

See your Ford Dealer. Check the facts in his "Certified Economy Book." Look into Ford's modern features. You'll discover that the things you want most in *your* new truck are in the 1960 Fords!

*Name available on request. Send inquiry to P. O. Box 2687, Ford Division, Ford Motor Company, Detroit 31, Michigan.

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LESS TO OWN . . . LESS TO RUN . . . BUILT TO LAST LONGER, TOO!



TRUCKS

WITH

Certified
Economy

Left: new F-600 Stake, available with Ford's gas-saving Six as well as V-8 engine. *Center:* '60 Styleside pickup with new styling, 23% more rigid frame and longer lasting brakes. *Right:* America's most popular Tilt Cab truck!



Insure extra built-in potential 2 ways with FRIGIDAIRE WALL OVENS

featuring Drop-Leaf Doors — another Frigidaire First!

1 Built-In Customer or Tenant Satisfaction with Frigidaire.

Cooking satisfaction is the real test of a kitchen in any price home or apartment. Naturally you can't invite every homemaker prospect to try out your kitchen for livability—but—you can be certain she'll feel like a Queen with a Frigidaire Built-In Cooking Center. And here's why: All Frigidaire Built-Ins are designed with today's woman in mind. Even the economy model De Luxe Wall Oven (RBZ-93) features the famous Drop-Leaf Door for easiest cleaning without stretching. Holiday-meal capacity and Sheer Look beauty, too! And the brand-new budget model Cooking Top (RBA-102) has four Radiantube Units, famed for quick, even cooking. Easy-to-reach, easy-to-read control knobs are built-in on the top... offer five exact heat settings for each unit. Cooking satisfaction? It's built-in!



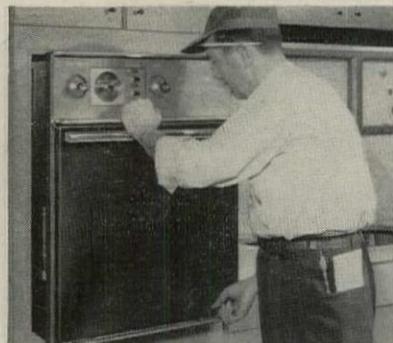
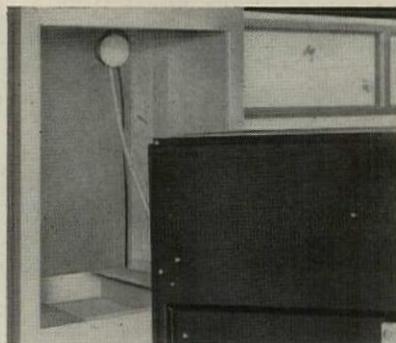
RBZ-99 Wall Oven and RBZ-101 Cooking Top.

2 Built-In Savings with "Minute-Man" Installation.

Frigidaire Built-Ins are designed with you, the builder, in mind, too! For example, Wall Ovens were installed in as little time as 7 minutes and 52 seconds in factory tests! Here's how easy: 1. With carpentry and rough wiring completed, connect junction box and factory attached 54" armored cable. 2. Slide oven onto level shelf. 3. Mount oven with screws concealed behind door. (If required, leveling may be done in

minutes with feet provided.) Time saving? You bet!

Every home you build can feature the "feel like a Queen" appeal of a Frigidaire Cooking Center. Let your home-buyers choose from four Wall Oven models, three matching Built-In Cooking Tops and five space-saving Fold-Back Surface Units. Ask your Frigidaire Distributing Headquarters for your copy of the 1959 Builders' Planning Guide, or write Frigidaire Division, General Motors Corporation, Dayton 1, Ohio.



See our catalogs in Sweet's Architectural and Light Construction Files.

FRIGIDAIRE Advanced Appliances ...
designed with you in mind



FRIGIDAIRE
Product of General Motors



Build with Frigidaire in '59!



Shown above . . . B.F. Goodrich Koroseal floor tile in Black White, Citron, and White Black.

Thrifty tile adds carefree beauty to your homes!

FOOTSTEPS ACTUALLY BUFF its lustrous anti-slip surface . . . enhance its good looks. That's one reason home buyers go for B. F. Goodrich Koroseal, the best-known name in vinyl. So everlastingly tough . . . B. F. Goodrich Koroseal vinyl asbestos floor tile virtually takes care of itself. This amazing tile can't peel or crack . . . defies dirt, grease, stains, chemicals. A damp mop leaves it glistening clean.

YOU'LL GO FOR its economical cost—and the flexibility of design it gives you. You choose from smart new terrazzo, cork shades, carpet shades or marbled patterns. 39 decorator colors. 9" x 9" tiles for below, on or above grade. 1/16" for residential use, thriftier and faster to install. For more details, see Sweet's or write The B. F. Goodrich Company, Flooring Products, Watertown 72, Mass., Dept. HH-10.



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CHOOSE YOUR FAVORITE
FASHION IN WOOD...

Fashionwood[®]

KITCHENS by CURTIS



Now, Fashionwood Kitchens offer you all the warmth and charm of wood in your choice of seven delightful natural wood finishes. Professional decorating ideas, too . . . for your very own "personalized" kitchen. And such marvelous work-saving features as Marblitone[®] interiors and rounded corners that you simply wipe clean! See your Fashionwood dealer about this unique combination of beauty and utility that gives you a personalized kitchen at modest cost, or write Curtis Companies, Inc., Box 111, Clinton, Iowa.

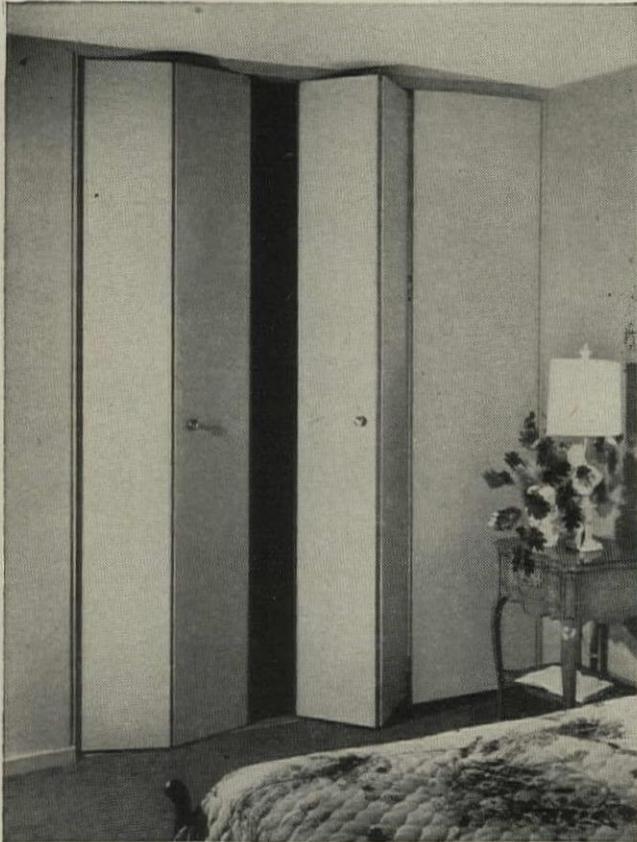
Individuality and Quality in doors, windows and Fashionwood cabinets

PINKWOOD SILVERWOOD FRUITWOOD WILLOWOOD ROSEWOOD BIRCHWOOD PLUMWOOD



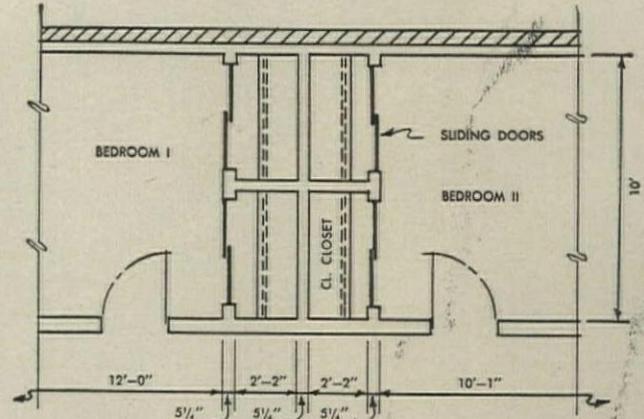
Give More Living and Storage Space at Less Cost to You

Floor to ceiling

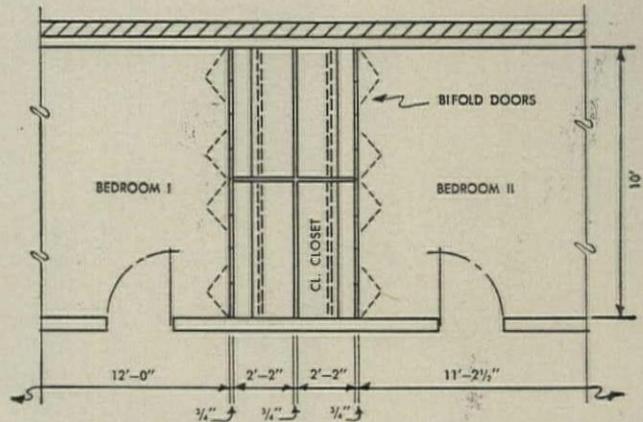


PANIFLEX BIFOLD DOORS of Novoply in the Willoughby Walk Apartments, Brooklyn, N. Y. Arch: S. J. Kessler and Sons; Bldr: Herbert Const. Co.

Wall to wall



CONVENTIONAL CONSTRUCTION—2 x 4 studding and plasterboard.



NOVOPLY CONSTRUCTION—Paniflex Bifold Doors and Novoply partitions.

Weldwood Paniflex Bifold Closet Doors of Novoply

...SAVE MONEY. Weldwood Paniflex Bifold Doors save you the cost of 2 x 4 studding and framing in, can be installed without floor or ceiling tracks. Why? Because the doors are made of Weldwood Novoply, a 3-ply panel with face plies of wood flakes over a wood chip core. Each ply is resin-impregnated and bonded under heat and pressure to give the strongest, flattest panel on the market.

...SAVE TIME. Packed complete with specially designed hardware, Paniflex Doors can be installed with ordinary labor in 30 minutes total. Novoply is also ideal for shelving and partitions in closets between rooms (see diagrams). Closets are installed without the need for studding and back supports because Novoply has the stability and strength to span its width without buckling.

Write us for the name of Paniflex door manufacturer in your area.



PANIFLEX T.M. BIFOLD DOORS • NOVOPLY®

Products of UNITED STATES PLYWOOD CORPORATION. In Canada: Weldwood Plywood, Ltd.

...SAVE SPACE. Unlike sliding doors, Paniflex Bifold Doors give full closet access. And Paniflex Doors permit floor to ceiling closets that help you meet the new FHA minimum storage requirements without altering your floor plans. Because 2-sided partitions of plasterboard and studding are eliminated, Novoply walls yield more usable floor space. For free descriptive booklets on Paniflex Doors and Novoply, mail the coupon.

United States Plywood Corporation
Dept. HH10-59, 55 West 44th Street, New York 36, N. Y.

Please send me: #1815—"Paniflex Bifold Doors."
 #1770—"Installation Details for Novoply."

Name

Firm

Address

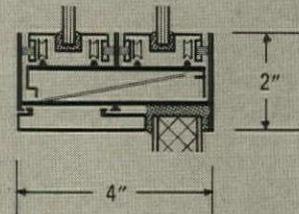
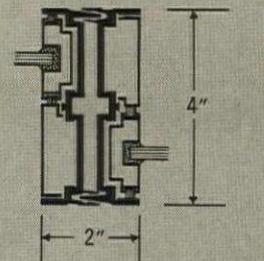
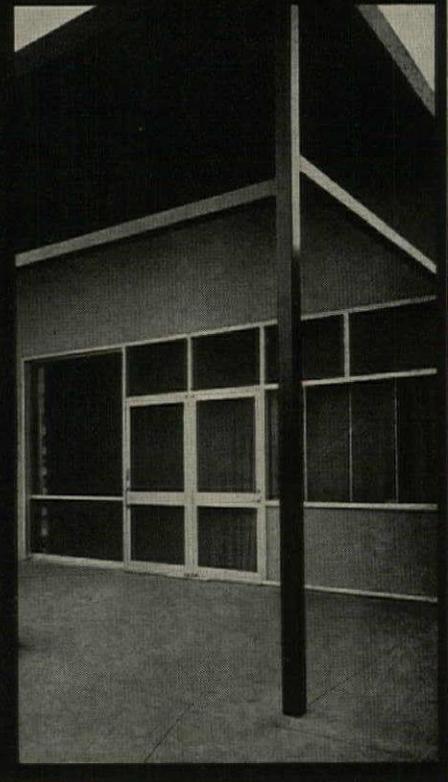
City Zone State

NEW WALL SYSTEM

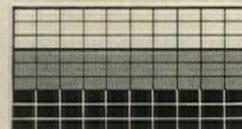
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is this institutional building. Cleanly finished lines of this simple, versatile wall system add to the beauty of this Fine Arts building, completed in 1957. Ador-Wall is ideal for medical and professional buildings, industrial and office buildings, schools, stores and shops, and motels and apartments.

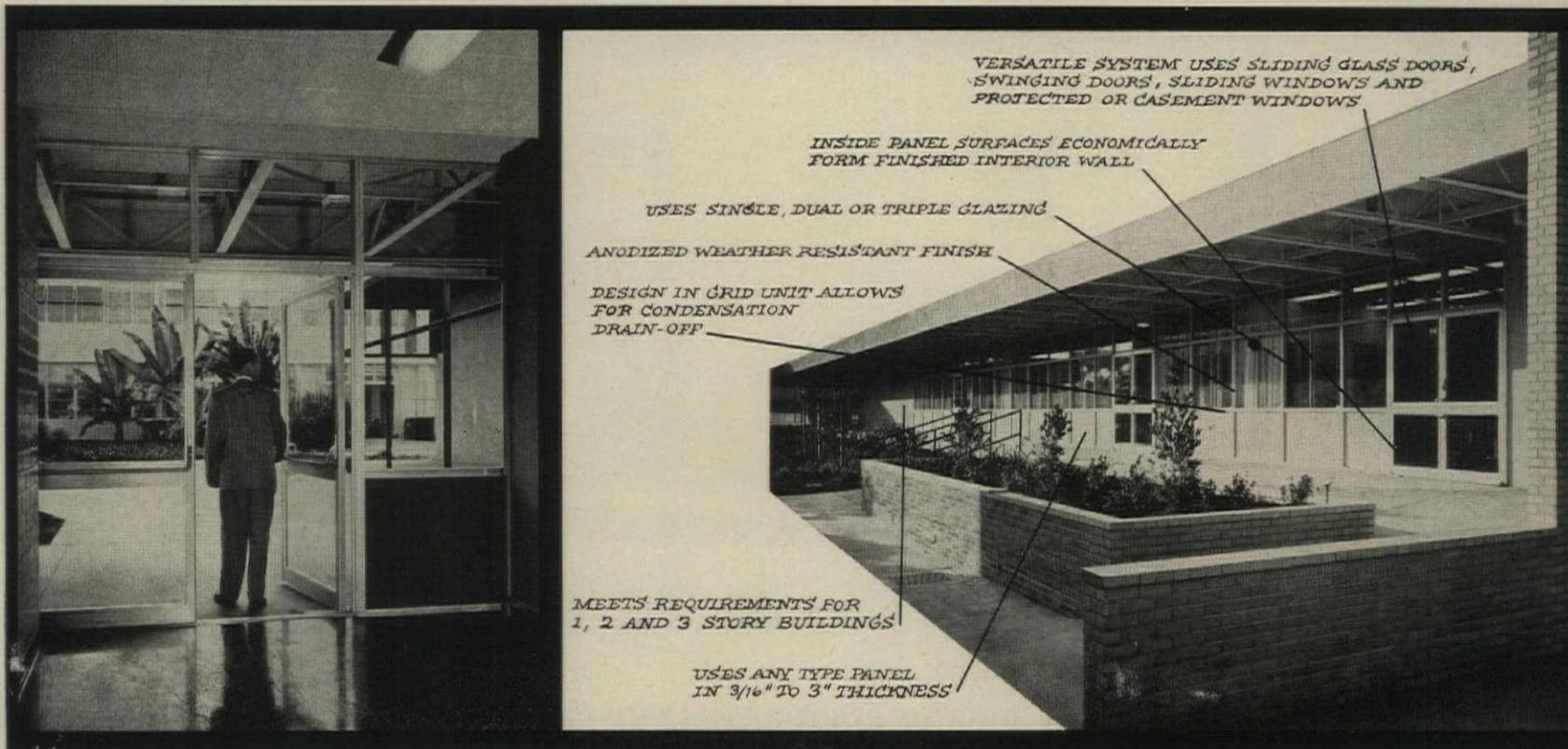


Basic 2" x 4" mullion system used throughout, with available add-on mullion to obtain greater architectural definition and depth.



ADOR-WALL

OF CURTAIN WALL FOR SMALLER BUILDINGS



VERSATILE SYSTEM USES SLIDING GLASS DOORS,
SWINGING DOORS, SLIDING WINDOWS AND
PROTECTED OR CASEMENT WINDOWS

INSIDE PANEL SURFACES ECONOMICALLY
FORM FINISHED INTERIOR WALL

USES SINGLE, DUAL OR TRIPLE GLAZING

ANODIZED WEATHER RESISTANT FINISH

DESIGN IN GRID UNIT ALLOWS
FOR CONDENSATION
DRAIN-OFF

MEETS REQUIREMENTS FOR
1, 2 AND 3 STORY BUILDINGS

USES ANY TYPE PANEL
IN 3/16" TO 3" THICKNESS

ADOR-WALL is first competitively-priced structural system to meet individual design needs of smaller buildings

In the design of curtain wall little attention has been given to the needs of one segment of construction which stands to gain major benefits from the use of wall systems—the 1, 2 or 3 story building.

Now, for the first time an economically-priced system is available for the smaller building.

Ador-Wall—a new engineering approach to window wall provides complete design freedom to meet individual building specifications. Ador-Wall offers unusual ease of installation at lower cost; a knock-down design which eliminates bulky shipments and provides savings in shipping costs; elimination of damage to product in transit; and permits

rapid assembly and full standards inspection on the job site.

Architectural beauty is a major contribution of Ador-Wall through its basic 2" x 4" mullion system—the first to produce desirable narrow sight lines to the scale of the smaller building. All surfaces are finished trim and smooth without exposed fasteners, and glass extends cleanly without exposed glazing beads. Designed by Ador, pioneer in the quality sliding glass door field and in the multi-story curtain wall field, the new system has been fully proven in installations over the past 2 years.

For complete information write today for the Ador-Wall Brochure. Just address: Ador Corporation, 2345 Commonwealth Ave., Fullerton, California.

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Chicago builders get greater crack resistance at no extra cost with the

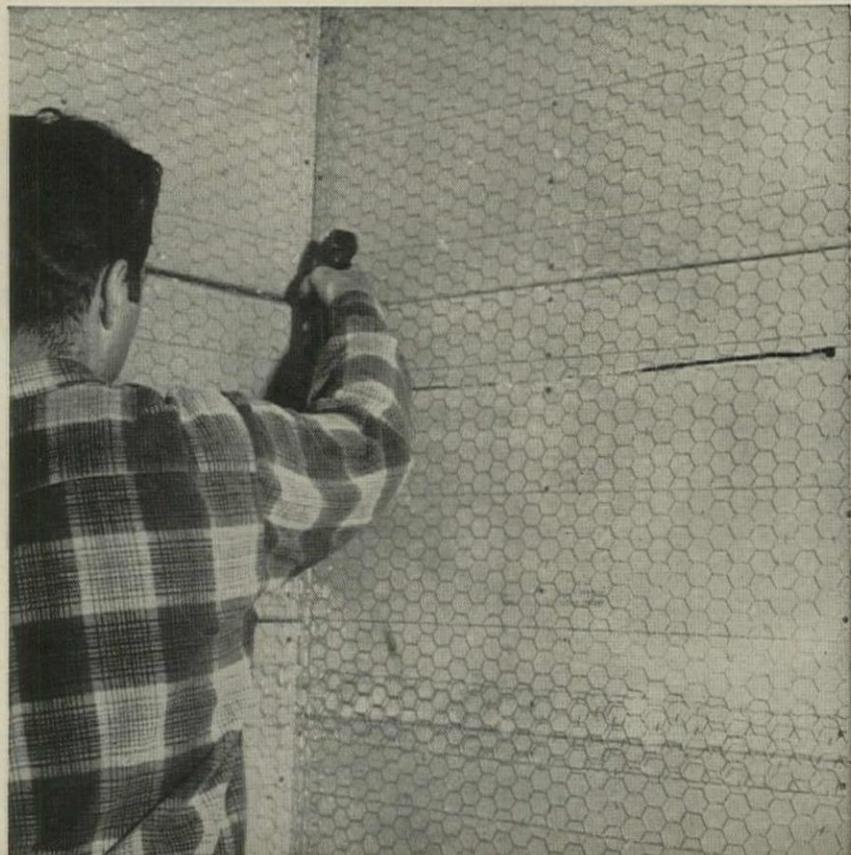
KEYMESH® - KEYCORNER -

Lasting beauty and low maintenance are built into the new Williamsburg Apartments located in Chicago, Illinois. That's because greater plaster-crack resistance is assured by reinforcing the lath and plaster walls.

Valenti Builders, Inc., Chicago, found it cost no more to get this extra reinforcing quality. By specifying Keymesh, Keycorner and Keystrip galvanized reinforcing lath, the builders got top quality reinforcement with greater resistance to cracks and fire.

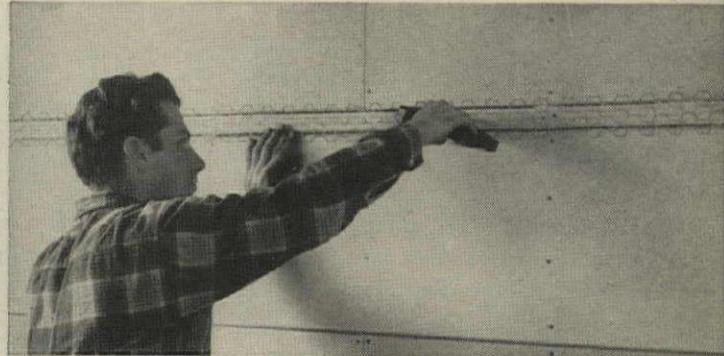
Tiled bathrooms in the Chicago project have lasting beauty with KEYMESH reinforcement. The portland cement plaster reinforced with Keymesh provides a strong, maintenance-free base for the tile. You'll find Keymesh makes any gypsum lath and plaster wall stronger and more crack resistant.

Keysmesh rolls out flat and laps without bulging . . . forms easily and cuts quickly. The open mesh permits rapid troweling and assures a full, even thickness of plaster. Keymesh, Keycorner and Keystrip are galvanized against rust.





KEYSTRIP is a new addition to the Keystone line of plaster reinforcement. Here, this flat strip reinforcement is stapled over joints where narrow strips of gypsum lath are used. This use of Keystrip adds strength where needed.



KEYSTRIP can be used as a reinforcement for plaster in a space too narrow for strips of gypsum lath. A full bond of Keystrip to the plaster is assured. Keystrip also adds strength to points of stress above doors and windows.



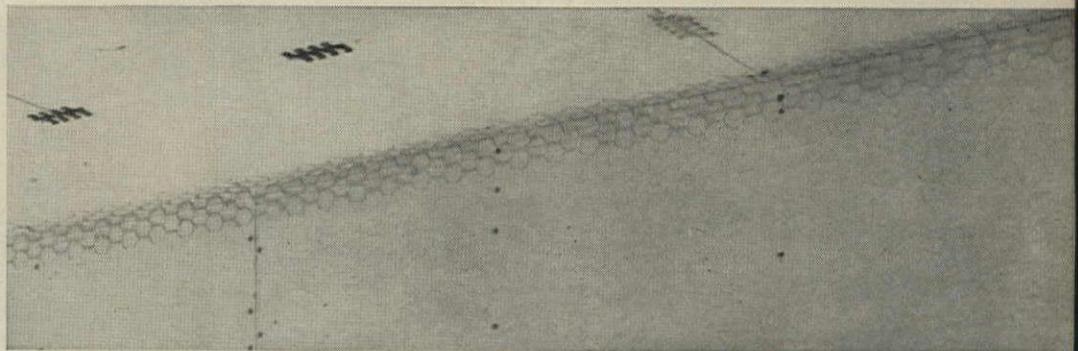
three keys to stronger plaster

KEYSTRIP

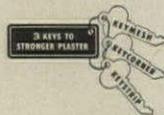
GALVANIZED
REINFORCING
LATH

Inside plaster corners reinforced with KEYCORNER lath have almost twice as much resistance to cracking as corners reinforced with other materials. Recent tests and actual use confirm this feature.

The men working on the Williamsburg Apartments, as on other jobs, found the preformed, 4-foot lengths of Keycorner easy to handle. Keycorner goes into place quickly and can be nailed or stapled. The open mesh design makes it easy to plaster over and assures a complete bond.



Get quality wall construction with lath and plaster at low cost by specifying the three keys Keymesh, Keycorner and Keystrip. Send for more complete information and results of recent tests conducted by leading laboratories. Write Keystone Steel & Wire Company, Peoria 7, Illinois.



KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

Keycorner • Keymesh • Keystrip • Keywall • Keydeck • Welded Wire Fabric

BUILT-IN AIR CONDITIONING—MODERN ESSENTIAL FOR PROFITABLE RENTAL PROPERTY

HERE'S HOW FEDDERS

Important economies for you in construction . . . during operation

Every builder and operator of rental property knows that built-in air conditioning, today's most dramatic renting feature, will be an absolute essential in the next year or two — for wage-earner garden developments as well as luxury apartments. Fedders, world's largest manufacturer of room air conditioners, offers a complete line of through-the-wall air conditioning that assures lowest construction costs now . . . lowest operating and maintenance costs as long as your building stands.

1 FEDDERS WALL-FIT DESIGN SAVES ON INSTALLATIONS

Unlike makeshift adaptations of window models, Fedders Wall-Fit Air Conditioners are specially engineered for through-the-wall installation. Ten models and two sizes assure efficient performance for every size room and on every voltage . . . provide a handsome architect-approved appearance, inside and out, in every type of wall construction. Simple, speedy installation is guaranteed by the special Wall-Fit sleeve which cuts masonry costs since it fits regular and jumbo brick courses, cement and cinder block. Zinc-coated steel construction provides rugged strength and extra protection against the weather.

2 FEDDERS LEADERSHIP MEANS NO SERVICE PROBLEMS

The Fedders seal is your assurance of years of reliable service that only the world's largest-selling brand can offer. A nationwide network of trained servicemen and replacement parts depots guarantee fastest service if ever needed. Fedders Wall-Fit Air Conditioners are sold to serve for the entire life of your building.

3 FEDDERS ROOM AIR CONDITIONING COSTS LESS TO BUY, LESS TO OPERATE

To start with, you literally save a fortune on air conditioning with Fedders Wall-Fit models. In contrast to the \$800-\$1000 per room cost of central air conditioning, Fedders room units are sensationally low in cost. There are operational savings, too, since individual room control means that many air conditioners will often be lowered or turned off . . . an important consideration where you pay operating costs.

4 FEDDERS PRESTIGE MEANS FEWER RENTING PROBLEMS

Air conditioned apartments rent better — and Fedders air conditioned apartments rent best. Prospective tenants are assured by the presence of Fedders, a name they know and trust. And Fedders' remarkably quiet operation, powerful cooling and handsome styling by Raymond Loewy give prospective tenants extra incentives to rent.

No other make or system of air conditioning for rental property offers as much comfort and convenience to tenants . . . as simple, speedy installation to architects and builders . . . as large operating economies to owners and operators. That's why more new apartments are air conditioned by Fedders than any other brand in the world.

Also available — Fedders thru-the-wall Heat Pump models and Adaptomatic Heat Pump air conditioners — for year-round heating and cooling in duplex garden apartments and multiple dwellings.



FOR HIGH RENT LUXURY APARTMENTS . . .

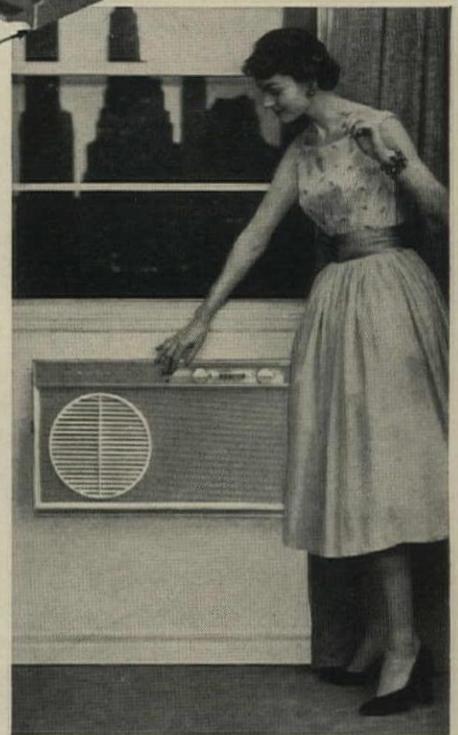
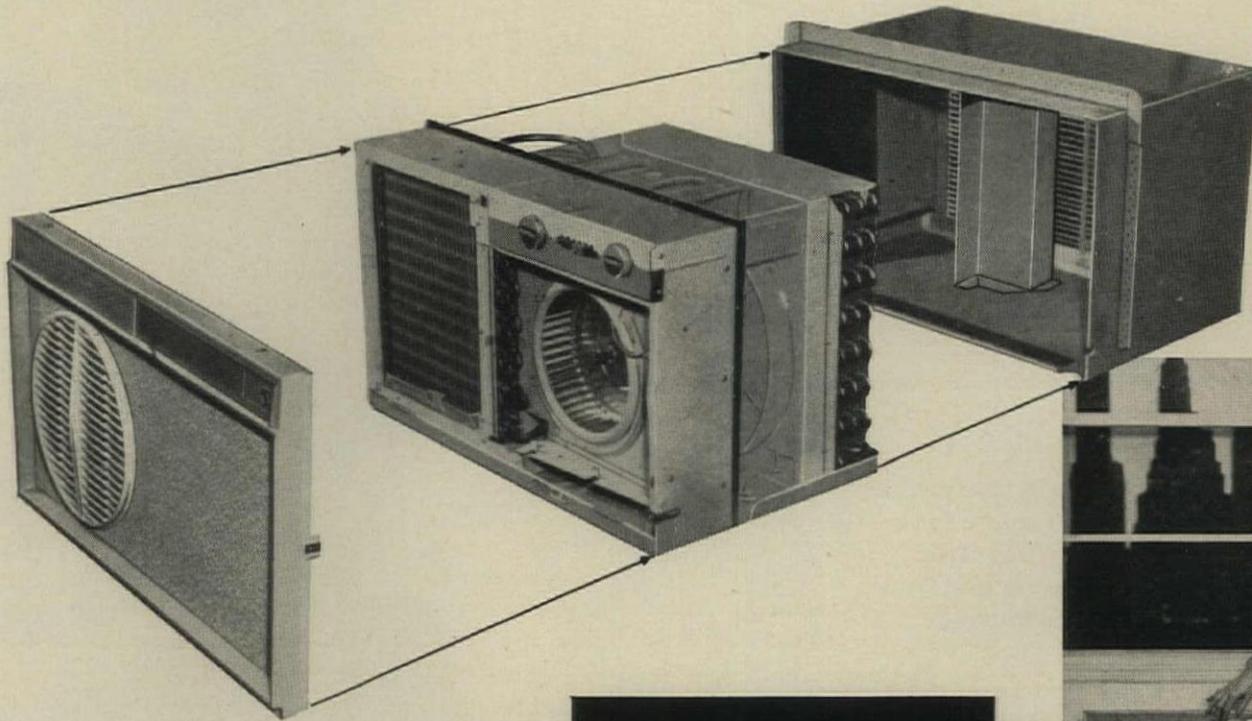
Outstanding performance and minimum maintenance encouraged Crane Construction Co. of Chicago to install Fedders Wall-Fit Air Conditioners in every one of the luxury apartment buildings it has built in the past few years.



AND WAGE-EARNER GARDEN DEVELOPMENTS

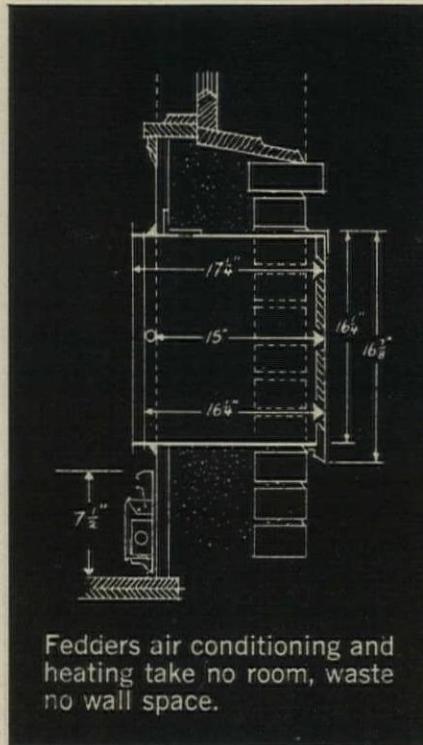
Fedders Wall-Fit Air Conditioners are being installed in garden apartment developments all over America

GIVES 4 BIG SAVINGS



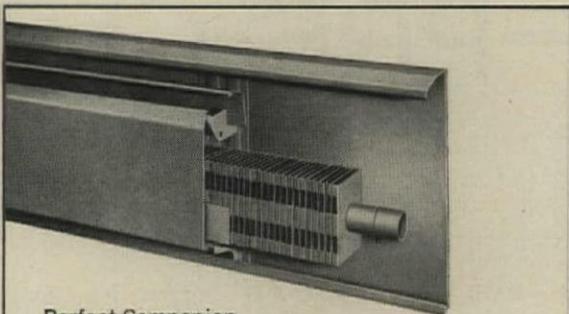
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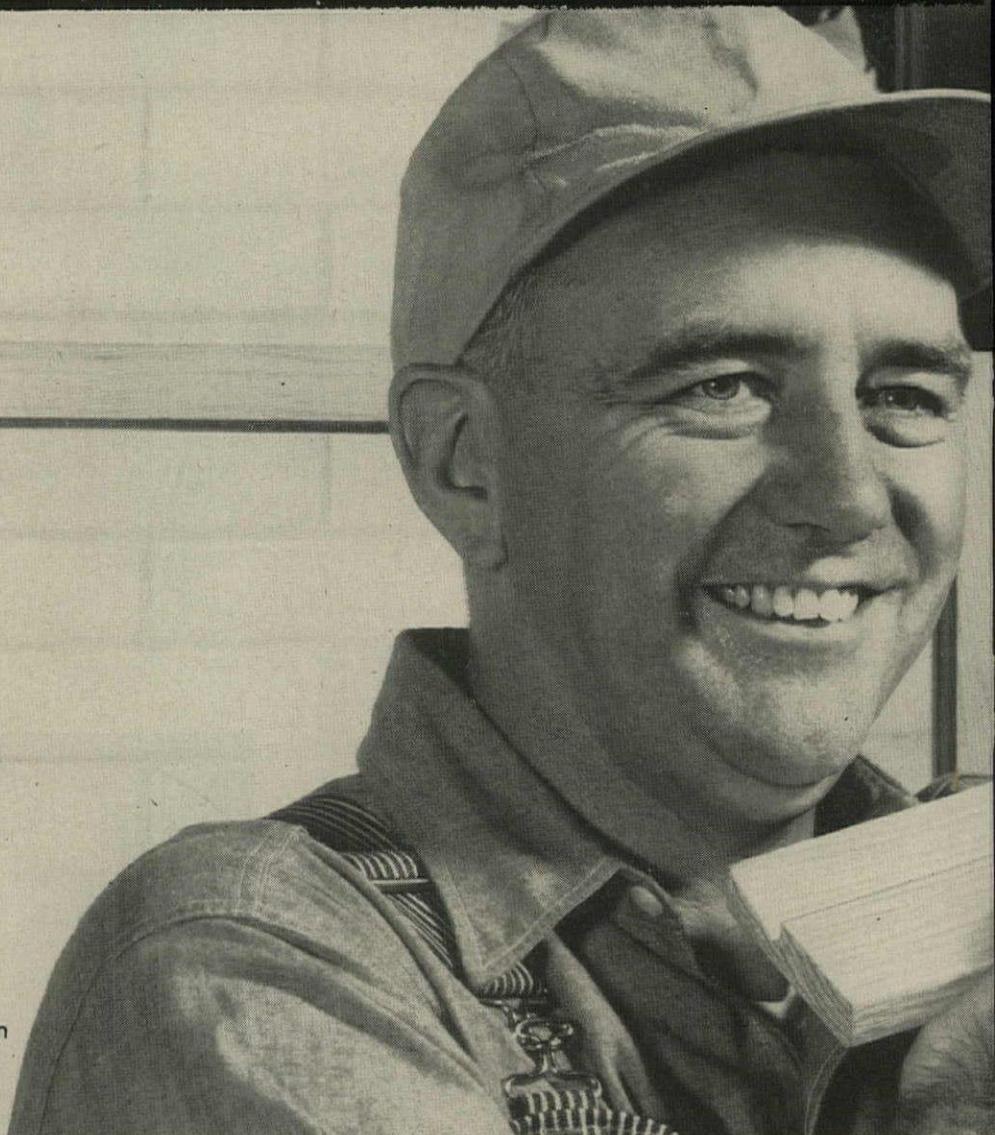
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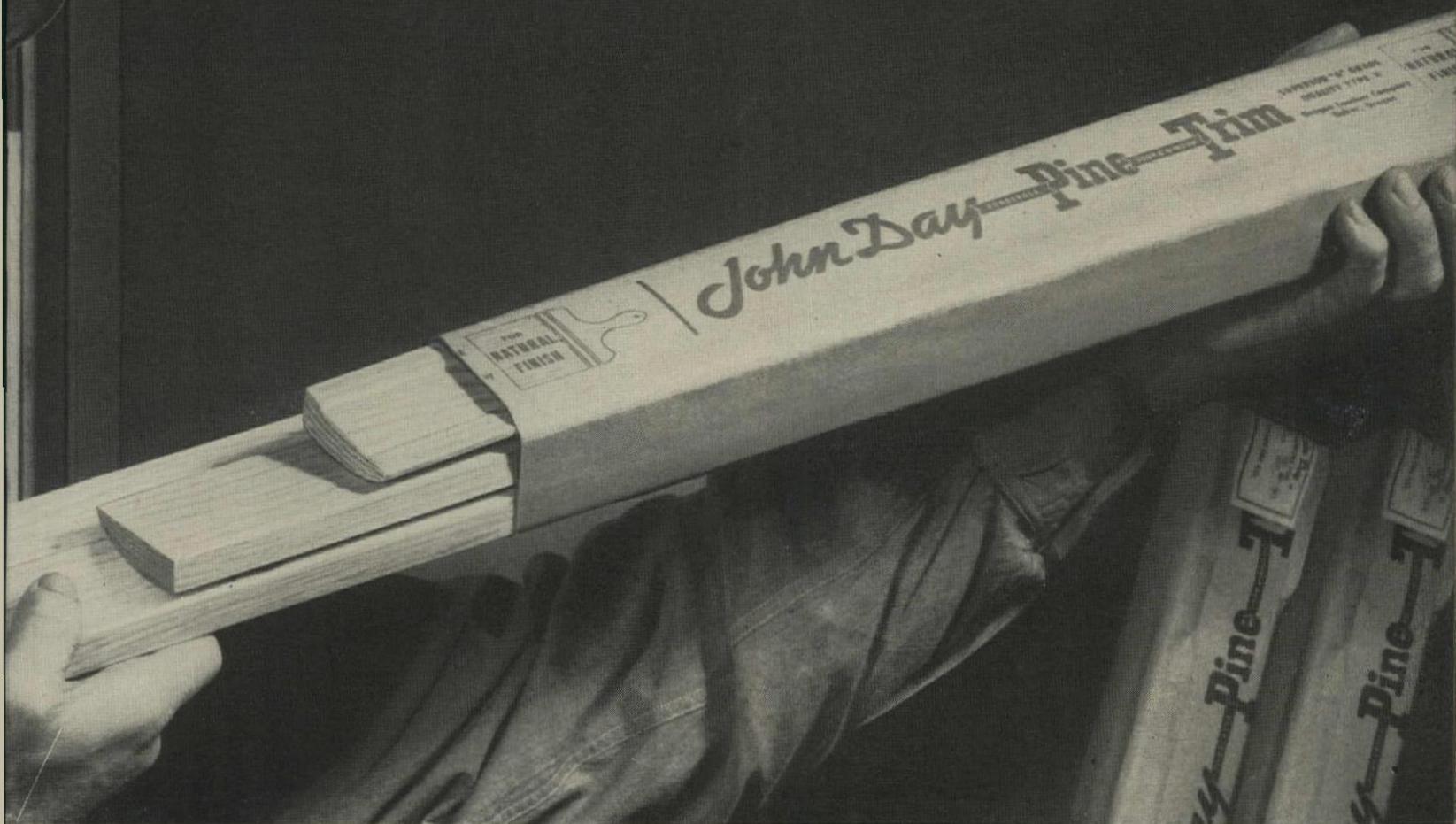
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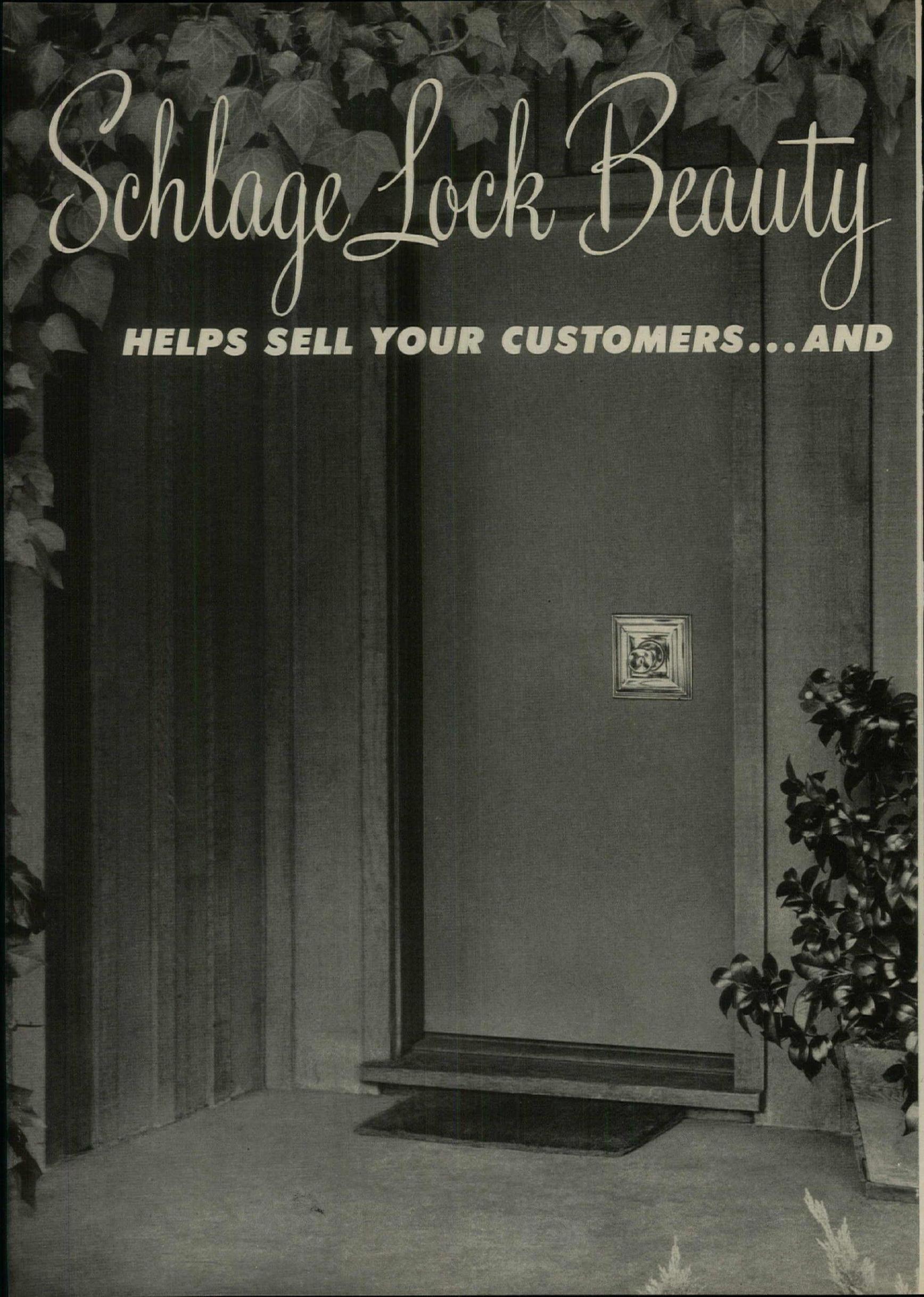
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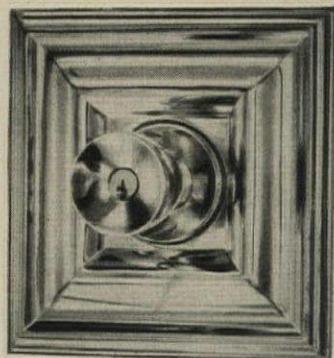
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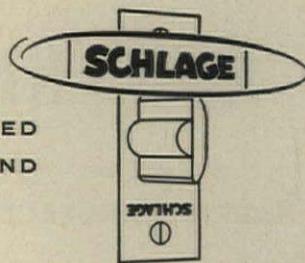
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Letters

Underground Wiring

I thought the underground wiring story which appeared in your August issue was excellent. I am increasingly impressed with each issue of *HOUSE & HOME* that I read, with the quality of your publication, and the importance of its influence on the housing market.

T.M. McDANIEL, JR., vice president
Southern California Edison Co.

I am waging a one man war against unsightly poles and lines here in Cocoa Beach.

Your August article on underground wiring is most provocative and I would like to buy 15 reprints to circulate to members of the City Commission, Zoning, and Planning Board and the Florida Power & Light Co.

GEORGE F. BOVIE
Geomar Enterprises
Cocoa Beach, Fla.

We are in the throes of writing a new mobile homes ordinance for the City of Pullman. As chairman of the Planning Commission I have been pushing for the most progressive ordinance we can get. This month's article on underground wiring could not have been more timely, as underground wiring is a key requirement which is already stirring up some controversy. Would you please send me one-dozen reprints as quickly as possible.

ROBERT P. DARLINGTON, architect
Pullman, Wash.

Mortgages for investments

Under the headline "Commercial banks study FHA, VA plan to freeze out mortgage bankers," *H&H*, May *News* contains an article describing a plan developed by this firm at the joint request of a group of New York commercial banks and the committee on pension fund mortgage investments of the ABA. We believe that the plan will ultimately benefit and not "freeze out" mortgage bankers.

Pension trusts alone, for example, offer a potential field for mortgage investment far exceeding the mortgage originating capacity of interested commercial banks. Despite increases in stock purchases by trusted pension funds, recent SEC reports indicate that during 1958 such funds purchased \$1.3 billion in corporate bonds. As another *News* article points out on the same page of your May issue, existing plans (which involve middleman costs) are not proving competitive under present market conditions. By eliminating such costs the ABA approved plan aims to make mortgages more competitive with bonds. With modifications, the principles involved in the plan could be adapted for use by larger mortgage bankers.

All members of the committee on pension fund mortgage investments which approved the plan as a "valuable contribution" to the mortgage industry are members of the MBA. One of them, Clifford C. Boyd, is president of Institutional Securities Corporation, the parent of Instlcorp which operates a competing plan.

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New York City.

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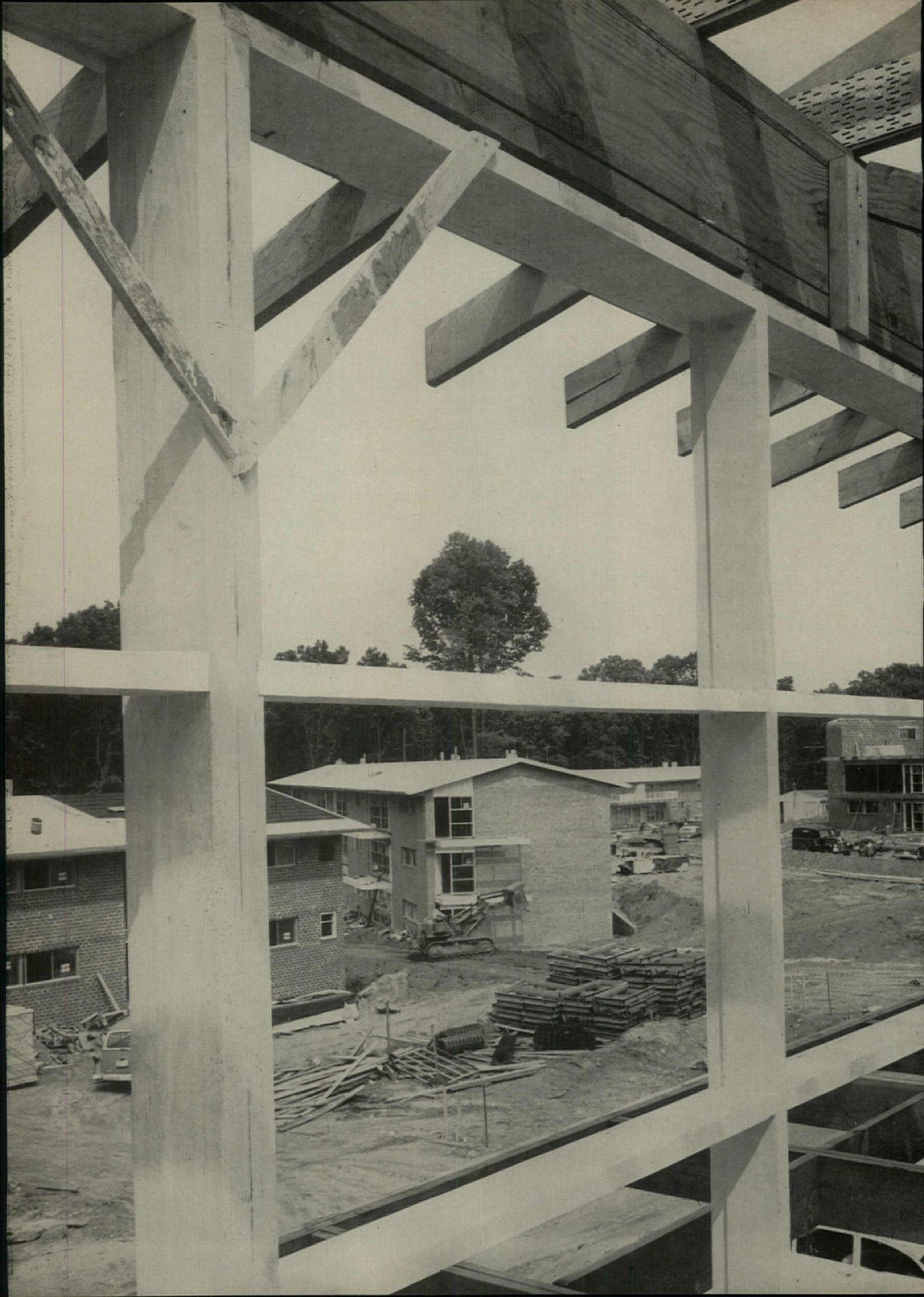
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COVER:
Edgewood Arms.
Designed by Irving Castor & Assoc
for Builder John Mackay.
Photo: Fred J. Maroon

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America is spending more money than ever to build more APARTMENTS

America is building so many apartments that 1959 may break the 257,000-unit record that has stood unchallenged since 1928.

And next year America will probably spend still more money to build still more apartments.

With a few outstanding exceptions like Detroit, Norfolk, and Salt Lake City the apartment boom is touching almost every metropolitan center from coast to coast:

The boom by major areas

Metropolitan areas	Housing permits	Apt permits	% apts
Los Angeles	80,562	38,321	47.6
New York	84,159	36,674	43.6
Washington	22,455	9,740	43.4
Chicago	43,631	8,838	20.3
San Francisco	25,157	8,602	34.2
Miami	18,761	6,269	33.4
San Diego	22,839	5,580	24.4
Phoenix	16,196	3,101	19.1
Seattle	10,300	2,989	29.0
Denver	11,170	2,717	24.3
Philadelphia	20,793	2,278	11.0
Cleveland	10,352	2,228	21.5
Atlanta	10,337	2,152	20.8
Columbus	8,967	2,038	22.7
Detroit	23,742	1,922	8.1
Milwaukee	6,660	1,861	28.0
Baltimore	10,979	1,474	13.4
Boston	8,803	1,292	14.6
Birmingham	6,649	1,196	18.0
Buffalo	6,328	543	8.6
Indianapolis	4,987	400	8.0
Salt Lake City	4,196	271	6.5
Rochester	2,969	247	8.3
Norfolk	4,715	34	0.7

These figures were compiled for H&H by Samuel J. Dennis, chief, Construction Statistics Office of the Census Bureau from building permits issued in 1958.

New York is building next to the most apartments, including the most bad apartments (because New York's less than 1% vacancy rate still makes anything and everything easy to rent).

Philadelphia is building some of the best apartments, because apartments have to be good there to meet the row-house competition.

Boston has plans to rebuild much of Back Bay with low-rise rentals.

Washington is setting a cost-cutting example that builders elsewhere should follow, and one architectural firm has 6,350 project apartments on its drafting boards.

Atlanta renters want dining rooms even in small walk-ups.

Chicago is building thousands of high-density apartments (some high-rise, some walk-ups), but no true garden apartments at all. Permits are up 70% over last year.

Memphis is proud of its new four-room units for negroes at \$50 a month.

Los Angeles has built so many apartments that 18% are vacant and the apartment owners' association has begged the local savings and loans not to glut the market by financing any more.

San Francisco Bay is building nearly three times as many multiples as in 1955.

Seattle is doubling its 1958 rate despite stricter land-use limits.

Sacramento has five top-flight architects designing the country's finest urban renewal project.

America is spending a lot more money this year to build a lot more apartments than America spent and built at the peak of the 608 boom in 1950.

This is the great new bonanza market in housing—less than a billion-dollar market in 1956, but \$1.5 billion in 1957, climbing just over \$2 billion in 1958, soaring to \$3.3 billion this year, and probably to \$3.9 billion next year!

The Apartment Round Table ponders ...



You will find their expert suggestions and comments on page after page throughout this issue

For two days the top-flight housing officials, architects, builders, lenders, and suppliers at the Round Table sparked such a rapid fire of good ideas and informed opinion that it seemed wrong to stop the discussion to seek agreement on a series of Round Table recommendations. Instead, we have interpolated Round Table comments into the text and into the margins throughout the issue. We wish space would permit reprinting the entire 320 page transcript.

The panel for this HOUSE & HOME Round Table included the FHA commissioner, his assistant for technical standards, and five of the seven members of the Industry Advisory Committee now working on new FHA standards for apartments; the Defense Department executives in charge of military housing; a member of the Home Loan Bank Board; the chairman of the Rental Housing Committee and the Urban Renewal Committee of NAHB; and three other top flight apartment builders, four outstanding apartment architects; the chairman and past chairman of the Mortgage Committee of the Savings Banks' Association, the chairman of the Apartment Committee of the US Savings & Loan League; the past chairman of the mortgage policy committee of the Life Insurance Association, and the principal life insurance lenders; a past president of the National Association of Real Estate Boards; and representative spokesman for building product manufacturers with the biggest stake in better apartments.

FROM THE FEDERAL HOUSING ADMINISTRATION
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How to meet the big new market for better APARTMENTS

Most of these better apartments will have to be sponsored, planned, built, supplied, appraised, financed, merchandised, and marketed by the readers of HOUSE & HOME.

So this issue has been researched, written, and edited to help you analyze your market (see pp 130-135), to help you plan the kind of apartments your market will continue to absorb long after the present shortage is eased (see pp 142-157), to help you build those apartments better for less (see pp 158-167), to help you merchandise their advantages to attract the right tenants (see pp 172-175), to help you avoid the mistakes that make tenants move out and projects go broke (see pp 202-203), to help you work the tax angles right (see pp 193-195).

HOUSE & HOME acknowledges gratefully the help of hundreds of architects, builders, and lenders whose advice we have sought and whose projects we have visited from coast to coast. We acknowledge gratefully the help of the industry leaders and government officials who traveled hundreds and sometimes thousands of miles to take part in our Apartment Round Table and its preliminary conferences.

And we acknowledge gratefully the help of housing's No. 1 economist, Miles L. Colean, FAIA; of housing's No. 1 construction expert, James T. Lendrum, FAIA; of housing's No. 1 tax consultant, Sylvanus G. Felix; and of Dr Louis Winnick, whose rental housing report to ACTION, financed under a \$250,000 grant from the Ford Foundation (McGraw-Hill, \$8.50), is quoted so often that for brevity it will be referred to simply as the ACTION Report.

Without their help it would have been impossible to gather for you all the information and expert advice that you will find on the next 65 pages.

Milford A. Vieser, *past chairman*
Mortgage Policy Committee,
Life Insurance Assn
financial vice president,
Mutual Benefit Life Insurance Co

Dale Wright, *architect*
Metropolitan Life Insurance Co

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If the new apartments are attractive enough, this boom could go on for years, because . . .

Says Lender VIESER: "The housing needs of our people are changing. The demands that grew out of the lack of housing during the depression and war years have been largely cured. National lenders have a responsibility for quality, and we're in as good a position as anybody to demand quality."



Photos: Walter Daran



Says Lender GIBSON: "There isn't enough vacant land and money to service a proliferation of single-family homes. We've got to design a cheap, inexpensive garden apartment in which the average American will find satisfactory living."



Says Builder CENKER: "Because the 608s were built at a time when building costs were substantially lower, the only way a new apartment can compete with a 608 in the same area is to be much more livable, and therefore much more rentable."



Says the Pentagon's ARRINGTON: "Military families are bigger now, and of course they prefer to rent."

1. Some 45 million more people have crowded into the 192 metropolitan areas since 1929; but the housing industry has been so busy building houses that it has hardly built enough new apartments to keep up with apartment demolitions and conversions to business use.
Whatever increase these years have seen in the apartment supply has come almost entirely from converting single-family brownstones to multi-family use and from cutting up big apartments into little ones.
2. The market for apartments will grow even faster than the market for houses, because from now to 1970 the number of younger families and the number of older families will increase even faster than the number of families in the house-buying age bracket between 25 and 55. (Apartments are the natural habitat of young couples before they can afford to buy a good house and older couples after they no longer need a house.)
3. Land prices are so inflated that fewer and fewer families can afford the land cost of single-family houses close in. So more and more families around the big cities will have to live in apartments if they do not want to spend an hour or more each morning and an hour or more each evening getting to and from work. Says the ACTION Report: "The detached house, which requires relatively large quantities of land, becomes an economic impossibility where raw land costs more than a few cents per sq ft."
4. VA is on its last legs, and when VA finally dies no one will be able to buy even the cheapest house without a token down-payment of at least 3%.
5. More than half of today's apartments need to be replaced or completely rebuilt between now and 1970, because in 1970's much richer America no one will want to live in them. The new housing census found that one-fifth of today's apartments are either dilapidated or lack a private inside bath. And nearly half the remainder are antiquated units priced for the dwindling minority of very poor families (less than 17% today, less than 10% by 1970) who cannot afford to pay more than \$60 a month for a home.

Here is a tremendous potential market for good apartments—a market that can easily absorb more than three million units in the next decade if they are made so attractive that people will want better apartments as much as they want the other things that compete for the same fast-growing consumer dollar.

Here is not one market, but four:

Says the ACTION Report: "The production of rental housing must be aimed at the types of demand that exist for it."

Says FORTUNE: "If this new demand for apartments is to be satisfied, builders will have to provide apartments suited to the special needs of each of these groups, rather than the uniform and tasteless (and expensive) barracks now being built in most cities."

1. A big market for good small apartments for bachelors and young couples.
2. A big market for good economy apartments for older couples without much money and a parallel big market for better and often larger apartments for prosperous older couples who no longer wish the responsibility of a big house.
3. A big market for good family-sized apartments for families with children who prefer not to live way out where land is cheap.
4. A huge replacement and redevelopment market for good apartments in all sizes to replace perhaps two million old apartments that are no longer good enough to meet today's standards and tomorrow's needs or no longer located in good enough neighborhoods.



Says Builder MADWAY: "I equate quality with an apartment that keeps the tenant happy."

Says Architect KRONSTADT: "My idea of apartment quality is to make living there comparable to living in a good single-family house."



Says Builder CENKER: "It's the environment for people that makes the difference between quality and non-quality. I like to have a man write me when he leaves saying 'I sure hate to move; we have enjoyed living here.' To me, that is the difference."

Says Architect SCHLOSSMAN: "The quality of the space, the quality of the plan, and the quality of the site arrangement—these are the least expensive qualities to provide—and you can't do anything to add to them later."

Says Architect WEIHE: "We've got a buyer's market now, which didn't happen in the 608 days."

Says Commissioner ZIMMERMAN: "How much quality do you have to put into the apartments to make them both marketable and economically sound. This is a question we have to face up to in setting our minimum standards."

But the boom can fizzle out fast with a poor product or poor selling

H&H staff



Renting apartments is a different business from selling houses, because the leasing market for apartments is so much more fluid than the resale market for houses.*

Renters are free to move any time they find something they like better, and most of them do. The average renter moves every three years, so the only reason why half of today's apartments are not vacant right now is that nothing better is available—yet.

And the only reasons why promoters can still find tenants for new apartments that are not very attractive or very good values are 1) most cities still have an apartment shortage, and 2) new apartments are always easier to rent, because so many women like to be the first occupants.

But take a good look at the vacancies in Los Angeles before you risk good money in apartments that aren't good enough to stay rented when the shortage is eased. In Los Angeles, the less attractive apartments have up to 40% vacancies; the more attractive apartments are still nearly 100% rented, even at considerably higher rents.

Wherever and whenever the shortage is eased, renters can pick and choose, and they will expect to get more for their money. They can choose to move to a better apartment. They can choose to move to a house. Or they can choose to pay less rent and spend their money for something else.

So how many new apartments the housing industry can rent and keep rented in the next three years will depend almost 100% on:

1. How good you make those apartments, how much more desirable than today's obsolescent units, and how much more desirable than the other things your tenants will be free to spend their money on.
2. How well you merchandise these advantages.

If the new apartments you build are good enough and your merchandising is good enough, the market can easily absorb 300,000 new apartments year after year.

If not, this boom can fizzle out as fast as the last one.

*That is why the average homeowner lives in a house only half as good as FHA thinks he could afford. Right now more than 11-million families could qualify FHA for a house costing \$17,000 or more—but less than four million of those 11-million families live in \$17,000 homes. The other seven-million-plus go on living in the cheaper houses they bought before their incomes went up.

That is why the homebuilders have to go on building cheap houses, even though the housing census shows there

are now far more cheap houses than families who need cheap houses. Says Mary Hamman of LIFE: "The people who can afford better houses aren't sleeping in trees; they already own houses, and until they can sell those houses they can't move to the better houses they can now afford."

That is why trade-up works too slowly today on houses, and that is why a good trade-in system is so all-important to help homeowners move to better houses and to help builders sell more better houses to second-time buyers.

Some of the new apartments are very good

Some of the new apartments you are building are better built and better designed for today's changing way of life than any apartments ever built.

Some of them combine the amenities of suburban houses with the convenience of close-in living. See *p 171*.

Some are planned with private terraces or patios for more enjoyment of indoor-outdoor living. See *p 150*.

Some offer fine community facilities like swimming pools, cabanas, nurseries, laundries, service shops, and even restaurants. See *p 167*.

Some of them are designed by top-flight architects.

Some pioneer new materials, new finishes, and new conveniences unknown when yesterday's apartments were built. See *p 157*.

Some are air conditioned and well ventilated for year-round comfort, easier housework, and cleaner, healthier living. See *p 155*.

Some include all the labor-saving appliances. See *p 153*.

Some are quiet, with sound-proof walls, cushioned floors, and acoustical tile in the noisy spaces. See *p 156*.

Some offer better equipment, better baths, better windows, better lighting, better wiring, better piping, better flooring, better tiling, and better storage.

And some of them borrow new construction methods from volume house building to build much better for less. See *p 158*.

Says Builder Harry Madway:

chairman, Rental Housing Committee, NAHB

"These good new apartments can count on good rentals and low vacancies for a great many years—provided, of course, they are wisely located and built at a reasonable cost."

Photos: Walter Daran



Says Commissioner ZIMMERMAN: "I don't think FHA should make it difficult for builders to point for a high level of the market, but FHA cannot turn its back on the minimum market."



Says Assistant Commissioner MASON: "The architect not only has to be good, he has to be excellent. Cost certification makes the sponsor really pay the architect instead of using the so-called architect's fee to reduce his own equity so builders have begun to figure that so long as you have to pay the architect you might as well get a good one."



Says Builder MADWAY: "We need knowledgeable architects more than we need good ones."

Leonard Schugar



Says Builder SCHEUER: "A remarkable group of good architects are getting into this field—like Ieoh Ming Pei, Mies van der Rohe, Vernon DeMars, Skidmore, Owings & Merrill, Wurster, Bernardi & Emmons, Satterlee & Smith—we're getting the cream of the fraternity now."

But too many new apartments are not—

Too many are built for a quick tax-free killing while the shortage market lasts (see p 193).

Too many are built with too little thought for long-term value and long-term livability. Too many will be hard to rent when today's shortage is eased. Too many will go the way of so many 1929 promotions and go broke at the lender's expense or the second owner's—unless inflation bails them out.



Says Realtor SUMMER: "Builders often try to squeeze the last possible unit on a choice site. If they were looking correctly at the long-range picture they would see it makes far more sense not to overcrowd it and have something that will always be rentable."

Says Builder MADWAY: "I think the greatest single contribution FHA has made has been the improvement of site planning. Even today, looking back and thinking of all the arguments we gave them on 608, I can say that 90% of the time the FHA land planner was right . . . and we fought him all the time."

Says Commissioner ZIMMERMAN: "I don't suppose anybody is too happy with what has been produced in the last few years in multi-family dwellings."

Says the ACTION Report: "Post-war apartment construction has been distinguished by neither imaginative architecture, nor innovations in site plans, design, room layout, or equipment."



Says Appliance Maker RITZENTHALER: "The floor under minimum quality has been left at the same level for too long a time. It has not been kept in line with our changing economy. You will be forced to upgrade the quality of these apartments competitively to get full occupancy, because people are going to shop around for something better. If you upgrade the apartments and equip them better, you will attract better tenants."

Says Builder Lewis Cenker:

chairman, Urban Renewal Committee, NAHB

"We are using a lot of money, materials, and labor to build apartments that will be in trouble as soon as the supply gets anywhere close to the demand. They will be in trouble because they are not attractive enough to be easy to rent in a competitive market, and their sponsors have not left themselves room to upgrade them later on. They will be in trouble in one of two ways and perhaps in both: their rents will have come down, or they will have too many vacancies. Either way they won't produce the income on whose capitalization their financing is based. They will run into trouble in the sixth or seventh year, and I don't see how they are going to survive."

This is the way to kill the boom. This is the way to kill the goose that could lay three-million golden eggs.

Too many of today's new apartments are not quite good enough to hold their tenants and maintain their rents. Too many are planned by cut-rate, cut-corner designers. Too many show little or no advance in livability over the 608s of 1949, which in turn showed little advance over apartments built in 1929. Too many are built too cheaply to meet FHA's none-too-high requirements. Too many sacrifice privacy to cheapness by using their balconies as corridors. Too many have such flimsy walls that you can hear every word from the next apartment. Too many are badly ventilated, so smells spread from apartment to apartment. Too many have too small rooms and too little storage. Too many have only one bath.

Too many are built to make land speculation pay off, because land used for apartments carries a higher price tag than the same land used for houses; too many spend too much for land and too little for quality; too many overcrowd the land and fall far below the land-use standards that prevailed in 608 days. (Some squeeze eight apartments on a lot too small for a single detached house.)

Competition has already caught up with the builders of such second-rate apartments in Los Angeles. Good apartments in good locations are still almost 100% occupied, but many almost-new apartments, cheaply built, on overcrowded sites, in poor locations, are 40% vacant.

When the need for more good apartments is so strong and the market for second-rate units already shows signs of weakness, putting good money into bad apartments is just plain foolish.

continued

“Continued adherence to minimal standards today amounts to economic irrationality”

says the ACTION Report

“If a larger market for rental housing is to be achieved, rental housing will have to be made more attractive. . . . The consumer must be served and served with the kind of housing he is willing to pay for rather than that which a public agency thinks he ought to have. As other consumer industries have demonstrated, it is often the extra and so-called non-functional features that evoke consumer response. The American propensity for gadgets and novelties provides a powerful lever for increasing consumer demand. It would be unfortunate [not] to make full use of this market force for so important a social commodity as housing. . . .



Leonard Schugar

“A greater market-consciousness would dictate new policies with respect to dwelling-unit design, equipment, and type of market to be served. Because of unwonted concern for minimal rents FHA has tended to encourage projects with minimal standards rather than projects with the greatest tenant appeal. . . . By no means is this a sound investment principle. Rigid adherence to such a standard amounts to economic irrationality and does both the investor and the consumer a disservice. The inclusion of a swimming pool, tennis courts, air conditioning, or electric kitchens may add \$5 a month in cost, but may yield \$10 extra monthly rent over the life of the project. Such items add to, rather than subtract from, the safety of the investment, not to mention the satisfaction of the tenants.

“However understandable a philosophy of minimal costs and rents may have been in the earlier post-war period of returning veterans, steeply rising building costs, and a seller’s market, a policy of economy housing can no longer be defended. . . . Economy housing has resulted in unesthetic and low-quality construction. Cheap housing has also made the solution of urban planning problems more difficult, because it results in increased density and poor apartment design.

“New rental housing is now forced to compete—and compete vigorously—for the consumer’s dollar. The main barrier to the expansion of rental housing is not production, but marketing. Tenant appeal must now become a more important criterion. Efforts at rent reduction must be concentrated on building and operating efficiency—ie, giving the consumer what he wants at the least possible cost—rather than on stripping rental units of what some are pleased to call gimcracks.

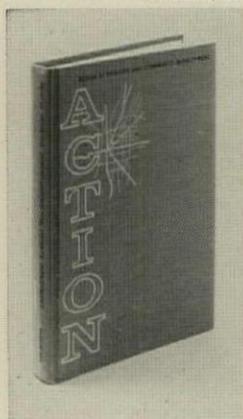
Here are some things tenants want:

“Present-day construction of rental units leaves room for endless innovation in design, layout, equipment, type of structure, type of services, site planning, and on-site amenities. In cities where land costs are not prohibitive, a strong market can be developed for low-density, open-planned rental units. Success has been reported with inner-suburban apartment developments offering swimming pools, tennis courts, and individual garden plots. In the more expensive central-city apartments there appears to be greater consumer preference for air-conditioning, fireplaces, multiple bathrooms, and larger floor areas. There is the utmost need, therefore, for careful exploration of the wants of different classes of consumers relative to their willingness to pay, and an equal need for greater exploitation of advertising as a vehicle for laying the apartment building industry’s wares before the public.

“A large part of the coming apartment market will be people with the means to pay for luxury and semi-luxury features. . . . Rational grounds exist for adopting a national housing policy aimed at making the filtering-down process more effective. Every new rental unit built in the upper rent range makes another good unit available to a lower-income family.

“It would be a grave error to conclude that efforts to make more and better apartments available for middle-income families should be restricted to building new apartments for this group. Under present costs the lowest rent attainable even on economy dwellings is too high in big cities to be acceptable to a large part of the middle-income class.”

Phil Shapiro



Most tenants can afford more rent

You can't expect tenants to pay a penny more than they have to if all you offer them is shelter in too small rooms with too little storage space, too small kitchens, too few baths, too little privacy, and no special advantages.

But don't worry too much about their ability to pay more rent if you offer them something they really want. Many builders (Carl Freeman, for example) have found it smart to locate a good new project right near an unattractive 608 where rents are much lower, because so many 608 tenants are now prime prospects for something better.

The number of families with incomes over \$10,000 has doubled in the past five years. But rents have gone up less than any other important living-cost item since the war, and the average family is spending less of its income for rent today than at almost any time in all our history.

HOUSE & HOME has repeatedly defended the 608s as the best 400,000 apartments ever built in so short a period, but they are nowhere near as good as the garden apartments you can offer today. Very few 608s offer big enough rooms, big enough windows, big enough storage, adequate acoustical privacy, adequate kitchens, adequate baths, adequate ventilation, adequate piping, or adequate wiring for electrical living and air conditioning. Almost none of them offer any private outdoor space on terraces or balconies; almost none offer community attractions like swimming pools. Most of them waste on kitchens and bathrooms perimeter space that might better be used for living rooms and bedrooms. Few have economical heating plants or adequate wall and roof insulation for comfort conditioning.

Says Economist Miles Colean: "Judging by the rental housing data developed for the 1956 housing inventory, a very large number of apartments are occupied by renters who could afford better accommodations. At least 51% of the renters with incomes between \$2,000 and \$6,000 a year paid less than 20% of their incomes for rent (including utilities) and at least 23% actually paid less than 15%.

"As the tenants' income rises, the proportion devoted to rent falls still lower. In a significant proportion of the upper income groups rent bears much less than a 20% ratio to income; 27.5% of the \$10,000-a-year-or-more income-group

pay less than \$80 a month, which is less—and often far less—than 10% of income."

The apartment inventory showed that the median rent in 1956 was only \$60 a month. Only 22.9% rented for as much as \$80 a month (\$960 a year) whereas in 1957 (see table below) more than 60% of all non-farm families had after-tax incomes over \$5,000 a year and could qualify FHA to pay much more than \$80 a month for a home. Only 9.9% rented for as much as \$100 a month (\$1,200 a year), whereas by FHA standards 44.7% of all non-farm families could have afforded to pay much more than \$100 a month.

The apartment inventory fits the income pattern up-side-down

Only 11.6% of all non-farm families had 1957 incomes so small they could not afford at least \$50 a month rent (at 20% of their income for rent and utilities), but 33.4% of the apartments rented for less than \$50.

At the upper end of the scale, 27.6% of non-farm families could afford to pay at least \$120 a month, but only 4.2% of the apartments rented for that much; 44.7% could afford at least \$100 a month, only 9.7% rent for that much.

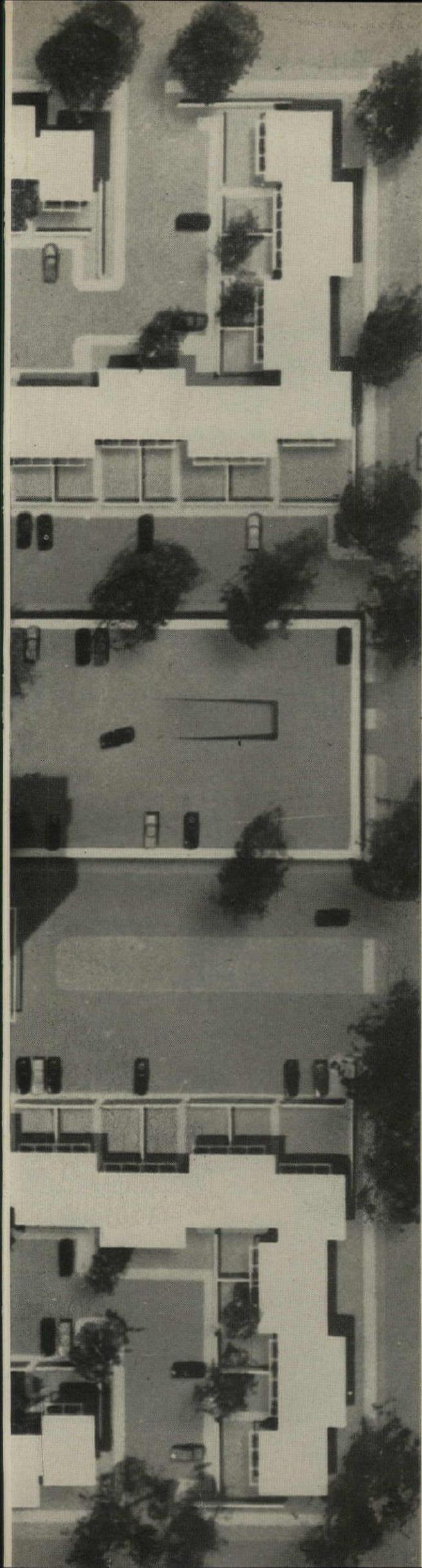
ANNUAL INCOME			MONTHLY RENT
UNDER \$3,000	11.6%	33.4%	\$ 50
\$3,000 - \$3,999	12.1%	25%	\$50 - \$66-67
\$4,000 - \$4,999	16%	17.6%	\$66-67 \$79
\$5,000 - \$5,999	15.6%	13%	\$80 - \$99
\$6,000 - \$7,499	17.1%	5.7%	\$100 - \$119
OVER \$7,500	27.6%	4.2%	OVER \$120

Source: Apartment rent percentages are taken directly from the 1956 Housing Inventory Report except that two-thirds

of all apartments renting for \$60-\$69 a month were arbitrarily assumed to rent for \$60-\$67.66. After-tax-income figures

were projected by Economist Miles Colean from official figures published by the Department of Commerce.





Start right with the site

Good land planning is as important in an apartment development as in a subdivision of single-family houses.

Prospective tenants recognize it. If your site is attractive, it will help you lure people out of their old apartments into your new ones.

Lenders recognize it. If you use your land well, it will help you get higher valuations on your apartments.

Here are some points to keep in mind when you plan your site:

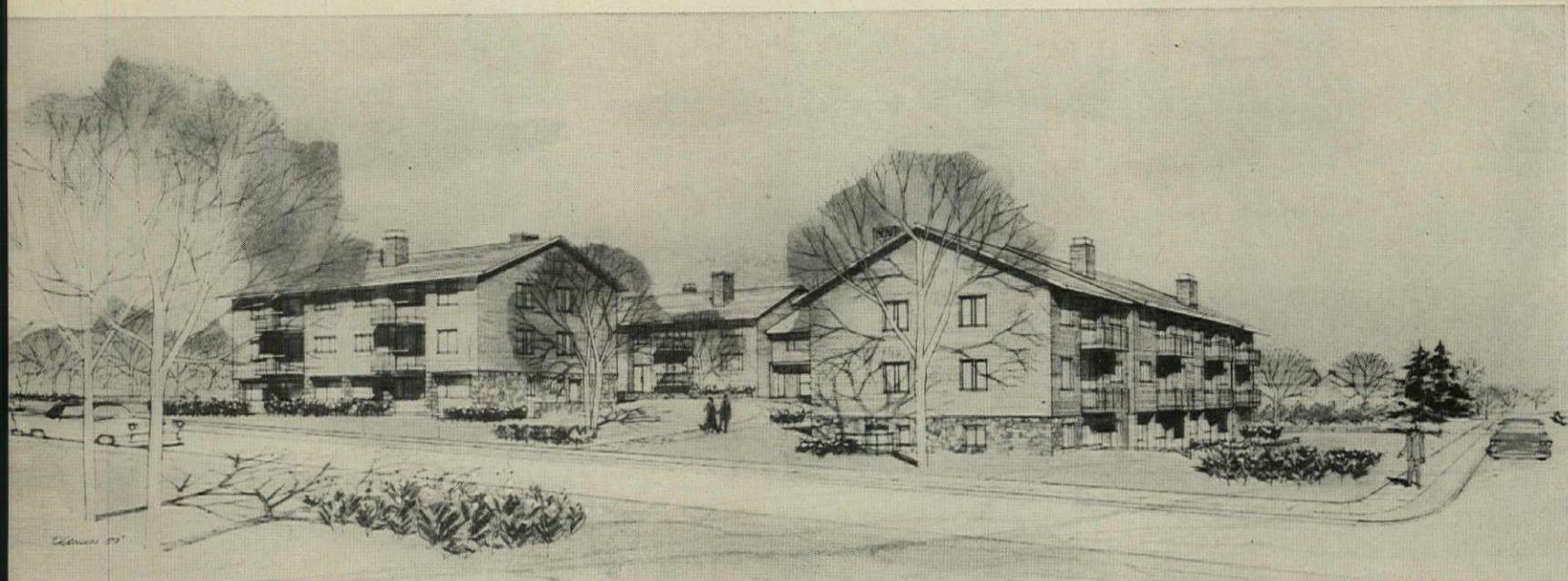
Get a professional land planner to do the job. He can usually save you enough on excavating and street layout to more than pay for his service. Suggest Realtors Gratton & Simmons of San Jose, Calif.: "You can also get excellent free advice from city, county, and FHA planners."

Never accept the first plan—you can always make it better (for example of a plan that was made better, see *p 139*).

Be sure you have enough land—particularly when you are building downtown. Says Cleveland Builder-Investor Raphael Silver: "The more amenities you offer to people, the easier it is to rent to them. With any piece of ground, you must create your own environment. This means you have to have seven to ten acres—the more the better."

SACRAMENTO REDEVELOPMENT PROJECT—Capitol Towers—will combine low-rise and high-rise apartments on downtown site formerly occupied by commercial buildings. Architects: Wurster, Bernardi & Emmons; Edward L. Barnes; DeMars & Reay. (For front and rear elevations of garden-type units, see *p 144*.)

continued



SMALL PROJECT—23 units—in Ridgewood, N.J. will take advantage of gently sloping site with private patios for some ground-floor apartments, inconspicuously located garages, and intimate entrance courtyard. Architects: Keyes & Lethbridge. Builder: Fidelity Engineering Co.

1. Don't overcrowd your site

Apartment renters, like house buyers, want the feeling of freedom and privacy that result from plenty of open space between buildings.

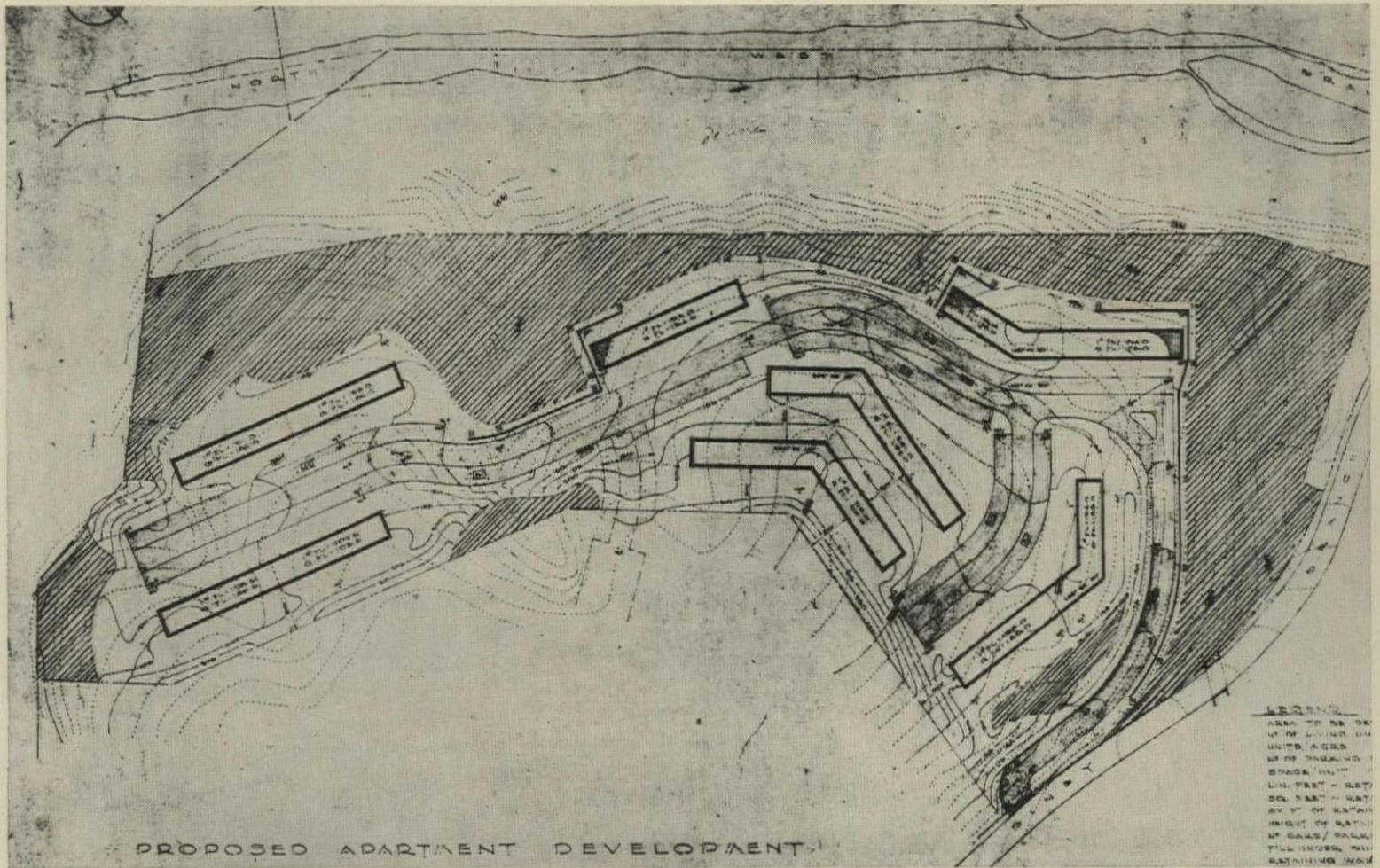
More space outdoors is the cheapest luxury you can offer. Its only cost is the land and a little grass seed and planting. Only the land speculator stands to profit if you overbuild; he will try to squeeze you for a higher land price. Actually you can't save much by crowding your site. If your land cost is \$1200 a unit and your construction cost is \$6000, you can't save more than \$300 a unit by putting one-third more apartments on your site.

Says Sacramento Builder John Jacobson, whose Sierra Madre Apartments are shown below: "We don't crowd the land. We give people family-type living and enough recreation areas."

QA

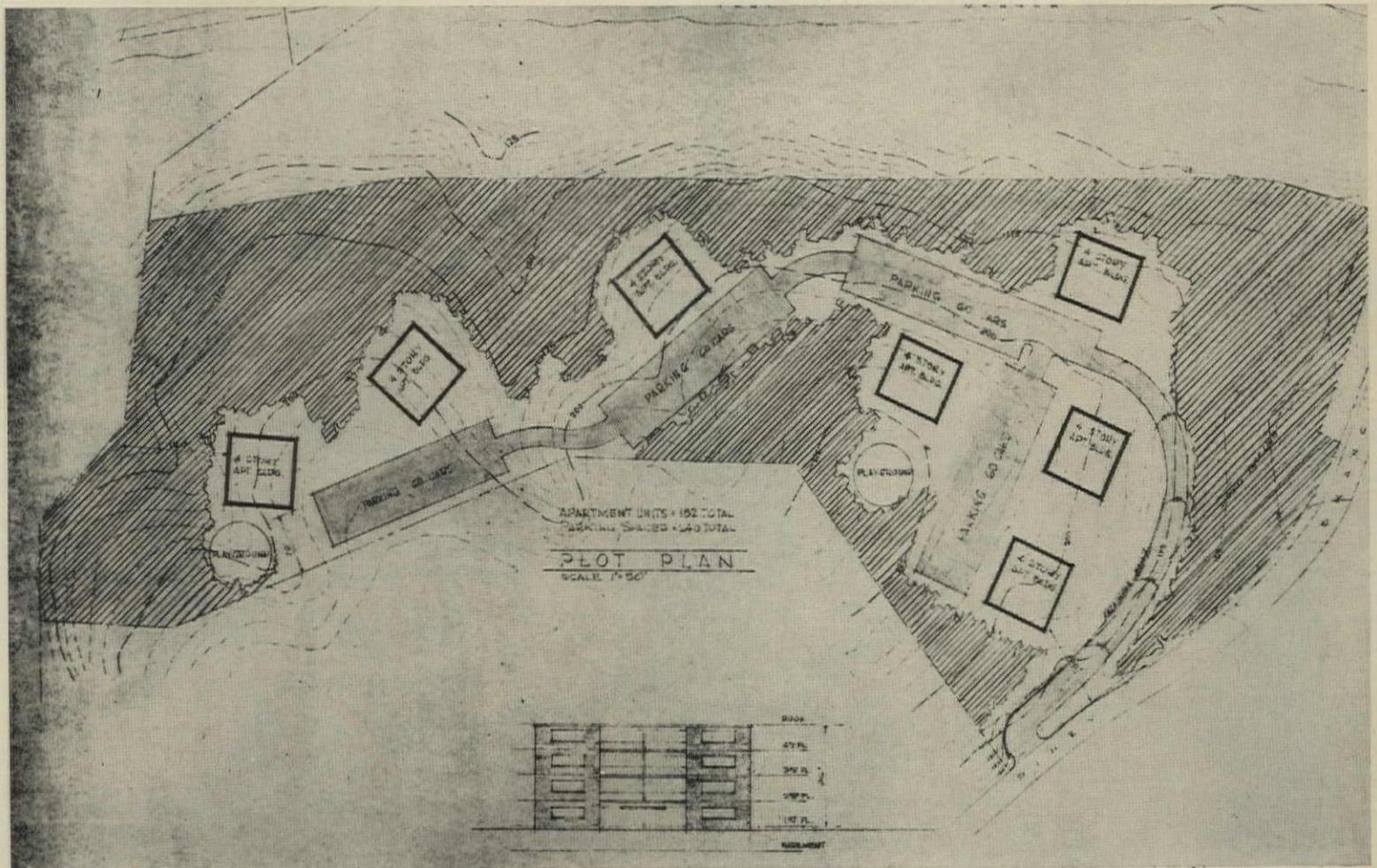


LARGE PROJECT—Sierra Madre Apartments, Sacramento—will have 184 units built around large quadrangles on 16-acre site. Builder John Jacobson will provide community building, swimming pool, tennis courts, and locations for school and church. Architect: Frank Green.

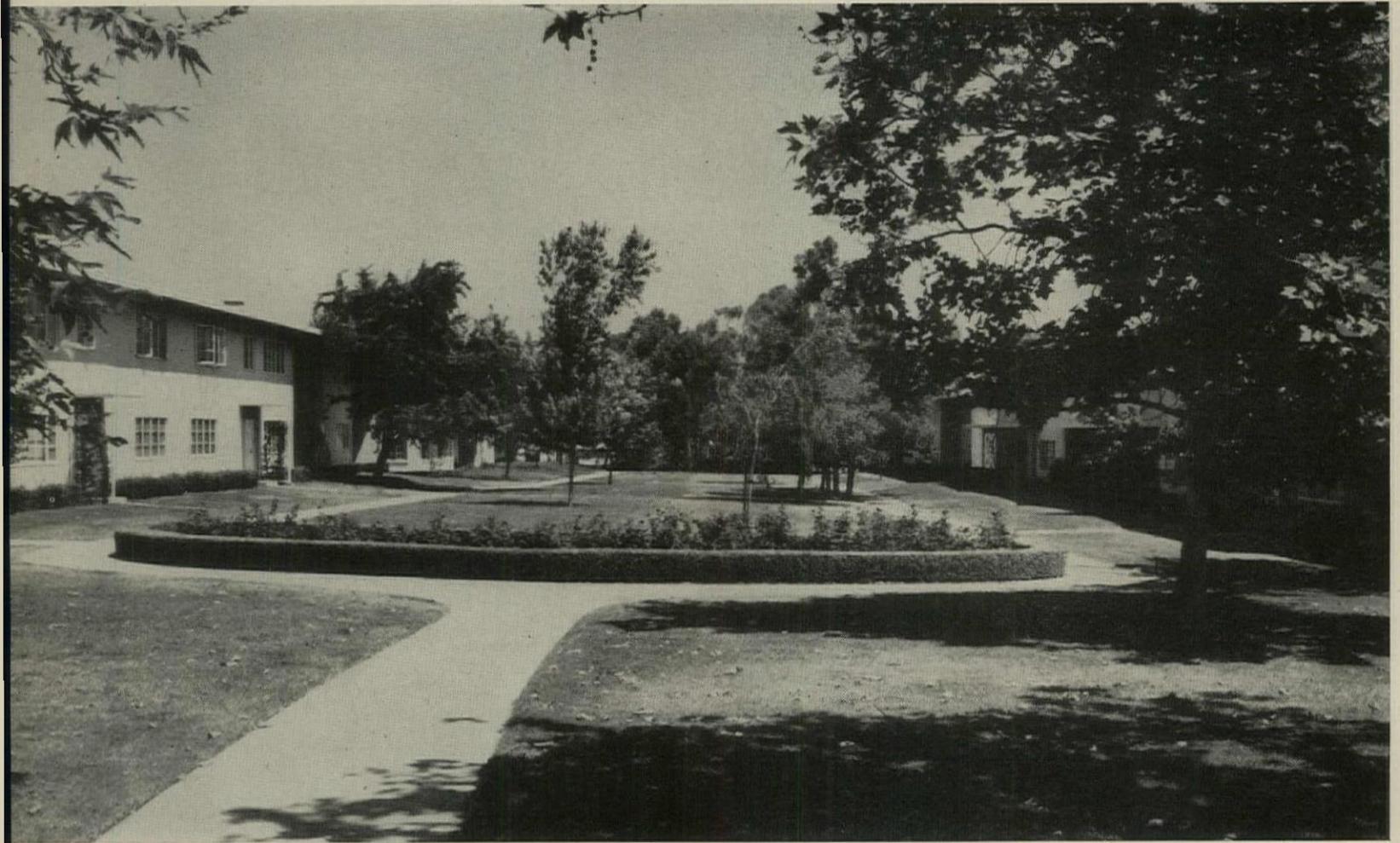


COMPARISON OF TWO PLANS prepared by Architect Arnold Kronstadt for steep hillside tract in Montgomery, Md. shows why it pays not to overcrowd land. First plan (above) called for 202 units in garden apartments that conformed with local zoning. Second plan (be-

low) called for 182 units in four-story buildings that did not meet zoning requirements. But Kronstadt urged second plan—and county planning commission approved it—because it requires less grading and filling, saves more trees, and simplifies parking and road layout.



continued



CLASSIC EXAMPLE of park-like planning, Baldwin Hills Village, Los Angeles, filled since opening in 1941, has two-year waiting list.

2. Don't make your garden all asphalt

You wouldn't think of letting a paved parking area dominate the landscaping of a single house. So why do it with an apartment? Of course, you need parking space and walks, but you can add a lot of warmth and appeal to apartments by leaving plenty of green area around them.

3. Don't waste premium space on parking

"Too much land is used for parking," says Architect I.M. Pei. "Autos bring blight. They are a blot on urban development . . . not good for investment. Your apartment may have all the conveniences, but it can be spoiled by a parking lot where there should be a landscaped area."

Suggests Webb & Knapp's Dave Slipper: "Don't guess about how much parking you need. Make a survey."

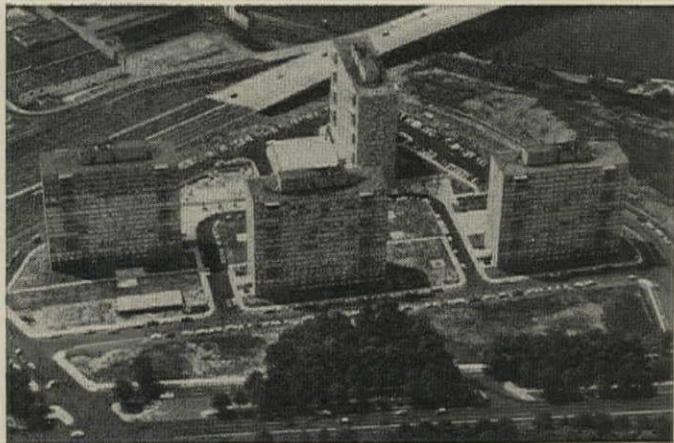
Webb & Knapp interviewed families in apartments facing Philadelphia's Rittenhouse Square, found that only 40% kept even one car in town. Result: w&k was able to persuade authorities not to require one-for-one parking in a new project.



UNDER BUILDING BUT NOT UNDERGROUND, this solution of parking problem frees open space for swimming pool at Burlingame, Calif. project. Architect: Mogens Mogensen. Builder: Douglas Pringle.

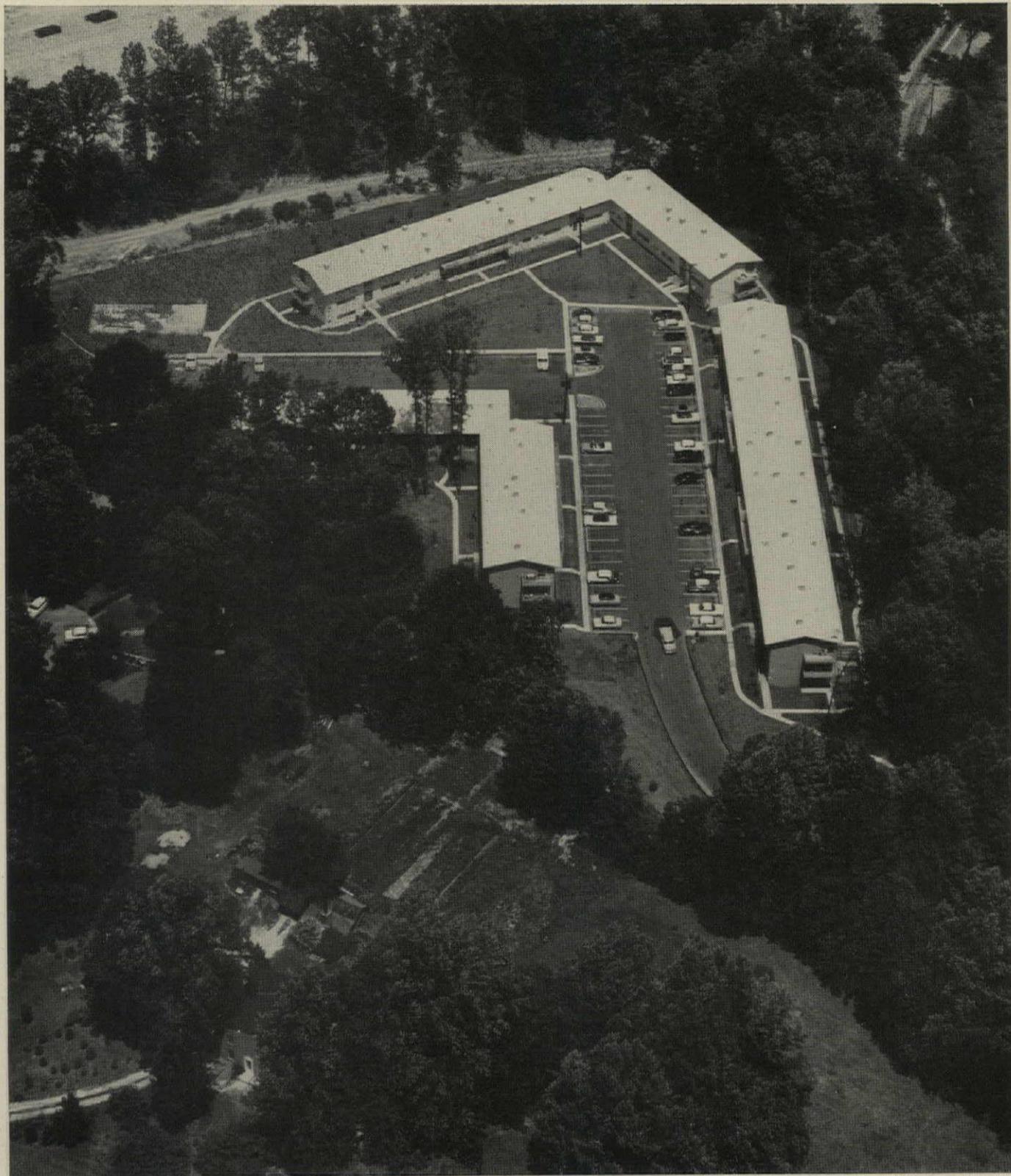
4. Don't dedicate your streets

Says Carl Freeman, builder of Nob Hill (below): "If you keep your streets, you don't lose control of them. You're not at the mercy of the municipality on parking, for instance. You can get more units on the site because dedicated streets are usually not included in the acreage count. And since you own the streets, you're not as tightly restricted by set-back rulings."



HIGH-RISE PROJECT in Philadelphia—Bernard Weinberg's and Harry Madway's Park Towne Place—has underground parking on two levels for 760 cars, plus surface parking for 300. Streets were not dedicated. Architects: John Hans Graham & Associates; Milton Schwartz.

LOW-RISE PROJECT near Washington—Carl Freeman's Nob Hill—has its parking areas on private interior streets.





Design your apartment to live like a house

If architects and builders keep this important advice firmly in mind, they won't go far wrong in apartment house design. From coast to coast the apartments that are renting fastest these days—and the ones that stay filled—are those that approach the good new houses in comfort and livability.

"To get people to stay in an apartment you must make them think of it as a home."

Architect Edward Fickett, Los Angeles

"At Webb & Knapp we believe the future of the apartment market is very big, but we are convinced that apartments have got to be a great deal more like houses in their character, space, and everything else than they have been in the last 20 years."

David Slipper, New York

"When people move into an apartment, they want a home."

P. C. Rowe, Curtis Companies

"To keep apartments occupied we must build into them enough quality, enough graciousness, enough quietness to compare with the attractions offered to owners of a single-family dwelling—a home. The standard of living has increased at such a rate that people will not be willing to live in apartments if they have to give up the conveniences of single-dwelling units."

Floyd Fennell, Universal-Rundle Co

"The closer you can get to duplicating the home atmosphere and what people want—which is a single-family house—the better off you are. Our most persistent demand from renters is for visual privacy and noise privacy."

Builder Raphael Silver, Cleveland

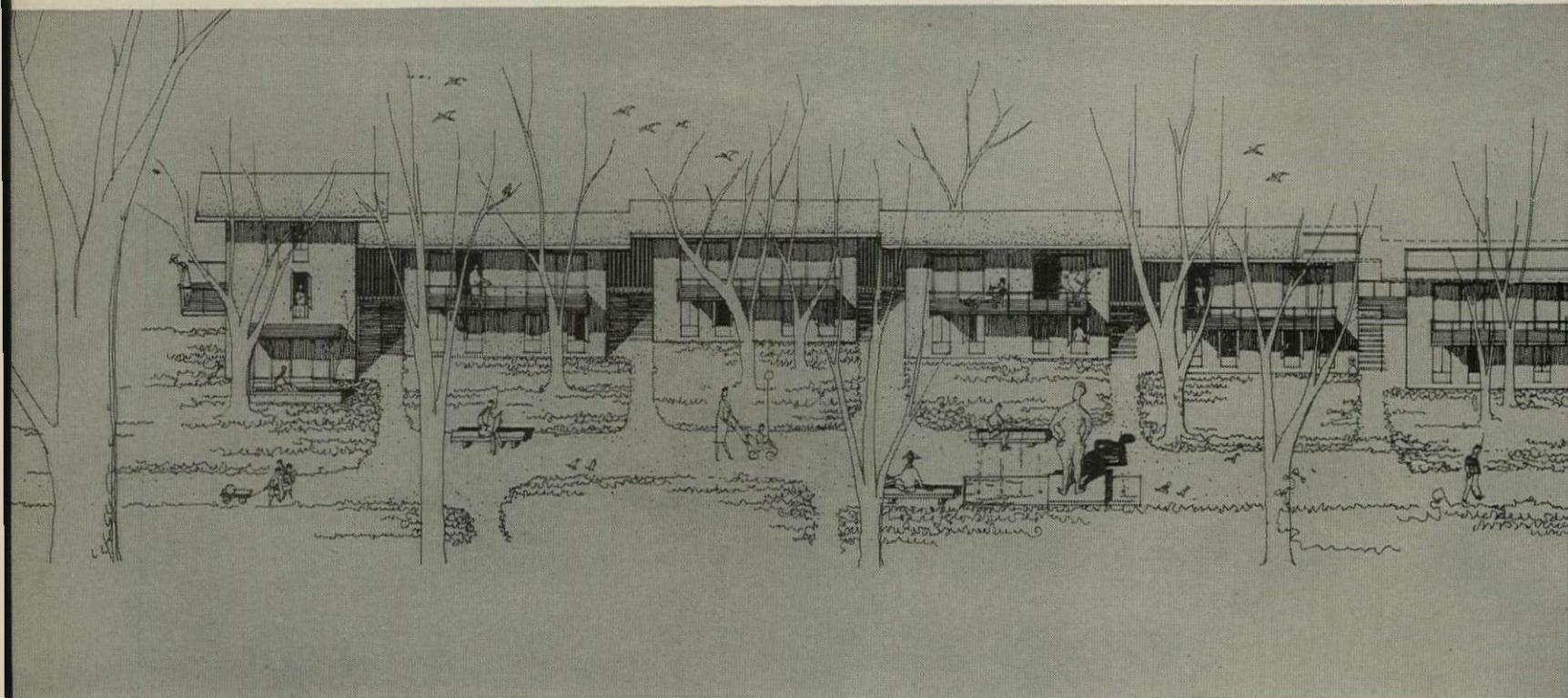
"I think we can hit it if we keep our eyes toward the single-family house and try to get as close as possible in design and arrangement to a single-family dwelling."

Architect Arnold Kronstadt, Washington

TWO-FLOOR LIVING makes this Bakersfield apartment like a home in appearance and comfort. Architects: Eddy & Paynter.

Julius Shulman

continued



BALCONY SIDE of Architect Barnes' Sacramento apartments shows how his walkways divide units and individuality to a long row.

1. Break up large buildings into smaller ones

People feel that small buildings are more like home than are large buildings—more intimate, personal, and snug. Dividing a long row of apartments into several shorter groups, as Architect Edward Barnes has done above, gets away from the impersonal big-project look. It also permits more variety in building pattern, color, and landscaping. John Mackay's apartment shown on the cover and below might have been two long rows of apartments facing each other. Instead there are eight buildings around two pleasant courts.

Morley Baer

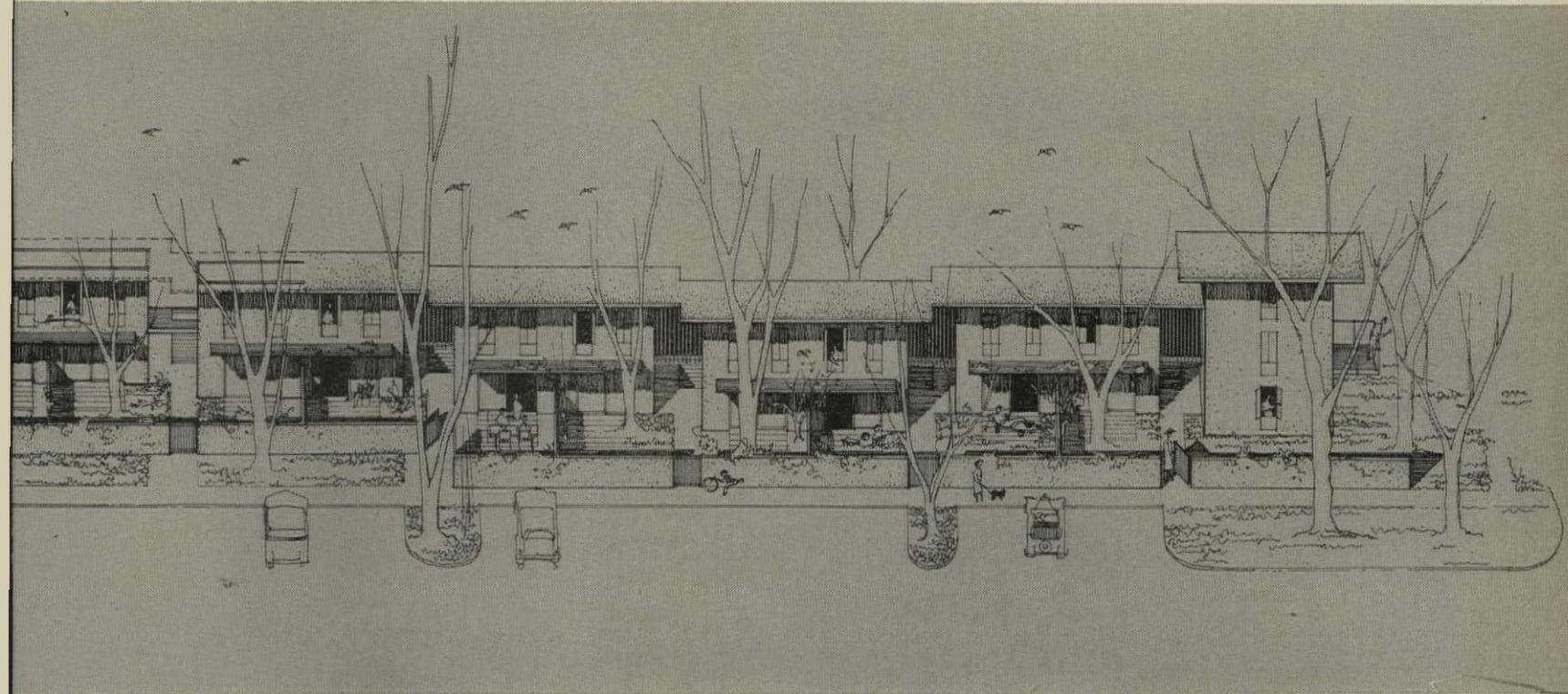


Julius Shulman



HILLSIDE APARTMENTS were divided into numerous small units instead of being concentrated in one long row in these L.A. apartments by Carl Maston. Note step-downs used for clerestory lighting.

SCREENED OPENING (center of photo) provides entryway leading to quadrangle formed by four similar units of Mackay apartments in Santa Clara. Stairways at right serve two second floor families.



PATIO SIDE of same apartments shows handsome facade and landscaping facing the street and parking area. Drawing below shows both floors.

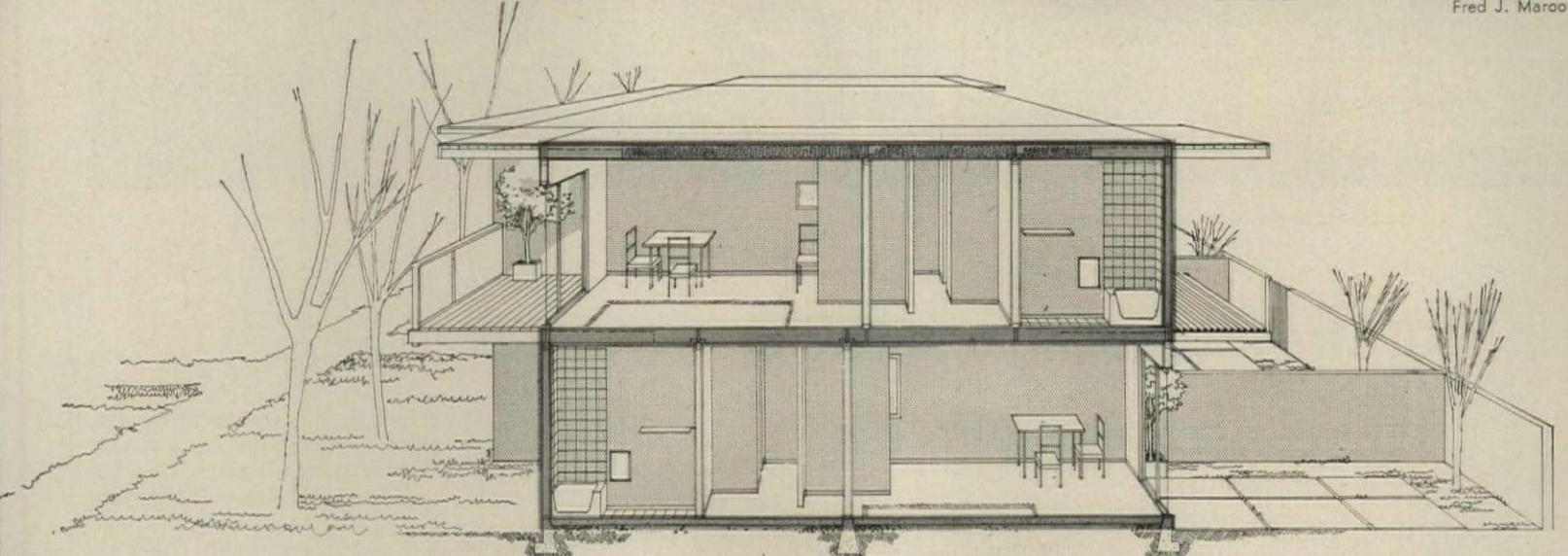
2. Give your buildings two fronts

If you put half your entrances on one side and half on the other, everyone feels he gets more individuality and privacy. Front doors are less crowded together, and if there is no back to the building it looks better and there is no garbage-can atmosphere. Architect Edward Barnes designed this two-way look (drawings above and below) into his apartments for James Scheuer in Sacramento, with the ground floor patio and entrance facing the street side and the second floor balcony facing the interior side.



Fred J. Maroon

BOTH SIDES are "fronts" in Carl Freeman's Nob Hill apartments (at right) outside Washington. This design lets Freeman give private entrances to more ground-floor apartments. Architects: Collins & Kronstadt.



"TWO-WAY LOOK" gives privacy to both families. Second-floor tenant has private balcony at left; ground floor has private patio at right.

continued

3. Give each ground floor apartment a private front door

Pope Studios



PRIVATE DOORS on each level give distinction and a feeling that "this is my home" to Randolph Parks' apartments. These entrances are on a large and nicely landscaped court which gives apartments privacy.

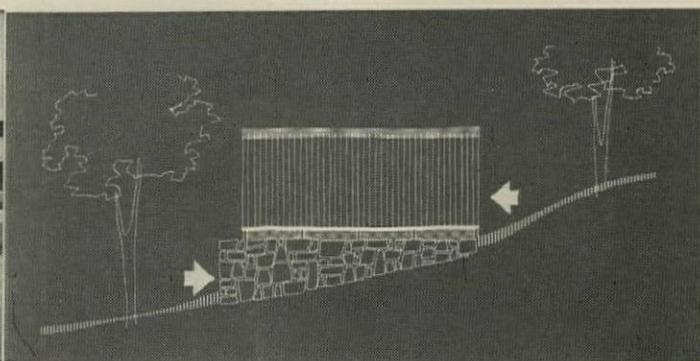
There is no quicker or better way to make tenants feel they are living in their own house. It provides the "private town house" feeling that New Yorkers get with their individual city houses. Builders like Randolph Parks of Sacramento credit private front doors for much of their quick success. (see photo at left). And one reason for the popularity of duplex apartments is their individual entrances. Here is an idea of proven success which will work in any area.

"We like to keep as many separate entrances as possible to follow the single-family living concept. People don't like walking down long halls past cells to get to their own cell."

Architect Arnold Kronstadt,
Washington

4. Try to plan private entrances on the second floor, too

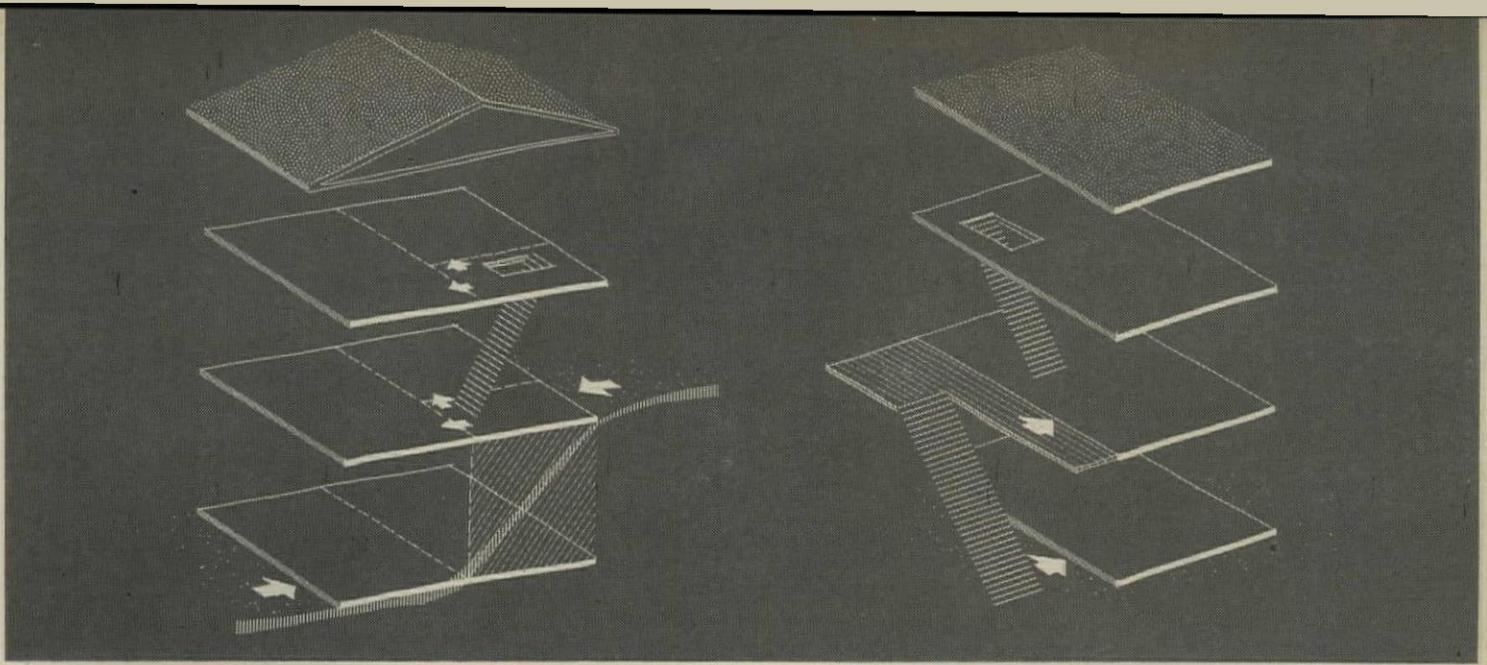
The strong appeal of the private front door works just as well on the second floor as on the first. It costs more because of the extra cost of stairs and balconies, but it is worth aiming at. In a cool climate, snow on open stairs is a problem. Architect Richard Keller of Cleveland has achieved several advantages in his new "penetrating court" designs. (see drawing on p 155.)



HILLSIDE APARTMENTS above were designed by Architects Sargent-Webster-Crenshaw & Folley for Hamilton College faculty members.

5. Take advantage of the slope to get two entrance levels

Hilly land offers many advantages for the apartment builder. One is that you can have front entrances on the low side and still run the apartments whose front entrance is on the high side right through the building. Another (and very profitable) advantage is that you get the economy of a three story walk up without making any tenant climb even ten feet to his front door. (See drawing on next page.)



FOUR-STORY DESIGN of Architects Collins & Kronstadt meets two-story zoning in the Washington, D.C. area because of inside stairs.

THREE-STORY PLAN with a duplex on top of a one-story flat is used to end the rows of two-story units shown in drawings at top of p 144.

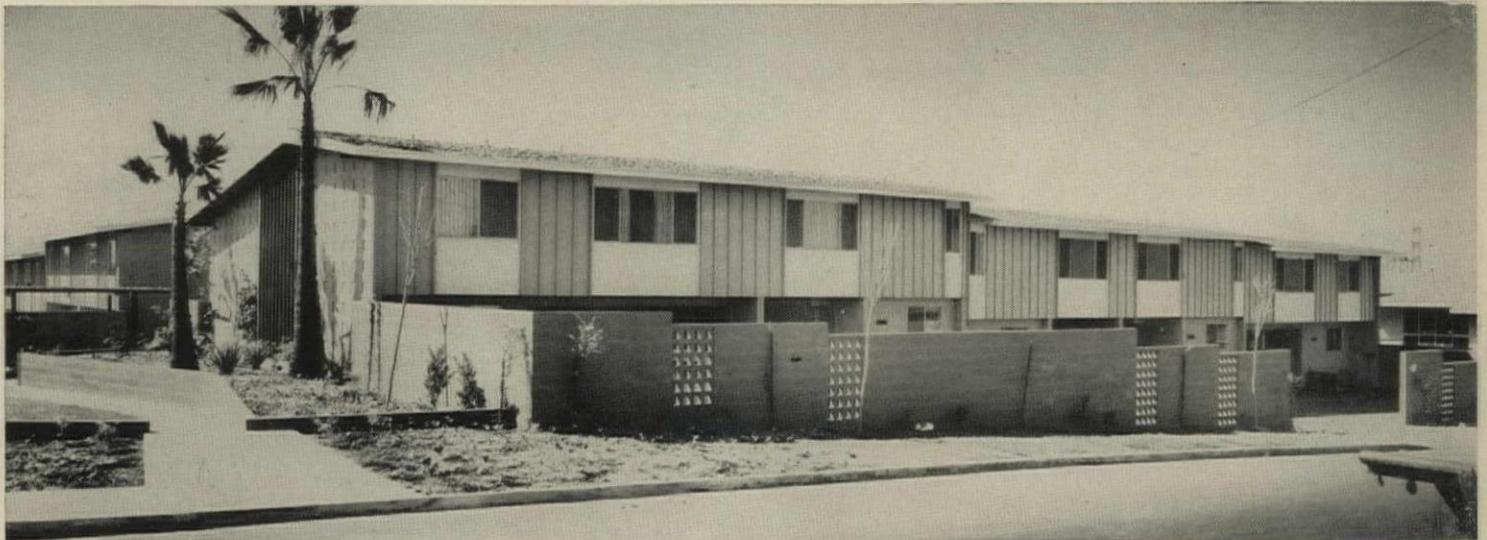
6. Consider the piggy-back duplex

"Why not build a 3-story garden apartment with the second and third floors set up as a duplex so that no one has to walk up more than one flight?"

Alexander Summer, past president,
National Association of
Real Estate Boards

One of the hottest new ideas in apartment design is the piggy-back duplex with its front door one flight up. It was developed in the area around Washington, D.C. to meet local zoning which limited non-fireproof apartments to two stories. With a piggy-back design, builders can meet this zoning with a three story building on level ground or a four story building on a hillside. The public stairway (on the high side) goes up only one floor. Stairs inside the apartment do not count, nor does the row of apartments with their separate entrances on the lower ground floor level. The drawing above left shows how this design works.

Julius Shulman



TWO-STORY LIVING is a feature of these apartments in Bakersfield, Calif., designed by Eddy & Paynter. Privacy wall close to street is a

decorative feature yet gives additional home-like feeling to families living here. These are the exteriors of apartment shown in photo, p 142.

7. Include some town-house apartments

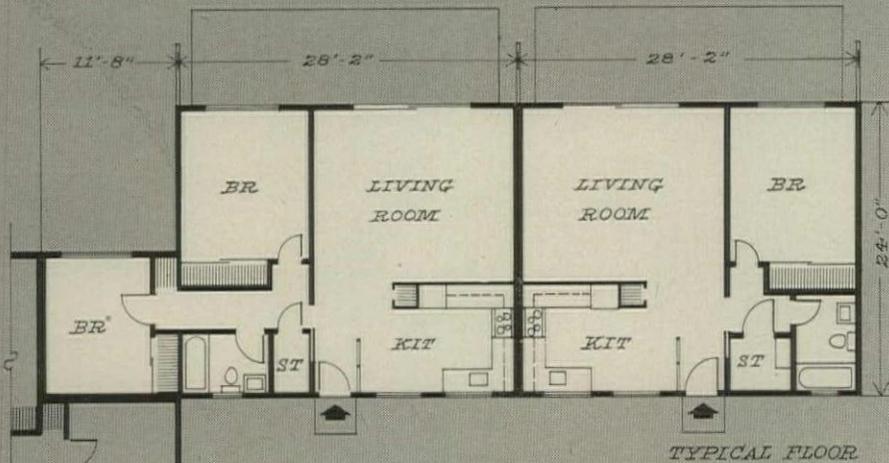
A "town house" is just another name for an old form of multiple dwelling: a plan with a private front entrance, living room, dining area, kitchen, and perhaps a family room and a powder room on the ground floor and bedrooms and a bath on the second floor reached by an inside stair. Chief advantage of this up-and-down plan is that people are enthusiastic about it. When builders George Holstein and Al Berger opened their huge rental project in San Diego they found their two-story town house plan was the run-away favorite. Says Dave Slipher: "You can always rent a duplex easier than a one-story apartment." Says Cleveland Builder Raphael Silver: "The fastest renters are the up-and-down type."

GLASS-FRONT DUPLEX was designed by Mies van der Rohe for Lafayette Park Community in Detroit.

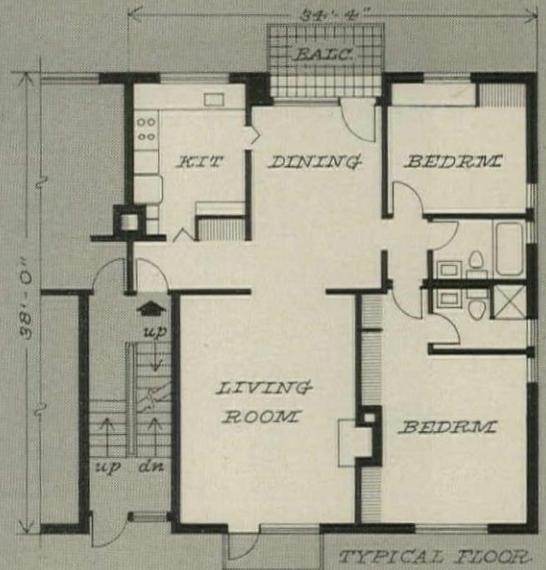


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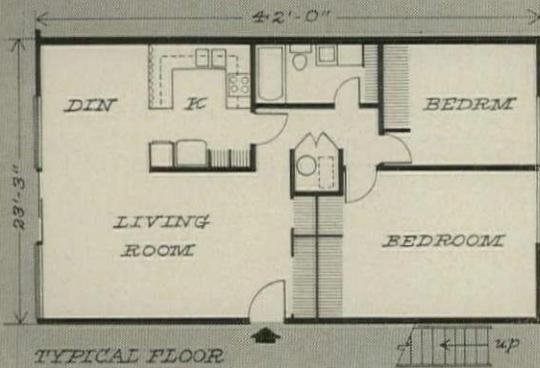
Livability



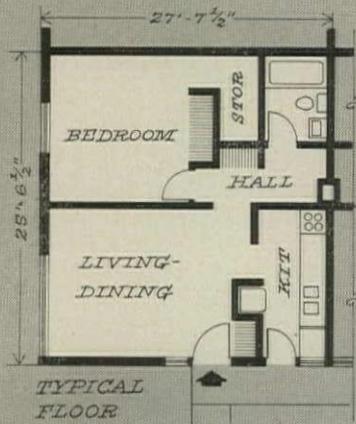
(A) ARCH: RICHEY & BROOKE
FOR: PRICE & KEYNOLDS
LOC: SACRAMENTO, CALIF



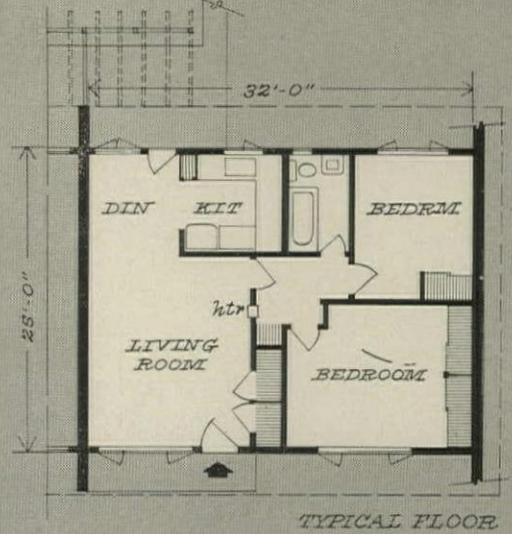
(B) ARCH: LEYES & LETHBRIDGE
FOR: FIDELITY ENG CO
LOC: RIDGEWOOD, N. J.



(C) ARCH: PALMER & KRISSEL
FOR: GEORGE HOLSTEIN
LOC: SAN DIEGO, CALIF



(D) ARCH: MEATHE, KESSLER & ASSOC
FOR: MT CLEMENS, MICH (LOW-
RENT PUB HOUSING PROJ)
LOC: MT CLEMENS, MICH



(E) ARCH: FRANK W GREEN
FOR: JACOBSON ENTERPRISES
LOC: SACRAMENTO, CALIF

8. Give each apartment a homelike plan

"A real merchandiser tries to meet every segment of the market, so I want my building to be as versatile as possible."

Builder Harry Madway, Philadelphia

"In Atlanta, renters want dining rooms even in small units."

Lewis Cenker, chairman,
Urban Renewal Committee, NAHB

"We would like the opportunity to play with the removal of a bedroom hall which, in a one-bedroom apartment, would either let us reduce rents or use that hall space money for a balcony, patio or something else. It's the cost of the hall I object to."

Architect Arnold Kronstadt,
Washington

"There is a constant demand today for larger apartments. In planning a project why not give more thought to flexibility that could be achieved by combining apartments — combining three and four rooms so you can have a seven-room apartment?"

Alexander Summer, past president,
National Association of
Real Estate Boards

"One of the shortcomings of the FHA room count is that it discourages you from putting in a full dining room. This room is needed to meet a big segment of the market. Our high-rise tenants first lived in a house in the suburbs, then in a suburban garden-type apartment and finally move into the center-of-the-city apartment house. Most of them prefer a full dining room."

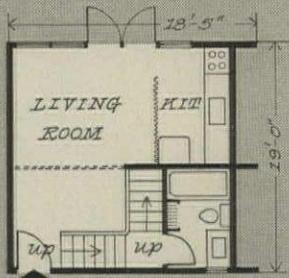
Builder Harry Madway, Philadelphia

"Those old FHA 608 apartment plans are all out of date," said one FHA District Director. "We don't use them anymore."

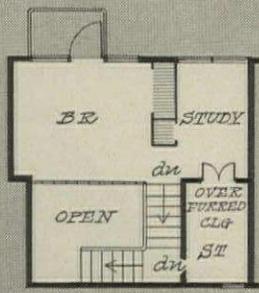
What are up-to-date architects using instead? Their new plans, for apartments are as different from old plans as new house plans are.

And the new apartment plans are getting more and more like the new house plans. Some new apartments are only one story high, like A above. Some of them have separate entrances to the living room or the kitchen, like E and F. Some of them (but not enough) have entrance foyers, like H and I and K and L. Some have fireplaces, like G. And lots of them are duplexes or even triplexes, so different activities can be well separated and a greater variety of activities can be included: individual laundries, recreation rooms, two or more baths, individual garages (like J and K).

So everything about these new plans is better: rooms are better sizes and better arranged, and the space within them is better planned for family living. The plans here show some of the best new ideas.

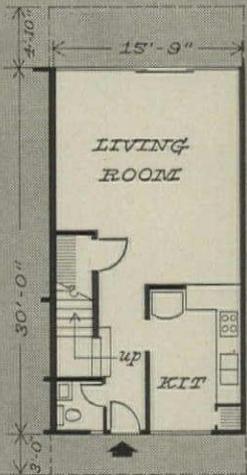


FIRST FLOOR

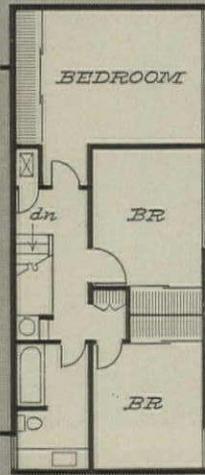


SECOND FLOOR

BLDK: E. SODERGRÉN
 ARCH: RALPH ANDERSON
 LOC: SEATTLE, WASH

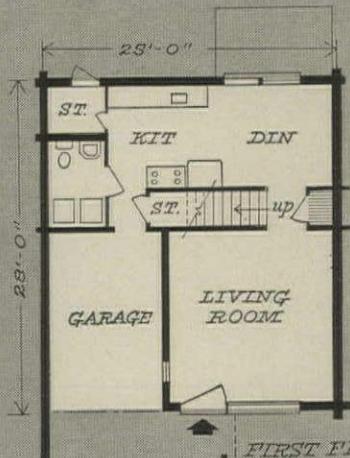


FIRST FLOOR

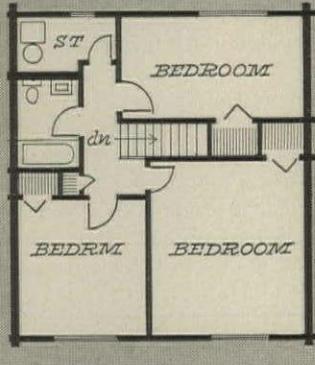


SECOND FLOOR

ARCH: PALMER & KRSEL
 FOR: GEORGE HOLSTEIN
 LOC: SAN DIEGO, CALIF

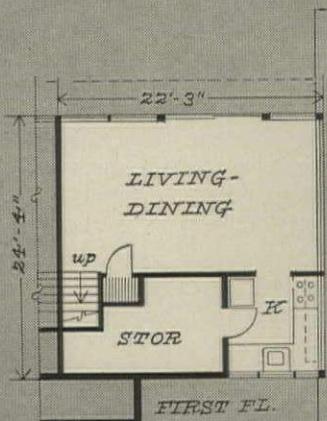


FIRST FL

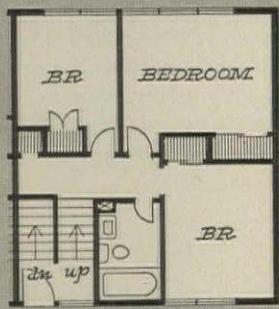


SECOND FL

ARCH: HARRY QUINN
 FOR: FACHSETTER HOMES, INC
 LOC: RIVERDALE, ILL

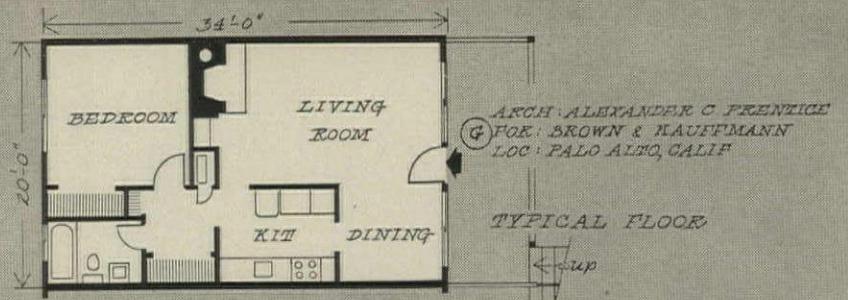


FIRST FL.



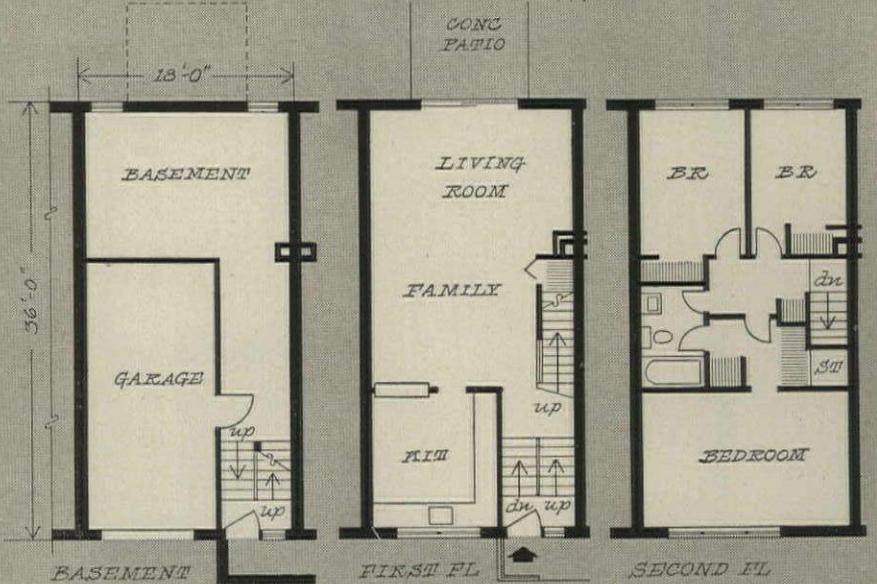
SECOND FL.

ARCH: SARGENT-WEBSTER-
 CRBNSHAW & FOLLEY
 FOR: FACULTY APTS, HAMILTON COLLEGE
 LOC: CLINTON, N.Y



TYPICAL FLOOR

ARCH: ALEXANDER C. PRENTICE
 FOR: BROWN & KAUFFMANN
 LOC: PALO ALTO, CALIF

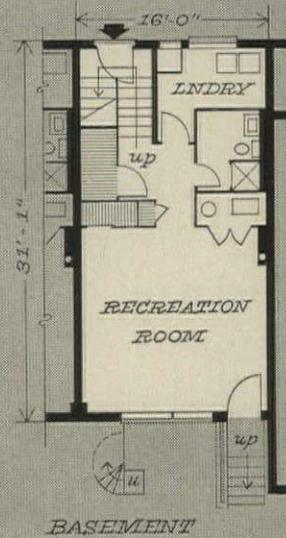


BASEMENT

FIRST FL

SECOND FL

ARCH: GEORGE HAY
 FOR: RIDLEY PARKVIEW HOMES
 LOC: DELAWARE COUNTY, PA

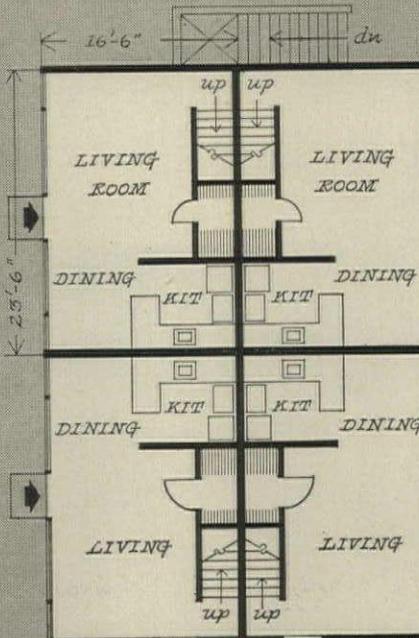


BASEMENT

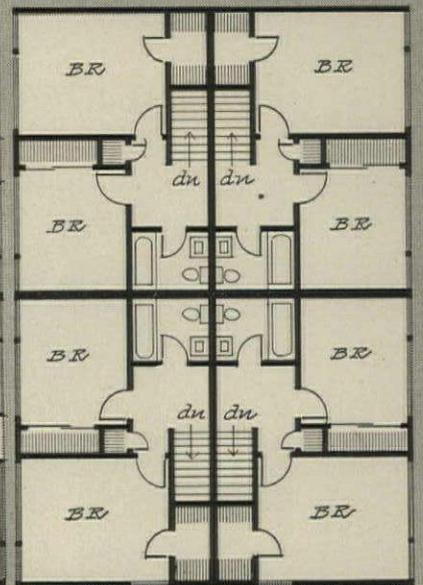
FIRST FLOOR

SECOND FLOOR

ARCH: SATTERLEE & SMITH
 FOR: FIRST NAT'L CAPITAL
 REDEVEL CORP
 LOC: WASHINGTON, D.C.



FIRST FL



SECOND FL

ARCH: JACK WOODMAN
 FOR: BELL & VALDEZ
 LOC: BELLEVUE, WASH



WIDE BALCONIES overlooking landscaped areas are one of the outstanding characteristics of Carl Freeman's Nob Hill apartments outside

Washington. Says James Gibson of John Hancock Mutual Life: "I know these apartments and they are some of the best for the price."

9. Give upper floor apartments private balconies for outdoor living

"In a quality apartment you create your own environment. You have privacy that doesn't depend on keeping venetian blinds down all day. You give them a home."

Architect Carl Maston, Los Angeles

Here is the above-grade equivalent of the private patio—if it is designed for privacy. It must be wide enough to be usable (FHA requires 6' wide and 12' long to get half a room count). It should look out on something pleasant—not just another balcony a few feet away. A balcony that is used by a dozen other families is like the front porch of a resort hotel. Builder Dick Price of Sacramento has solved this problem nicely with a public balcony along one side of his buildings and private balconies on the other side. An ingenious plan is in Jim Scheuer's apartments, p 145.

10. Give ground floor apartments private patios for outdoor living

Julius Shulman



One of the greatest pleasures you can give to renters is a place to sit outside. *Any* place of their own is good, but if it is private, so much the better. The private patio is a new trend that has caught on from Westchester County to California, and from Minneapolis to Florida. It attracts people in all climates. Even though small, it offers the same kind of outdoor living that a house does: a place for the baby carriage, for small children to play, a place for a sunbath, quiet drink, or even a barbecue. The photos show a variety of patios—each of which has been a drawing card.

PRIVATE PATIOS like this behind six- to eight-unit apartments are typical of Architect Carl Maston's work in L.A. Because plantings grow fast, renters soon have thick growth between them and neighbors.

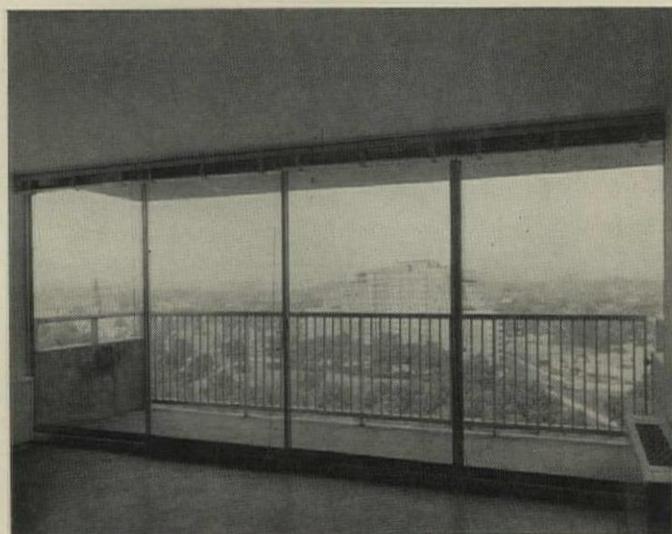


HANDSOME ROOMS like this, with big sliding glass doors to a private patio, are one of the reasons Carl Maston's apartments in Los Angeles

stay filled up year after year. "I don't crowd my lots and I give a patio with space to live outdoors and have a barbecue," he says.

11. Integrate indoor and outdoor living with big glass walls

The sliding glass door is becoming an open sesame for apartment owners as it has been for house salesmen. It is a symbol of the new kind of indoor-outdoor living that families want. If you have a patio or a balcony, it becomes twice as effective when divided from the living room with only a glass wall. Large windows or window walls are one of the chief attractions that are drawing renters out of old apartments into new ones. Most old apartments are dark and dreary and have living rooms that are a great contrast with those shown here.



SLIDING GLASS DOORS to big balconies helped these apartments to rent first in Carl Madway's Park Towne Place in Philadelphia. Excellent site, uncrowded buildings, and view of river all added to rental values.



WALL AND BENCH outside match wall and bench inside, help to make one big room in this glass-walled California apartment by Architects Buff, Straub, and Hensman. Plantings in tubs add to outdoor atmosphere.

continued



Morley Baer

LARGE LIVING-DINING ROOM is real luxury space and seems even larger because it has big floor-to-ceiling windows on two sides with wide balconies beyond. This San Francisco apartment was designed by Architect Michael Wornum.

12. Make your rooms a little bit bigger

"If you increase the room size from 150 to 200 sq ft your costs will not go up proportionately."

Architect Norman Schlossman, Chicago

"Lenders should look into room sizes, air conditioning, whether there is enough closet space, whether noise insulation is adequate."

Builder George N. Seltzer, Cleveland

"FHA is looking at these matters of quality—room size, acoustical treatment and other things—very carefully because we feel these do, in fact, increase the economic soundness of the project."

W. Beverley Mason, Jr., assistant commissioner, FHA

Livable apartments need rooms the same size as livable houses, but only the plushier apartments have rooms big enough to meet the minimum standards set by Metropolitan Life. (FHA room sizes are much too small. FHA accepts bedrooms too small for a double bed and counts a living room 13'x20' as two rooms.)

Making rooms a little bit bigger is the cheapest change you can make to improve a garden apartment, where added space can cost less than \$5 a sq ft. Even in high-rise buildings, added space is relatively cheap provided it is added to the depth of the room without increasing the length of exterior wall.

Stiller-Hunt



Morley Baer



OVERSIZE LIVING ROOM with fireplace gives this Spokane apartment great appeal and is the kind of attraction that persuades upper-income families that apartment life is good living. Architect, Bruce Walker.

PLENTY OF SPACE to walk around a double bed is a feature of Zuckerman & Morris' Sepulveda Park in Los Angeles, by Architects Harris, Rice, and Campbell. This is one of several model apartments.

13. Make your kitchens better and bigger

Morley Baer

The Cornell kitchen study and the Small Homes Council kitchen research both found 96 sq ft the minimum work space for a good kitchen, but FHA gives a full room count credit for anything over 60 sq ft, and too many apartments crowd close to this minimum standard. These tiny kitchens can seldom provide adequate wall space for adequate storage, adequate appliances, and adequate work area! The minimum kitchen should be big enough to hold a 10 cu ft or 11 cu ft refrigerator with adequate freezer capacity; a dishwasher-sink, and a four-burner range and oven, and it should be wired and piped for these appliances whether or not the landlord includes them in the rent. In garden apartments it should include a good garbage disposer.

Just about the biggest improvement in houses since 1929 is the improvement in kitchens, but too few of today's apartments provide the kitchen equipment needed, expected and taken for granted by older families moving to apartments from well-equipped homes, and by young people setting up housekeeping in apartments after being brought up in well-equipped homes. Says Robert Morgan, past chairman of the Mortgage Committee of the Savings Bank Association:

"We lenders know the women want better kitchens. We know it because the real estate salesmen have told us better kitchens are a must. We also know that most apartments have poor kitchens and we know you can't expect women to accept apartments with such poor facilities after what they have become accustomed to in houses."

Making a too-small inside kitchen big enough adds less than \$150 to the cost of a garden apartment, less than \$300 to the cost of a high-rise apartment.

"The people who wanted two bedrooms or more were really interested in the dishwasher. In some places you have to put in bigger waste lines for dishwashers. In others you don't."
Builder Harry Madway, Philadelphia

"A minimum kitchen should be measured by the storage space and work space provided rather than by floor area."
Architect Norman Schlossman, Chicago

"The tenant here is a shopper and can afford to live where he wants to. He is now in a position to be very choosy. So in our new apartments we are giving a lot of glamour, with bigger rooms, good kitchens with lots of cabinets and storage. We are trying to assure ourselves of as close to 100% occupancy as possible for the long pull."
Builder Alen Herman, Minneapolis

"The kitchens in our new apartments are just as important a merchandising feature as in our houses. So we do them right, with color, built-in stove and oven, a garbage grinder, a 11½ cu ft refrigerator, vinyl floor."
Brown & Kauffmann, Palo Alto, Calif.



LUXURY TOUCHES and an uncrowded feeling were given this Spokane apartment kitchen by Architect Bruce Walker who included wood cabinets, oak floor, ceramic counter, and built-in double oven.

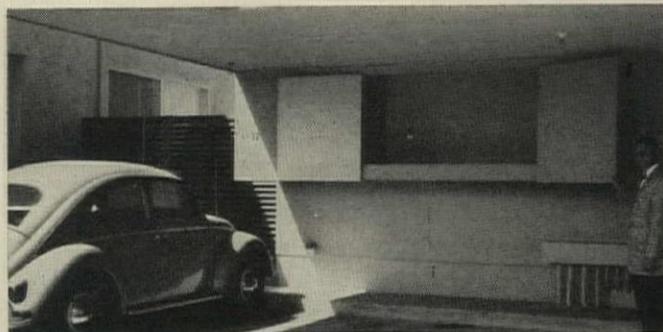
14. Put in plenty of storage

H&H staff

Lack of adequate storage is the No. 1 complaint against new housing and also the No. 1 complaint against most new apartments. In the Detroit area, Market Analyst Aaron J. Blumberg interviewed several hundred renters, asking what they liked and did not like about their apartments. Big closets and storage space were features nearly everyone wanted.

Where can people put their summer clothes and blankets in winter? Where can they put their winter clothes and overcoats and blankets and quilts in summer? Where can they put their sports equipment and cameras? Where can young couples put their wedding gifts and where can retired couples put their accumulations of 40 years? Better closets are more important in apartments than in houses, because houses are more apt to have added storage space in the cellar, the attic or the garage.

More storage space costs even less to add than more living space. Half the added storage your tenants need can be provided just by making the full height, the full depth and the full width of your storage space usable. (H&H, Sept '58). You can double the usable storage in a garden apartment for well under \$100, in a high rise for a little over \$100.



EXTRA STORAGE over car hoods is provided for apartment tenants of Zuckerman & Morris in Los Angeles. Architect Russell Harris.

"We don't like to see waste space but we do like to see ample closet space."
Irving Bjork, vice president
Conn. General Life Insurance Co

"We find that even if you offer people two bathrooms, two terraces, etc, if you don't give them enough storage space they won't rent the apartment."
Alexander Summer,
past president, NAREB

continued

15. Put in enough baths and make them good



Edward Saxe

STATLER HOTEL BATH packs good fixtures into minimum area (4'10" x 6'7"). Toilet does double duty as chair for vitreous china make-up table.

More than half of today's new houses have at least two baths; many have more; some lenders refuse to finance any new house with less than 1¾ baths. Builder Harry Madway, whose Parke Town Plaza is one of the year's best new apartments, found that 40% of his two-bedroom tenants would pay \$20 a month extra to have a bath for each bedroom, so he increased his equity to pay for the second bath even though FHA could give him no credit for it in his room-count.

But 95% of today's new apartments still have only one bath. And 95% of the appointments in those single baths are not good enough: the toilets are short-lipped and so noisy they can be heard in the next apartment; the lavatories are so small a man cannot wash his face in them without splashing water on the floor and a woman must use the kitchen sink to wash her hair; the medicine cabinets are too small to hold today's much bigger stock of medicines and cosmetics; the fittings are second-line and will soon give trouble; the walls and ceilings are only partly hard-surfaced, so they will need repainting every year; and the tub needs shower curtains for want of a metal-framed enclosure.

One big reason so few new apartments have enough baths and so few have good enough baths is that FHA's room-count formula (see p 184) gives no credit for even a single bath, let alone a second bath. And only the plushier, conventionally financed apartments are likely to set standards much higher than FHA requirements.

Making a too-cheap, single bath good enough would cost less than \$100 (See H&H, May, p 173); and a second bath back-to-back should cost much less than the first bath.

16. Locate baths inside...

If inside baths make sense for houses (as a growing number of good designers and builders say they do) they make even more sense for apartments. In deep apartments they can be tucked away on inside walls, leaving premium perimeter space and windows for living rooms and bedrooms. With no bathroom windows to worry about, architects can do a better job of designing exteriors, as small and non-matching bath windows often spoil a handsome front. Inside baths are actually better for tenants, as there is more wall space, more privacy from neighbors, more efficient exhaust of steam and hot air if you use an effective fan. See the plans on p 148 for ways various architects have located their inside baths.

"Too often a minimum requirement becomes a standard requirement which everybody puts in. Maybe the classifying should be sub-minimal, standard, status, and de luxe. Even the sub-minimum fixture will function, but most people wouldn't put them in if they knew the difference."

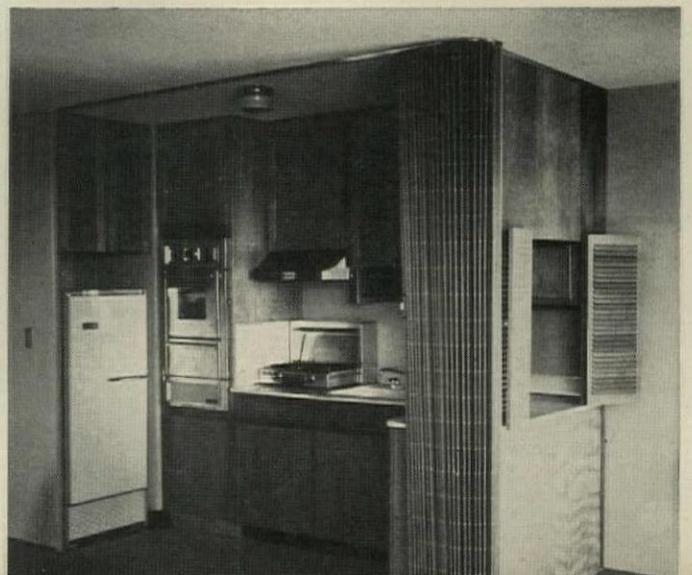
Floyd W. Fennell,
general sales manager,
Universal-Rundle Co.

"We build apartments with inside baths and with inside kitchens. People like them and ours are the most copied plans in the Washington area."
Builder Carl Freeman, Washington

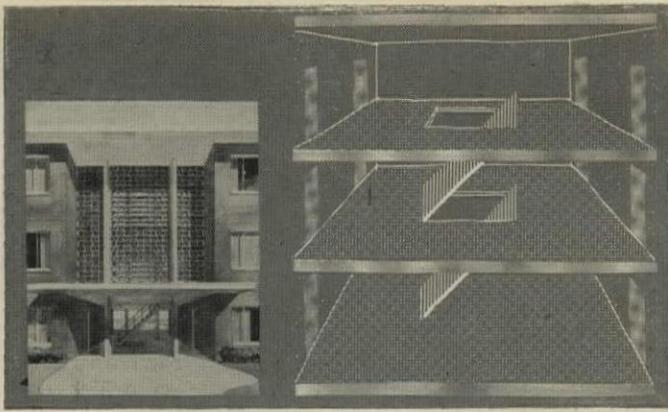
...and consider the inside kitchen

The inside kitchen also makes sense with many floor plans. For certain types of buildings an inside corridor is logical and "You should always plan your corridor to serve both sides," says California Builder Douglas Pringle. "This is more economical, as twice as many apartments share the corridor space. With this arrangement the best plan is to put the kitchen next to the inside corridor and give it a separate entrance, so the tenant won't have to carry food in and garbage out through the living room. If you light it well and make a nice kitchen, women will still like it, even though it's inside." See the floor plans for inside kitchens.

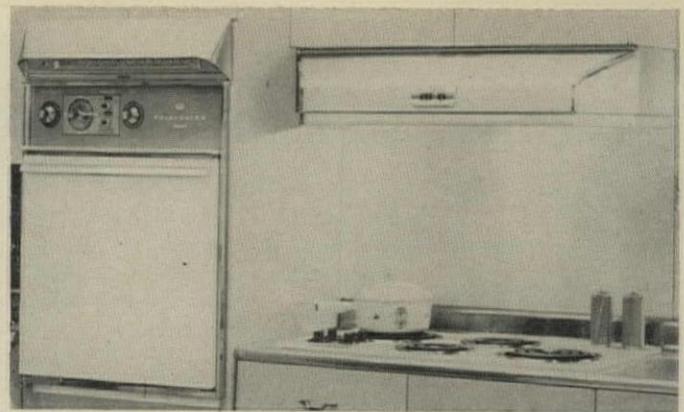
INSIDE KITCHEN is compact but has built-in refrigerator, foldaway stove burners, exhaust hood, ceiling-height cabinets and a folding door that shuts off kitchen. This is Alen Herman's Crestview, Minneapolis.



H&H staff



"PENETRATING COURT" APARTMENTS solve smell problem as each of 12 units has two exposures, door to outside entrance. Screened court design is by Architect Richard Keller of Cleveland for Raphael Silver.



CUT KITCHEN SMELLS with an effective hood over oven and larger hood over stove, thus removing both heat and smells at the source. Hoods are now standard equipment in most new apartments.

17. Make sure your ventilation is adequate

Proper ventilation is one of the most important and most neglected phases of apartment construction. Putting kitchen and bath in inside space makes good ventilation twice as imperative. All this is so new that too few builders understand ventilation and too few provide it. So many new apartments are muggy and close; too many smell bad; and too many apartment hallways are so full of cooking odors that you can tell as you pass each door just what the tenants will be eating.

Adequate ventilation requires adequate fan power—either small fans in each interior space to push exhaust air up the vent or big fans on the roof to pull it out through a central system. Either way it should cost only about \$100 per apartment more than inadequate ventilation, provided it is built in during construction. It costs a lot more to provide it as an afterthought—and still more if you fail to plan adequate vent space into your structure.

"The way to keep odors out of the halls is to make the air pressure in the corridors heavier."

William Gove, manager,
Multiple Dwellings
Minneapolis-Honeywell Regulator Co

"In our new penetrating court apartments no one gets anyone else's cooking smells because we have no inside corridor, every apartment has two outside walls and we have taken care of the ventilation problem."

Architect Richard Keller, Cleveland

18. Plan for air conditioning—now or later

"Air conditioning has become such an important part of modern living that in a few years' time in many parts of the country the home without it will probably be considered obsolescent," says FHA Commissioner Julian Zimmerman. For apartments air conditioning is even more important than for houses, because few apartments have cross ventilation and more apartments are built close in, where city soot and dust are a problem. In Minneapolis, where residential air conditioning is found in only the more expensive houses, Builder Alen Herman says, "I'm putting air conditioning in my new

apartments because I know people want it and it is one more way to help me keep my buildings fully rented in the future." In Sacramento, where few houses have air conditioning because nights are generally cool, Randolph Parks says, "All my new apartments are air conditioned and I know this helped me to rent my units fast.

If your budget is too small to permit the economy of installing air conditioning during construction, you can still save later expense by putting in the wiring and piping now and leaving plenty of space for ducts and ventilation.

"If you don't build an air-conditioned building, you're at least guilty of some degree of obsolescence. Where you just put in window units you are doing as good a job as you can for the money. I'm sure everybody would like to build quality if they could figure out how to do it at a price that meets the market."

Otto L. Nelson Jr., vice president
New York Life Insurance Co

"In our slum-area urban-renewal job in Cleveland we put in through-the-wall units with this feeling: that any apartment building—whether it be redevelopment or luxury type—would be obsolescent within a few years if it didn't have air conditioning."

George N. Seltzer, Cleveland

"In New York, apartment air conditioning has made a great breakthrough. The ARI is going to assemble information on the economics of air conditioning: increased rentals, reduced turnover, rentals with and without air conditioning, maintenance costs, etc. Equipment standards set up by ASRI are being used now and we are doing all we can to set up more standards. They are being enforced through a certificate program."

Ray Serfass, chairman,
Merchandising Committee, ARI

19. Insulate as you would a home

In Detroit, surveys of what people don't like about their apartments showed that high on the complaint list is "draftiness" and "need for more insulation." People were cold and didn't like it. This is also a frequent complaint in warmer climates of the South, Southwest, and West Coast where renters suffer during cold snaps. Adequate insulation in side walls and

roofs pays off in added comfort both in winter and in summer. It pays off many times over in reduced heating and cooling bills over the years. Roof insulation is particularly important.

Adequate insulation is one of the cheapest forms of comfort an owner can offer his renters. The cost is peanuts compared with the return.

continued

20. Build in some peace and quiet

Today's apartments are full of electric noise-makers but few of them muffle the noise with acoustical panels and most have flimsy party walls that reduce sound transmission by less than 40 decibels. This lets nearly three times as much noise through the walls as FHA's theoretical 45-decibel standard and ten times as much noise as the 50-decibel standard enforced in England. So most renters have to listen to three TV programs—their own and the programs on either side and some times the programs above and below too. Many tenants can hear conversation right through the walls. When Market Analyst Aaron J. Blumberg asked several hundred Detroit apartment families what they disliked about their present apartment, the No. 1 complaint was about hearing noises from other apartments.

With frame construction, adequate sound privacy from floor to floor requires either rugs on the floor, or a cushion under resilient sheet flooring, or heavier floors or ceilings suspended from resilient clips.

Adequate sound privacy on either side is best achieved with solid masonry walls, for noise-transfer attenuation is primarily a function of mass. Second choice (with frame construction) is a pair of two completely separate walls set in separate plates and headers with the studs staggered. Between the two walls is placed a sheet of blanket or fiberboard insulation which is *not nailed*. This framing can be covered

with wet plaster on wire lath or plaster board, or by at least 5/8" drywall and preferably 3/4" or 1" laminated drywall, fastened to the studs with adhesives and a minimum of nails (because nails carry sound vibrations deep into the walls). See drawing (p 164) for one type of such wall.

Adequate noise reduction inside each apartment usually requires acoustical tile on the kitchen ceiling and part of the kitchen walls to muffle the racket of dishwashers, garbage grinders, and other appliances.

Noise control should begin on the drafting board, with the architect planning room arrangements so that whenever possible, kitchens back up to kitchens, baths to baths, living rooms to living rooms, and bedrooms to bedrooms. Walls of closets next to party walls make an effective noise barrier. A revolutionary new lightweight wall panel to stop noises is being developed by Bolt, Beranek & Newman of Cambridge, Mass. For details see *N&H* next month.

None of these noise-control methods is expensive. Builders can cushion sheet flooring for 20¢ a sq ft. They can erect laminated 3/4" drywall for about 4¢ a sq ft more than 1/2" drywall, and they can buy 1" blanket insulation for about 2¢ a sq ft. FHA lets builders finance carpet for apartments under the mortgage or they can rent carpets for as little as 17¢ a sq yd per month which is less than \$3 for a 12'x12' living room rug and about \$2 for a 9'x12' bedroom rug.

"We have carefully staggered studs and we isolate the plates. We even put the plates on caulking compound so that we don't have any transmission within the floor. We use wood-block flooring and lay it in mastic. Because the floor floats in mastic we get better sound isolation."

Architect Arnold Kronstadt,
Washington

"We recognized the noise problem and tried to solve it in the big FHA project in San Diego. Most noise travels vertically and in many of the units we solved it by our two-level apartments, with the bedroom upstairs. People don't mind as much hearing their own noises."

Architect William Krisel,
Palmer & Krisel, Los Angeles

"In the design stage noise control does not cost much but mistakes are hard to correct after the building is finished. A checklist of danger points would include whether the medicine cabinets in different apartments are back to back, whether the plaster stops short of the floor, whether there are holes in party walls for electric outlets, whether the elevator shaft is properly insulated."

Paul Washburn, president,
Acoustical Materials Assn

21. Provide adequate wiring with plenty of good base plugs

"We put 14 electric wall plugs in the living and dining area of our apartments, six in the bedroom, and six in the kitchen. People want lots of outlets and we provide them."

Builder John Mackay,
Menlo Park, Calif.

"We're getting to a point in this country that no matter where you live, air conditioning is going to be a necessity. There are plenty of reasons why apartments are more mortgagable and worth more if they are air conditioned."

Architect Norman Schlossman,
Chicago

"Paying 75¢ more per electric switch will save thousands of dollars later. We spent from \$5 to \$10 an apartment for better plugs, outlets, and switches. We spent more on lighting fixtures and they last longer."

Builders Hebb & Narodick, Seattle

"When you are building you can install sufficient wiring at much less expense than you can add later. The electrical load today is no longer in just one portion of the apartment—it's all over, bedroom, kitchen, bathroom. It is going to be more so every day. In evaluating wiring for a living unit it should be done on the basis of power capacity per square foot."

Howard Stevenson, chairman,
Industry Committee
on Interior Design

"We have found that families are using a terrific increase in the amount of electricity. We've learned that what we thought was ample at one time is increasingly not ample today."

Otto L. Nelson Jr., vice president
New York Life Insurance Co

Demand for electricity in homes has increased nearly four-fold since 1946, but four out of five new apartments are still wired to 1946 standards. For efficiency units 60-amp service may be enough, but anything bigger needs 100 amp, with two heavyload circuits in the kitchen and with three-wire service all around the perimeter to permit unit air conditioners. Apartments need more base plugs per foot of wall than houses, because all the same electrical appliances and gadgets may be crowded into a more compact space. (FHA accepts a single outlet behind the beds, where many families try to plug in as many as twelve small appliances and lamps!)

Adequate wiring can cost less than \$50 more before the walls are closed in, but will cost many times that much to add later. New York Life has had to spend thousands of dollars this year to modernize the wiring in its Fresh Meadows apartments, which were considered the latest word in 1949. Utilities in Chicago, Detroit, and other cities are beginning to assume all or part of the cost of bringing adequate current to the service drop of single-family houses. Specification-grade devices with two-side contact will require a lot less replacements and cost a lot less in the long run.

"Why don't more builders, contractors and architects use the know how, the materials, and the products that are available? Wood, steel and aluminum all have a place in the apartment if you fit them in as they should be used."

T. C. Carter, General Bronze.

"**ENGLISH BASEMENT**" (right) gets crisp treatment in John Paulson's Minneapolis units.

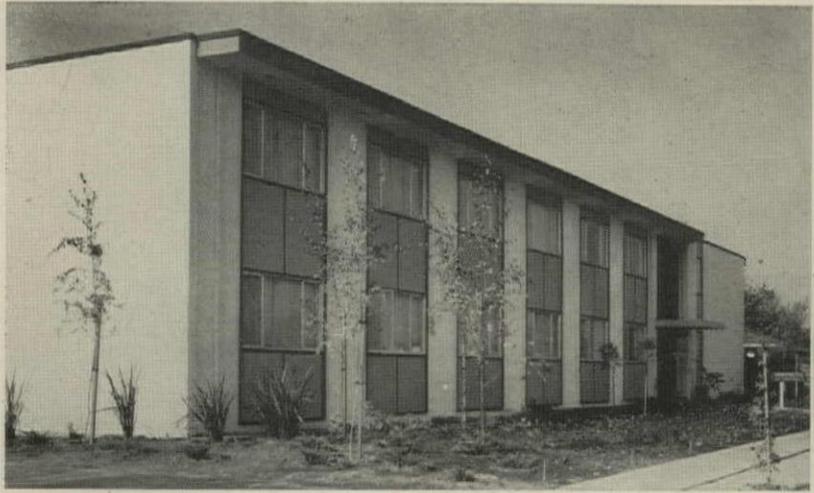


H&H staff

Hedrich-Blessing



HANDSOME HIGH RISE is Architects Loeb, Schlossman & Bennett design for Chicago's Prairie Shores Apartments.



Dell Carlo

PANELIZED LOOK was given this David Bohannon apartment in Santa Clara by Architect Mogens Mogensen's use of patterned concrete blocks, vertical stucco panels, and asbestos cement squares.

22. Be sure your buildings have the new look

"We use an oversized brick that is light colored and sand finished which looks better but costs no more in place than common brick. We think the big brick makes buildings look smaller and more like houses."

Architect Arnold Kronstadt,
Washington

"People who wouldn't buy a contemporary house like contemporary-apartments. Our next buildings will be even more contemporary."

Builder John Mackay,
Menlo Park, Calif.

Apartments with a fresh new look are the ones that rent fastest. "Nine times out of ten a builder is too tight to spend money where it is most important: on exterior eye appeal," says Hebb & Narodick of Seattle. "People ask themselves, 'What will our friends think of this building?' So we pay for expensive brick and a fine entrance."

To give identity to their apartments other builders use stainless steel panels, aluminum panels, colored porcelain enamel and other attractive curtain wall materials used in big buildings. Continuous windows are another feature that make a building stand out. While Colonial and other traditional architectural styles are still strong in one-family houses, the trend in apartments is strongly to contemporary.

A big roof overhang will give your apartments a long low look, shading upper-floor windows and keeping rain off walls.

Thomas Airviews



CINDER BLOCK EXTERIORS, with each building painted a different color, gives a fresh look to Alfred Levitt's apartments near NYC.



H&H staff

"**CONTEMPORARY DESIGN** attracts renters who would never consider buying a contemporary house," says Minneapolis Architect Hal Fridlund, who designed this 22-unit apartment for Builder Forest Bjork. English basement is economical to build.



Cut apartment costs by using the same cost-cutters that work for houses

Today's house building, as practiced by the best production builders and architects is much more efficient and much more economical than any other type of construction in America.

It is much more efficient because it is more highly industrialized, so the house builders can use standard shop-fabricated components sized to fit together with a minimum of costly on-site labor. It is much more efficient because every operation has been time-studied. It is more efficient because needless pieces have been detailed out. So house prices have risen far less since 1950 than land prices, material prices, money costs, and wage rates, whereas school costs, hospital costs, store costs, and office building costs have soared up and up.

Now these same smart house builders and architects are carrying over into garden-apartment construction the efficiency methods they learned building detached houses. They are building apartments as they would build big houses (which cost much less per sq ft than small houses—H&H, Sept '58). They are using slabs, trusses, tilt-up, wallpanels, window panels, pre-assembled plumbing, and all the other cost-cutting techniques of volume house building.

And they are getting construction costs so low they do not dare reveal the figures—construction costs that may even be as low as \$8 a sq ft.

"We used to build houses, but we gave them up for apartments—we like to build them better. And we can often build apartments for as much as 25% less per sq ft than houses. Just as often it will be not quite 20% less, and the average is 20% less. The economies we get should work out about the same anywhere in the country."

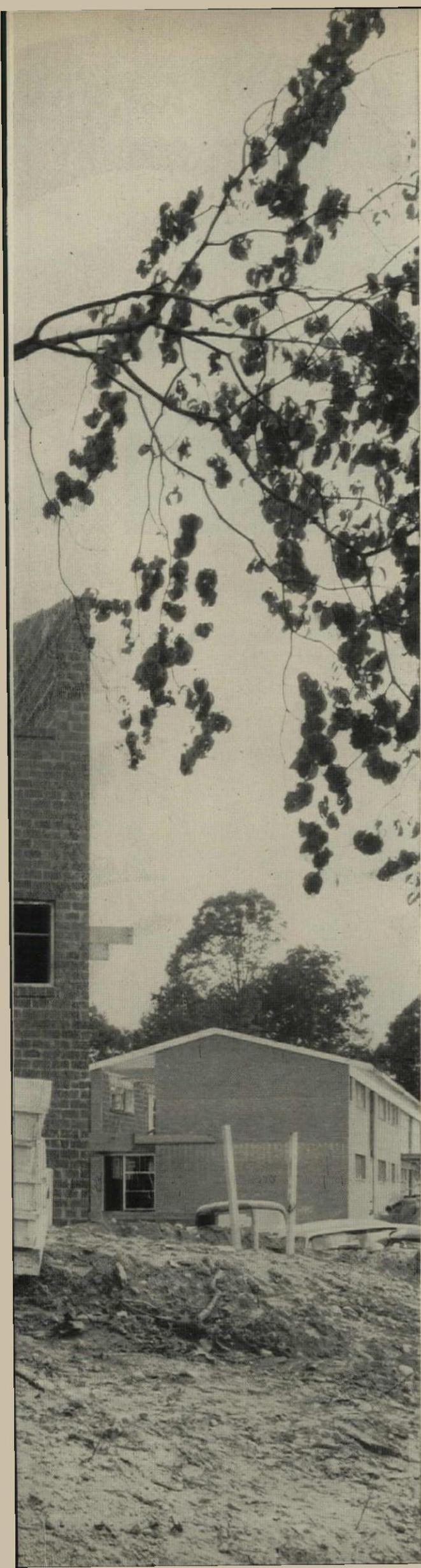
Bill Troth, builder

"A house builder has advantages over a big contractor not used to houses. The big contractor tries the same sub—such as the plumber he used on big heavy construction—and they seldom know how to install plumbing in houses cheaply. House builders use the same subs for apartments as for houses. And house builders are more used to handling all the little details required in houses. They can coordinate all the contracts and keep a whole lot of subs going together—important because you actually have more subs working on apartment jobs than on big buildings."

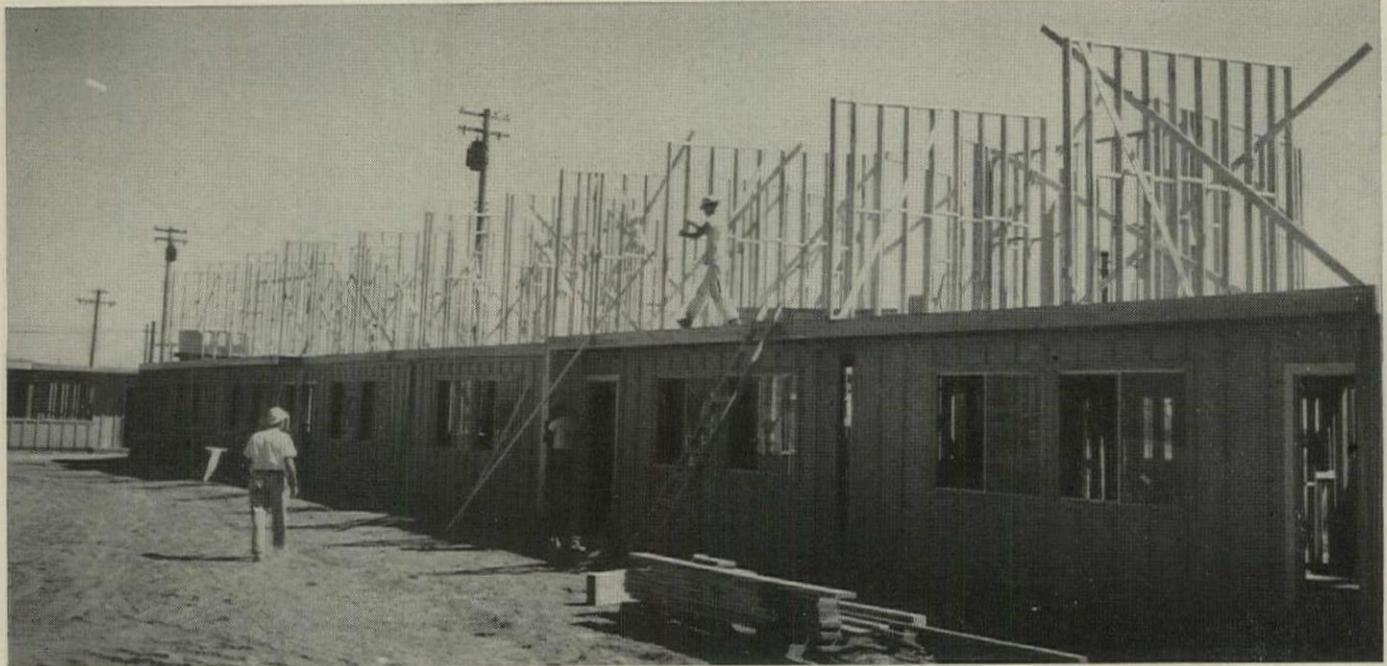
Harry Quinn, architect

PRE-FAB WINDOW WALLS are stacked up before installation in Nob Hill Apartments in Montgomery Co., Md. Apartments were designed by Collins & Kronstadt for Dreisen & Freeman.

continued



Fred J. Maroon



SHOP-MADE interior walls are braced in place. Builder John Jacobson also shop-fabricates exterior walls, puts them in place with siding on.

1. Build with shop-made panels

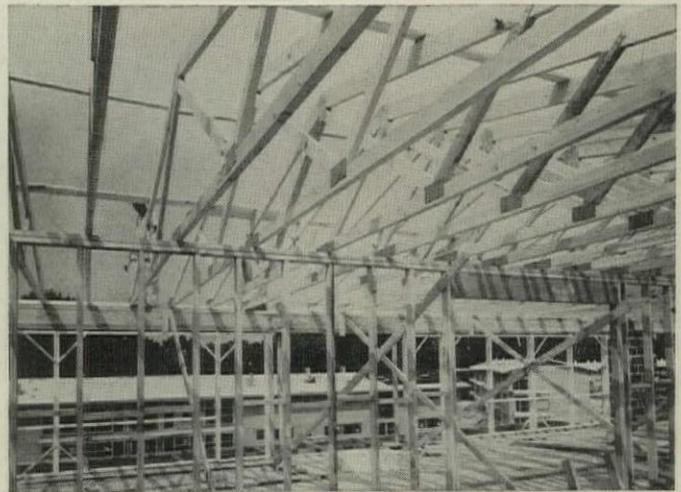
It makes good sense to shop-fabricate both exterior and interior panels for apartment houses, and put them into place with hoists and tilt-up construction. And when you are building enough apartments in one area, it makes even better sense to put the shop right on the site, make the panels close to their point of use.

2. Prefabricate big parts

Big components cut costs because they cut the number of pieces to be handled. And says Architect Arnold Kronstadt: "They give you more control over your men. A carpenter who goes into a building to trim out doors might be there all day, but with prehung doors, he has to be out in half an hour and onto the next job."

TRUSSES at right are in two-story apartments like those in background. On 2' oc spacing, trusses form overhangs as well as roof structure.

Fred J. Maroon

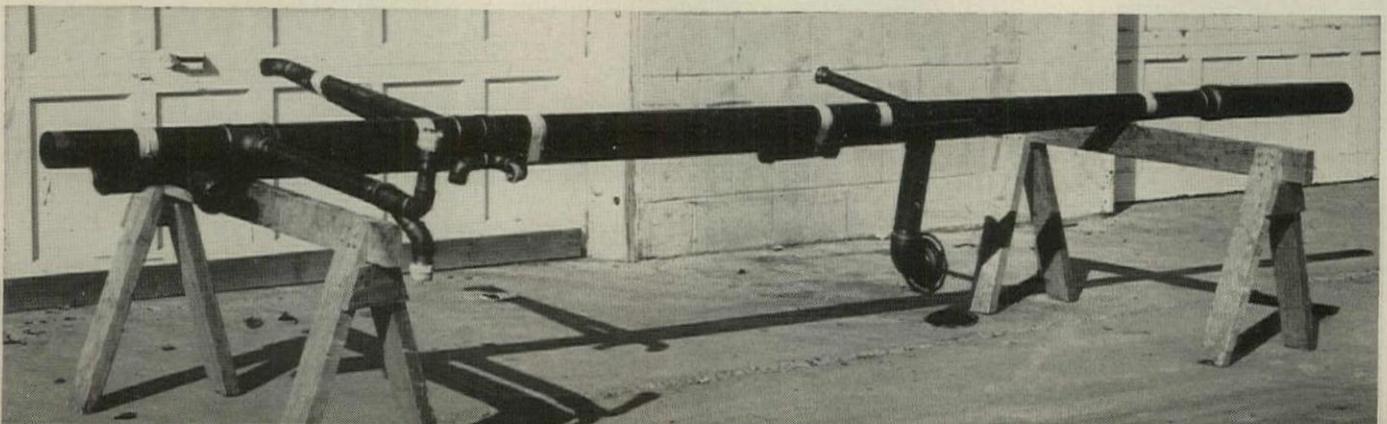


3. Use a prefab plumbing tree

Unions that raise all kinds of trouble if you bring plumbing prefabbed off the site will sometimes (as in Chicago) let subs do the prefabbing right on the site itself. With no distance to travel, plumbing can be prefabbed in even larger sections. With prefabbed plumbing, keep kitchen, laundry and bath centralized.

Phillips

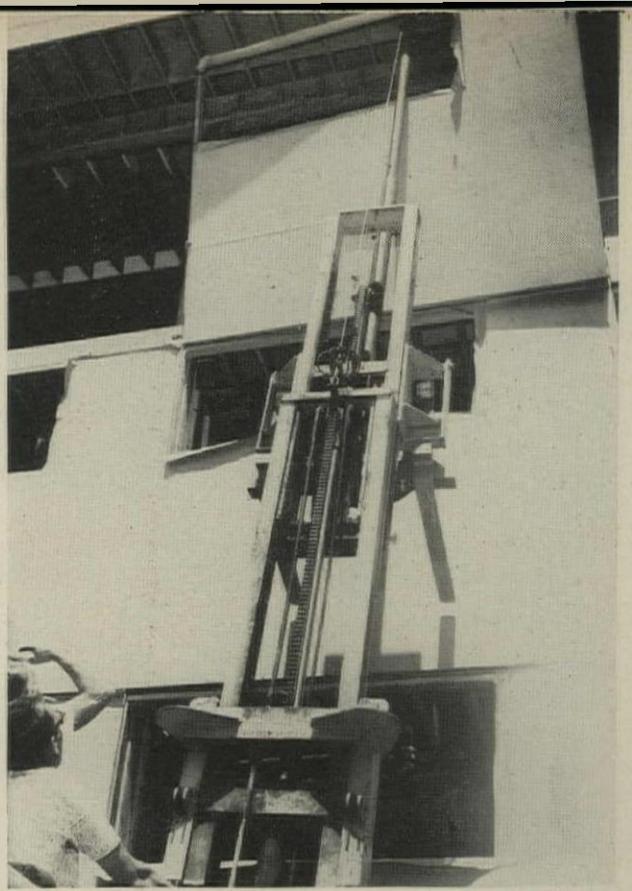
TWO-STORY STACK for waste and vent was site-assembled, is ready to be lifted into place.



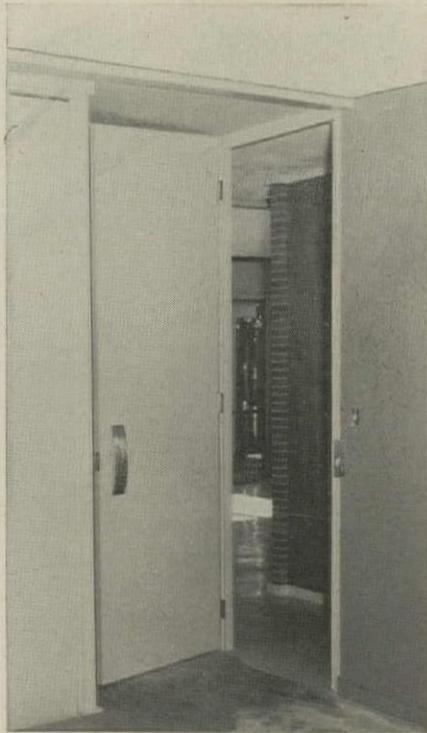
4. Mechanize your materials handling

With most garden apartments going to two and three stories in height, it pays even more to mechanize materials handling wherever you can. You wouldn't do your grading with a shovel, so don't rely on old-fashioned handpower to put the parts of your building in place. Swinging a truss up two or even three stories by hand is as expensive as it is slow.

PREFABBED PANELS of plywood with a plastic overlay are being hoisted into place as exterior walls for residential buildings at Squaw Valley, site of Olympics.



Tom Vano

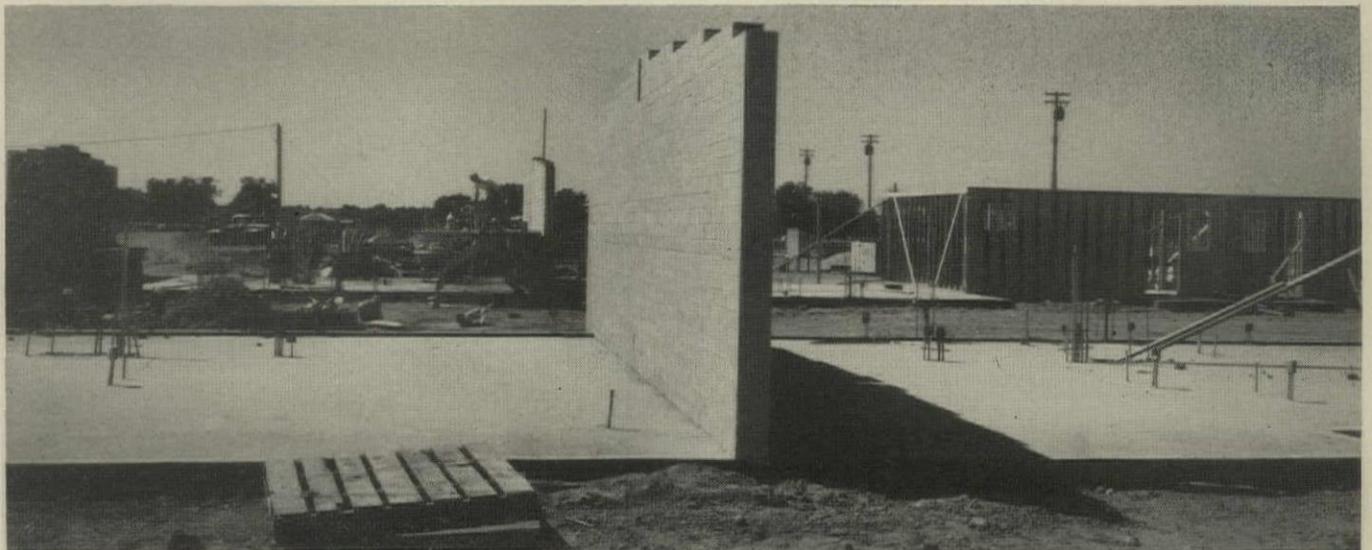


5. Carry your door panel right up to the ceiling

It omits extra furring, so the oversize door pays for itself. And with plaster walls, running the door to the ceiling is one way to prevent plaster from starting cracks at an angle from the corner of the door frame. Another way to prevent this: set the door in a panel, so there is no plaster over it.

OVERSIZE DOOR fits right under ceiling, so ceiling structure doubles as door header. The trim at door header also works as moulding to cover juncture with ceiling.

H&H staff

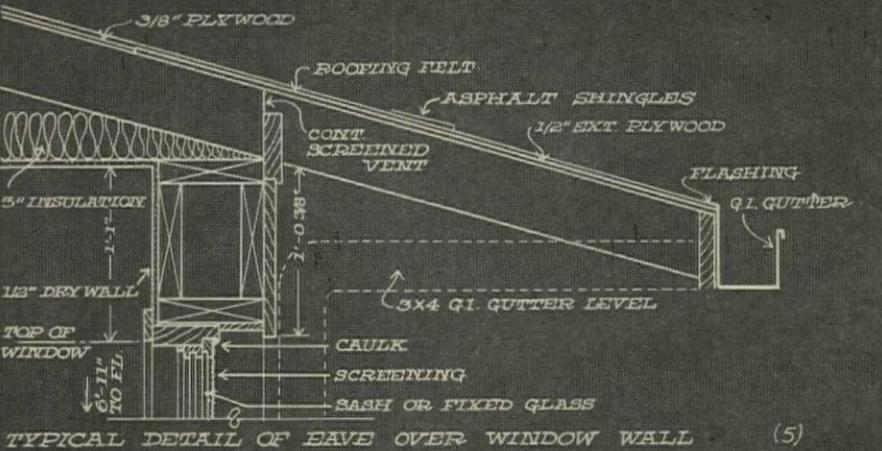
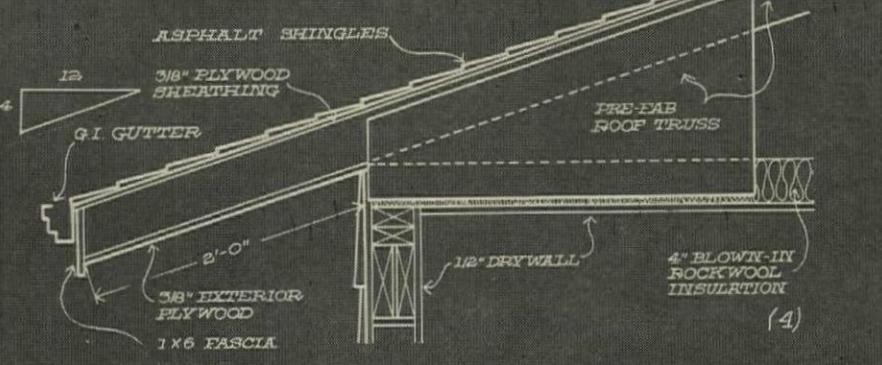
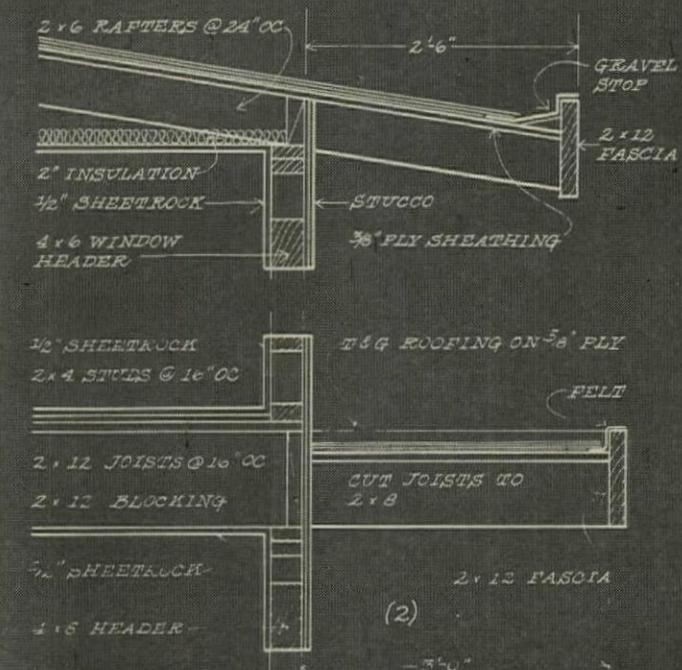
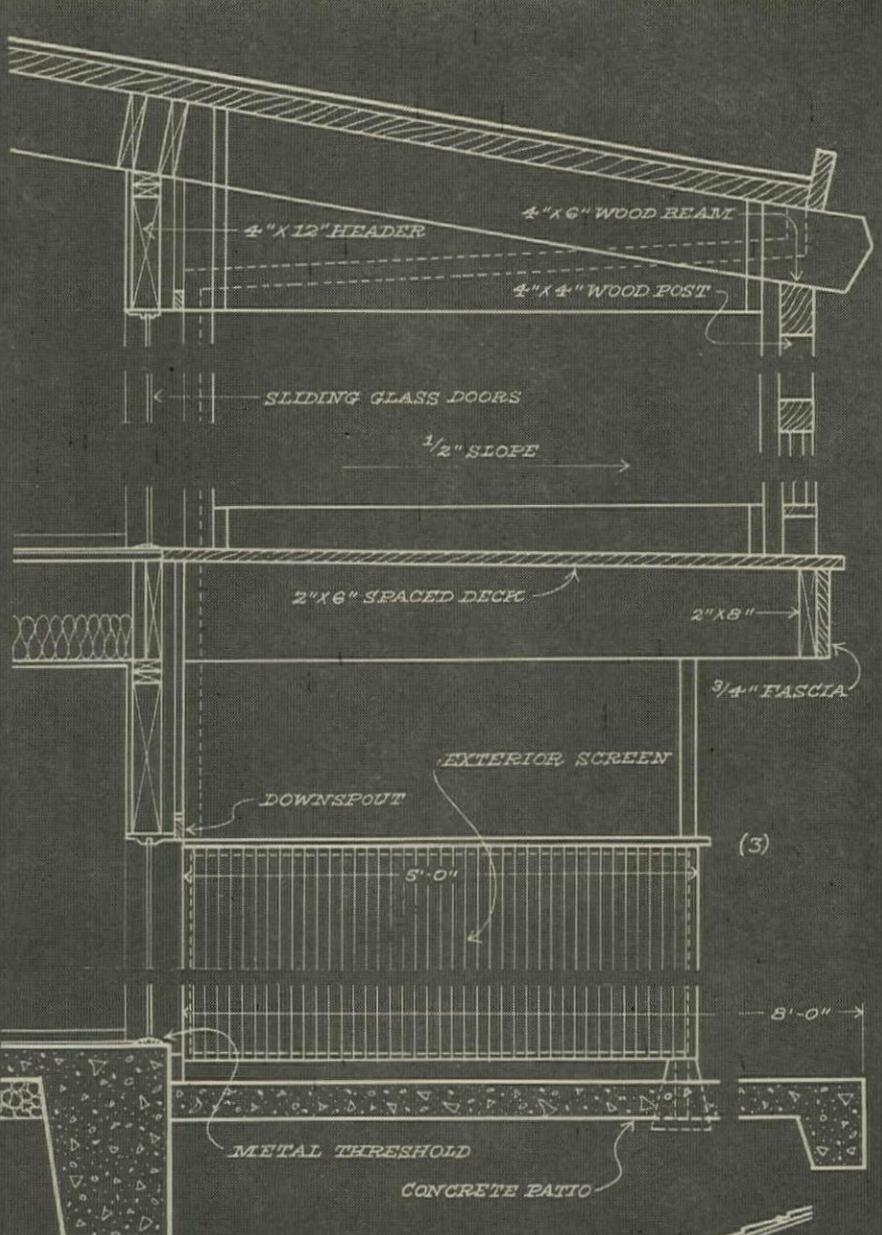
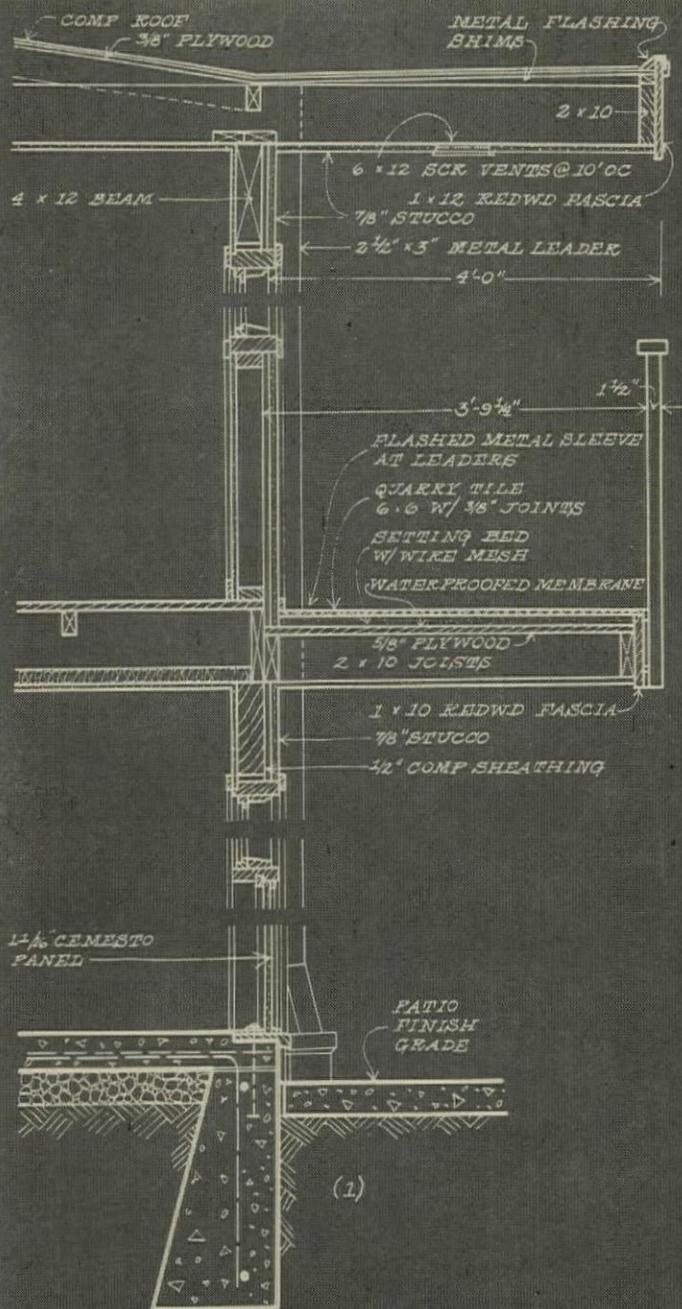


SLAB makes one long working platform for erection of rest of apartment building; masonry party wall stands out dramatically.

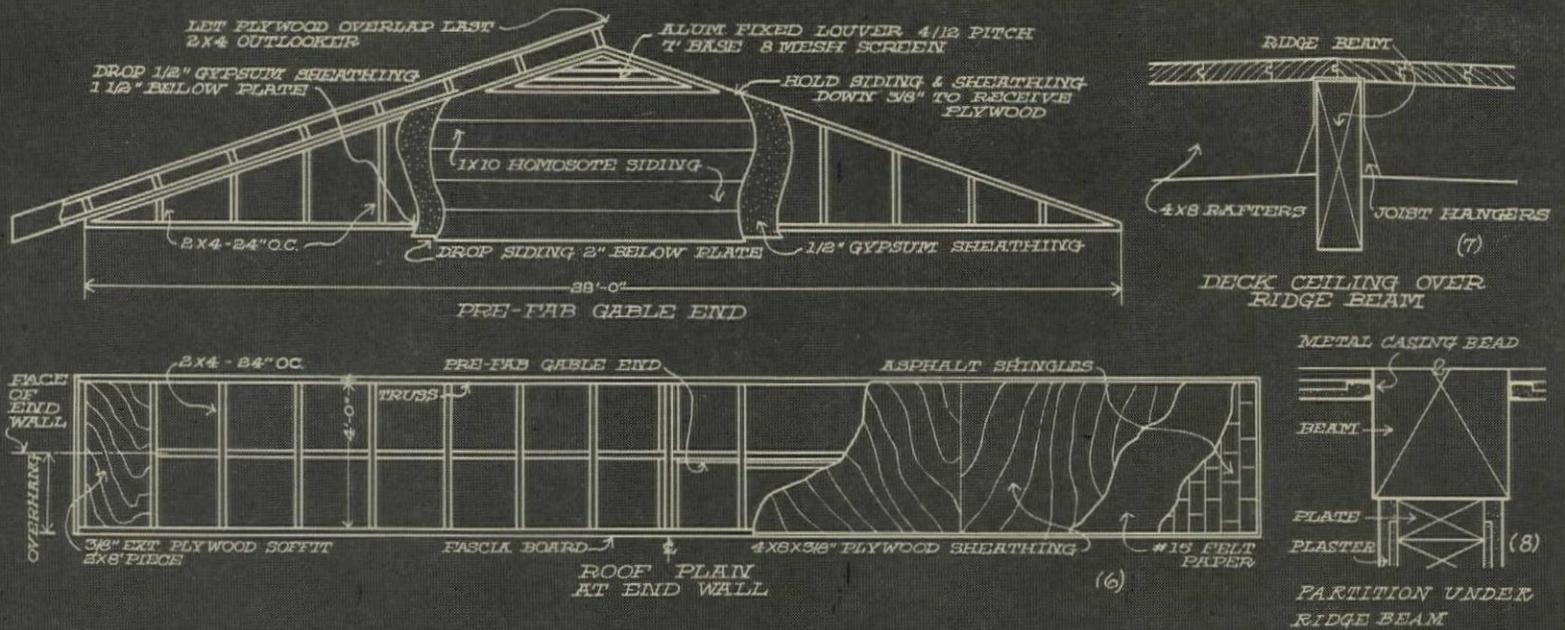
6. Consider starting with a slab instead of a hole in the ground

With slabs you can start working on a platform as soon as the concrete sets, so party walls can go right up, exterior and interior walls can be set right in place. You not only cut out cost of a basement but you also cut out cost of framing an extra floor. Only possible problem: getting at plumbing in case of trouble.

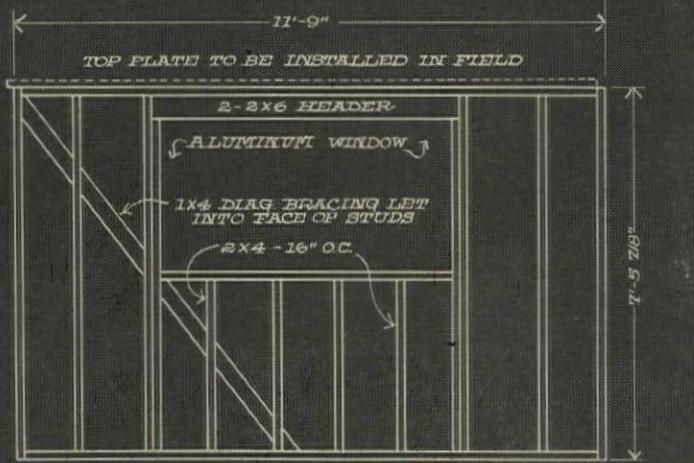
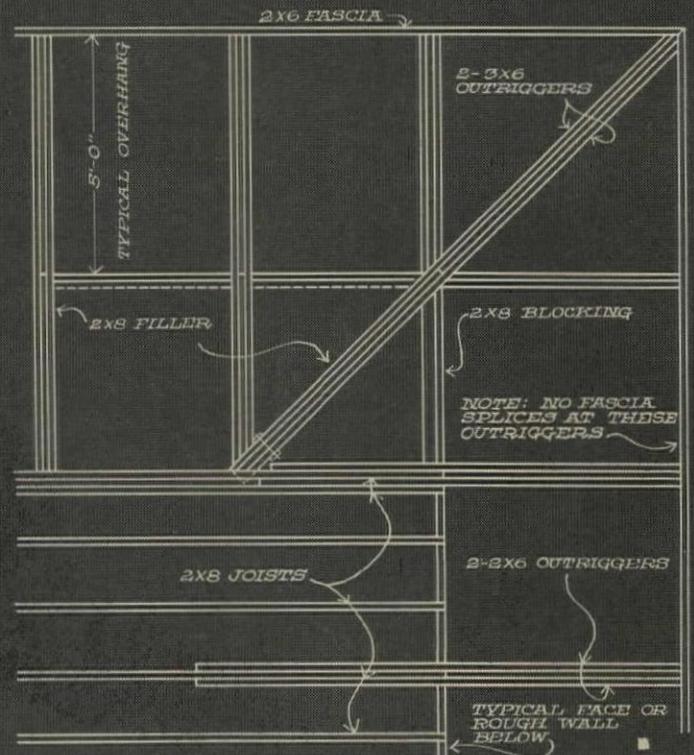
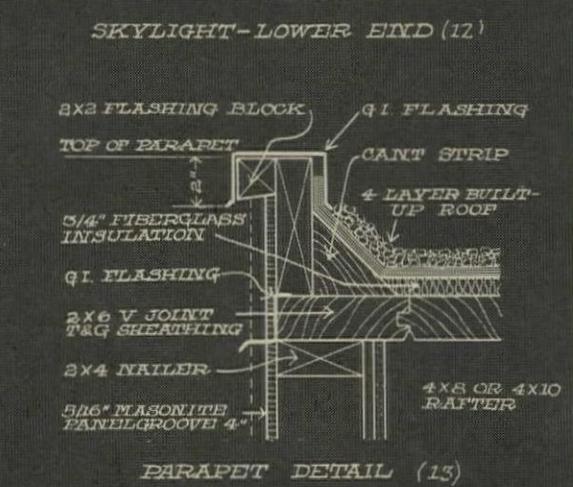
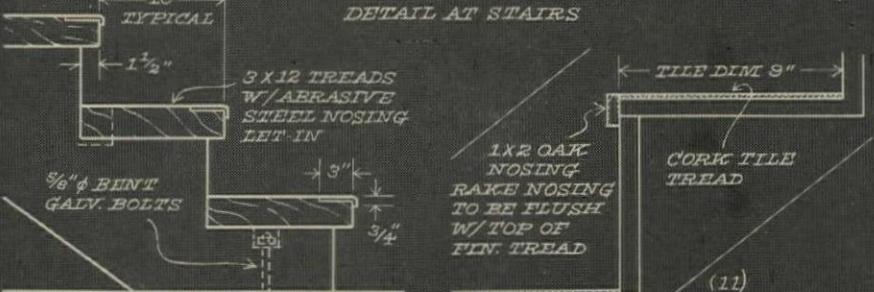
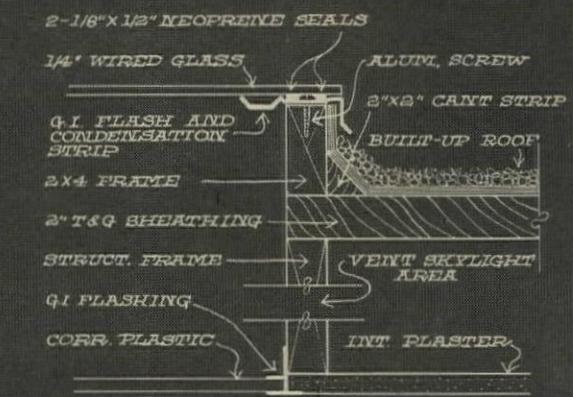
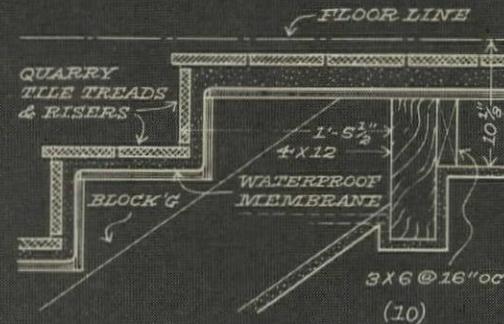
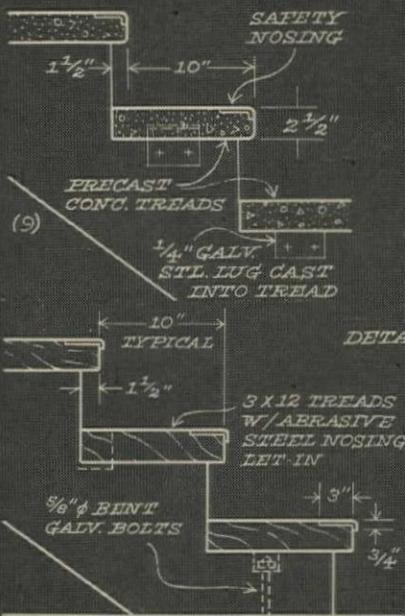
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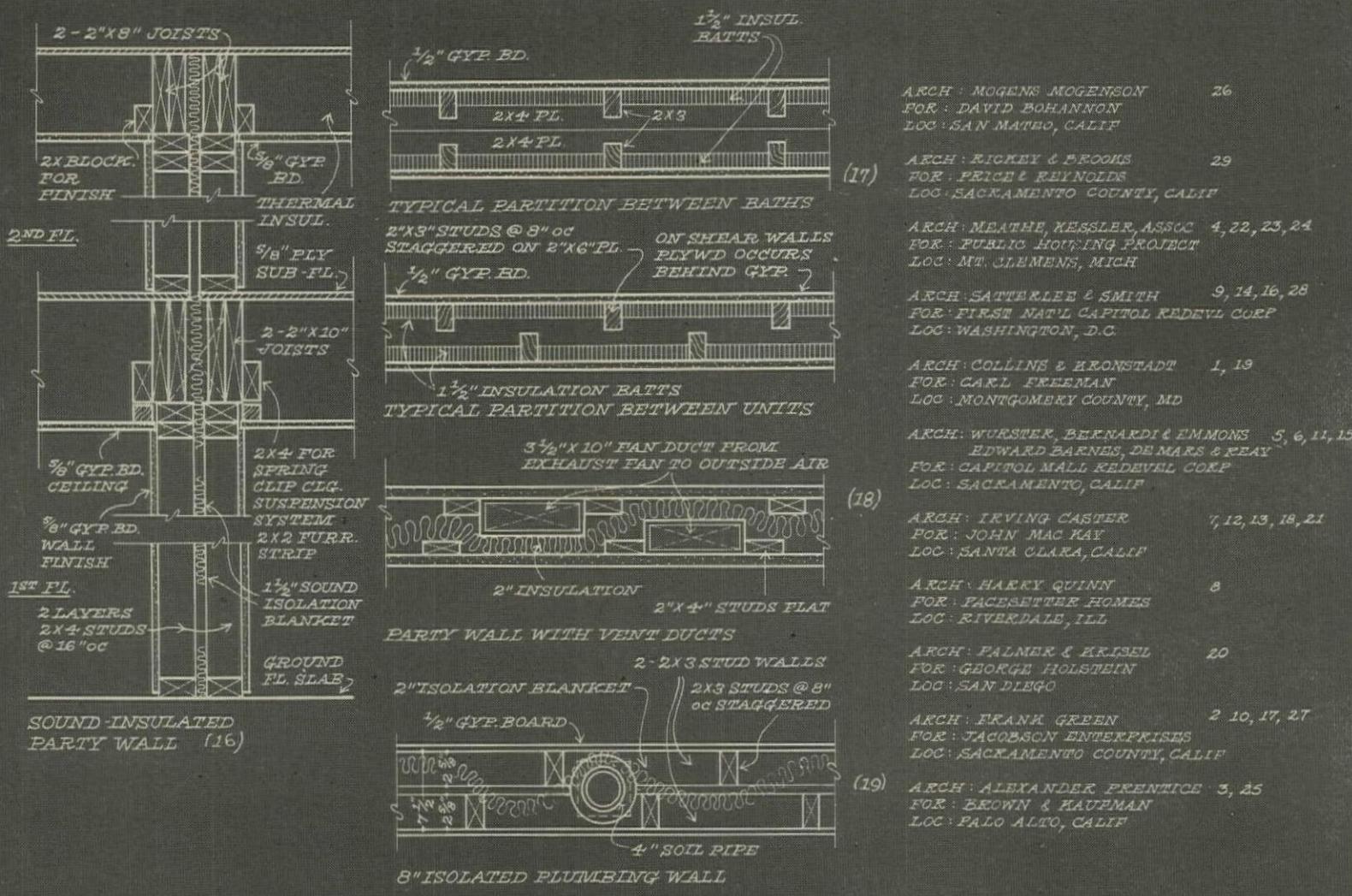


7. Remember the importance of overhangs



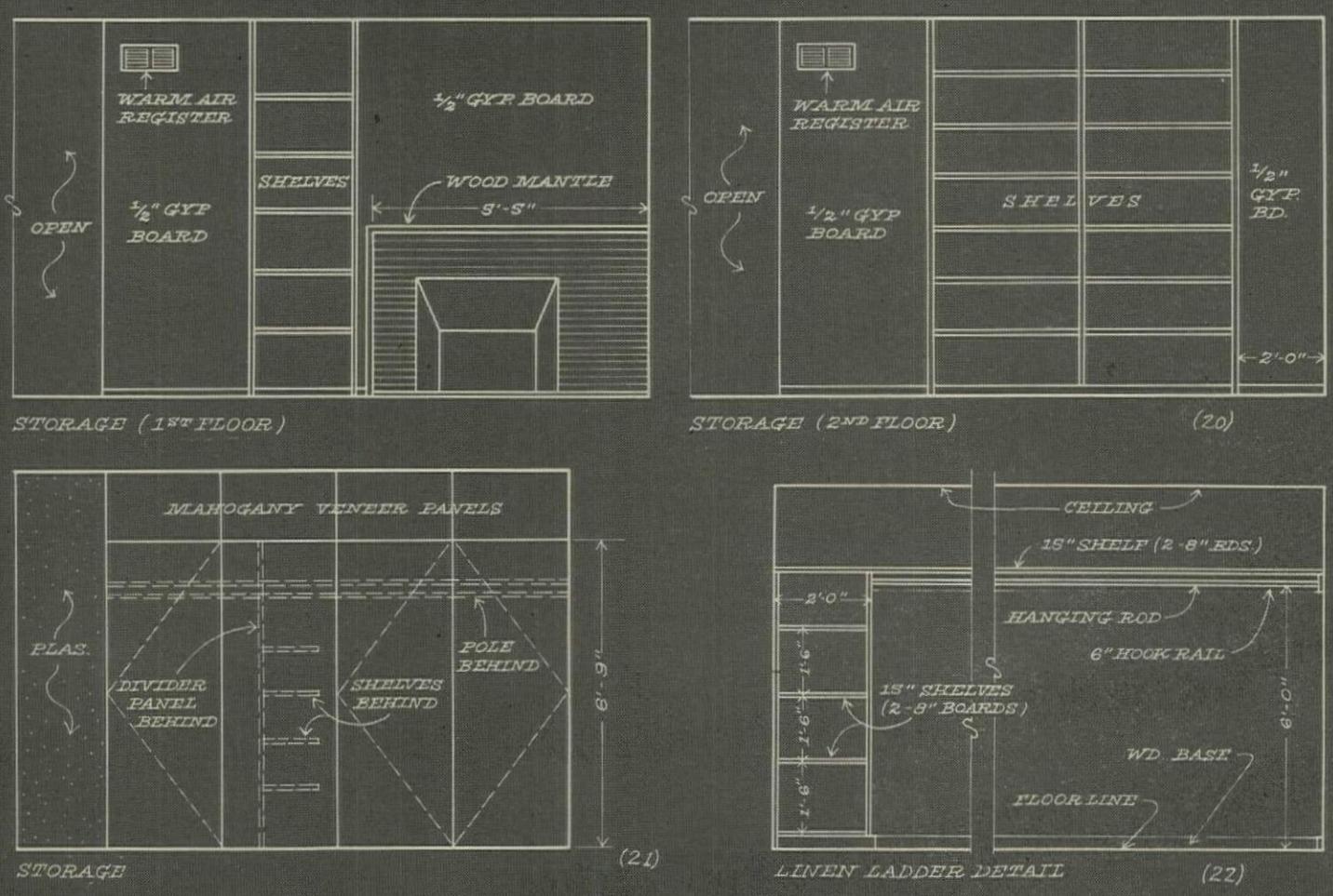
8. Keep details as simple as these borrowed from homebuilding





- ARCH: MOGENS MOGENSON 26
 FOR: DAVID BOHANNON
 LOC: SAN MATEO, CALIF
- ARCH: RICKEY & BROOKS 29
 FOR: PRICE & REYNOLDS
 LOC: SACRAMENTO COUNTY, CALIF
- ARCH: MEATHE, KESSLER, ASSOC 4, 22, 23, 24
 FOR: PUBLIC HOUSING PROJECT
 LOC: MT. CLEMENS, MICH
- ARCH: SATTERLEE & SMITH 9, 14, 16, 28
 FOR: FIRST NAT'L CAPITOL REDEVL CORP
 LOC: WASHINGTON, D.C.
- ARCH: COLLINS & HONSTADT 1, 19
 FOR: CARL FREEMAN
 LOC: MONTGOMERY COUNTY, MD
- ARCH: WURSTER, BERNARDI & EMMONS 5, 6, 11, 15
 FOR: EDWARD BARNES, DEMARS & PEAY
 FOR: CAPITOL MALL REDEVL CORP
 LOC: SACRAMENTO, CALIF
- ARCH: IRVING CASTER 7, 12, 13, 18, 21
 FOR: JOHN MAC KAY
 LOC: SANTA CLARA, CALIF
- ARCH: HARRY QUINN 8
 FOR: FACESETTER HOMES
 LOC: RIVERDALE, ILL
- ARCH: PALMER & KRISSEL 20
 FOR: GEORGE HOLSTEIN
 LOC: SAN DIEGO
- ARCH: FRANK GREEN 2, 10, 17, 27
 FOR: JACOBSON ENTERPRISES
 LOC: SACRAMENTO COUNTY, CALIF
- ARCH: ALEXANDER PRENTICE 3, 25
 FOR: BROWN & HAUFMAN
 LOC: PALO ALTO, CALIF

9. Detail party walls to control noise



10. Build in storage wherever you can





Offer extras like this that will make your project a standout

Often the little things make the difference between an apartment with vacancies and one with a waiting list and often it is the little things that people are willing to pay more money to get.

"The hottest renting apartments everywhere," says Economist Louis Winnick, consultant to ACTION, "are those that add distinction to the building and give tenants a sense of individuality. Huge successes have been reaped by builders who have had the foresight to add such features as beach clubs, garden clubs, boat landings or swimming pools."

"My renters want extras and I believe it is good business to provide them. I include a pool, big glass windows, a good kitchen with oversize storage, a dining area, a dressing room, a good bath. There is a laundry room with automatic machines on each floor. In the rent I include car parking, gas, electricity, water, carpets and curtains. Every apartment has quite a lot of built-in furniture so they need very little of their own. They do a lot of entertaining and I try to give them a building they can be proud of."

Douglas Pringle, Burlingame, Calif.

LANDSCAPED COURT with tree and curving wall adds great charm to Architect Fred Marburg's design for Bay Tree Apartments in Los Gatos, Calif. Eckbo, Dean & Williams did the landscaping.



LANDSCAPED POOL is central element in open court of Malibu Apartments in Seattle. Architect Lawrence Hazen for Allan Deutsch.

1. Include a swimming pool or beach club in your project

So popular have pools become that they are now seen in new apartments almost everywhere, including New York and Philadelphia. FHA and conventional lenders include them in the mortgage. But heed warning of Realtor Alexander Summer: "Pools are an asset only if located so that noise of late and early swimmers does not disturb other tenants."

Julius Shulman



OVERSIZED POOL is big attraction in Park Towne Place high-rise built by Harry Madway under FHA sponsorship in Philadelphia.

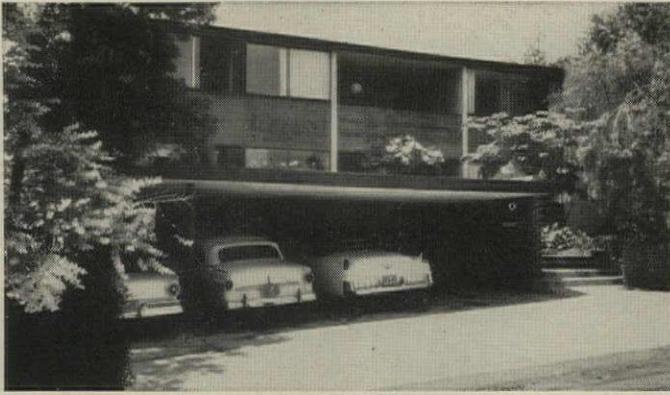


FREE BEACHCLUB plus pool and community house helped Alfred Levitt make outstanding success of high-rise group outside N.Y.C.



MANY SMALL POOLS are located throughout Loma Palisades in San Diego. Each tenant has a key for nearest pool gate.

H&H staff



PROTECTING ROOF provides car shelter and creates strong horizontal line in this 4-apartment building in Los Angeles by Architect Carl Maston. Carports face street side, private patios are on opposite side.

Morley Baer

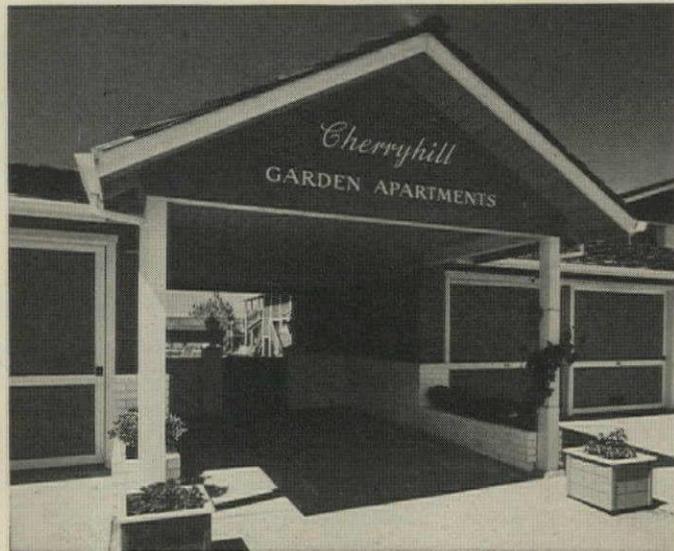


HIDDEN CARPORTS with handsome stone ends toward street are features of John Mackay's San Jose apartments. Deliberate effort was made to eliminate rows of cars parked around buildings.

2. Provide carport or garage space for your tenants

A covered shelter for his car is one of the little extras that every renter appreciates, whether he lives in a hot or cold climate. Getting cars off the street and hidden from view helps improve the general appearance of your project. Some apartment owners include car space with the rent, others charge a small extra fee for it.

Herbert Holden

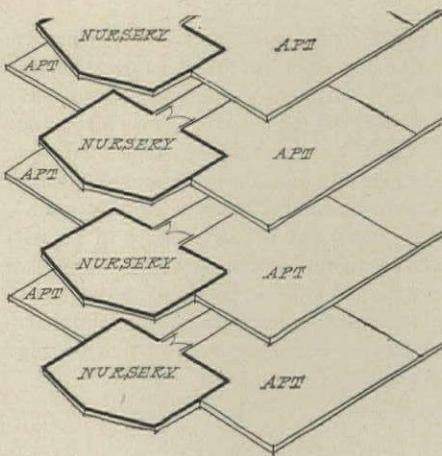


SLIDING-DOOR GARAGES (right) form two ends of quadrangle of Brown & Kauffmann's California apartments. Doors were added by Architect Alexander Prentice to improve entrance appearance.

3. Don't forget the children

Play space for small children is one of the extras in most new groups of apartments. "If you provide space for kids and put in some slides and swings the kids will be happy to stay in one area rather than play all over the place," says Bill Driscoll of Mackay Homes.

Julius Shulman



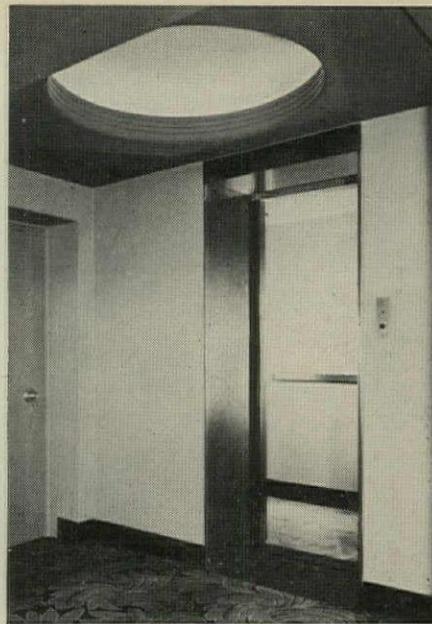
NURSERY on each floor is in new Webb & Knapp building where one girl can baby-sit for a dozen kids. Arch: Sabatino & Fishman.



PLAY YARDS that are small but numerous and close to buildings are better than fewer, larger areas. This is Loma Palisades, large FHA project in San Diego by Architects Palmer & Krisel.



TREND for apartment owners to include carpets and curtains as part of the rent is growing, although some offer them as optional extras. This is the Ranei Apartments, Miami. Architect: Wm. Kreidt.



Hedrich-Blessing

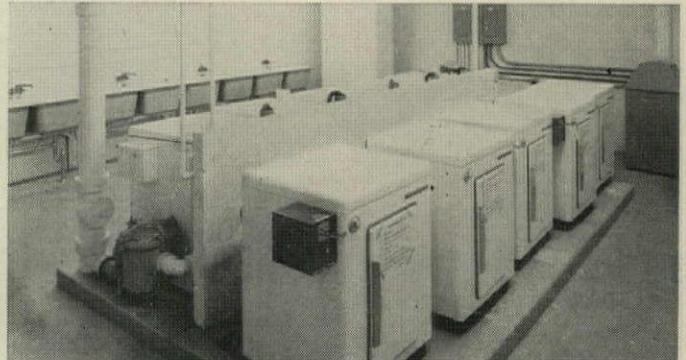
ELEVATOR, even in two- and three-story buildings is appreciated by older renters. Architect: Mark Kalischer, Evanston, Ill.

4. Put in luxuries that make life easier for your tenants

Realtors in many cities report that the most profitable rental opportunities are in apartments renting for over \$200 a month. Tenants who can spend this amount want—and can pay for—many little luxury touches.

5. Install washers and dryers and put them in a pleasant place

Standard equipment in most new apartments is the coin operated laundry. Some owners buy and maintain their equipment, others lease it out and take a share of the profits. Whichever practice is followed, an owner should make the laundry room clean, bright, and cheerful.



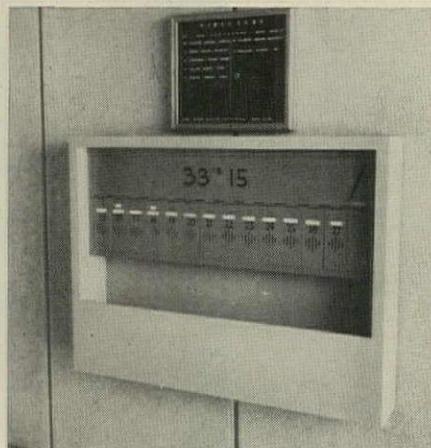
COIN-OPERATED WASHERS AND DRYERS are a standard feature in practically every new apartment, some bring in as much money as one apartment. These are in Park Towne Place in Philadelphia.

6. Give tenants practical solutions to everyday problems



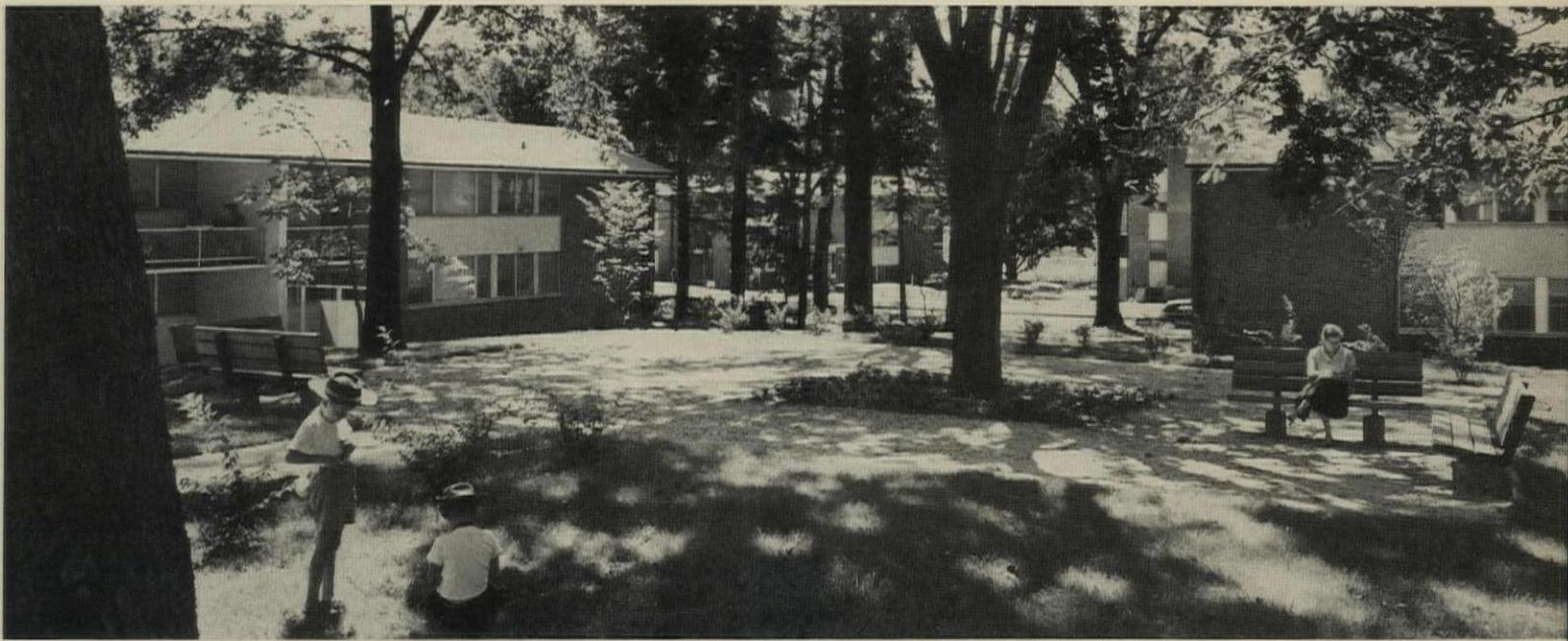
H&H Staff

SWINGING DOOR hiding refuse cans is neat solution at Grandview apartments, Los Angeles. Architect Russell Harris demonstrates.



MAGAZINE RACK below mailboxes is a small thing but one of many extras that count. This is also a Harris design for Grandview.

Renters often move to new apartments that have a lot of little features which make family living easier. For example, any improvement an owner can make in handling trash or garbage will be popular. For this reason Harry Madway locates his incinerator rooms conveniently adjacent to corridors and he installs a sink where garbage cans or receptacles can be washed. Even such minor matters as a better mail box arrangement becomes an asset that people talk about.



SERENITY in apartment living is a rare thing but it has been achieved here in this restful scene in the Cherokee Village apartments near

Philadelphia designed by Architect Oskar Stonorov. Trees of any size are rare and builders should save every tree possible.

7. Give people breathing space and a place to sit and enjoy it

For many families space is the prize most sought after. Renters who find an atmosphere like that shown in the photo above won't soon be moving away.

8. Persuade your lender to include a restaurant in the mortgage

A convenient eating place is an extra that every family will enjoy. Because it adds value to an apartment, many lenders are permitting builders to include one in the mortgage if the apartment project is large enough to support it. The new restaurant shown at right is part of a downtown apartment project for 1,000 families.

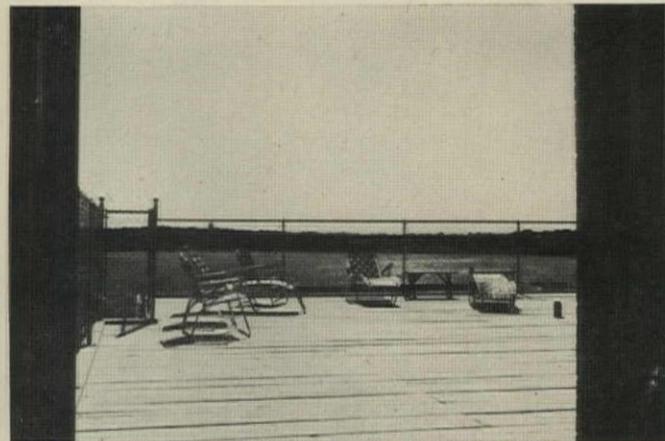


FINE RESTAURANT, one of many reasons why Harry Madway's and Bernard Weinberg's Philadelphia apartments are among best in the country, can be reached from underground plaza containing a dozen service shops, all financed under FHA mortgage.

9. Turn your roof into a deck for sunbathing

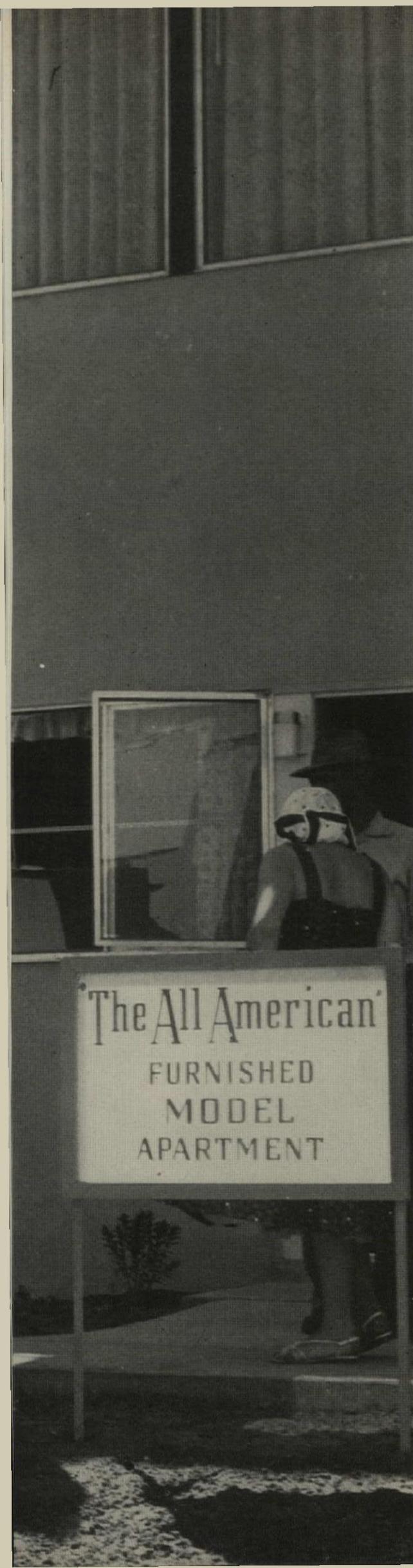
People drive miles along hot, crowded roads to find a place to sit in the sun when a little imagination on the part of their apartment-house owner could let them get the same enjoyment at home. Flat roofs of apartments not used as sun decks are among the greatest wasted opportunities. This particular kind of outdoor living can be practiced in clean, smog-free areas even if it won't work in the dirt and cinders of big industrial cities.

INEXPENSIVE SUN DECK turns an ordinary flat roof into a popular, resort-like feature, especially if it overlooks a lake as this one does. It is the Crestview Apartment, built by Alen Herman in Minneapolis.



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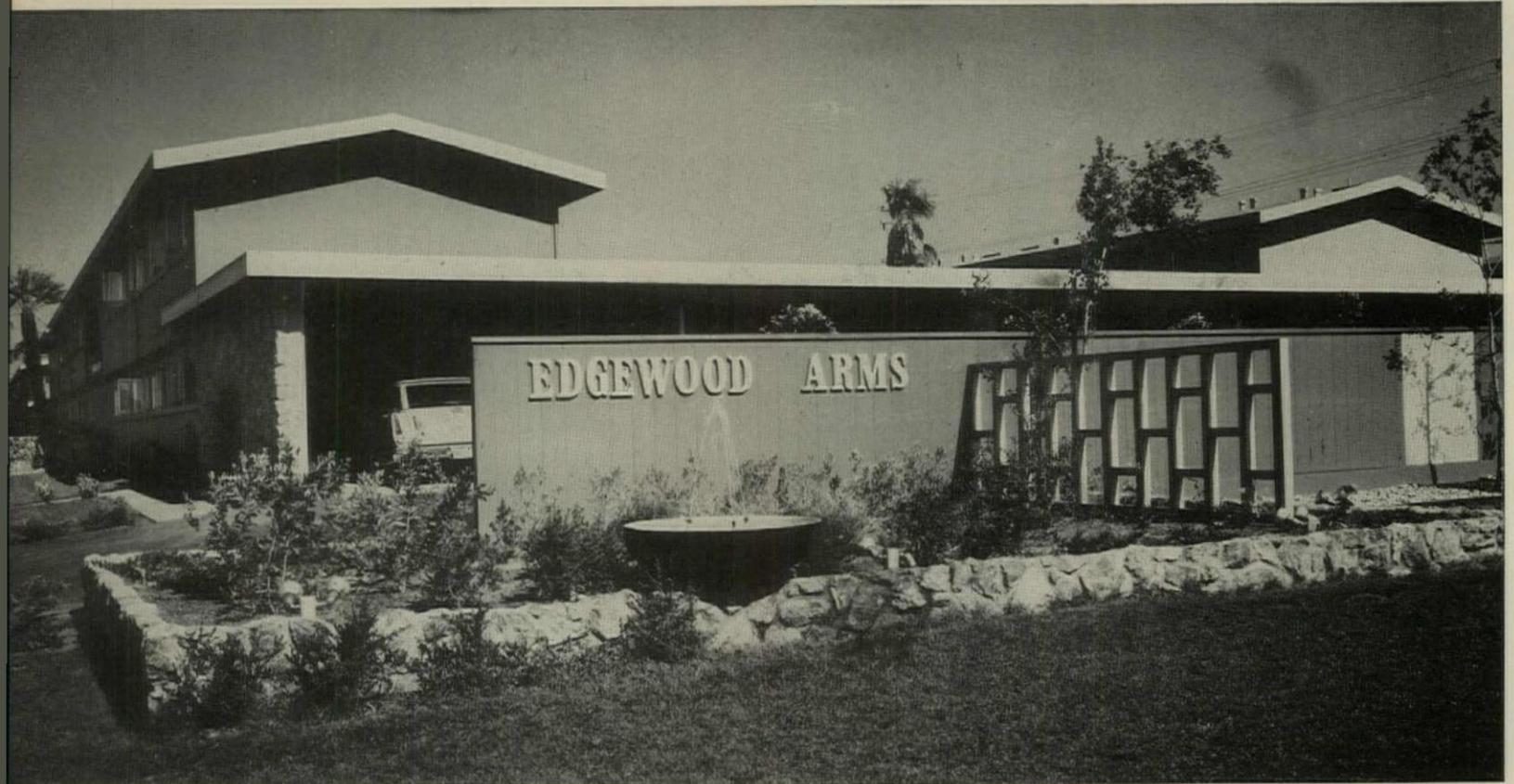
Merchandise apartments the way you merchandise houses

All over the country merchant builders are finding that renting places for people to live calls for very much the same technique as selling places for people to live. To attract tenants these builders are using the same kinds of sales and merchandising methods and appeals that work so well in subdivisions.

"We tried to bring a whole new merchandising concept to apartments," said Sales Manager Bill Driscoll, describing how John Mackay rented all 50 units in his new apartments (on the cover of this issue) in less than three weeks. "We thought of it as a merchandising problem from the very beginning. We had a lot of competition only a few blocks away and our rents were from \$10 to \$15 higher. Yet we pulled people out of those apartments because we had a better over-all effect. It is design, appearance, and atmosphere that counts."

LONG QUEUES of renters stand to see six furnished apartments designed by Palmer & Krisel for George Holstein and Sam Berger in San Diego.

continued



CURB APPEAL of John Mackay's apartment in San Jose catches the eyes of passing motorists, who are attracted by the building, fences, sign, plantings that Architect Irving Caster and Design Consultant Dick Finnegan have included in the over-all facade.

1. Give your apartment a distinctive identity

It's easier to rent if people remember and talk about your apartment and if your tenants are proud of their address. So give your apartment a distinctive name. You want it to be known as "Edgewood Arms" or "Park Towne Place" or "Nob Hill"—not as "that apartment out on Hillside Avenue."

Fred English



TWO-STORY GLASS PANEL set in natural stone wall makes distinctive entrance in this Burlingame apartment. Architect: Mogens Mogensen. Open stairs are exciting when lighted up after dark.

Rada Photography



GOOD-SIZED TREES and other plants give the entrance to this Ft. Lauderdale apartment designed by Polevitsky, Johnson & Assoc's a warm and dramatic appearance.

2. Landscape your entrance to make it inviting

People balk at an apartment—or a house, for that matter—that looks raw and new. The quickest way to erase the raw new look is to set off the entrance with trees, shrubs, and good-quality sod. And don't overlook the rear and side yards. The view from inside should be attractive, too.



STRIKING NIGHT LIGHTING helped attract so many prospects that this building on Burlingame's main street was soon filled. It was designed by Architect Mogensen for Douglas Pringle. Daytime photo of this highly successful contemporary apartment is on p 140.

3. Get advertising value from night lighting

Sure, it costs you more to leave the lights on at night, but the extra cost is not much to pay for the extra advertising. People pass by a dark apartment without noticing it. But lights in an apartment make it stand out—perhaps even more than in the daytime. They give it a warm, inviting, lived-in look.

H&H staff



ILLUSTRATED SIGNS listing features helped rent apartments during construction, says Builder Alen Herman of Minneapolis.

4. Start selling when you start building

From the moment you break ground, you're looking for tenants. If you can get 100% occupancy before you even finish building, so much better. Signs at the site (like the one at left) help. So does newspaper advertising (teaser ads are a good bet). And, of course, you can have a simple rental office out on the job.

Pope Studios



FURNISHINGS were so attractive in this model apartment that a cocktail party here helped Randolph Parks get Sacramento people talking about his apartments, brought prospects for other buildings too.

5. Furnish at least one model apartment

And you may want to furnish more if your apartment, like many, has more than one kind of unit. Rooms that are furnished look bigger than unfurnished rooms. They are more homelike, and they let people see themselves living in the apartment. Suit your furnishings to the tastes and pocketbooks of prospective tenants.



QUALITY DESIGN AND MATERIALS add elegance to this apartment in San Mateo, Calif by Architects Morley Wong and John Carden Campbell.

Money is the big problem:

a 10% cut in the budget forces

a 50% cut in quality and amenities

Few apartment sponsors succeed in borrowing all the money they need to build as well as they might like, and very few feel they can afford to double or triple their equity investment to make up the difference.

So most apartment budgets get cut 10% or 15%. The builder can't take the cut out of the cost of his land, or the cost of code-enforced waste, or the cost of his discounts, or the basic code-controlled costs of walls, foundations, structure, and utilities—so he has to make his savings by overcrowding his site and skimping on the relatively small items where quality is optional.

Says coast-to-coast builder Jim Scheuer: "The guts of the building have to be the same for a good apartment or a bad apartment, so the only thing we can cut are the amenities, the room sizes, and the finish.

"A 10% cut in the budget often forces a 50% cut in quality and livability. Or, to put it the other way round, for 10% more we could make the apartment 100% more livable and more desirable."

Says New York Mortgage Banker George Warnecke: "Spending 5% more on a new apartment can make the difference between financial success and slow rentals."

Says US Plywood Vice President E. J. Moroney: "A little more money would permit a much better use of materials."

Says Architect Norman Schlossman: "Soundproofing, good ventilation, adequate wiring, better bathrooms are necessities. The problem comes when we try to fit those necessities into the number of dollars we can borrow to pay for them."

Says Cleveland Builder George Seltzer: "Money is the key to quality. We all know that better storage, big-enough room sizes, and better land use are important. The question is: 'Do the lenders recognize them? Does FHA recognize them? And if

they do, will they respond with the money needed to provide them?'"

Says Builder Scheuer: "We're in a terrible bind on this. It's the last \$1500-a-unit we have to cut that really hurts the quality of the project, but we just have to take an axe and cut a lot of things that would make the apartments a lot more livable and a lot more rentable, because if we put in a better ventilating fan, or more tile, or a bigger medicine cabinet, or better closet space, or better kitchen equipment, or central air conditioning, it's all cash out of our pockets. You can't get a bigger mortgage to pay for them.

"You would think the lenders would want to protect their own degree of exposure by insisting on the solid, attractive things that would make the apartment more desirable and a better long-term risk, instead of sticking their necks out on so many fairly marginal buildings. But Congress set the ceiling on FHA apartment mortgages too low to cover much more than FHA minimum standards, and the statutory limit on conventional loans is so low that lenders get cold feet about lending the extra 5% or 10% needed for quality" (see p 179).

Says Builder Seltzer: "The lenders should look into whether the rooms are big enough, and whether the storage, the noise insulation, and the air conditioning are good enough."

Says Builder Lewis Cenker, chairman of the NAHB Urban Renewal Committee: "Regardless of what the architects and the builders try to do, the standards of the investors will control what is built."

Says Truscon Merchandising Manager Albert Lind: "Our basic problem is with the lenders. For their own protection the lenders ought to make sure quality goes into the building they finance, but if the money men don't know what is quality and what is not quality, then that is the crux of the problem."

Says Banker Robert M. Morgan, past chairman of the Mortgage Committee of the National Association of Mutual Savings Banks: "I would like to put another twist on this quality question. I think the investor needs a little education on quality, and that's the fault of the housing industry, which has not done the job. If you want to sell quality, you ought to do a better job educating the man who is going to lend the money."

Leasing instead of buying can ease the squeeze

The cost bind is so tight that many apartment sponsors have taken to leasing equipment like air conditioners, dishwashers, clothes washers, refrigerators, ranges and dryers, and even carpets, from the manufacturers or their dealers, instead of buying them.

The sponsor then collects an extra monthly charge from the tenants for each of these items—\$5 a month for a dishwasher, \$5 a month for a room unit, \$3 to \$8 a month for a 12'x12' carpeted room, etc. This makes it unnecessary for the sponsor to put up more equity to provide the extras and amenities his tenants want. Quite a few of the appliance manufacturers, air-conditioning manufacturers, and carpet manufacturers are finding these lease-purchase deals big business and extra profitable. The dealer (or manufacturer) keeps title to the rented equipment, services it, and replaces it when worn out.

continued

To build the right kind of apartments the builders need a complete new deal

Says Builder SCHEUER: "Urban renewal is the only place in rental housing where the cards are stacked in favor of doing something better instead of doing something worse."

Says the ACTION Report: "Rental housing requires a reappraisal of the country's housing policies. . . . A new and more positive housing program is needed if the apartment potential is to be realized. . . . As things stand now there are simply not enough inducements for equity investors, mortgage brokers, bankers, builders, and entrepreneurs . . . [so] new rental housing [was] apparently going the way of the ice-box and the horse car."

Most of what's wrong with today's new apartments is wrong because some federal, state or local rule or law or tax makes it too hard to attract equity capital, too hard to borrow quite enough money, too hard to buy a good location, too hard to cut needless costs, too hard to develop a sound long-term quality value and too easy to make a fast buck, too hard to build better and too profitable to build worse.

The wonder is that any good apartments at all are built under these crazy and often conflicting rules—rules that almost compel mortgaging out and rules that forbid mortgaging out, rules that require big equities and rules that penalize big equities, rules that make builders pay too much for land and leave them too little to spend for quality, rules that make builders waste millions of dollars on useless make-work and then skimp on the prime essentials for rentability and better living, rules that make builders build cheap even if what they build cheap may be hard to rent.

In this jungle of over-taxation and under-taxation, over-appraisal and under-appraisal, over-spending and under-spending, too many apartment sponsors have found it more important to have a good lawyer and a good tax adviser than to have a good architect and a good builder.

Too many have found the profit motive hitched to quality backwards or not at all. Too many have found they could make more money building worse instead of better. Too many have found that bigger value meant smaller profits.

On pages 179-183 you will find eight important ways local, state, and federal policies discourage better apartment building.

So because of these obstacles many promoters figured the best way to make money on apartments was to:

1. Shoot for a big appraisal markup on land. Some sponsors have gotten \$250,000 appraisals on land they bought for \$50,000. A three-to-one appraisal markup for "energizing" the land is not unusual.
2. Try to mortgage out on your land write-up and your building fee.
3. Build as cheap as you can, because the less you spend for construction quality and construction extras the better your chance of mortgaging out.
4. Spread your equity as thin as you can to provide minimum equities for more apartments instead of bigger equities for less.
5. Take the limit on depreciation, so there will be no corporate income tax to pay for six years.
6. Treat your depreciation cash flow as a tax-exempt profit.
7. Take your money out fast and take your profits as a capital gain by selling the project. The Los Angeles *Times* carries two full pages of want ads offering new apartments for sale at 6 to 7½ times their gross rents.
8. Don't spend money now to get lower maintenance over the years. Let the second owner worry.
9. Trust inflation to bail you out.
10. Don't build at all if you have to worry about renting.

This was all very well when the apartment shortage was so bad that anything and everything would rent. But a lot of apartments will go broke that way when tenants can pick and choose between good apartments and bad.

So despite these obstacles builders like Jim Scheuer, Carl Freeman, Dick Price, Dave Bohannon,

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and many others think they have found a better way to make money. Says Scheuer: "We plan to hold all the \$100-million worth of apartments we have under contract as a permanent investment, because we have learned by experience that over the years a well-located apartment project, well-designed and well-constructed, will create a big equity for us *both on the up side and on the down side.*

On the down side your tenants will pay off your mortgage for you out of their rents, provided your building is good enough to stay fully and profitably rented. On the up side you can count on a well-built, well-managed property increasing in dollar value from year to year in our expanding economy.

"You may have to refinance once or twice when the income tax on your equity profit gets bigger than your cash flow (see *p 194*), but eventually your million-dollar mortgage will be paid off out of rents and that's \$1 million on which there will be no income tax to pay, because the mortgage pay-off is canceled out taxwise by your depreciation allowance. And yet in the 1990 market your fully depreciated building may well be worth twice as many dollars as it cost you new in 1960!

"That's why we build the very best buildings we can afford; that's why we would build better if we could (see *p 177*); and that's why we plan to hold every apartment we build as a permanent investment—because we want our apartments to stay rented over many years to give us that big capital gain."

Federal, state, and local governments hamper better builders in eight ways

1. State governments discourage better apartments with antiquated mortgage limits

Says Researcher WINNICK: "A 90% mortgage can be a lot safer than a 67% mortgage if the extra money goes into marketable features. When the lender cuts his mortgage the builder has to cut his apartment."

Says Builder SCHEUER: "They buy land by the acre and then they put it into the valuation by the foot."

Says Economist COLEAN: "This ceiling is, in practice, a source of appraisal perversion. It may lead the lender to accept an inflated appraisal to justify his making the loan; it may lead the builder to cut corners in construction, fake rent rolls, and otherwise hoodwink the lender."

Says Builder CENKER: "Mortgaging out with conventional financing is made possible by the capitalization of high rents. When these rents fall or costs go up they will be in trouble."

Most states limit conventional mortgages to 60% or 66 $\frac{2}{3}$ %, ie, they require 33 $\frac{1}{3}$ % to 40% equity investment. Everybody knows this is unrealistic, because it is hard enough to attract even 10% equity money. It is also undesirable, because without big mortgages at low interest rates, rents would have to be set too high for families with moderate means.

The only reason conventional financing is workable at all under these unrealistic ceilings is that lenders are willing to predicate their loans on big appraisals based on "capitalized earnings." These appraisals bear little relation to costs; they usually include a big writeup in the land valuation over what the builder paid for his site; and they are often so liberal that builders find they can actually borrow more money on a 67% conventional loan than on a 90% FHA loan.

*Even with high appraisals to get around the law, the low legal limit puts a tight squeeze on builders and often forces a 10% cut in their overall costs, which in turn forces a 50% cut in quality (see *p 177*).*

Says the ACTION Report: "Equity funds cannot be attracted into new rental housing unless an annual return of 15% to 20% can be foreseen," and "only by taking advantage of the leverage resulting from very high proportions of relatively inexpensive debt capital can the equity investor be offered a sufficiently attractive rate of return at rents that will not drive the consumer away," because "rents have to be raised \$8.33 a month on a \$10,000 apartment for each percentage point of capital return."

continued

2. Federal taxes penalize long-term equity investment

Promoters can get complete exemption from federal income taxes if they take their money out fast. In fact, says Tax Expert Felix, "a prudent use of accelerated depreciation and other tax-saving techniques will result in a tax-deductible loss the sponsor can deduct from his ordinary income while his project is actually appreciating in value."

But long-term investors who leave their money in may eventually find that their total cash flow after operating expenses and mortgage payments is less than the federal taxes they will have to pay on their profits (see p 194).

Photos: Walter Daran



Many economists, notably Miles Colean, think the heavy impact of federal income taxes after the first ten years is the most serious deterrent to building better apartments for long-term value rather than quick profit. Says Colean: "Under today's federal taxes, the trick is to arrange matters so a small initial investment can be returned with a high yield *tax free* before the grim day when the mortgage amortization payment becomes bigger than the depreciation allowance and the project stops producing a big-enough cash flow to pay the taxes. The result is to make rental housing, which used to be a conservative long-term investment with a moderate but steady yield, a highly speculative form of enterprise permitting a quick and lush tax-free recovery on a minimum equity. This quick and lush recovery is possible only at rents high enough to earn maximum benefits from accelerated depreciation, so the present tax system discourages building moderate rental property, at the same time that it discourages building for low maintenance and long-term value."

To put real estate investment on a sounder basis, Economist Colean would allow real estate investment trusts the same conduit tax treatment that is permitted security investment trusts (a tax change that is now pending before Congress) and he would allow investors in rental-building corporations with no more than ten stockholders the same partnership treatment for tax purposes that is now open to other types of small business corporations.

Says the ACTION Report: "Investors do not consider depreciation an expense (even if it is so regarded by the Treasury) but a tax-free income."

3. The local tax system makes land cost too much

Says Lender SELIGA: "Something ought to be done about the high cost of the raw land."

Says Land Planner GARDNER: "We have retrogressed as far as land planning is concerned. We overload three times the number of units that should be on the land."

Said WINSTON CHURCHILL long ago: "The system of local taxation is vicious and wasteful."

"The greater the population around the land, the more serious the economic loss and the greater the inconvenience caused to everybody (by holding the land off the market until it is 'ripe'), the larger will be the profit of the landlord when the sale is finally made. The unearned increment in land is reaped in exact proportion, not to the service, but to the disservice done.

"Land is the mother of all monopolies. The unearned increment derived from land arises from a wholly sterile process, the mere withholding of a commodity. This is not merely not beneficial, but positively detrimental to the general public.

"Everywhere today the man or the public body that wishes to put land to its highest use is forced to pay a preliminary fine in land values to the man who is putting it to an inferior use or to no use at all."

Local governments undertax land—especially unused or underused land. That's why land prices have skyrocketed six or seven times as fast as other housing costs since World War II. Taxes are the only cost land has to meet, so when land is undertaxed there is no cost-brake at all to keep land prices from soaring ahead of population growth. Raw-land prices in the suburbs have multiplied five- or six-fold since 1945, and land prices in the cities have multiplied as much as ten-fold (like some of the slum land bought for New York's Lincoln Square redevelopment).

Says Frank Cortright, first executive head of NAHB: "It is getting harder and harder for the builder to make a profit after the land-seller has taken his profit out first."

Undertaxing land has another bad effect. It makes it cheap and easy for landowners to hold their land off the market for years waiting for peak prices. That's why almost every city is ringed with a suburban blight belt of underused land whose owners are holding out for tomorrow's prices. This blight belt includes many of the most desirable locations for close-in suburban apartments.

One reason local governments undertax land is that many state governments and some state constitutions set arbitrary ceilings on land taxes. Land is the only investment that enjoys such a legal shelter against local taxation.

When an apartment builder has to pay too much for his land, he has just that much less money left to build better, and usually he feels forced to crowd too many units on each overpriced acre. Says Architect Norman Schlossman: "On land priced at 50¢ a sq ft we can deliver apartments to rent at \$33 a room that are just as good as anything that commands \$50 or \$60 a room on expensive land."

Under-taxation is the No. 1 reason why the federal government has to spend billions of dollars to buy out slumlords at inflated prices and write the land down to a price redevelopers can afford to pay.

4. The local tax system penalizes better buildings



Walter Doran

Says Lender BJORK: "Greater increased real estate taxes are a serious problem."

Says Architect SCHLOSSMAN: "In the Chicago area land cost is too high."



H&H staff

Says Builder SELTZER: "Many of the most desirable locations are presently covered by something else."

"In most cities rental buildings are over-assessed, because apartment owners have less votes per dollar invested than homeowners."

This was the almost unanimous agreement of the architects, builders, lenders, economists, realtors, city planners and government observers at the HOUSE & HOME Round Table on How to Make Rental Housing Work (H&H, June '58).

And the better the apartments, the more taxes the owner will have to pay on them.

Says the ACTION Report: "Among the costs which determine rent, real estate taxes are among the most important." In FHA apartments around New York, real estate taxes take 21¢ of every rent dollar and the tenants contribute about four times more to local governments than to their landlord's profit.

Everyone concerned with better housing should study closely the tax system widely used in Australia, New Zealand, and South Africa, where all realty taxes are levied against land alone and buildings are tax exempt. This system keeps land prices from skyrocketing and encourages improvements with tax exemptions. It reduces the taxes on good homes, apartments, stores, and offices by increasing the taxes on vacant lots, underused land, and slum landlords.

5. The threat of rent control discourages better apartments

Investors know from sad experience after two wars that apartments are the one investment sure to be singled out for politically dictated price control long after the war is over. Fourteen years after World War II ended some few cities (notably New York) are still enforcing wartime rent control.

This gives investors good reason to shy away from long-term equity investment in apartments. Before World War I, rental property was one of the most popular long-term investments for small capital; since World War II it has been one of the least popular.

Says the ACTION Report: "The investor's coolness to new rental housing reflects unfavorable investment experience in the recent past, the result of depression in the 30's followed by rent control in the 40's."

6. Local governments run up useless costs by wasteful and conflicting code requirements

Says Builder MADWAY: "People who move out of a nice beautiful home in the suburbs move first to a suburban apartment house. But as they grow older they want to get closer to 'adult entertainment.'"

Says Architect KRONSTADT: "I wonder if it is necessary to make the center of town an old-person's paradise. I wonder if the older person, given the same facilities without having to go down town to get to them, wouldn't enjoy those facilities just as well in the country."

Says Builder FREEMAN: "The planners should be able to set the density of the land and then let the builder use some of it for houses for sale and some for apartments for rent. That way we could build a community that would have a variety. We think good apartments should be allowed in areas which are now zoned for single-family detached houses.

"Kensington zoned apartments out for fear too many Democrats would move into them."

Bad codes often add hundreds of dollars to the cost of a small apartment. For example, nine different and conflicting codes in and around Washington block the economies of standardization, and their requirements are so divergent on so many important points that the same small unit may cost \$1,500 more in one community than it would right across the county line. Sacramento runs up the cost of garden apartments \$375 per unit by a unique requirement that fire walls must extend far above the roof. Chicago makes builders waste money on separate soil lines for kitchens and baths; New York makes builders waste money on separate vents for each bathroom fixture.

Most of these wasteful requirements are lobbied into the codes by connivance between local labor and local subcontractors to make more work for themselves. There is no excuse for any local code requirement in excess of the safety requirements in the national electrical code or the national plumbing code, and there is no excuse for tacking local amendments on to any one of the four proprietary model codes (BOCA, Underwriters, International, or Southern) or the New York and New Jersey state codes.

The more waste the codes require the less money is left for more quality and more livability.

Says Realtor SUMMER: "I think years are going to have to go by before you can get progressive zoning."

Says Builder CENKER: "There is nothing wrong with a higher density in parts of a subdivision."

7. Local governments discourage good apartments by bad zoning

Says Builder SCHEUER: "It costs the community five times as much to service a single-family house in suburbia as it costs to service a garden apartment; ie, utilities, streets, police, fire department, etc."

Says Builder FREEMAN: "People who pay rent are not second-class citizens."

Says Architect SCHLOSSMAN: "The more rounded a community can be, the more stable it will be. A community composed only of single-family residences already has the seeds of its own destruction in it. Zoning officials must realize changes in residence are bound to occur as the residents get older. If they have to move away to find their new homes, the community will suffer, but if they can just move to a different type of building within the same community, then the community will be stable."

Says Land Planner GARDNER: "The school people have been my biggest enemies."

Some try to zone apartments out completely, in the unfounded fear that apartments will swamp their schools without paying enough school taxes to educate the apartment children.

Actually, so few school children live in today's apartments that this fear is usually foolish. Long Island Builder Herbert Gold found that his 285 apartments were paying \$1,709 in school taxes for each of the 28 school children who live there.

Some zone apartments out of residential neighborhoods, restricting them to a none-too-desirable buffer zone next to industrial or commercial areas.

The Apartment Round Table was almost unanimous that good apartments should be permitted (within the prescribed density limits) in areas now zoned for detached houses. Says Builder Carl Freeman: "You can't satisfy the needs of people who want to live in good garden apartments if you zone apartments out of good residential neighborhoods."

Others contribute to overbuilding and inflated land costs by authorizing needlessly high densities. Says Planner Carl Gardner: "In and around Chicago we overload three times the number of units that should be on the land."

Says Carl Freeman: "As a builder I would rather build 15 garden apartments to the acre than 30. Almost the only people who get any benefit out of zoning more apartments per acre are the people who own the land—not the builder and not the developer. The landowners ask twice as high a price if they can get their land zoned for twice as many apartments."

Redevelopment authorities likewise tend to base the resale price of the land they condemn on how many units will be built there. In Sacramento the redeveloper paid 75¢ a sq ft for low-rise apartments, \$2.50 for exactly the same land for high rise.

8. Federal housing legislation offers little help

Says Builder SCHEUER: "The present FHA program does not make rental apartments competitive with single-family homes or cooperatives, or particularly pleasant for the builder."

Says Builder CENKER: "FHA must take a little more risk and go out and encourage the development of family living in apartments."

Says Builder MADWAY: "The minute FHA abdicates any field of housing to conventional lending, it narrows the market. FHA is not fulfilling its basic function of providing housing for all phases of the market."

Says Architect WEIHE: "FHA standards are minimum. If you go above them, you get no credit for it."

Says Commissioner ZIMMERMAN: "We want to serve the entire rental market. I don't think FHA can turn its back on the minimum rent market, neither do I think FHA should make it difficult for builders to build for a high level of the market."

Congress has not given FHA the tools for a workable program for rental housing since 608, so FHA plays almost no part in apartment finance. In the first half of the year FHA insured 6,489 urban renewal units under Sec 220 and 221, but only 10,344 rental units under section 207, and only 1,508 rental coops under section 213. In other words, except for slum clearance projects, FHA helped finance less than 8% of the nation's new apartments.

Fourteen specific reasons why so few sponsors use FHA to finance apartments are listed on the next page, but the basic reason is this: Congress is not much interested in helping builders provide better apartments. Says the ACTION Report in a notable understatement: "The FHA rental program has always suffered from lack of political appeal."

Congress gives homebuyers every possible help through FHA because Congress loves homebuyers. But in recent years Congress has offered renters little FHA help, because Congress does not love landlords and Congress is afraid that anything FHA might do to help renters, would help landlords more.

Congress votes billions of dollars for high-cost public housing, because public housing helps renters without helping landlords. But Congress made a scandal of Sec 608 (which broke the war-born housing shortage by providing 400,000 good apartments, at no cost to the taxpayers), as soon as Congress saw that Sec 608 had helped the smarter landlords make big profits on small cash investments.

The stated No. 1 purpose of FHA is "to raise housing standards", but that is not the No. 1 purpose of the rental housing provisions written into federal housing legislation in 1954 at the height of the 608 scandal hunt. Their No. 1 purpose was to make it impossible for apartment sponsors to mortgage out. Their No. 2 purpose was to force builders to build for the low-rent market.

Since 1934 FHA has given home buyers a complete new deal—a new deal that has spread from federal policy to state policy too. But FHA has given renters no such new deal, so rental housing policy, both federal and state, is almost 30 years further behind the times than in 1929.

Here is why few apartments are financed FHA

1. The law makes FHA require a separate corporation or trust for each project, so sponsors of FHA apartments have to pass up many of the tax savings explained on page 193.
2. This separate corporation requirement makes it hard for the sponsor to withdraw the early tax-exempt cash flow without personal tax liability.
3. FHA makes builders amortize their mortgages on the accelerated-curtail-declining-annuity basis, which requires bigger amortization payments in the early years than a constant annuity mortgage.
4. FHA limits earnings by setting rents designed to allow, with 93% occupancy, only about 11.5% profit before corporate income taxes on a 10% book equity (7% on the book equity plus a ½% override on the 90% mortgage).
5. FHA ties the rent scale permanently to its original replacement cost estimate and permits future rent increases only to cover increased operating costs. Says the ACTION report: "FHA control over rents is probably the most irksome restraint." It lessens the investor's chance for capital gains by anchoring his rent schedule to the original construction cost. The only escape from this rent ceiling is to refinance conventionally.
6. FHA's overworked offices take so long to process applications and make inspections that many builders say they can have a conventionally financed project finished and occupied before they could even break ground FHA.

This is partly because too few conventional lenders take time to enforce good standards, partly because Congress will not let FHA spend enough of its income to do its job right, partly because FHA has been overcautious since it got into so much trouble over 608.

Walter Daran



Says Architect KRONSTADT: "The thing that keeps us out of FHA is the time element. It takes ten months longer to get a project started FHA."

Says the ACTION Report: "There is no reason why the mortgage per dwelling unit in rental housing should not approach the maximum limit set for one-family houses."

Says Commissioner ZIMMERMAN: "I think there is a grave weakness on our part in not recognizing additional quality in excess of our minimum standards."

Says FHA's MASON: "One reason so few apartments are financed FHA in Los Angeles is that conventional standards there, and most particularly conventional land-use standards, are so much lower."

Says Architect KRONSTADT: "Our experience is that FHA bases its rent estimates on what other apartments in the neighborhood rent for, not on what facilities and amenities you are offering in the new project."

7. FHA's artificially low interest rate (fixed by law at not more than 4½% for Sec. 207 until the new 1959 Housing Act raised the limit to 5¼%) made FHA financing impossible without paying big discounts (except to Fanny May). These discounts often require bigger equities, because under cost certification the excess discount can be included in the costs used to set the mortgage only as an offset to unbudgeted higher costs for something else. Furthermore, discounts are not tax deductible, so the sponsor cannot share their cost with the US Treasury.
8. FHA makes builders put enough money into a replacement reserve each year to pay for future replacement as equipment wears out. This cramps the style of builders who want to get all their equity out right away.
9. FHA cost certification worries sponsors who remember the troubles 608 builders had during the 1954 scandal hunt.
10. FHA 90% mortgages were limited (before the 1959 Housing Act) to apartments cheaper than the cheapest good houses that could be built in most areas (about \$12,500 for three-bedroom walk-ups in most areas, about \$20,500 for three-bedroom elevator apartments in the highest cost areas, if all the units were the same size).
To make these limits workable, most FHA builders doctor their plans to get just over the four-room-count line and FHA perverts the English language to count a one-room apartment as 3½ rooms if the one room is 260 sq ft plus a 60 sq ft kitchen alcove plus a 6'x12' balcony.
11. FHA Sec 212 makes apartment sponsors pay "prevailing wages" and prove it.
12. FHA appraisers have trouble "justifying" budgets based on higher rents in better new apartments than the rents prevailing in older apartments nearby, so their estimate of "economic feasibility" often cuts the FHA valuation below the estimated replacement cost.
13. Some conventional lenders are willing to underbid FHA's quality standards, so too many builders have found they can crowd more units on their land and save up to \$1,000-a-unit on construction by steering clear of FHA.
14. Conventional lenders often accept such high appraisals that many apartment sponsors say they can borrow almost as much on a 67% conventional loan as they could borrow on a 90% FHA loan.

continued

The new housing act gives rentals a better break and FHA is doing its best to make the law workable

The new Housing Act raises the ceiling on FHA apartments high enough to permit financing much better apartments through FHA. It raises the maximum mortgage on less-than-four-room walkups from \$8,100 to \$9,000, on less-than-four-room elevator apartments from \$8,400 to \$9,400; it raises the per-room mortgage limit for units with four or more rooms from \$2,700 to \$3,000; and it raises the maximum extra for high-cost areas from \$1,000 to \$1,250 per room.

The new law also gives cooperative housing a tremendous shot in the arm, a shot in the arm that may set off a real gold rush to section 213.

At least as important as these changes made by Congress are the steps FHA Commissioner Zimmerman and Assistant Commissioner Beverley Mason are taking to cut FHA red tape and make FHA's rental housing program more workable. As a result, many more sponsors will probably use FHA next year.

Here are some of the steps FHA is taking:

1. FHA has just simplified its cost estimating procedure to permit per-square-foot calculations without requiring a quantity survey. This will save weeks of time.
2. FHA is bringing a group of its ablest officials with the most experience in multi-family processing—some of them zone underwriters, some of them local directors—to Washington this month for a two or three week re-study of every aspect of rental housing procedure. Says Commissioner Zimmerman: "I want them to knock every barnacle off our rental housing processing, and I hope we can cut our processing delays at least in half."
3. FHA is refining its extra allowance for high-cost areas to make it conform more accurately to the local level of construction costs. In the most expensive area builders may be allowed the full \$1,250 extra per room, but in others they may be allowed only \$500 extra, or even as little as \$100 extra.
4. FHA is revising all its apartment standards, just as it revised all its single-family house standards earlier this year. The new standards are being developed in collaboration with a distinguished and experienced industry advisory committee including:
 - Builder Alvin L. Aubinoe
 - Builder George N. Seltzer
 - Architect Robert E. Alexander
 - Architect Ieoh-Ming Pei
 - Architect Norman J. Schlossman
 - Architect Edwin B. Weihe
 - Land Planner Carl Gardiner

They will try to eliminate every unreasonable requirement in the present standards (some builders are particularly critical of having to spend \$200 extra for a bedroom hall in one-bedroom apartments because FHA will not accept a bath accessible only through a bedroom), but they are likely to recommend much-needed higher standards for noise control, odor control, ventilation, adequate wiring, insulation, water heaters, etc.

Some of the new standards will have to be recognized in the room-count formula. One suggestion is that half-a-room credit should be given for a second bath in more-than-one bedroom apartments; another is to require bigger and better equipped kitchens to qualify for a full room count. (Today

a builder can up his mortgage limit as much as \$2,125 just by increasing the area of his kitchen from 59 to 60 sq ft). Another is to give additional room-count credit for bigger rooms.

5. FHA has revised its corporate charter requirements in consultation with NAHB Attorney Herbert Colton to make them more palatable to builders.
6. FHA has also changed its cost certification requirements to make them a little less onerous. At FHA's suggestion Congress amended the law to let FHA assure the builder that once FHA accepts his cost certification, he is in the clear.
7. FHA is updating its booklet on Planning Rental Housing Projects. It is supposed "to demonstrate what in the opinion of FHA are the desirable principles to observe," but it was last revised in 1947.

FHA's best deal for everybody may be a co-op under Sec 213

FHA made it possible to sell twice as many houses by underwriting what Builder Tom Coogan calls "a new kind of tenancy"—ie, a system of home ownership with such a small down payment that it takes almost as little cash to buy as to rent.

Now FHA may make it possible to rent many more apartments by underwriting "A new kind of ownership;" ie, a system of renting based on a big government-insured mortgage and a nominal purchase payment.

This program is FHA Sec 213.

It lets the builder erect the project with no investment except his time, his skill, and a small part of his land write-up, and it lets him cash in as soon as the units are all rented pocketing a builder's fee of perhaps 7%, an organizer's fee of perhaps 3% (minus expenses) and whatever write-up he was able to get FHA to allow him on his land.

It lets the occupant, in return for a down payment of about three months' rent, 1) save about \$130 a year on a \$10,000 apartment by eliminating any need of equity earnings; 2) save about \$50 the first year, and a little more than \$50 each year thereafter on 40-year amortization instead of 20, plus a little more on level annuity payments instead of declining-annuity-accelerating-curtail; 3) save several hundred dollars income tax because the tax and interest components of his rent payments will be tax deductible (as on any other type of home ownership); and 4) make a substantial capital gain if inflation and/or other economic forces increase the market value of his apartment.

Says Dwight D. Townsend; special FHA assistant in charge of cooperative housing: "The occupant under Sec 213 would pay about \$120 a month for an apartment that would cost him \$150 as ordinary rental housing."

FHA Sec 608 was on the books for nearly ten years before the builders woke up to its profit potential. Now Sec 213 has been on the books for nine years, but builders were so slow to make use of it for apartments that Congress has just sweetened the deal still further by cutting the cash requirement (formerly 5% for veterans and 10% for others) to only 3% for anybody plus 2% for working capital.

Says Builder Jim Scheuer: "Sec 213 is a better deal for most builders than Sec 207 or Sec 220. You get your land profit and your builder's profit and you are out."

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MORE ABOUT APARTMENTS:

Save money on taxes: how to make a profitable project show a tax-deductible loss.

see page 193

Prevent future headaches: you can make tomorrow's upkeep a lot easier if you take care of these trouble spots now.

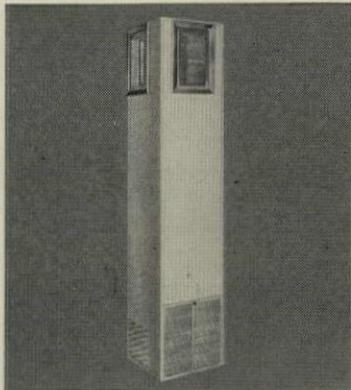
see page 197

Get the right answer--or else: seven questions to check out on before you commit yourself to any apartment project.

see page 201

Pick products that solve problems: among the new products in this issue suited to apartment building you'll find . . .

... Small-scale heating like



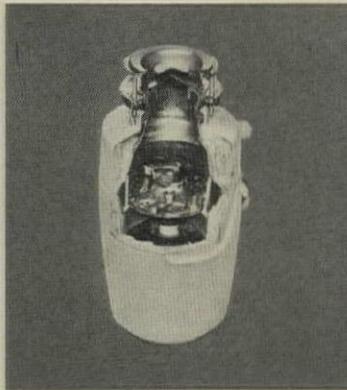
Compact furnace takes only 18"x18" of floor space, produces 50,000 Btuh of heat. It can be used in a closet or in a wall. Unit provides for up to four intake grilles at the bottom, hot air grilles at top. Unit is gas-fired, has ceramic-coated heat exchanger. Gravity upflow assures quiet operation. Furnace will continue to heat if electric power fails.

Holly-General, Los Angeles.

Check No. 1 on coupon, p 272

see also p 231

... Quiet appliances like



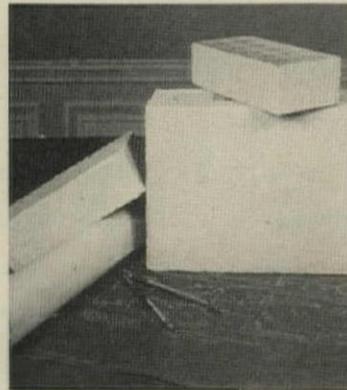
Sound-proofed disposer is enclosed in 1/2" of fiberglass and a polystyrene shell. It is suspended from the sink by a thick rubber cushion. Other rubber cushions separate the disposer and drain, form a seal across the waste feed hole. All moving parts are balanced to cut vibration. Imperial model has 1/3-hp motor, retails at \$129.95; Super is 1/4-hp, \$99.95.

Waste King Corp, Los Angeles.

Check No. 2 on coupon, p 272

see also p 232

... Low-upkeep finishes like



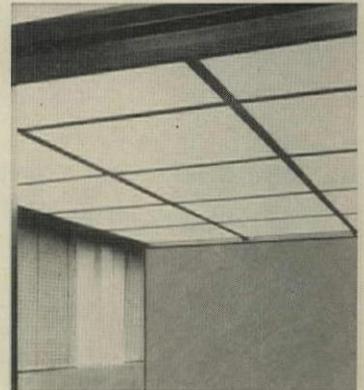
Tile-like plastic can be applied to masonry blocks, brick, plaster, asbestos cement, wallboard, wood, or metal. Glid-Tile is resistant to impact, abrasion, corrosion, stains, is easily cleaned. It gives a solid continuous film of almost permanent endurance, can be applied in a film thickness of 5 to 20 mils in one coat. A broad range of pastel colors is available.

Glidden Co, Cleveland.

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see also p 234

... Soundproofing like



Plastic acoustical sheet comes translucent, opaque, and in colors, is being widely used in luminous ceilings. Thin vinyl sheet is laminated between porous cellulose fibers. Evenly spaced pores break up sounds, give 70% noise reduction. Translucent sheet gives 48% light transmission. It may also be used in acoustical walls, in space dividers, as duct liners.

Contrex Co, Chelsea, Mass.

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see also p 236

MORE NEW WAYS TO BUILD BETTER

What the leaders are doing

28 new model houses from leading builders across the US show six big new trends that will give more variety to the 1960 market . . .

see page 213

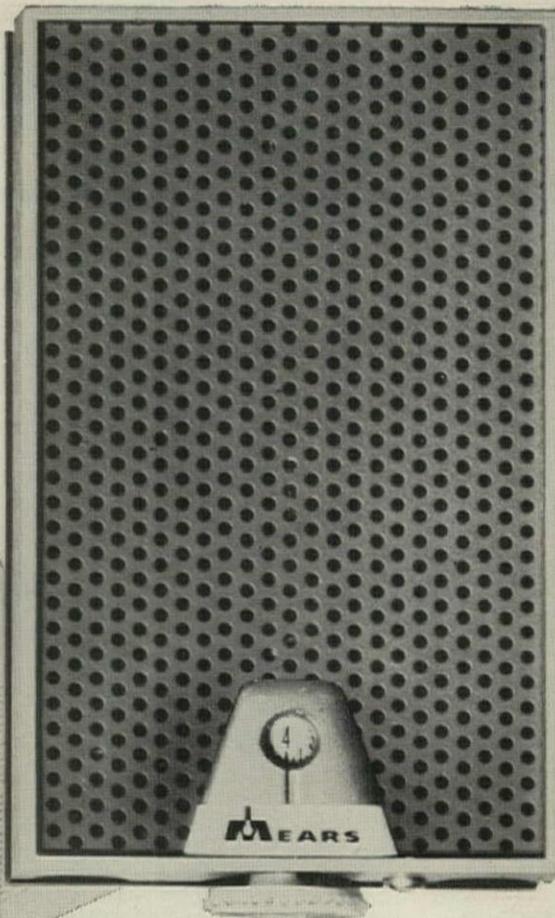
Technology

see page 206

Publications

see page 270

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Your best customers and prospects will be reading about the *new*, 1960 Mears "decorator" thermostat in *House Beautiful* this year. Advertisements starting in September will be telling them about the 1960 model . . . the M-6 series . . . the stylishly slim, dependable electric heat thermostat . . . the only thermostat recognized in the 1958 *Annual Industrial Design Review*.

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Profession.....



Says the ACTION Report: "No housing investor can afford to omit the tax angle from his analysis of a contemplated investment."

How to save money on taxes

The boom in rental housing offers the investor a great opportunity for big profits. But the full profit potential cannot be realized unless the project is carefully planned in all respects, including location, construction, financing, operation, and *income tax consequences*.

The smaller the equity the sponsor puts into the project and the nearer he comes to mortgaging out, the better his chances of making a big quick profit and the less taxes he will have to pay.

Most apartment sponsors try to mortgage out, and most of them succeed in borrowing enough to cover all their costs except what they actually paid for the land, so the land cost is all they have to invest in the project other than their time and skill.

Sometimes the sponsor already owns the land, in which case he can probably borrow enough to cover all his out-of-pocket construction costs if he can get qualified independent appraisers to set a high enough valuation on what the land will be worth after an apartment has been built on it.

Sometimes the sponsor takes a long-term lease on the site. This saves him from tying up any of his equity funds in land and makes his ground rent a tax-deductible expense, but 1) he cannot expect to borrow as much on the building and 2) he loses the building when the ground lease expires. This is probably a better deal for the landowner than for the sponsor, for 1) it gives him an assured and perhaps generous income on land which in many cases has been underused and unprofitable, and 2) it gives him this income without paying the capital gains tax a sale would involve, and 3) gives him the building free and clear when the lease expires, and 4) reserves for him the unearned

increment in the land value over the term of the lease.

Sometimes the sponsor can get the landowner to subordinate a long-term lease to the mortgage. This lets the sponsor get the maximum mortgage on the minimum equity.

But both leasehold plans limit the capital gain the sponsor can hope to make by selling or refinancing the project.

Sometimes the sponsor can find an investor who will commit himself to take the apartment off his hands as soon as it is finished and rented. This gives the sponsor a quick and assured construction profit without making him tie up any of his own equity money. It may also get him a profitable management contract on a lease bank, but it gives him no further chance of capital gains.

Sometimes the sponsor can put together a syndicate to provide whatever equity capital is needed, with individual

participants putting up as little as \$700 each (as in the case of N.Y.'s LaGuardia Hotel at LaGuardia Field) and with the sponsor putting up his construction profit to pay for his own shares. Most of these syndicates are partnerships or limited partnerships because individuals can get a big tax advantage from not incorporating (see below). A syndicate is probably the best deal for a sponsor who cannot afford to put up enough equity money himself, for it gives him an almost-free ride on a share of the capital gains which offer the principal hope of profit in an apartment venture.

Sometimes a well-heeled builder sets up a separate subsidiary corporation to sponsor an apartment and then takes a contract from the subsidiary to do the actual construction. In many cases the subsidiary has been able to borrow the full amount of the construction contract price; by filing a consolidated contract turn both corporations avoid paying any tax on the inter-company profit.



Felix



By Sylvanus G. Felix and Thomas F. McIntyre, of Felix, Griffin, Bowman, Templin, and McIntyre

Tax techniques

The alert apartment-house sponsor can take advantage of many tax-saving opportunities afforded by the internal revenue laws.

The Federal Internal Revenue Code will permit you to keep your books in such a way that the project will show a tax-deductible loss instead of a taxable profit for six or seven years. Maximum tax savings depend on taking maximum advantage of the maximum depreciation allowance and then taking your profit as a capital gain taxable at not more than 25%.

continued

Maximum tax benefits flow from proper use of tax techniques including:

1. Short economic life

For a frame-construction garden apartment, try to get Internal Revenue to agree that the economic life of the building will be 25 years. On a \$1-million structure, this would make your

straight-line depreciation allowance \$40,000, which is \$15,000 a year more than your allowance would be if the economic life is figured as 40 years. A few garden apartment sponsors are able

to make out a good enough case to get 25-year depreciation approved; most get 30 years. Masonry buildings occasionally get a 35-year depreciation approval; most get 40.

2. Accelerated depreciation

The 1954 Internal Revenue Code allowed, for the first time, the use of accelerated methods of computing the deduction allowable for depreciation. It offered a choice of two new methods, double-declining-balance and sum-of-the-digits.

Both give approximately the same de-

duction, but the double-declining-balance method is preferable, because it is easier to administer, it requires no salvage value, and it can be switched to straight-line depreciation without permission of the Commissioner of Internal Revenue.

Depreciation computed in accordance

with one of these accelerated methods will usually result in a deductible tax loss for several years while the property is actually appreciating.

The table below shows how double-declining-balance depreciation works on a fairly typical project with a \$1-million building and \$1-million mortgage.

How to cut your taxes with accelerated depreciation

This example will show you at a glance how accelerated depreciation can be used to give you a big tax-deductible loss at first (col. 4), how the tax bite grows from year to year (col. 5) until it is bigger than your total cash flow (col. 6), why it is smart to shift to straight-line depreciation when the building is about half depreciated (col. 1). Note how the tax-deductible depreciation allowance and the tax-deductible interest payment both diminish, while the non-deductible principal payment component of the constant debt annuity increases.

This example assumes a 25-year depreciation on a \$1 million frame-construction building financed by \$1 million

5½% 25-year constant annuity mortgage. It assumes a constant \$96,000 gross income (8% on a \$1.2 million total investment) after operating expenses and local taxes, producing a constant cash flow of \$22,200 a year after paying the constant \$73,800 debt service annuity. In the thirteenth year depreciation is switched from double-declining-balance to straight-line, which permits a bigger deduction after the half-way point.

Income taxes are computed on the assumption that the property will be transferred from individual to corporate ownership after the seventh year.

Year	Maximum depreciation	Interest payment	Principal payment	Taxable income	Tax to be paid	Net cash after taxes
1	\$80,000	\$54,510	\$19,290	—\$38,510		\$22,200
2	73,600	53,430	20,370	—31,030		22,200
3	67,710	52,280	21,520	—23,990		22,200
4	62,290	51,070	22,730	—17,360		22,200
5	57,310	49,790	24,010	—11,100		22,200
6	52,730	48,350	25,450	—5,080		22,200
7	48,510	47,050	26,750	—440		22,200
8	44,630	45,490	28,310	5,880	\$ 1,764	20,436
9	41,060	43,890	29,910	11,050	3,315	18,885
10	37,770	42,200	31,600	16,030	4,809	17,391
11	34,750	40,430	33,370	20,820	6,246	15,954
12	31,970	38,540	35,260	25,490	7,754	14,446
13	28,280	36,550	37,250	31,170	10,708	11,492
14	28,280	34,440	39,360	33,280	11,805	10,395
15	28,290	32,230	41,570	35,480	12,949	9,251
16	28,280	29,890	43,910	37,830	14,171	8,029
17	28,280	27,410	46,390	40,310	15,461	6,739
18	28,280	24,790	49,010	42,930	16,823	5,377
19	28,290	22,040	51,760	45,670	18,248	3,952
20	28,280	19,110	54,690	48,610	19,777	2,423
21	28,280	16,020	57,780	51,700	21,384	816
22	28,280	12,760	61,040	54,960	23,079	—879
23	28,290	9,320	64,480	58,390	24,862	—2,662
24	28,280	7,720	66,080	60,000	25,700	—3,500
25	28,280	5,690	68,110	62,030	26,755	—4,555

3. Individual ownership vs corporate ownership

The deductible tax loss resulting from accelerated depreciation and large interest payments in the initial years can be used directly to reduce the sponsor's (or sponsors') personal income tax liabilities if ownership is kept in the name of an individual, partnership, or syndicate instead of a corporation.

Movie stars and other high-bracket taxpayers take advantage of this fact by investing in rental properties which give them a depreciation deduction to

offset against their ordinary income while their asset is, in fact, appreciating and making possible future long-term capital gains.

Later on when the apartment can no longer show a tax-loss as a result of fast depreciation, it may become advantageous to change to the corporate form of ownership. This can be done very easily, tax-free, by transferring the interest that is owned individually to a corporation and, thus take advantage of

the lowest corporate rates. The tax rate on the first \$25,000 of taxable income for a corporation is 30% at the present time. Thus, a husband and wife could transfer each of their interests in rental property to two separate corporations, one for the husband and one for the wife, and realize an income in these corporations of up to \$50,000 (\$25,000 in each corporation) and not pay more than 30% in taxes.

4. Capital gains

Another possibility the apartment-house owner has is that of realizing capital gains on the sale of his property. After the property has been operated for sev-

eral years and the tax basis reduced by accelerated depreciation, the owner quite often has an opportunity to sell the property at a price equal to, or

greater than, his original cost, due to the normal appreciation in real estate. The gain on such a sale is a capital gain and the maximum tax payable is 25%.

5. Additional first year depreciation

In 1958, a provision was added to the Internal Revenue Code, permitting an additional deduction for depreciation equal to 25% of the purchase price in the year of purchase. This additional depreciation applies only to tangible personal property with a useful life of

six years or more. The deduction is limited to \$2,000 per year per taxpayer or \$4,000 on a joint return.

Small though this relief provision is, it is a great bonanza to the owners of furnished apartments who invest as much as \$20,000 per year in furnish-

ings. Under these circumstances a husband and wife can deduct as much as \$4,000 per year additional from a joint return. Considering that this comes off of their top bracket, it can amount to a sizeable income-tax saving even for owners in a relatively low bracket.

6. Tax-free exchanges

An apartment house can be traded tax-free for other investment or income producing property. The owners of an apartment-house unit therefore have an opportunity to upgrade their investment from time to time. Alert operators have been able to acquire rundown properties, repair and modernize them and

increase their productivity from an income standpoint and then be in a position to trade these for better property and continue this process. This is done under the "exchange of like-for-like" provisions of the Internal Revenue Code, which provide that such trades are nontaxable except where additional

cash is received: then the tax is limited to that portion of the gain represented by the cash received. The provisions governing the "exchange of like-for-like" are so broad and generous that a farm may be traded for an apartment house in the city and still qualify as nontaxable.

7. Use of rental income to offset personal holding company income

A corporation that received dividends from other corporations is entitled to an 85% dividends-received credit, which means that it pays tax on only 15% of the income so received. This is a tremendous advantage, from a tax standpoint, since an individual must pay tax on the entire dividend received, less a small credit. However, there is a pos-

sible tax trap in a corporation receiving dividends in that if the bulk of its income is from dividends it may fall into the "personal holding company trap" and be subject to a penalty surtax. However, if more than 50% of its gross income is from rents, it will not be a personal holding company. Thus, an individual who owns dividend pay-

ing corporate stocks can transfer these stocks to his family corporation which receives rental income. As long as the corporation's gross income from rents is more than 50% of its total income it will not be a "personal holding company" and it can enjoy the low effective tax rate on its dividend income due to the 85% dividends received credit.

8. Use of subsidiary to eliminate inter-company profit and justify accumulation of surplus

As mentioned hereinbefore, one technique used by large builders who have accumulated substantial net worth in their construction companies is to organize a subsidiary to own and operate a rental project. The Internal Revenue Service has always frowned on the accumulation of earnings in a corporation unless it could be clearly shown that such accumulations were actually necessary for the corporate business. If not, the corporation was subject to a penalty surtax for "improperly accumulated earnings." The creation of a sub-

sidary to own and operate an apartment house project is a bonafide business purpose and would justify the accumulation of a large amount of the parent corporation's earnings. Thus, by creating such a subsidiary, a corporation can successfully sidestep this "improperly accumulated earnings" trap.

A construction company has the additional advantage of being in a position to do the actual construction work for a price equal to the price that would be paid to any independent construction company and thus the parent will

realize, for financial purposes, a profit on the construction of the apartment house project. Then, by filing a consolidated income tax return, this inter-company profit will be completely eliminated.

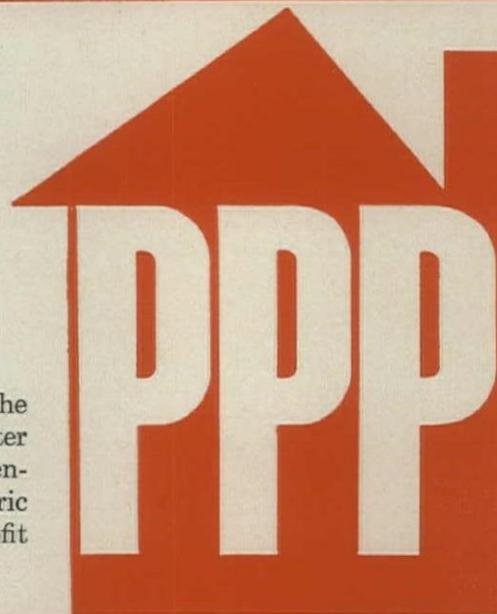
However, the subsidiary, for financial purposes, will reflect the contract price, including the profit to the parent. Thus, by the use of a subsidiary by a construction company, the benefits of the inter-company profit for financial purposes are gained while, at the same time, there is no tax burden. /END

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HH-10

Plan for less janitor service and less maintenance

High operating and maintenance costs can ruin your profit picture. One method of forecasting what might go wrong in the future is to look at old apartments to see what has gone wrong in the past.

What goes wrong in old apartments?

To get the answer, HOUSE & HOME editors interviewed scores of apartment builders, architects, mortgage bankers, investors, owners and management firms from New York to the West Coast. In addition there were Round Tables and many luncheon meetings. Here, in condensed form, is what the experts recommended:

Everything takes a beating because the renter is harder on materials than the home owner.

Architect Arnold Kronstadt,
Washington.

We rent furnished and unfurnished. People who rent furnished apartments take poorer care of things than people who own furniture.

Al Berger, San Diego.

If I were building garden apartments for suburban families, I would put in good garbage disposers to minimize janitor service and I would let the tenants provide their own heat and hot water from a separate unit in each apartment.

James Scheuer, New York.

Don't call your janitor a 'superintendent.' Call him a 'manager.' It adds prestige to his job, gives him more respect and authority.

Builder Alen Herman,
Minneapolis.

You can reduce damage to apartments by charging tenants a \$100 deposit and deducting for actual damage they do.

Al Berger, San Diego.

One thing that always bothers us is when we get maintenance trouble on what we had assumed to be a quality building.

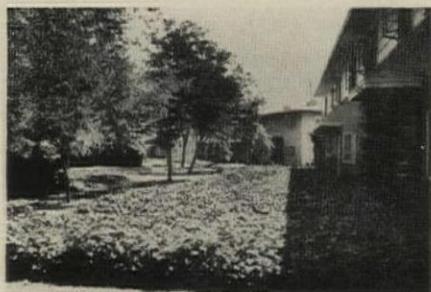
Harry Held, sr vice president,
Bowery Savings Bank,
New York City.

The greatest point of failure in apartments is the tenant turnover. So don't put in gimmicks. Put in sound value. Either put everything in right, or don't put it in at all. Your maintenance must be kept up or you can't expect tenants to keep up their part.

Builder Raphael Silver,
Cleveland.

continued

H&H staff



Heavy ground cover needs almost no care for many years at Baldwin Hills Village, L.A.

Landscaping and paving

Use durable ground cover that needs little or no maintenance. This costs more than grass seed initially but is much cheaper in the long run. Fence in new planting. Use underground lawn sprinklers. Children are the biggest problem with either new or old plantings, so plant "hard" types of shrubs that withstand punishment. Pave areas that get heavy foot traffic. Put your sidewalks where people want to go. Use concrete on your driveways and parking areas because asphalt is damaged by oil.

Studio House



Put paths where people walk, as in this Scheuer redevelopment job in Cleveland.

Patios

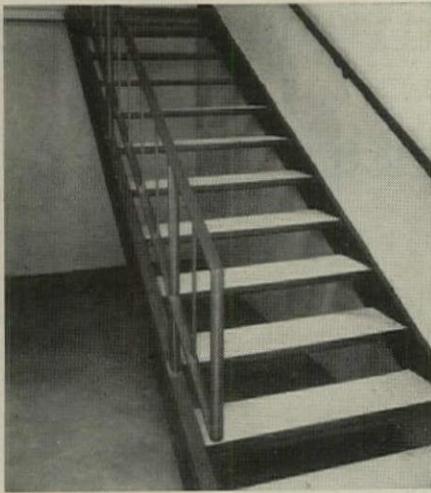
"To keep maintenance low, make your patios indestructible. Use concrete block walls with color integrated so you won't have to repaint. If you have plastic screen walls, bind the edges with aluminum," says Grandview Construction, Los Angeles.

Exterior doors

Make your doors durable, warp-proof, heavy, and tight enough to keep out noise from halls or outside. A door from a plastered corridor will develop plaster cracks running 45° from each top corner to the ceiling after a few years of use, say Architects Voorhees Walker Smith Smith & Haines. The solution: use floor to ceiling doors or a frame with a panel at the top of the door.

An oversize door takes less punishment from furniture movers, too. In some 11-year old buildings maintenance men report: "Panel wood doors are a maintenance problem, especially exterior doors, frames and trim. Some wood reveals had to be replaced, many doors are showing opening joints between stiles, rails and mouldings.

H&H staff



Long-life stair at Loma Palisades, San Diego, has pebble concrete treads, steel frame.

Public areas outside

Design corridors, decks or stairs for materials that have long life and that can be washed with a hose, like Diato or pebbled concrete. Use railings of steel, aluminum or materials that will hold paint a long time.

"It is a good influence on tenants when management sets a good example by keeping all the public areas clean and tidy."

Al Berger, San Diego.

Pope Studios



Quality grade of carpet for halls and stairs will last ten years. R. Parks, Sacramento.

Public areas inside

Design inside corridors or stairs for carpeting to reduce noise and use all of one color. A good carpet will last 10 years or more. Keep corridors 6' wide so furniture movers won't damage the walls. Consider a freight elevator if your building is three or more stories. If you have just a passenger elevator, make the inside a sturdy, fool-proof material that will stand up to the furniture movers.

Foundations

Garden apartments are built on slabs, crawl space, basements, "English basements" (half story in the ground with apartments there), or supported on piers with car parking below the building. Of these various methods, slabs are the most popular because they are cheapest and most nearly trouble free. "If you build on a slab," says Architect Robert Alexander of Los Angeles, "compact your soil 4' below. All slabs settle, but this will give you uniform settling which is what you want." "Always reinforce your slab with steel," Grandview Construction of Los Angeles recommends.

Some owners prefer crawl space because you can get at the plumbing more easily. But crawl space construction can cause trouble if not handled properly. New York Architects Voorhees Walker Smith & Haines made a study of some 10-year-old apartments, discovered that condensation was causing deterioration of wood members because the moisture barrier was not effective and there had been poor ventilation. Their conclusion: a good slab is a simpler solution.

Roofs

Leaking roofs are a costly problem and one solution is to use a quality grade of commercial built-up roofing. Another solution is to use a heavier grade of shingles than is used by most home builders. Lomas & Nettleton, management firm and apartment experts of Hartford, Conn., have seen many roofs affected by dry rot, recommend proper roof ventilation, especially in flat roofs. They suggest using 2x4s on top of roof joists (running at 90°) with the sheathing on the 2x4s. This gives 2" of air space. Breathing holes bored through the joists help some but are not enough.

A pitched roof helps to solve the dry rot problem and makes for a cooler roof in summer.

All management firms recommend using a master TV antenna system so men will not be climbing around on the roof. A spokesman for Phoenix Insurance Co said they liked gable roofs in the northeast but take flat roofs in the south and southwest.

Squire Haskins



Unpainted brick is favorite exterior wall. Plaza Apartments, Arch: Hal Anderson, Dallas.

Outside walls

The aim of most apartment builders is to get an outside wall that does not need to be repainted or otherwise maintained. Unpainted brick is far and away the first choice. Aluminum, stainless steel, porcelain enamel, concrete block, stucco and redwood are also growing in use.

The N.Y. Housing Authority, which maintains many brick buildings, reports that the biggest water leak problem is at the flashing below and above windows and at spandrels. Its maintenance engineers recommend against using brick parapet walls, suggests railings instead. An above-roof wall is so much colder than a wall abutting apartment space that the parapets will crack.

Grandview Construction, Los Angeles, has found that stucco walls absorb moisture near the ground. After a few years stucco becomes discolored and cracks off. Solution is to stucco down to a horizontal metal bead about 18" or more above the ground and paint concrete below that a matching color.

"Masonry construction costs more but later your maintenance costs are lower. A multistory building (meaning four to eight floors) will give you 15 to 20% more profit per dollar invested than garden court apartments."

Hebb & Narodick, Seattle.

H&H staff



California builders stop stucco short of ground to prevent hydrostatic action.

Balconies

The biggest problem is to make them weatherproof and provide proper drainage. In concrete buildings in cold climates the slab should not be run through to form a balcony without putting in a thermal barrier, says the N.Y. Housing Authority. Otherwise the balcony floor will carry cold right into the ceiling of the apartment below and moisture will condense there.

Windows

You can find enthusiastic fans for each type of window—wood, aluminum, steel.

In colonial or conventionally designed garden apartments, wood windows are the favorite. Even some designers of high-rise apartments wish they could use wood windows because of their good cold-weather performance.

Aluminum for modern design is the favorite because of their low maintenance; architects and builders recommend using only the highest quality. (Aluminum windows take a beating during construction and must be protected. The N.Y. Housing Authority recommends the use of a bitumen coating where aluminum meets a brick wall, or grease or tape where aluminum frames meet a plastered wall.)

New York Life officials are among the strongest backers of steel windows, having used them in thousands of apartments. Steel windows were used in their big Manhattan House ten years ago and are repainted once in five years. "This not only protects the steel but dresses up the whole building," said one official. "I would say these ten-year-old windows look better and handsomer than much newer windows in another apartment nearby." N.Y. Life built apartments in Chicago seven years ago, using hot dip bonderized steel windows that were given a silvery finish in the factory. The windows have never been repainted and N.Y. Life thinks the factory finish will last 20 years without repainting.

In some 11-year-old apartments maintenance engineers reported: "Metal windows requiring a mechanical operator require high maintenance. Our preference now is for double-hung."

The biggest problem with any windows, says Lomas & Nettleton of Hartford, is heat loss around the outsides of the whole window frame, not between the sash and its frame. "Builders don't insulate properly," says L&N, "and a few dollars more spent here would really pay off over the years in reduced heating bills."

Window sills, both outside and inside, should be designed for low maintenance. Says L&N: "exterior sills should be of limestone and should slope down to carry off water. Limestone is a very good investment. Interior sills, especially in bathrooms, should be of waterproof material like marble, ceramic tile, or plastic."

Interior doors

"They should be 1¾" thick," says Architect Edward Fickett of L.A., "so they won't warp. And closet doors should be of a warp-proof material bound in metal." Closet doors in apartments take a severe beating and should be designed for a long and rugged life.



Vinyl floors, steel cabinets keep maintenance low at Madway's Philadelphia apartments.

Kitchens

What goes wrong in kitchens? Floors, cabinets, counter tops, wiring, hardware, walls, appliances. Cabinets are a controversial subject: some owners would have nothing but steel, others nothing but wood, but there are more who favor steel because it can stand punishment better and can be spray painted when necessary, or a door can be replaced. Cabinet hardware is important, as cheap hardware will break down.

Plastic counter tops are most commonly used and require little maintenance. In some areas, builders prefer ceramic tile. Stainless-steel drainboards are in one large group of apartments and after 19 years are still in fine shape.

Kitchen walls should have washable paint or wallpaper. A hood with a good fan and filter over the stove will help keep the kitchen walls clean and reduce painting costs.

Kitchen appliances should be bought with proper attention to maintenance as quality products far outlast cheap ones. Quality dishwashers, quality stoves, quality garbage grinders will have a much longer life than inferior products. In most new garden apartments garbage grinders are standard equipment. Most refrigerators are so reliable they cause little trouble. "We paid \$6,000 more for the best disposer we could find," says General Manager Al Berger of Loma Palisades in San Diego, "and we consider it a good investment."

"It is bad when kitchen cabinet doors warp and then don't fit. When this happens tenants misuse them and don't try to keep them up."

Prudential official.

Bathrooms

In old apartments the bathroom shares with the kitchen the dubious distinction of "rooms that go bad first."

Window sills over tubs rot out, plaster ceilings fall down, walls around tubs absorb moisture and have to be replaced, floors get wet so often they cause trouble, medicine cabinets rust out, metal fixtures such as holders for soap, toothbrushes and drinking glasses corrode, lavatories become chipped because bottles from medicine cabinets fall down (remedy: put the cabinets at one side). The flushing mechanisms of toilets break down: nearly one-quarter were replaced within nine years in one large apartment group.

Shower curtains are another source of trouble. Cheap plumbing fixtures can cause expensive maintenance. Says Hebb & Narodick of Seattle: "If you must take the lowest plumbing bid, it is all right to take competitive grade fixtures but be sure to get the best fittings possible."

To save money in the bathroom, spend a little extra money for good materials and products. Ventilating fans in both inside and outside bathrooms are a good investment.

"Plumbing valves go bad first, then toilet floats, outside decks, balcony rails, paint."

Architect Edward Fickett,
Los Angeles.

Interior walls

In garden apartments of frame construction, drywall is the favored material and is generally considered to have lower maintenance costs than plaster. Most high-rise apartments are plastered. Whichever material is used, there is a maintenance problem when tenants handle their own curtain rods and put up pictures. To overcome this, many builders include curtain rods as they do venetian blinds, figuring it saves them money. Some have their superintendents hang all pictures, using hooks that cause little damage to the walls.

"Manufacturers must design preventative-maintenance products that the public will accept; finishes that won't scratch easily, corners that won't get banged up by every piece of furniture."

Builder Lewis Cenker, Atlanta

"Plaster cracks are always a problem in an old apartment building that is settling."

Prudential official.

continued

Interior floors

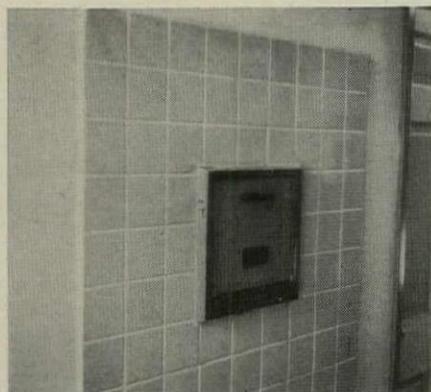
Use a good grade of oak flooring for living rooms, bedrooms and halls, say practically all apartment owners and maintenance engineers. Some apartment owners, like the Cafritz Construction Co in Washington, are upgrading old apartments by replacing tile with oak.

For kitchens and baths owners agree that better grades of resilient flooring like vinyl or vinyl asbestos pay for themselves in low maintenance. Many believe that sheet material is better than small squares of tile, are divided between linoleum and vinyls.

"We get complaints from tenants about creaking wood floors and know this happens because the subfloor was not nailed properly."

Prudential official.

H&H staff



Good practice: surround incinerator door with ceramic tile as Alen Herman did here.

Incinerators

Install one if your code permits it. Put openings on each floor and protect the surrounding wall so it won't be mutilated, as in the accompanying photographs. If you expect each tenant to carry out his own trash, make it easy for people to find the trash area and give some thought to how the place will look after two or three years. Proper design will let you cut both janitor and removal costs.

H&H staff



Poor practice: without surround, heavy doors crack plaster in new building.

Laundry rooms

Remove the moisture with effective fans or you will have real trouble here. Run ceramic tile high up on the walls, especially behind the washers and dryers. Put a drain in the floor; plan the room for easy washing with a hose. Provide small individual lockers for washing powder, soap, etc. and put a hasp on the locker door so tenant can use a padlock.

Wiring

From a maintenance point of view, the most important fact about wiring is the high cost of adding more wiring when you don't do it right the first time.

In one large group of eastern apartments, the owners found they were replacing 10,000 fuses a year because of inadequate wiring and are now spending a huge sum to rewire. There were two principal trouble points: not enough outlets or capacity in the kitchen, and not enough capacity for room air conditioners. In another apartment building the consulting electrical engineer urged the owner to spend an extra \$2,500 to provide for future electrical expansion. The builder rejected this but after only five years found he had to rewire at a cost of over \$45,000.

One of the surest ways to keep apartments from becoming obsolete is to provide enough wiring. Add room for growth at the service entrance, at the main switch, at the meters. Add some spare steel conduit or metallic tubing at the time of construction so additional conductors can be pulled in later.

Paying more for good materials will save money later. "By paying 75¢ more for electric switches, more for plugs and outlets, saves us thousands of dollars later. It takes only \$5 or \$10 an apartment. We also spend more on lighting fixtures because they'll last longer," says Hebb & Narodick of Seattle. Everyone recommends using switch plates that do not have to be repainted.

"You will be forced to upgrade the quality of your apartments to get full occupancy because people are going to shop around for something better. If you upgrade the apartments and equip them better, you will attract better tenants. You certainly had better do something to prevent obsolescence."

A. B. Ritzenhaler, vice president,
Tappan Co.



Long life and individual room controls are big factors in choosing air conditioning units.

Air conditioning

The trend in garden apartments (and many high-rise) is to individual through-the-wall room units. These units let an owner pass on the operating costs to each tenant on his electric bill. Maintenance costs can be high if an owner buys poor equipment. This is no place to try to save pennies, and the price should probably include a maintenance contract. The wall opening should be designed for quick and easy changes when units need to be taken out for servicing.

Some apartment owners offer cooling units as optional extras and have nicely designed metal plates that cover both inside and outside opening if units are not used. In multistory buildings central systems may require lower maintenance over the years (one reason why office buildings have central systems).

Carrier



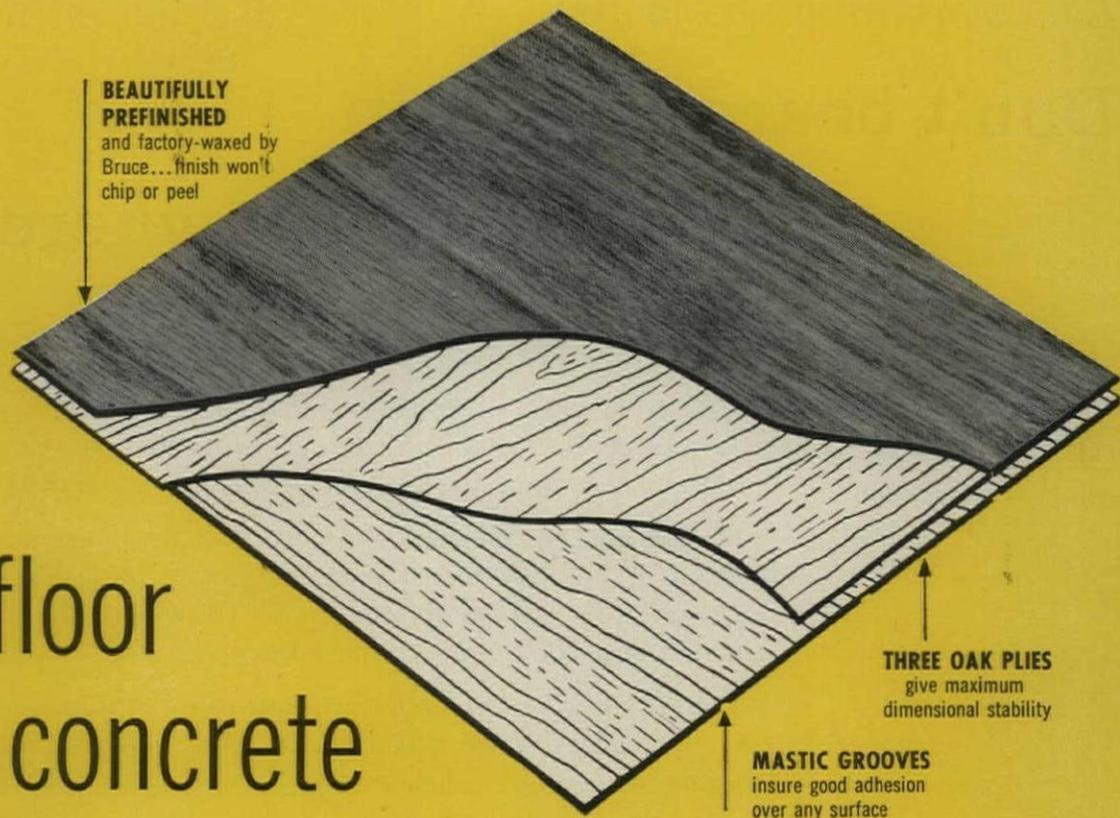
Individual heat pumps are newest trend, as in Walter Richter's apartments, Scottsdale, Ariz.

Heating

Individual warm air furnaces for each apartment (often located within the apartment itself) are a growing trend in garden apartments. This lets every tenant control his own heat, and he pays for it on his monthly bill. Obviously an owner is foolish to put in cheap furnaces that will cause trouble.

In areas where electric rates are low, electric heating has been put in many apartments. In some areas, notably Florida and Arizona, apartment builders are installing electric heat pumps for both heating and cooling and this will probably be a growing trend. The purchase price should include annual maintenance services and replacement if necessary.

Prudential official.



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Last word on apartments:

Don't board the train

until you know where it's going

This salty advice was volunteered by Dave Slipper, while he was planning apartment projects for Webb & Knapp, to warn builders against plunging into apartment construction without first doing a complete analysis of the local market.

Market analysis means: "Find out who your customer is, what he wants, where he wants it, and how much he can pay for it." A lack of such basic market information can lead to irreparable mistakes. Things you do wrong *before* you begin construction hurt you more than mistakes you make while building.

If you talk with FHA about insuring your loan, here are seven questions they will ask you, based on the FHA booklet, *How to Test Financial Soundness of Rental Housing Properties*, which makes good reading for any apartment-house builder whether he goes to FHA or not.

1. Have you chosen a good location?

Apartment-house builders are unanimous on one point: location can make or break an apartment. It is the single most important factor in success or failure. All the experts will tell you not to build on land just because you happen to own it or because it is cheap. Buy the best location you can find, because paying 20% more for your land will add less than 5% to your total cost. A good location must be where the kind of tenants you are aiming for want to live, close to the transportation, shops, churches, recreation, and other community facilities they want to use. The best location for one type and price class of renter is not always best for another (see No. 2 below).

"Don't buy land thinking you can get it re-zoned later for apartments. The neighbors will rise up and oppose you, and usually they will lick you."

Builder Douglas Pringle, Burlingame, Calif.

"It is much better to pay enough to get a good location. Ask your lender if he approves the site before you commit yourself."

Realtor Lowell Gratton, San Jose, Calif.

"Garden apartments should be within easy walking distance of neighborhood shopping, public transportation, and a main traffic artery."

Mortgage Bankers Lomas & Nettleton, Hartford.

"If the project is mainly efficiency units, it should be kept close to a major business district."

James Truesdall, Travelers Insurance Co.

"I try to give people a terrific address, one they can be proud of."

Builder Randolph Parks, Sacramento.

"Don't build on land you own just because it is cheap. Good location is the single most important factor in apartment building. It costs no more to build on good land than poor land. Stay out of smaller towns where the number of prospective renters is limited. We built in one small town and we won't go into another."

Builders Hebb & Narodick, Seattle.

"Just because an area is zoned for multiple dwellings is not a good reason for building there. In each location we first try to determine what rents we can get, because they are different for each area. If people have been

paying only \$54 to \$60 a month for rent, they will fight you on paying \$100. When you build in the suburbs, you face competition from one-family houses. Be very cautious about pioneering in a new area."

Builder Alen Herman, Minneapolis.

"The key to apartment-house success is good location. You can afford to pay twice the price of cheap land for really good land. Don't buy unzoned land. Remember that renters like to live near other renters."

Builder Raphael Silver, Cleveland.

2. What kind of apartments do people want?

One of the worst mistakes you can make is to build three-bedroom units where renters want only one bedroom, or vice versa. Should you build a garden-type walk-up, a high rise, a town-house duplex, efficiency, or what? What kind of new apartments are drawing renters out of old apartments? Should you build 10, 20, 50, or 100 units? On vacancies and migration you can get help from the electric, gas, and telephone companies, from your local real estate board, from the Bureau of Labor Statistics, from mortgage brokers and banks.

The best market analysis is one you hire a professional analyst to make just for you. In Detroit, for example, several apartment-house builders have used the services of Aaron J. Blumberg, who works out a careful questionnaire and interviews 100 or more prospective tenants who are now living in other apartments nearby. He finds out how much rent they are paying, all about the services they get, what they like and dislike, and skillfully finds out what kind of apartment they would move to and how much they would pay for better living conditions. One of his typed reports covers about 30 pages.

It is obvious that an apartment-house builder who makes his plans on the basis of what potential renters want and will pay for is in a very strong position.

"Projects of less than 11 units are economical only if the investor intends to live in them and do his own management and maintenance."

Harvey Kuhnley, Twin Cities Federal S&L, Minn.

"If you are building to hold, 50 units is the smallest number to consider. Management costs for 50 are not much more than for 12. If you are building to sell, then 12 or 14 units are ok, because the smaller the building,

the easier it is to sell. When you build a small building to sell, put in one real nice apartment for the owner to live in."

Builders Hebb & Narodick, Seattle.

"A project of less than 50 units is not economical. You really should build 100 or more to get any economies. This is true from every point of view: planning, land use, construction, renting, maintenance, and management. The larger the venture, the lower the fixed costs per apartment."

Al Berger, general manager,
Loma Palisades, San Diego.

"Build for a special group of renters—don't build for everyone. There are four kinds of prospects: 1) young executives and business girls with good jobs; 2) young married couples with children; 3) older couples whose children are grown; and 4) senior citizens. Each group wants a different kind of location, price, and facilities. Group 1 wants to be close downtown and doesn't mind traffic noises too much. Group 2 wants a residential area, more bedrooms, play yards, open space, does not mind noise too much. Group 3 wants more luxury and more quiet, with some garden or patio space. Group 4 wants to be close to stores, wants lower rents, smaller apartments, may prefer old apartments because of lower rents."

Douglas Pringle, California

"Three-bedroom apartments are for larger families and should be put in low-rise apartments. Smaller units are for smaller families and can be put in high rise."

Architect I.M. Pei, New York.

"Set aside a separate building for couples whose children are grown up, but don't build three-bedroom units for them. Two is all they want."

B. Zuckerman,
Grandview Construction Co, Los Angeles.

3. What are competitive rentals?

Find out what old and new apartments are renting for. You've got to meet competition, but there are several ways to do it. Any new apartment will have to rent for more than an old apartment but people will pay higher rents if they get better value and they find new qualities older apartments lack. In Washington, Builder Carl Freeman draws many renters from a huge 608 project next door although his rents are \$20 per month higher. The reason: his many features seem like a bargain for \$20.

4. What features appeal to your market?

In many cities the apartment market is becoming as competitive as the single-family house market. So to be successful, a builder must find out what renters want and give it to them.

"Since you are competing against the single-family house, you need the same features to rent an apartment."

Builder George Gross, New York City.

"You can learn a great deal from listening to other people's complaints."

Architect Arnold Kronstadt, Washington.

"Consider an elevator for a two-story apartment, especially if you are renting to a better class of tenant. With your garage below the building, there is a two-flight walk to the upper floor. Elevators don't cost much and they are a real sales asset."

Douglas Pringle, California.

"Give people luxury. In a city where most rents are low, apartments of around \$200 a month are a big market. It is easier to finance luxury."

Builder Randolph Parks, Sacramento.

"Older families have dining room furniture and like a separate dining room."

B. Zuckerman,
Grandview Construction Co, Los Angeles.

"People who rent efficiency or one-bedroom suites have little furniture and want to buy as little as possible. So I build in a combination bar and breakfast counter between living room and kitchen, a built-in dining table, a counter in the dressing room. They can furnish it with very little stuff."

Douglas Pringle, California.

5. What will land and buildings cost?

An apartment house builder is like a juggler on a tightrope: everything has to be done just right or he spoils the act. "Apartments are a very specialized type of construction and builders who rush in pell-mell can be hurt," says Cleveland Builder Raphael Silver. "With houses you always have your profit to work against and you can pay for mistakes out of your profit. But with apartments you throw in your profit to begin with as your equity. If an ill wind comes along, you just have to put in more cash. For beginning builders, I'd recommend going FHA—it is good discipline and teaches good business methods."

You can find out what other new apartments cost from other builders, from lenders or mortgage brokers, from FHA. One of your best allies can be an experienced architect, like some of those whose buildings are shown in this issue. After they have done a number of buildings for different owners they often know more about costs than anyone in town.

Some 89% of all apartments are financed by conventional lenders and a builder's best bet is to talk with his mortgage man about the land and see if his lender will finance an apartment there. Lenders have strong convictions about what they will finance, and as money gets tighter you may have to shop around.

6. How much will your operating expenses be?

"Failure to design and build with operating and maintenance costs in mind can result in a project almost certain to fail," warns the FHA booklet. Low maintenance and low-operating costs often spell the difference between profit and loss (see p 197).

"Maintenance expense for an elevator apartment will run about 45% of the gross rentals and about 33% of a garden apartment."

Dave Slipper, New York.

"An owner should set aside about two month's rent for annual operating expenses."

Douglas Pringle, California.

"Management of a big project is a special job. If a builder does not have a management organization, he should sell his apartments. Otherwise he'll beat his brains out."

Al Berger, general manager,
Loma Palisades, San Diego.

7. What return on capital is required?

Perhaps this question should be asked first, because it is the key question. If you have financial partners, if you plan to sell, or if you plan to hold the apartment for your own investment, you must know what the pay off will be. Don't risk your money unless you can see a 15% return on your equity.

"Rental housing is not an investment; it's a commercial enterprise."

Neal Hardy, National Housing Center.

"Too many doctors, lawyers, and other people who aren't satisfied with 2½% or 3¼% always rush out and buy a piece of income-bearing property. They must take some kind of confidence course in real estate and then make mental projections about how much they'll make."

Builder Lewis Cenker, chairman,
Urban Renewal Committee, NAHB.

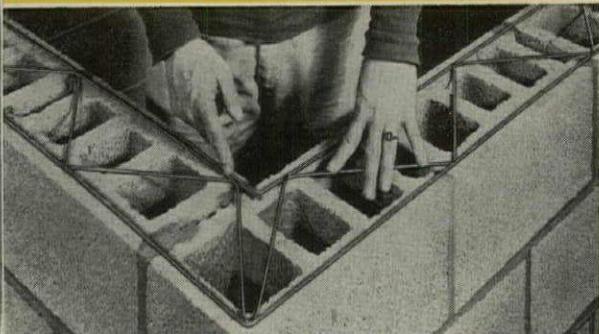
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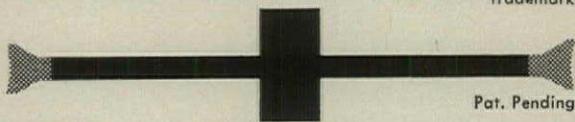


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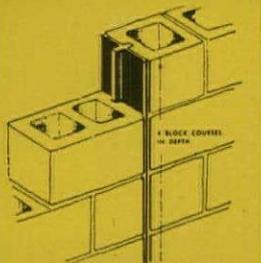


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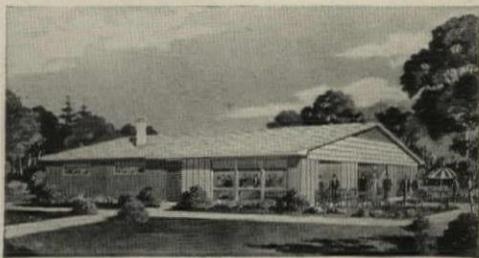
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What you need to know to design and build shelters against radioactive fallout

This report, designed to inform housing-industry professionals on the basics of fallout-shelter design and construction, was written by H&H Associate Editor Dick O'Neill after consultation with engineers of the Office of Civil and Defense Mobilization.

1. What is radioactive fallout?

Fallout is visible dust settling to earth from the thousands of tons of debris blown high in the air in a nuclear explosion. Up to 1% of these dust particles are radioactive. They emit three types of radiation: alpha, beta, and gamma rays. Alpha rays cannot penetrate the skin. Beta rays produce burns upon unguarded skin, but are blocked by clothing. Gamma rays are the chief source of danger, can cause sickness or death.

Exposure to gamma rays is measured in *roentgens per hour*. The actual dose of radiation is measured in *roentgens*. The table below, published by the Office of Civil and Defense Mobilization (OCDM), gives the probable effect of gamma radiation on humans.

Roentgens	
0-100	No obvious effects
100-200	some sickness
200-300	sickness and some deaths
300-600	severe sickness and many deaths
over 600	few, if any, survivors

Note: long range effects such as shortened life, higher incidence of cancer and leukemia, are not considered in the table.

2. What about blast and heat from nuclear explosions?

In any nuclear attack, blast and heat would probably take a smaller portion of the lives lost; most deaths would result from fallout. Studies by the Congressional Joint Committee on Atomic Energy estimate that a nuclear attack on the US, unprepared as it is now, would take some 50 million lives and cause 20 million casualties, mostly from fallout. Fallout shelters alone would reduce deaths to about 6 million, says the committee.

Blast protection can be provided in any shelter if the budget is available (see section 9). But in a hydrogen bomb explosion, within a few miles of ground zero only deeply buried bunkers could remain intact. At 15 miles or more from ground zero, ordinary fallout shelters would provide adequate protection. Only in the intermediate ring would a blast shelter be really useful.

3. How does radioactive fallout behave?

Dust from a nuclear explosion rises miles into the atmosphere and is carried by winds for huge distances. In an all-out attack on the United States, radioactive fallout could be carried all over the country in the form of dust clouds. Prevailing winds would tend to blow these radioactive dust clouds eastward, so the highest concentrations of fallout probably would be in the heavily populated areas east of the Mississippi River.

Since dust is heavier than air, fallout gradually drops out of the atmosphere and settles on roofs or on the ground. These radioactive particles continue to radiate gamma rays

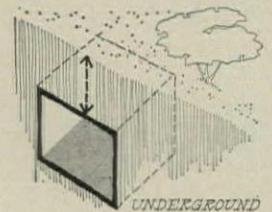
until their radioactive strength is reduced to harmless levels in a few days to a few weeks. (See section 6, below.)

4. How do you protect against radiation?

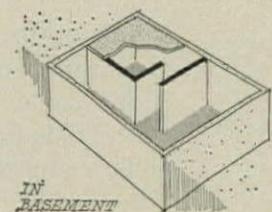
The best way to block gamma radiation is to get a lot of heavy-weight material between you and the radioactive particles. The heavier the mass, the better the shield. The best protection from radioactive particles would therefore be a very heavy lead capsule in which you could live for a time. But by far, the most practical scheme is to get a heavy concrete or masonry wall, or a considerable thickness of earth, between you and any spot where a particle might land. (For details, see sections 7 and 8, below.)

5. Why is underground the best place for a shelter?

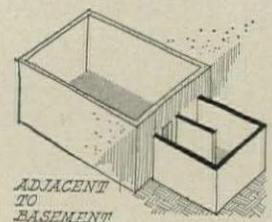
Because underground you can take advantage of the mass of the earth itself as a shield. A shelter above ground must use an extraordinary amount of block or concrete to give the same protection an underground shelter offers.



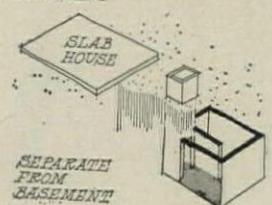
A good place for an underground shelter is in a basement. In a corner of the basement you can take advantage of the earth on two sides (behind the foundation walls). Then you build heavy walls on the other two sides and a heavy ceiling overhead.



A better place for shelters is a spot outside but right next to the basement. There you can get the benefit of the earth on three sides and overhead (above a structural ceiling deck.) The basement is used as an accessway to the shelter.



The best place for a shelter is completely underground with the earth surrounding it on four sides as well as overhead. (This is the only kind of single-family shelter that makes sense for slab houses.)



There is a danger spot in basement shelters: the part of the basement wall above grade. A foundation wall itself is usually not heavy enough to give sufficient protection. But by piling dirt against the basement wall—up to the level of the top of the shelter roof—you can get enough protection. Obviously, a shelter should have no windows.

6. How big does a shelter have to be?

It depends on the size of the family and the length of time they have to stay in it.

First of all a shelter should have a minimum of 12 sq ft to 15 sq ft per person. A family of five needs at least 75 sq ft for two double decker bunks, two chairs, storage shelves, and a small table.

If the family is going to spend any amount of time in the shelter, they should have more space to move around in. Budget will dictate how much space you can provide. OCDM figures that shelters should be designed for a two week occupancy.

It is possible that occupants would not have to stay in the shelter for two weeks. It depends on strength of radiation. Radiation decreases geometrically with time—seven hours after detonation it is only 1/10 as intense as at H hour+1; after 49 hours, only 1/100 as intense; after 343 hours (two weeks), only 1/1000 as intense. By using a meter, occupants can measure roentgens, come up if necessary when radiation intensity is less than 5-10 roentgens per hr. Many manufacturers have meters in production. Meters should soon be available at a cost of \$25-\$75 apiece. A person with a meter would probably be safe in going out of a shelter two days after the explosion and measuring the radiation intensity by holding the meter over exposed ground.

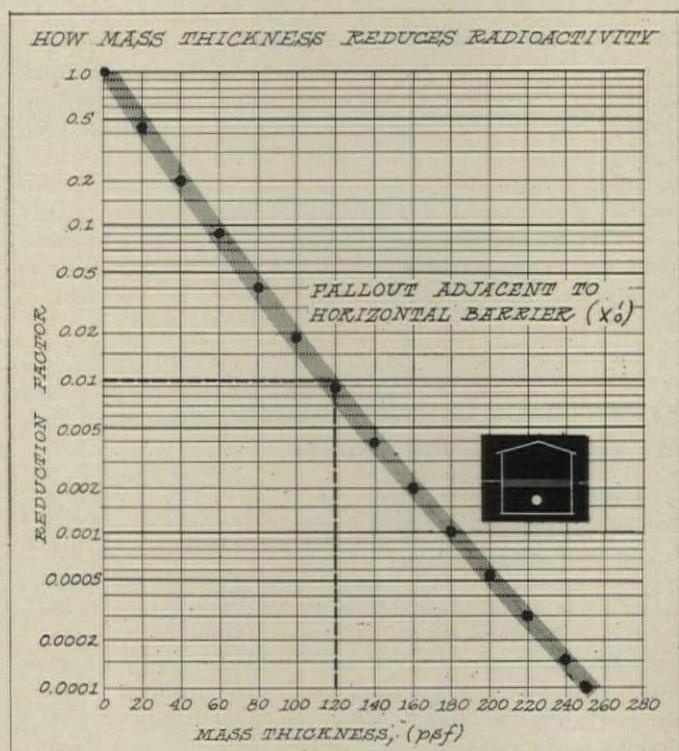
7. Is there a "standard" for wall and roof thickness?

No. The OCDM has no set standard because there is no telling how intense fallout radiation might be. The variables involved are 1) size of bomb, 2) how "dirty" the bomb is, 3) weather conditions like wind and rain at the time of the explosion, and 4) the elapsed time before the fallout hits the shelter. Perhaps significantly, OCDM usually uses an intensity of 2,000-5,000 roentgens per hour at H hour plus 1 in their studies. 10,000 roentgens per hour would be considered intense fallout. There is really no "maximum fallout intensity," so the only limit to thickness and weight of shelter walls and roof is the budget.

8. Then how do you decide about shelter thickness?

What you are shooting for is a maximum radiation dose inside the shelter of 25-50 roentgens. This will give occupants a "safety factor" when they come out of the shelter—the maximum safe dose during a short period is 100 roentgens (see table in section 1).

If the radiation outside measures 2,500 roentgens per hour,



at H hour+1 the shelter should provide a "reduction factor" of about 0.01. This would let in less than 25 roentgens the first hour, much less in later hours because of radiation decay. If the radiation outside measures 25,000 roentgens per hour, the "reduction factor" should be 0.001, and so on.

The "reduction factor" of any shelter roof or wall depends not on its thickness alone, but on its weight per sq ft of exposed surface, regardless of the material it is made of. Defense experts call this "mass thickness," measured in lb per sq ft.

As shown in chart below left, in order to provide a "reduction factor" of 0.01, the shelter would have a mass thickness of 120 lbs per sq ft. To provide a "reduction factor" of 0.001 the shelter would have to have a mass thickness of 180 lbs per sq ft. By increasing the mass thickness of the wall to 250 lbs per sq ft, the protection factor would be increased to 0.0001 (ie, adequate to protect shelter occupants against an intense outside radiation level of 250,000 r per hr).

The table below gives you the "mass thickness" of a number of standard building materials. For example, if you wanted to provide a mass thickness of 180 lbs per sq ft, you could use 8" of reinforced concrete (100 lb per sq ft) topped with 10" to 12" of sand and gravel (80 lb per sq ft).

Table of mass thicknesses

Material	Thickness	Mass Thickness (lbs/sq ft)
Brick	per inch	8-10
Concrete block (gravel, hollow)	4"	30
Cinder block	4"	22
Reinforced concrete	per inch	12½
Stone or gravel concrete	per inch	12-12½
Clay soil	per inch	6-8
Loamy soil	per inch	7-9
Sand and gravel	per inch	8-10
Steel plate	per inch	41
Stone masonry	per inch	10-14

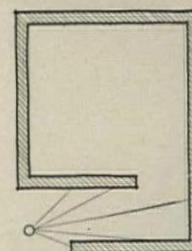
9. What will this cost?

Costs run from \$150 to thousands of dollars for fallout shelters. The simplest shelter put in a basement corner can be built for as little as \$150, the cost of a kitchen appliance. This covers costs of two walls and a ceiling with a mass thickness of 118 lb per sq ft of surface. A shelter completely underground with a reinforced concrete roof deck can be built for as little as \$400-\$500, depending upon the number of shelters you are going to build and the size of the shelter.

At higher cost some blast resistance can be built into the structure. A 20-megaton hydrogen bomb exerts a pressure of about 1,500 lbs per sq ft at a distance of 5 miles from ground zero. This pressure is a dynamic pressure: it hits fast and rapidly decreases. To withstand it a shelter would not have to be designed strong enough to resist a constant, or static, pressure of 1,500 psf. However, roof and wall reinforcing would have to be very heavy to support this dynamic load. A reinforced concrete shelter capable of supporting this load would cost from \$200 to \$600 more depending on the spans involved. At this design level, people in almost 90% of the blast area would be protected. The ordinary fallout shelter gives sufficient protection against ordinary high explosive bombs except for direct hits.

10. How do you design the shelter entrance?

Basement shelters should be designed with a baffled entrance (see drawing) that gives no direct path for radiation from any outside point. Variations on a baffle-type entrance should be used in any type of shelter. (For example, in a totally underground shelter, a hatchway should lead down into the baffle area, not directly to the main shelter area.)

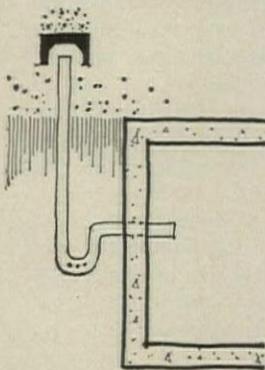


continued on p 208

11. What do you do about water?

You should provide enough water to last the occupants two weeks. Minimum requirements are 1/2-gal potable water per person per day. Ideally, each shelter should have its own storage tank. Water in the hot water tank in the basement is a good auxiliary source. If the house has a well, an underground line can be run to the shelter, and provision made for hand pumping.

12. How about ventilation?



Only the particles of fallout—not the air itself—are radioactive, so if you get rid of particles you can safely breathe the air. The best way to get rid of these particles is to force air through a circuitous route into the shelter (see sketch). Particles will be left behind as they drop out of the air. Hand operated blowers and filters for single family shelters are necessary only in totally underground shelters. Blowers are usually operated for about fifteen minutes every two hours.

13. How about food?

Enough food should be stored in the shelter to supply the occupants for two weeks. But people waiting idly in a shelter will not eat as much as they will ordinarily. Sedatives should be stored along with food, primarily to keep young children quiet. All food should be canned or dried, because a power supply could not be counted on to keep frozen food frozen.

14. What about sanitary facilities?

Toilets can be built into a shelter at some extra expense. A toilet would need its own protected water supply for flushing (4 to 6 gallons per flush) and its own disposal system. The usual septic tank and sewage line is above basement floor level as are street sewer lines, so they could not be used for a below ground toilet. OCDM recommends more primitive and economic facilities for single-family shelters: plastic bags and a good tight garbage pail. After a day or two, a person can leave the shelter just long enough to empty the pail. Chemical toilets are another possibility.

15. What about light?

Each shelter should be designed with an outlet, but since power is likely to fail, continuous low-level light may be had with a four-cell, hot-shot battery and a 150-milliamp bulb. Auto batteries could also be stored in the shelter.

16. What about heat?

The best way for occupants to stay warm in winter months is to wear lots of clothes and cover up with blankets. A fireplace in a shelter is an invitation to disaster since fallout

particles can drop right down the chimney into the fireplace. A Franklin stove, or similar apparatus, could smoke up the shelter so that people would be driven outside. Remember a human is a 90F radiator and putting four or five people in a single shelter is enough to keep them all warm.

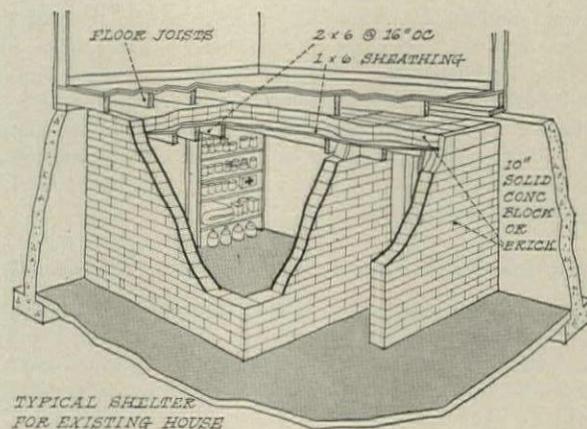
17. What other equipment should the shelter have?

Most important would be a portable transistor radio, strong enough to receive signals from distances up to 200 miles away. In the event of attack, any operative radio station would continue broadcasting whatever news is available on above ground conditions.

Second, there should be a large medical kit equipped to take care of anything except an operation. This would include bandages, antiseptics, splints, dressings, gut, needles, syringes, etc. The local Red Cross can give recommendations. Third, a telephone might be installed in the shelter so that contact could be made locally if telephone service were still operating. Each shelter should have a radiation detector as mentioned in section 6. Pick, shovel, crowbar, and machete might also be needed.

18. What do you do about existing houses?

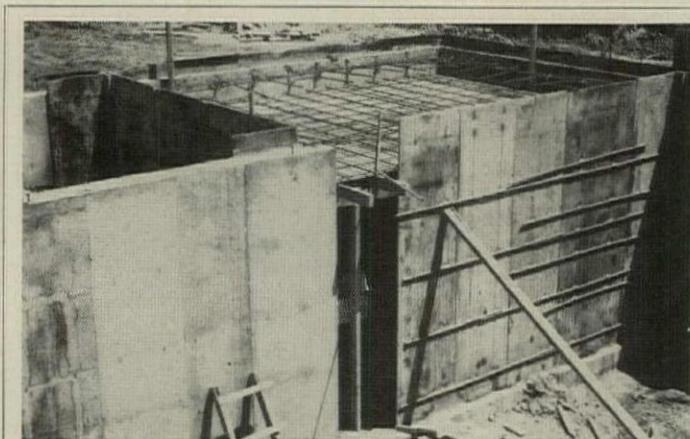
Easiest way to build a shelter in an existing house is to build it in the basement as mentioned in section 5. OCDM distributes a booklet called *The Family Fall-out Shelter*, #MP-15. For a copy write to OCDM, Winder Building, 17th and F Streets, NW, Washington, D.C.



TYPICAL SHELTER FOR EXISTING HOUSE

19. What about community shelters?

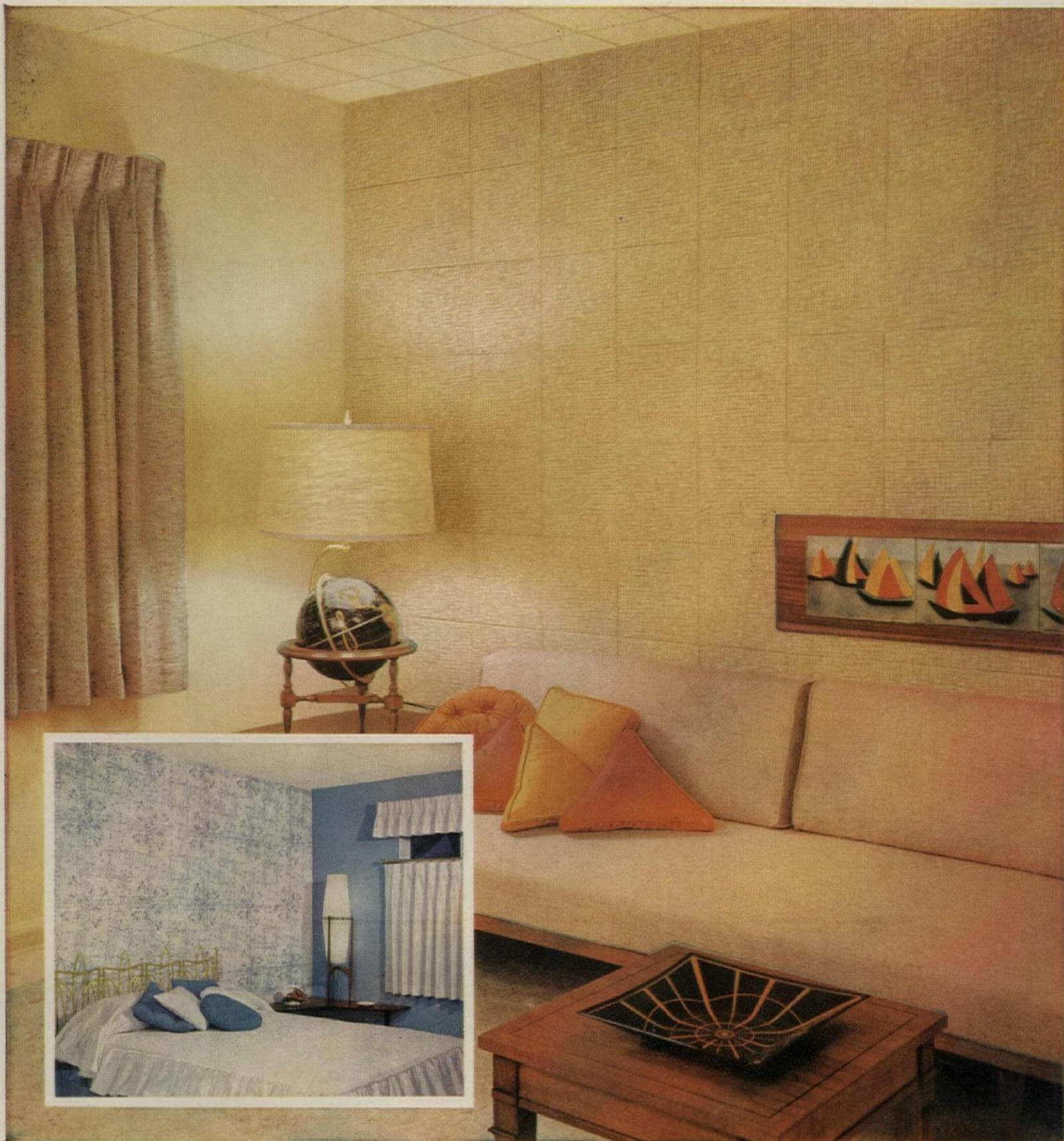
Builders of slab house developments may be able to build better and lower cost fallout shelters for their buyers by building one or two large community shelters, instead of digging single family underground shelters for each house. An underground shelter is a special problem calling for auxiliary power, heat and sanitary facilities. Design assistance is available from OCDM for anyone who wants to build community shelters. Costs run from \$100-200 per person. The bigger and simpler the shelter, the lower the unit cost.



Here is how a Colorado builder puts shelters in his houses

Jack Hoerner of Arvada built reinforced concrete shelters under the attached garages in each of his houses. Shelter was poured at same time as the foundation. Finished shelter, measuring 10'x12' inside, is surrounded by earth on three sides and has a 12" thick ceiling (mass thickness: 150 lbs per sq ft). Entrance to the shelter is from the basement (near side in picture above) through baffled entrance. Each shelter has a water storage tank and a ceiling outlet. Total cost to Hoerner, \$292 per shelter. To see how shelters affected his sales, turn to p 228.

/END



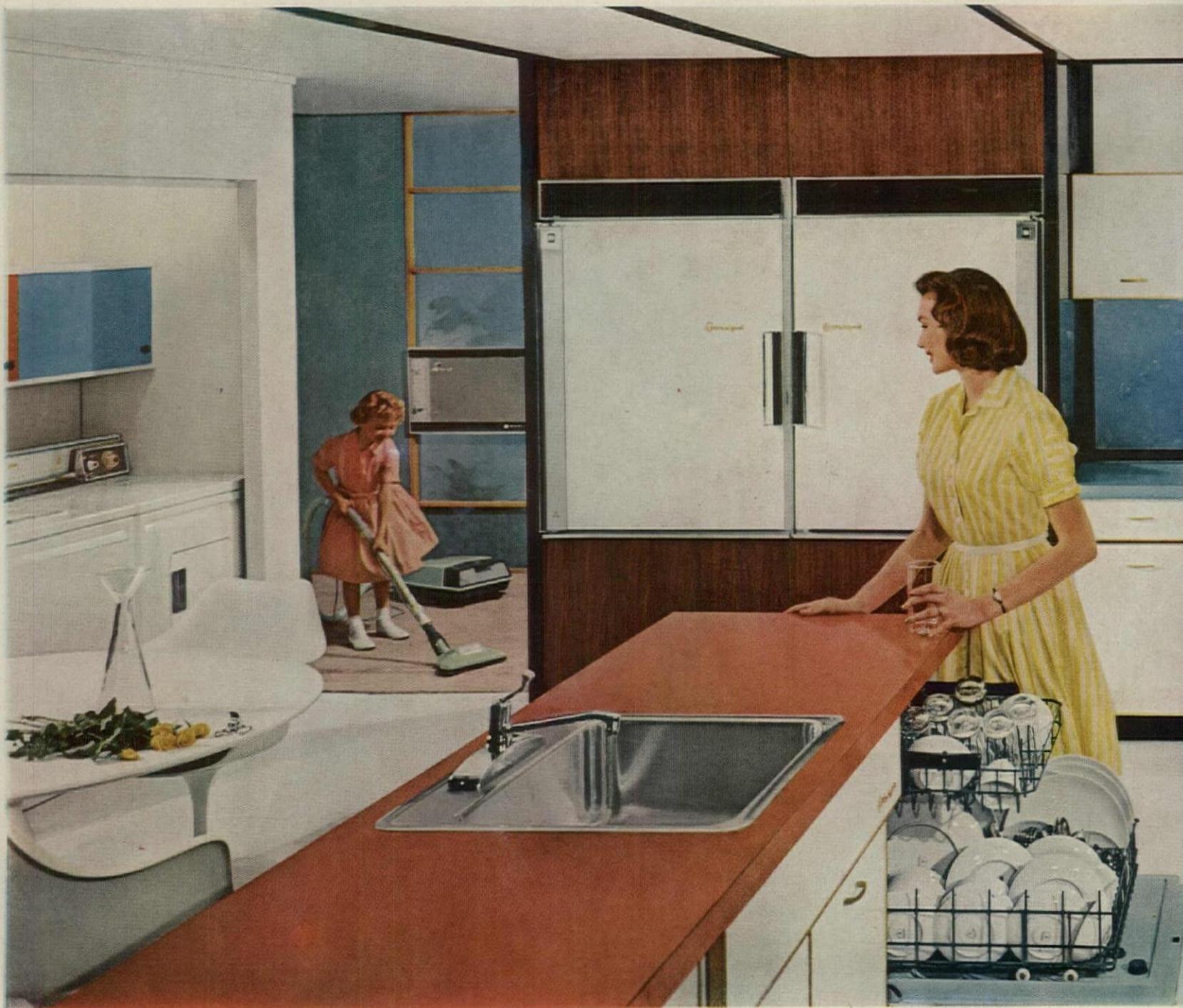
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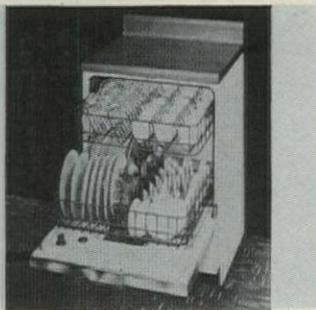
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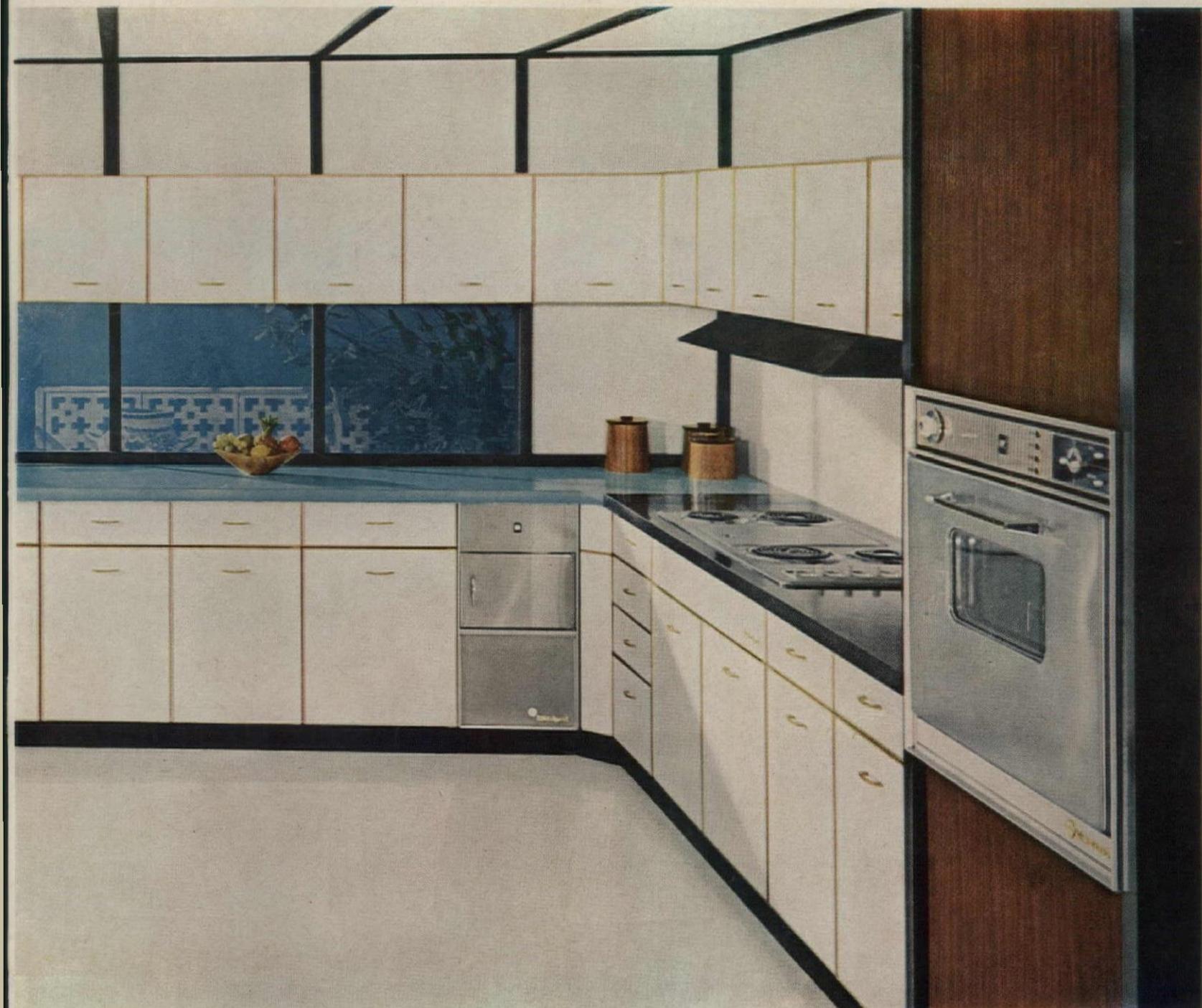


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MODELS SHOW FOUR TRENDS: Mossman-Gladman in Albuquerque offers 1) a broad line, 2) an L-shaped ranch, 3) a split, with 4) four bedrooms.

Eight-page report on what the leaders are building in 22 cities

New models show six trends for 1960:

Trend No. 1

More variety within developments: More builders are broadening their model lines, offering buyers several different styles and floor plans. For examples, see above, and pp 222 and 226.

Trend No. 2

More four-bedroom houses: They are now offered in most parts of the country, and in ranch models as well as split levels and two stories. See pp 215, 218, 221, 222 and 226. (For a five-bedroom model, see p 222.)

Trend No. 3

More two-story houses: They are making a strong comeback in the East. While exteriors are traditional, floor plans are anything but traditional. Builders are finding better ways to arrange the interior spaces to fit modern living patterns. See pp 214, 218 and 222.

Trend No. 4

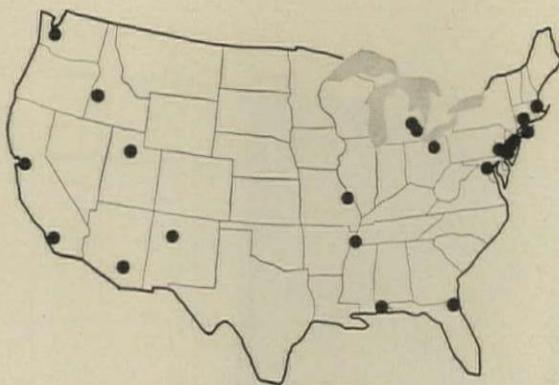
More "half-way houses": Two stories with entrance foyers midway between first and second floors are gaining favor in New England, in almost all price classes. Versions for lots sloping either to front or rear are shown on pp 215 and 226.

Trend No. 5

More split levels: Seven years after they first appeared on Long Island, this style has found its way into every major market except the South. This year's crop shows new emphasis on indoor-outdoor living, plus some new three-level-plan ideas. See pp 214, 218, 220, 222, and 226.

Trend No. 6

More variety in one-story houses: Ranches are still the staple in most regions. But more and more builders are avoiding the "box look" either by disguising the shape with big roofs or garage placement, or by building L, U, or T plans. See above, and pp 215, 220, 221 and 222.

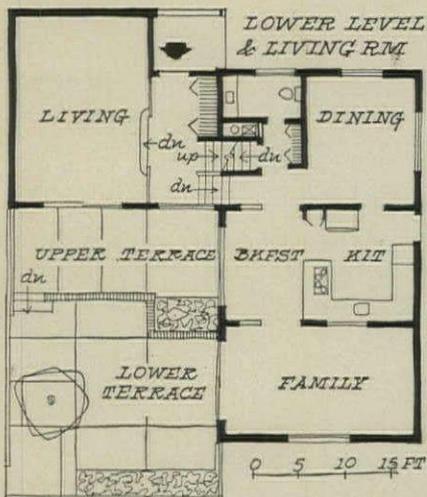
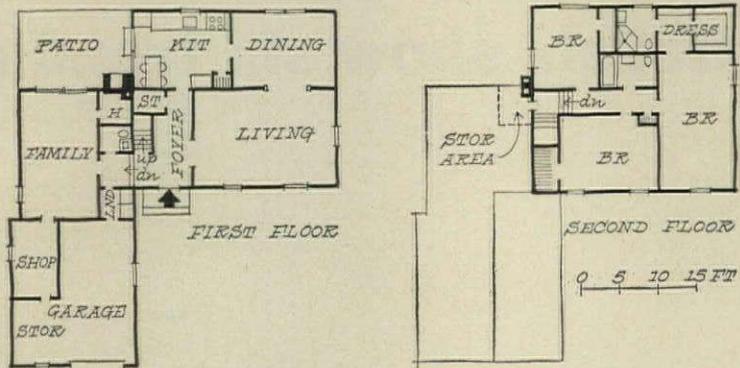


28 houses in 17 states are shown on these 8 pages.

To see new models turn the page



L-shaped colonial: Builder Bob Scarborough has fitted a garage wing to this new two-story colonial with a "shed" extension that adds extra living space where the wings meet. As plans at right show, there is family room, laundry, workshop, and paved terrace in this corner of the house. Otherwise, house is in the garrison colonial style, with separate dining room downstairs and three bedrooms and two baths upstairs. House sells for \$20,500, including built-in appliances. Scarborough has offered colonial designs for many years at his Barclay Farms tract in Haddonfield, N.J.

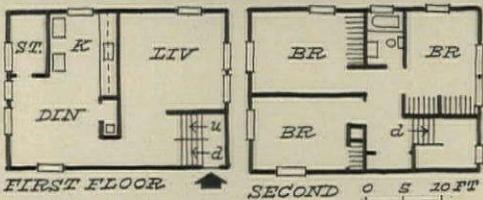
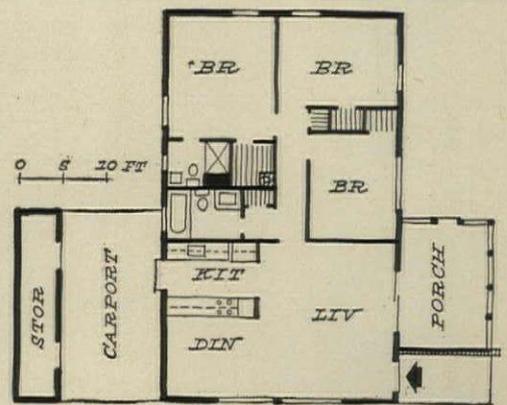


Split-level house, split-level terrace: Indoor-outdoor living is stressed by Kay Construction Co in its houses in Silver Springs, Md. Terrace has two levels, one open to the living room (see photo), the other open to lower-level family room. The 3-bedroom, 2½-bath house sells for \$26,450. Architects: Bartley & Gates.

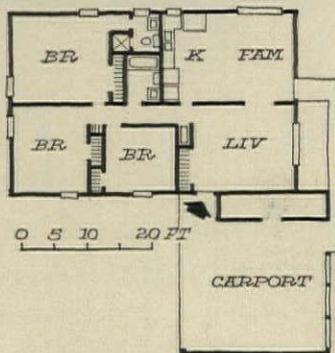




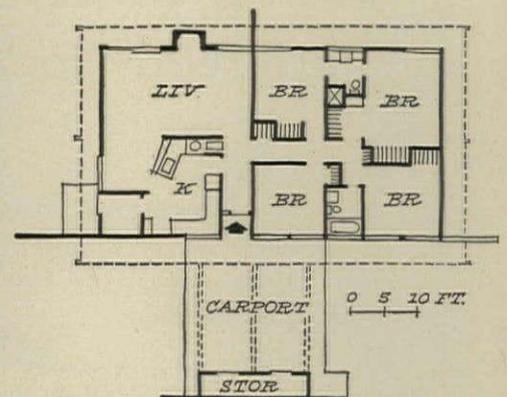
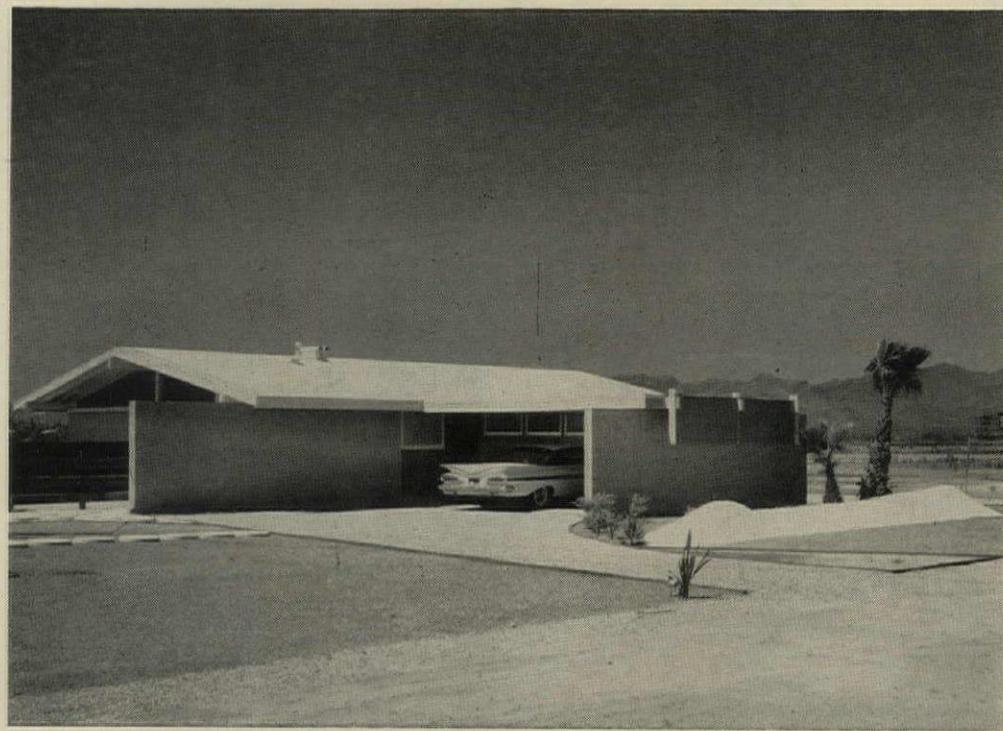
Disguised rectangle: Builders Fred and John Inganamort have opened a 600-acre tract in eastern Long Island with this "Floridian" model. The house has 1,066 sq ft of floor space contained in a rectangle 41' deep, 26' wide. But it looks twice as wide because the roof extends 52' wide from storage unit at left to cover a screened porch at right, behind bricked front wall. It has sloping ceilings throughout, two full baths, built-in oven and burner top, sells for \$14,490. The Inganamorts plan 2,000 units on one-third-acre lots, many of which are on the water.



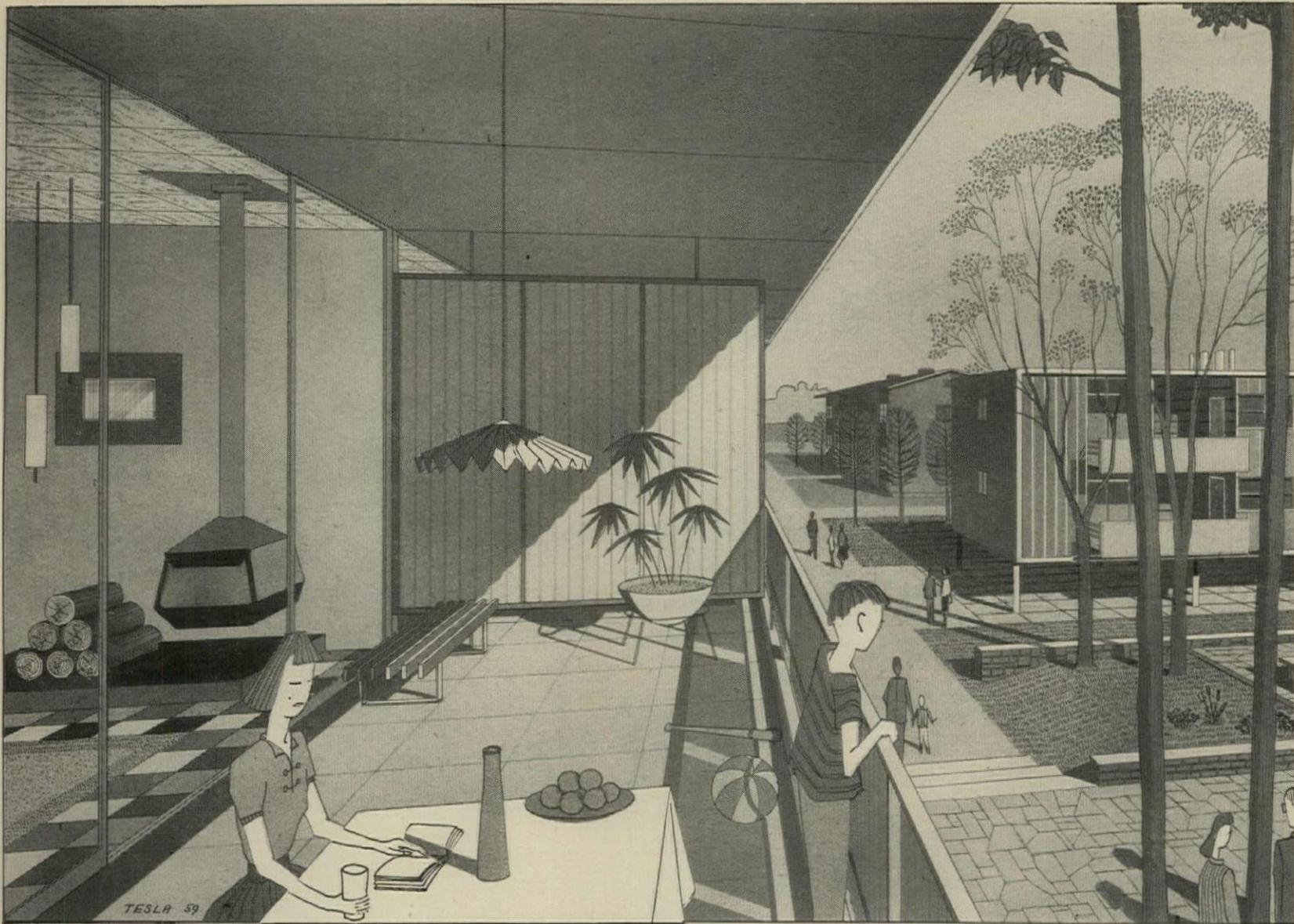
Half-way house: This two-story colonial is a best-seller (80 sold) in the New Haven area. It has 1,280 sq ft of living area, with the entrance mid-way between the two floors. Architect Gordon D. Orr designed it for Casey Construction Co of Hamden, Conn. Price: \$11,990 on one acre.



One-story best-seller: This house has been so successful in Memphis that Builder Kemmons Wilson (co-owner of Holiday Inns) plans to build 250 like it in Jackson, Miss. His Holiday Homes has sold 190 in Memphis and has 190 more under construction or planned. Buyers like the 1,200 sq ft of floor space, rough-hewn cedar siding alternating with used brick, sloping ceilings, a glass gable in the living room, the big appearance the house has from the street. The model sells for \$10,000 to \$15,000, depending on lot cost and number of built-ins.



Four-bedroom contemporary: Tucson Builder Fred Busby's new models include this four-bedroom house designed by Architects Palmer & Krisel. For \$15,500, buyers get a well-equipped kitchen with an angled snack bar, air conditioning, large fireplace, clerestory windows, four bedrooms, two baths with features like Italian marble vanity tops, and sliding glass doors opening from living room onto an outdoor terrace.



This provocative architectural rendering shows how new and modern building materials add character and distinction to contemporary garden apartments.

Johns-Manville quality building products *are ready today for the apartments of tomorrow*

THIS ARCHITECTURAL DESIGN AND RENDERING of a garden apartment project illustrates the unlimited functional and design opportunities available to architects through the use of Johns-Manville building materials.

And, for the builder, Johns-Manville building materials, many of them factory-finished, save time and labor on the job.

Important to mortgage lenders and appraisers is the fact that they can depend upon Johns-Manville quality building products to fully protect their long-term investments.

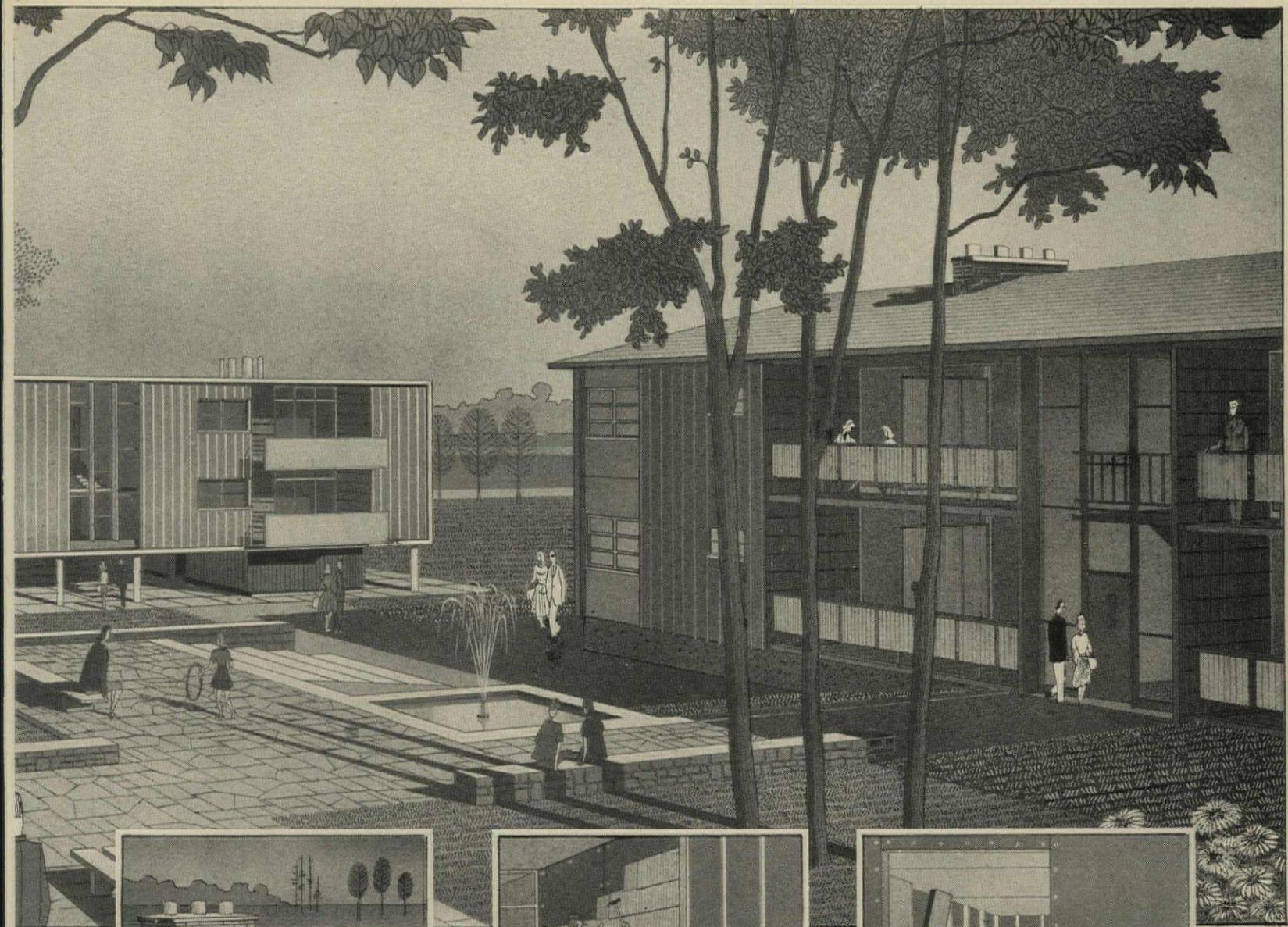
In addition, for owners and management Johns-Manville building materials cut or eliminate maintenance and replacement costs. They provide living units with tenant appeal.

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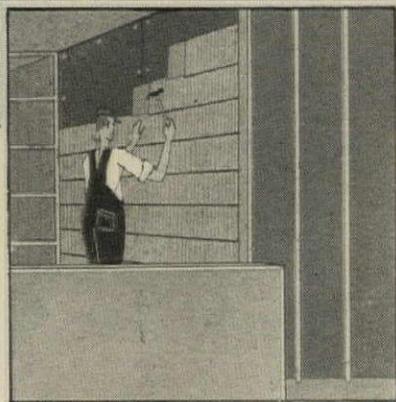
For more than a century, Johns-Manville has been famous for its leadership in research and development of quality building materials. Why not consult with a Johns-Manville specialist before you start your next apartment house project? Write Johns-Manville, Box 111, New York 16, New York. In Canada, Port Credit, Ontario.

JOHNS-MANVILLE

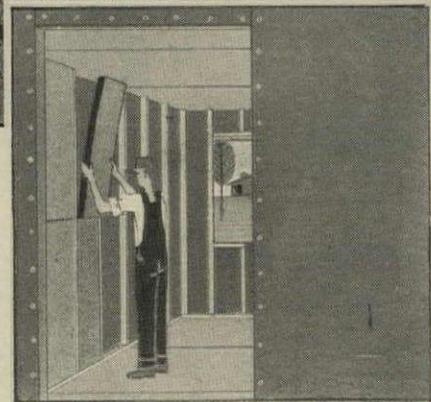




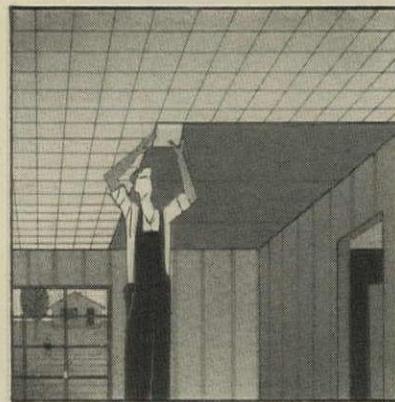
For the sloping roofs of this apartment house development J-M COLORBESTOS® Shingles are specified. Made of asbestos and cement, they are rigid and stonelike, require no maintenance and give lifetime protection. J-M AQUADAM Built-up Roofs recommended for the flat roofs (viz. center building) are bonded for 20 years of satisfactory service.



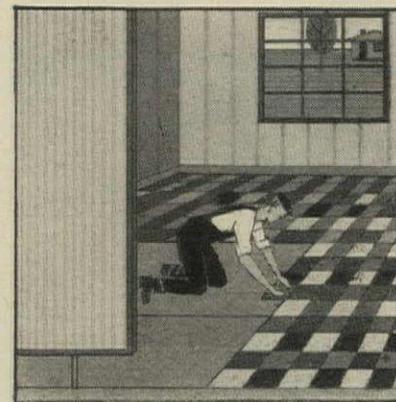
J-M Colorbestos® Sidewall shown on the return walls of the balconies and porches can't burn and never wear out. Applied in clapboard style, they contribute interesting horizontal shadow lines. Unity of design in the front of the buildings has been achieved by using large sheets of Pre-Primed J-M Asbestos FLEXBOARD® with batten.



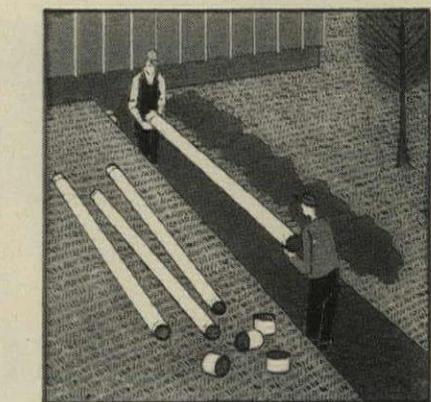
Exterior sheathing on all buildings is J-M STRONGBORD. It is specified to provide extra bracing strength to the building and eliminates corner bracing. Siding can be nailed directly to it. Johns-Manville FIBER GLASS or SPINTEX® insulation in the walls and ceilings assures winter and summer comfort, saves on heating and cooling costs.



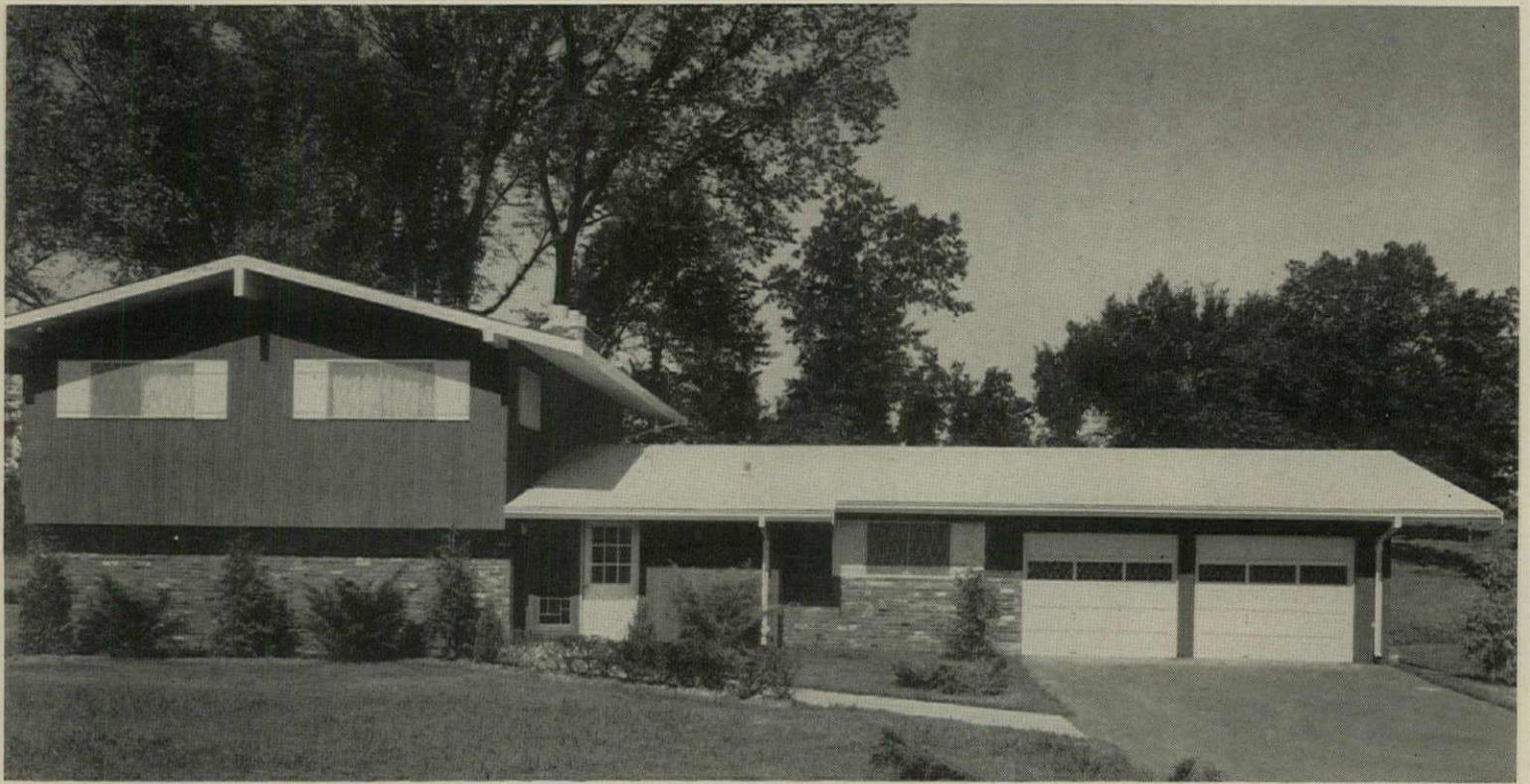
J-M Acoustical Ceilings are specified throughout to greatly reduce objectionable noise, a prime requirement in multiple living units. Furnished in a variety of beautiful designs, Johns-Manville acoustical panels harmonize with any decorative scheme.



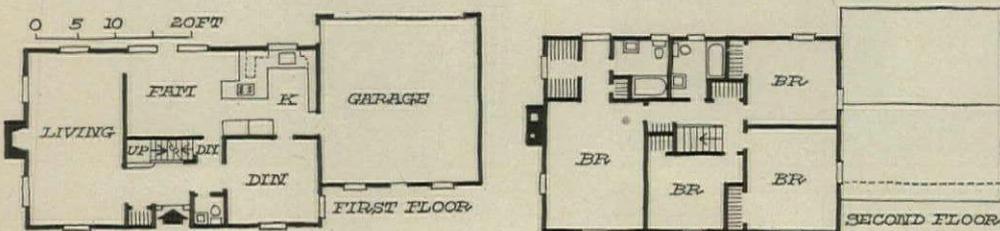
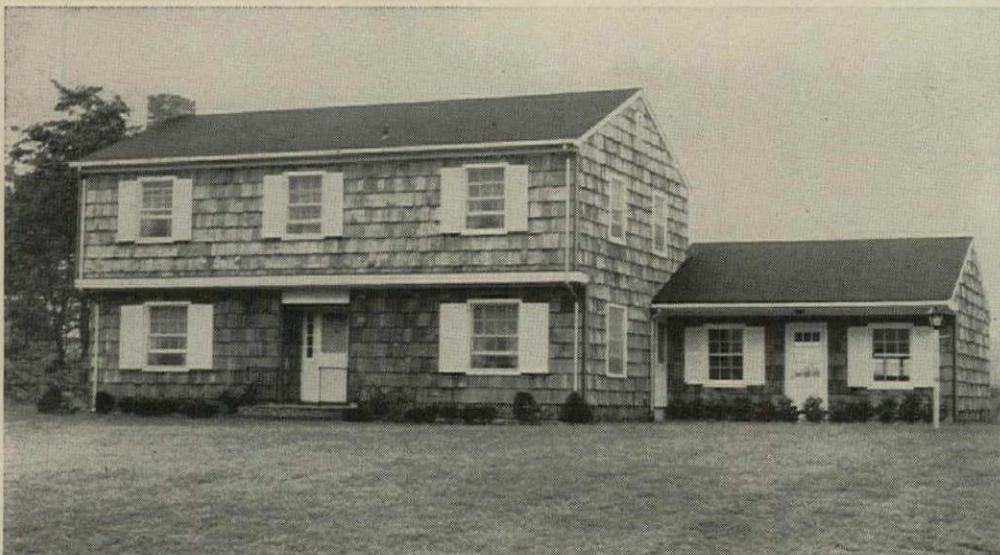
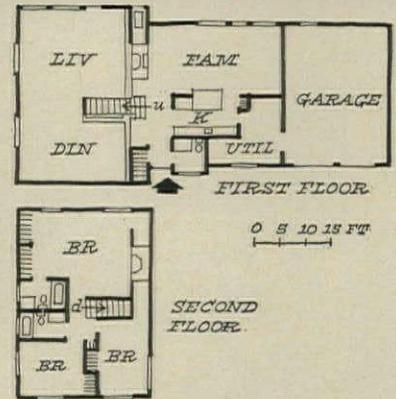
In apartment units, hallways and foyers J-M TERRAFLEX® vinyl-asbestos tile provides beautiful, carefree floors that last indefinitely. Room dividers, balcony partitions and railings are J-M CORRULUX® Fiber Glass translucent panels. They provide beauty with functional utility.



J-M Transite® Pipe—for building and community sewage disposal; for water main service; vents for soil pipe and gas-fired appliances; ducts for heating-cooling and cable systems; for lawn sprinkler irrigation. Corrosion resistant, incombustible, long service life.



Modified split-level: This split-level model in St. Louis is higher than most but does not look it because of the long wing extending over the garage. The lower level with living room and dining room is only two steps below the middle level. The upper bedroom level is reached by 11 steps from foyer. Photo at left is from dining area toward living room fireplace. Says Builder Burton Duenke: "The stairs give the house a good feeling of openness that buyers like." Features include a fireplace in master bedroom, barbecue in family room, and large utility room.



Traditional two-story: This big (2,000 sq ft) colonial in Middletown, N.J. is wholly traditional on the outside and wholly modern inside, as the picture of the kitchen shows. Builder Jacob Lefferts asked Good Housekeeping Institute to design the kitchen, which has a T-shaped dining and service bar. House has four bedrooms, two-car garage with rear entrance. Price: \$32,000.

more new models on p 220

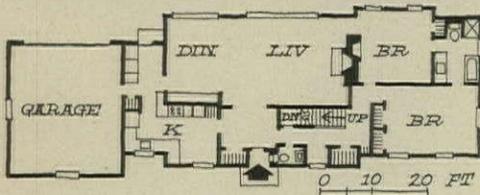
CALIFORNIA REDWOOD, specified by architects and builders for decorative effects such as exterior grilles, adds interest and warmth to garden apartments and other multi-unit dwellings. Not only does redwood harmonize naturally and beautifully with the planting but it also has the very practical advantage of requiring far less maintenance than most woods.

Buff, Straub, & Hensman, Architects

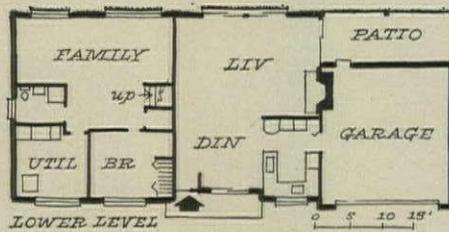
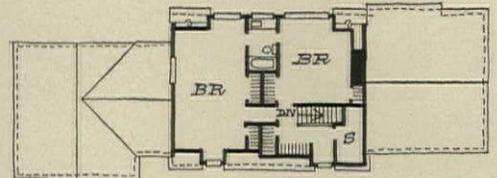


*All the wonderful warmth of wood
is best expressed in redwood.*

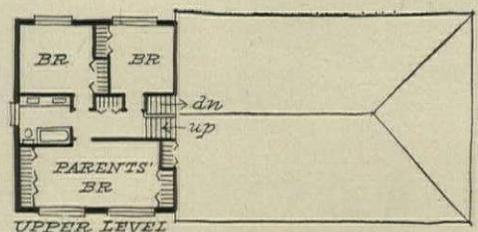
CALIFORNIA REDWOOD ASSOCIATION • 576 SACRAMENTO STREET • SAN FRANCISCO 11 • CERTIFIED KILN DRIED REDWOOD



Neo-classic design: This four-bedroom house designed by Architect Maxwell A. Norcross is one of many new \$55,000-\$90,000 houses built by Keyes-Treuhart Co on its Landerwood tract south of Cleveland. Slate-roofed house has 2,400 sq ft of living area, 2½ baths, many built-in storage units.



The level over the garage is roughed in for wiring, plumbing, and heating a fourth bedroom, second bath, and family room. The

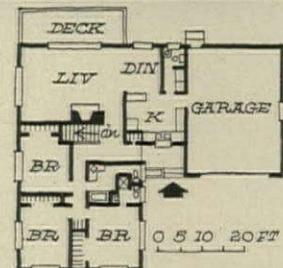
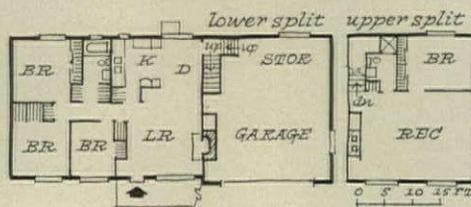


house has 1,650 sq ft of living area not counting the unfinished space, and sells for \$16,000 plus lot cost.

Unfinished split level: Tacoma Builder Herman Sarkowsky has introduced this model "to answer the cry for more space."



Five-bedroom house: This Livonia, Mich. split-level model has three bedrooms on upper level and two more (plus a family room) below. Plan squeezes 2,721 sq ft of living space into a house that can fit an 80'-wide lot. Builder Joseph Slavik and Architect Clifford Wright manage this by putting furnace and storage space in a basement under the main living level. Price \$27,490.

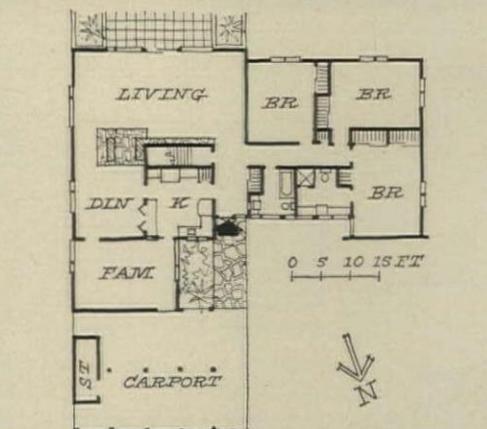
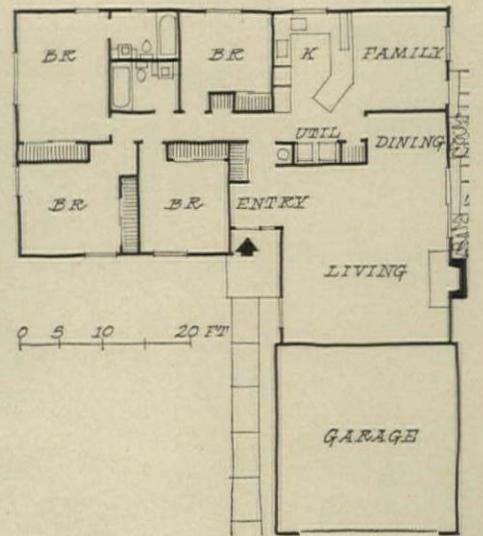


Story and a lower half: In Boise, Idaho, Builder Millard Bush offers this L-shaped house on sloping lots. Plan shows open stairwell leading down—and admitting more light—to lower unfinished floor with space for family room and more bedrooms.



Four-bedroom ranch: Salt Lake City Builders Holmes & Jensen's most popular model is this four-bedroom L-shaped house with white masonry and redwood board-and-batten exterior. It features a beamed ceiling living room with raised hearth and

sliding glass doors opening on a large terrace (below left), and a luxury kitchen with an angled service center-breakfast bar (below, center and right). Architect M.E. Harris, Jr., designed the 1,550 sq ft, \$19,950 house. Thirty are built or planned.



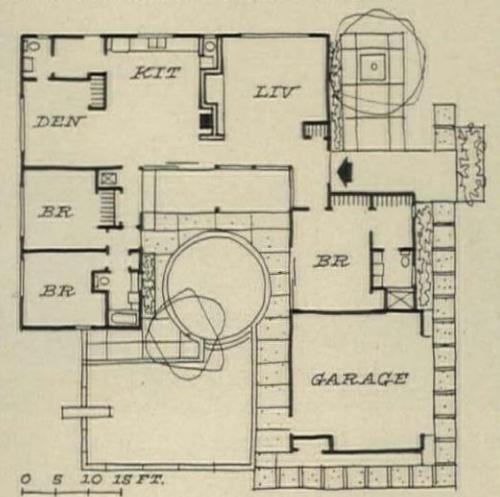
Weather conditioned contemporary: Architect Victor Olgyay designed and sited this \$44,500 model to keep out winter winds and make the most of summer breezes. On the northwest side (shown above), nearly solid walls rebuff the cold



(high narrow windows serve two baths). Photo of living room on southwest rear side shows striking flagstone wainscoting and fireplace. Fran-Wick Corp built this model to open a tract of 54 contemporary houses in Lawrenceville, N.J.



U-shaped Pacifica house: Focal point of this 2,320 sq ft house in Newport Beach, Calif. is the large pool in a patio open to family room, living room, and master bedroom (at right in photo). There are three bedrooms, den, utility room, and 2½ baths. Custom Builders Ivan Wells & Son sold this show-case model furnished for \$58,950.

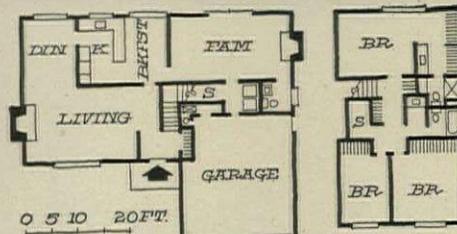


more new models on p 222



Western best-seller: Perma-Bilt Homes has expanded the split level that has become its trademark in northern California. (Over 500 have been sold by the San Leandro

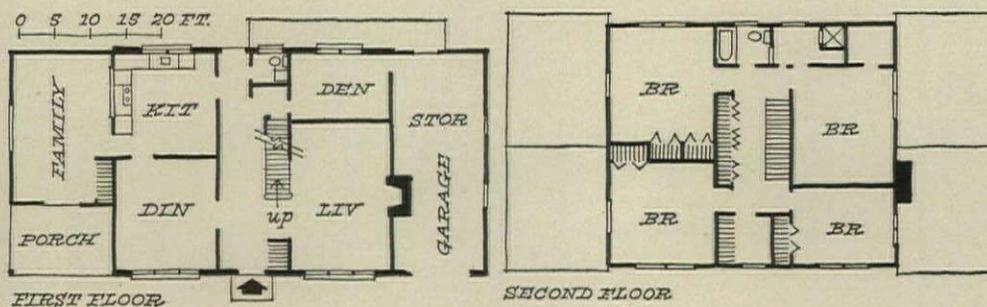
builder.) The new model has 2,020 sq ft of living area. Features include the beamed ceiling family room off kitchen and patio (above left), a big dressing room for the



12'x23' master bedroom (above right), 2½ baths, built-in appliances, 753 cu ft of storage area (plus attic), and two-car garage. Price: \$19,950 plus lot.



Trend-setter: This four-bedroom model was such a run-away success in Wilmington, Del. that Franklin Builder Homes had to



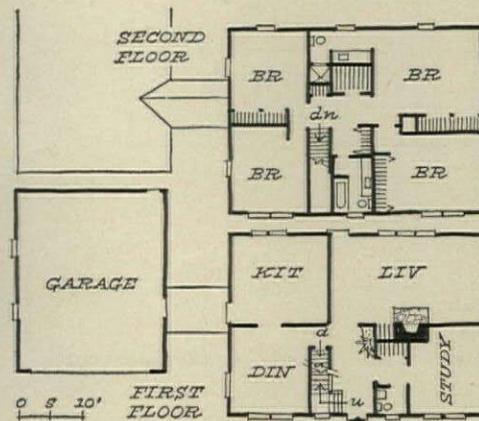
revise plans for a 72-unit tract to 1) restrict it to traditional designs and 2) raise the price class. The \$27,500 house includes

family, dining and living rooms plus a den downstairs; four bedrooms, a sewing room, and a big storage area upstairs.



Well-equipped two story: This four-bedroom model in Pennel, Pa. features a long list of brand-name products and equipment.

Included are wall-length refrigerator, dishwasher, washer-dryer, inter-com system, radiant ceiling heat, full attic and basement,



storm windows, 200-amp electric service. Pennel Builders offers this house for \$24,990 on a one-acre lot.



L-M'S PTLs were used to light this enchanting scene at the Ann Morrison Memorial Park in Boise, Idaho. Eighteen equally spaced 300 watt incandescent PTL

luminaires, mounted on 20-foot aluminum poles, provide soft, low-level lighting for the gardens and walks surrounding the pool.

Line Material's New Post Top Luminaire Combines Beauty and Efficient Lighting

Line Material Industries, one of the nation's leading manufacturers of outdoor lighting, has combined in the PTL (Post Top Luminaire) charming modern appearance with soft, even illumination. It is specially suited for parks, schools, playgrounds, institutional grounds, driveways, parking lots, bus stations, or wherever elegance and efficient lighting are desired.

The PTL incorporates a rigid spun-aluminum reflector, an efficient glass refractor, and a sturdy aluminum mounting base. The hinged reflector swings open for easy maintenance. It is available for mercury vapor or incandescent lamps in five IES light patterns.

Get Complete Information

L-M Bulletin 58203 completely describes the PTL unit. Get this bulletin, and complete information or engineering assistance on L-M's full line of outdoor lighting, from one of the 77 nationally located L-M Lighting or Field Engineers; or write Line Material Industries, Outdoor Lighting Division, Milwaukee 1, Wisconsin. In Canada: Canadian Line Materials, Division of McGraw-Edison Company (Canada), Limited, Toronto 13, Ontario.



THE PARKING AREA at New Orleans' fabulous Fontainebleau Motor Hotel is also lighted with Line Material Post Top Luminaires.

The new Line Material PTL is available in natural aluminum or in pastel colors for 3- or 7-inch diameter mounting. It is also available with photo control.



LINE MATERIAL Industries

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DISTRIBUTION TRANSFORMERS • KYLE RECLOSERS AND OIL SWITCHES • FUSE CUTOUTS AND FUSE LINKS • LIGHTNING ARRESTERS
POWER SWITCHING EQUIPMENT • PACKAGED SUBSTATIONS • CAPACITORS • REGULATORS • OUTDOOR LIGHTING
LINE CONSTRUCTION MATERIALS • PORCELAIN INSULATORS • FIBRE PIPE AND CONDUIT

Outdoor Lighting



HIGH RENTABILITY....

A happy formula for investors

Opportunity knocks...

For today's builder-investor, few opportunities for profit are as promising as the low-rise apartment buildings. More than 100 major American communities are being readied for large urban renewal programs. Thousands of smaller ones will follow. A large share of the \$600 billion which will be spent on construction during the next decade will find its way into urban multi-family dwellings.

What does this mean? To you, as designer, builder or potential investor, it means that opportunity is knocking—

High rentability

High rentability is a phrase that brings a light to any investor's eyes, but how do you get it? Experience has shown these to be among the most important structural factors:

- Pleasing, efficient architectural design
- Low sound transmission
- Low heat transmission

Low sound transmission

It is not at all unusual in today's low-rise apartment developments to find a just-retired couple who crave quiet living alongside a young couple with one or two children who seem to manufacture noise for the sheer joy of it. These two families are going to remain good neighbors only as long as the sounds of daily living are kept where they belong, whether they be from a toy kazoo or a blaring television set.

Heat control demanded

The heat transmission qualities of walls can best be expressed in terms of *individual comfort*, and heat control is something that today's apartment residents demand: cool in summer, warm in winter. It is, therefore, important to investors to know that the use of masonry walls to enclose low-rise apartments can permit substantial reductions in the size and cost of air-conditioning and heating equipment in comparison with other wall types.

Structural Clay Products Research Foundation studies provide striking evidence of the benefits of wall materials which "store" heat and so minimize the interior effects of fluctuations in outdoor temperatures.

To determine the comparative performance of masonry under actual conditions, the Foundation undertook an experimental study of eight walls. Six huts were constructed of various types of clay masonry, one of wood frame, and one of metal. All eight huts were provided with typical insulation for each wall type, and fitted with instruments to measure heat loss.

loudly. And it is the belief of the brick and tile manufacturers who comprise the Structural Clay Products Institute that their products are your best means of seizing it.

Their arguments are two-fold: first, that the intelligent use of brick, tile or terra cotta will produce *high rentability*, and, second, undisputed proof that this family of age-old, yet modern, building products provides the building owner with the *lowest ultimate cost*.

Now, let's take a closer look at each.

- Assurance of fire safety

High rentability begins with the architect, whose total design should be a pleasing one that uses materials which stand the test of economical day-to-day living. In short, it should be a design that looks and wears well, and makes the tenant want to live there.

Through tests conducted by the Structural Clay Products Research Foundation, it has been proven that clay masonry walls and partitions are excellent sound resistors—and without the additional, expensive acoustical treatment such as other wall types so frequently need. Inside the clay masonry-walled rooms, of course, the acoustic qualities are excellent.

Field tests at the SCPRF experimental grounds at Geneva, Ill., showed that up to 55 per cent more heat is lost through a typical metal-panel wall than through six inches of clay masonry. A comparison of brick veneer construction—typical of much residential building, including low-rise apartments—was made with frame. The latter lost 20 per cent more heat.

Similar benefits from the use of masonry apply under summer conditions, when the problem is to keep heat from the interior of the apartment. The Foundation's experiments showed that the storage capacity of masonry wall materially delays the penetration of summer heat. Test results showed it takes six to eight hours for a peak heat load, which accumulates in the wall throughout the day, to reach the interior.

Thus, heat penetration coincides with the cooler temperatures of evening, which can easily be taken advantage of by open windows and electric fans. In Australia, such construction and procedures frequently are used, and the need for air-conditioning systems in many low-rise apartment developments there has been virtually eliminated.

..LOW ULTIMATE COST

in low-rise apartment buildings

Fire safety

Heat transmission leads to a discussion of still another important consideration—*fire safety*—which, aside from the human factor, is highly important to the investor both from a standpoint of investment protection and reasonable fire insurance rates.

A proper understanding of some of the basic facts involved in fire safety may prove helpful. An eight-inch clay masonry wall of nearly any type will withstand temperatures of up to 2000 degrees Fahrenheit, a heat equivalent to temperatures which have been recorded in many major fires. An unpro-

Beauty of masonry

The key words in the esthetic vocabulary of masonry are *color*, *texture* and *pattern*. *Color* and *texture* are to be found in the units themselves, *pattern* in their arrangements in the wall. The *color* range of structural clay products is as wide as the visible spectrum, from creams and grays through buff, golden and bronze, into the traditional red hues, down to purple, maroon and gunmetal black. *Texture* is the surface appearance of the unit, independent of its color. There are many, ranging from a smooth, highly glazed surface to a stippled or hammered surface, to a vertical scored surface,

Low ultimate cost

Until now we've talked about the high rentability of low-rise apartments, and the structural factors that contribute to it. Hand-in-hand with that very important consideration is a factor that no investor can afford to minimize—low ultimate cost. At the risk of oversimplification, ultimate cost is the final cost to you, all factors considered. Good as far as it goes, you may say, but what are all the factors? To answer just such a question, Structural Clay Products Institute has completed a study called, "THE ULTIMATE COST OF BUILDING WALLS."

Of this study, PROGRESSIVE ARCHITECTURE magazine said:

"Here, thoroughly analyzed, are all of the economic factors involved in the cost of contemporary exterior walls. The authors produced solid evidence that the exterior non-bearing cavity wall, initially and over a period of years, is less costly than a metal panel or a double plate glass window . . . Although many assumptions are made, they were fair and without bias. IT IS OBVIOUS FROM READING THE BOOK THAT THE MASONRY WALL HAS A FURTHER ADVANTAGE IN ONE- AND TWO-STORY STRUCTURES WHICH WILL CERTAINLY CONSTITUTE OVER 90 PER CENT OF THE TOTAL CONSTRUCTION IN THE YEARS TO COME . . ."

The study considered fifteen cost factors including: Value of Money, Depreciation, Price Increases, Income Taxes, Initial Construction Cost, Cost of Supporting the Walls, Space Occupied by the Walls, Speed of Erection, Maintenance Expenditures, Illumination Costs, Salvage Value,

tected steel beam, however, will fail to support its own weight at 1750 degrees F., the temperature reached in one hour of a standard fire rating test.

The solution, where structural steel is used, is to protect it with structural clay tile. In fact, no other material used for the same purpose can compare with clay tile in actual job performance.

Earlier we spoke of the architect's design. Now let's consider the materials he uses to achieve it—specifically, structural clay products.

and each helps achieve a specific visual impression.

Pattern depends on the bond used. A wide variety of bonds can be used to achieve any desired effect, whether it be a startling, machine-produced look, as with the brilliant glazed brick end walls at Eero Saarinen's General Motors Tech Center, or the rugged, timeless appearance the same architect gave his pill box-like chapel at M.I.T. through the use of a number of bonding effects, including protruding headers. Esthetically, clay masonry is versatile enough to meet every demand of the designer.

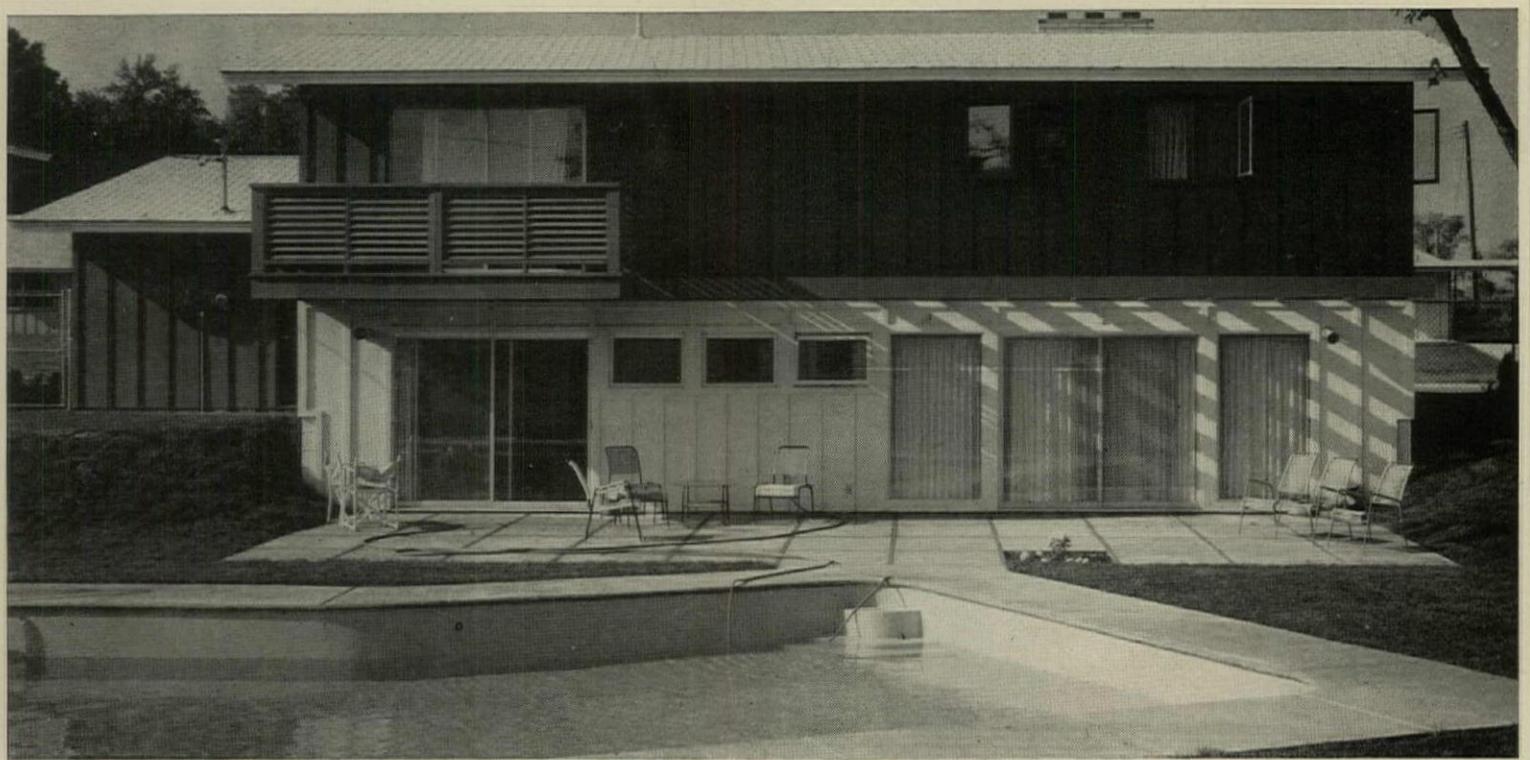
Insurance Rates, Real Estate Taxes, Air-Conditioning Costs, and Heating Costs.

Some of these factors affect the cost of ownership more than others, but none can be overlooked. Applying all of them, the potential investor can obtain a graphic comparison of the costs involved in using each of the three major types of exterior building wall—masonry cavity, metal skin, and glass. The following table summarizes the findings. Notice in it the separate categories for Taxpayer and Non-Taxpayer. These are necessary because the taxpayer is allowed to deduct operating and depreciation costs, while the non-taxpayer is not.

Ultimate Cost of Building Walls
(Per Square Foot of Wall Area)

Wall	Taxpayer	Non-Taxpayer
Masonry Cavity Wall	\$ 4.60	\$ 5.26
Metal Skin Wall	7.86	9.01
Glass Wall	18.29	30.02

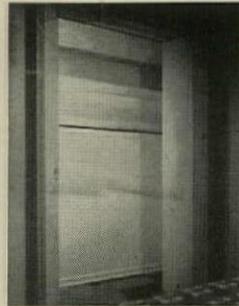
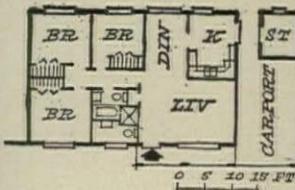
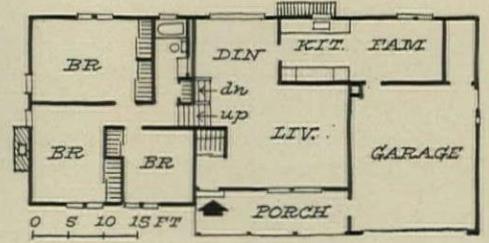
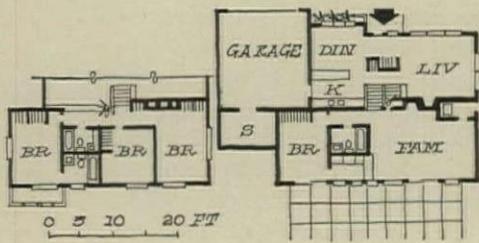
For additional information on this most important subject, you are invited to write the Structural Clay Products Institute, 1520 Eighteenth Street, N. W., Washington 6, D. C., for an excellent technical booklet on "Ultimate Cost," available at 55 cents a copy, or for a simplified version for investors, "What do buildings really cost," which is available free. Get the facts *before* you decide. We think you'll be glad you did.



Choice of designs: Here are two new split-levels added to Builder Bob Gerholz' model line in Flint, Mich. Photo above is the rear of the front-to-back split-level dia-

grammed below left. It sells for \$31,950 (pool is additional). Below (center and right) are photo and plan of a \$29,950 side-to-side split.

outdoor living areas, many built-in appliances, carpeting, and three bedrooms. Gerholz also offers contemporary and traditional one- and two-story houses.



Air-conditioned ranch: The three-bedroom model at left has become a best-seller for Pearce-Uible Co in Jacksonville, Fla. Main reason: builder includes year-round air conditioning in the \$14,200 house, which is on a \$1,900 lot. A 3-hp heat pump (effective down to 17F) cools and heats the house for \$200 a year. Another feature buyers like is the ceiling height of panel doors in all closets in the house (see photo near left).



Split entries for hillsides: Two-story "half-way" houses on lots sloping to rear are now favorites in the Boston area, according to Robert Stone Co, Boston realtor. The two shown left and above were built from plans supplied by this big realtor (600 new-house sales a year at \$20,000 to \$40,000). Stone builds about ten houses a year itself to test market reaction.

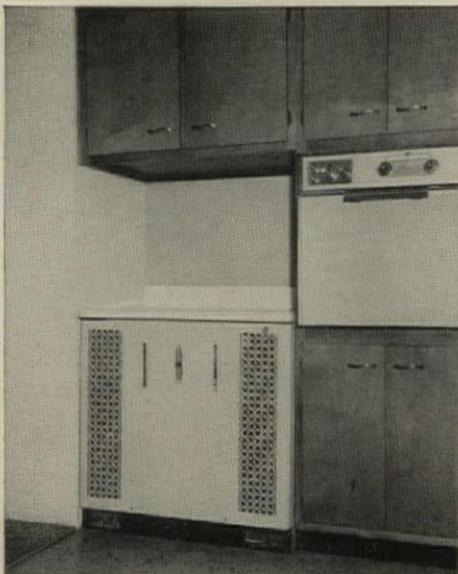


B&G *Hydro-Flo*[®] HEATING A STAR FEATURE IN 3,000 HOME DEVELOPMENT



B&G BOOSTER[®]

The key unit of a B&G *Hydro-Flo* System—a quiet, automatically controlled electric pump which circulates hot water through the heating system.



The amazingly compact house heating boiler is concealed behind the grille work of this counter top cabinet, providing added work space in the kitchen.

At Schaumburg, Illinois, a Chicago suburb, Campanelli Brothers' Weathersfield development covers a vast acreage. The model homes shown here illustrate the price range of from \$15,500 to \$21,000.

These homes feature the most modern equipment for comfort and convenience, including hydronic* B&G *Hydro-Flo* Radiant Heating...a forced hot water system with copper tube floor panels.

"In deciding on this type of heating" says Mr. Al Campanelli, "we were guided by the need in this highly competitive market for a feature of outstanding sales power. Radiant heating, with its sunlike warmth, can't be equalled for genuine comfort and cleaner, quieter operation. Its warm, draftless floors guard against usual winter ills."

NOVEL DEMONSTRATOR

In the Campanelli sales office this unit offers an understandable demonstration of B&G *Hydro-Flo* Heating. The jacket is removed from the boiler, exposing the B&G Booster pump and other working parts. The cut-away section of floor shows how copper coils, embedded in the slab, provide overall, radiant warmth.

"HYDRONIC HOMES" SALES PROMOTION FOR BUILDERS

A comprehensive program of ideas and sales helps for utilizing the outstanding and exclusive advantages of *hydronic** heating. Every builder should see this presentation—there's no obligation in getting the facts. Write, phone or wire today.



*Modern hot water heating.



***Hydro-Flo*[®] SYSTEM**
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*you build with the
best in fireproof gypsum
with*

**BESTWALL
GYPSUM
BUILDING
PRODUCTS**

*first with glass fiber
reinforcement**

**for superior
performance at
no extra cost.*



Bestwall Gypsum Wallboard—
reinforced with glass fibers for greater strength,
better nailing, easier scoring, less breakage.



Bestwall Gypsum Plasters—
glass fibers add strength, eliminate balling, reduce
droppings; in machine application, won't clog hose
or nozzle.



Bestwall Gypsum Sheathing—
glass fibers give greater structural strength; core and
papers are water repellent; weather-tight V-joints.



BESTWALL GYPSUM COMPANY • Ardmore, Pennsylvania
Plants and offices throughout the United States

What the leaders are doing

continued from p 226



**Builder gets lukewarm reaction
to radioactive fallout shelters**

Denver Builder Jack C. Hoerner reaped national publicity when he opened new models featuring a fallout shelter but he reaped few extra sales. (For construction details, see p 208).

"The public shows little interest in having a fallout shelter," he reports. "Professional people are the only ones interested so far. Our separate dining room is a much more salable feature."

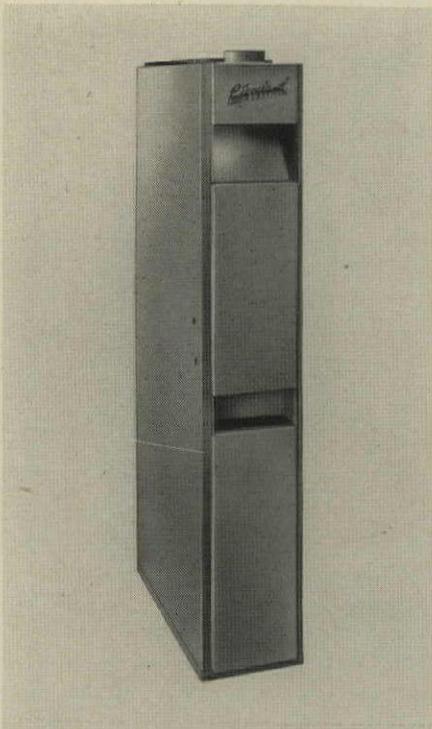
Hoerner includes the shelter out of personal conviction that homeowners should have it, rather than to clinch extra sales. And so far it has cost him money. FHA officials have declined to give him credit for it in appraisals, begging off, says Hoerner, because they have no rules covering such shelters.

In three weeks, Hoerner sold five houses, which he counts much better than usual, for he averages only 25 to 30 sales a year. He offers three-bedroom, two-bath, 1,200 sq ft ranches with one-car garage at \$17,500.



**Metal framing braces
can save \$5 a house**

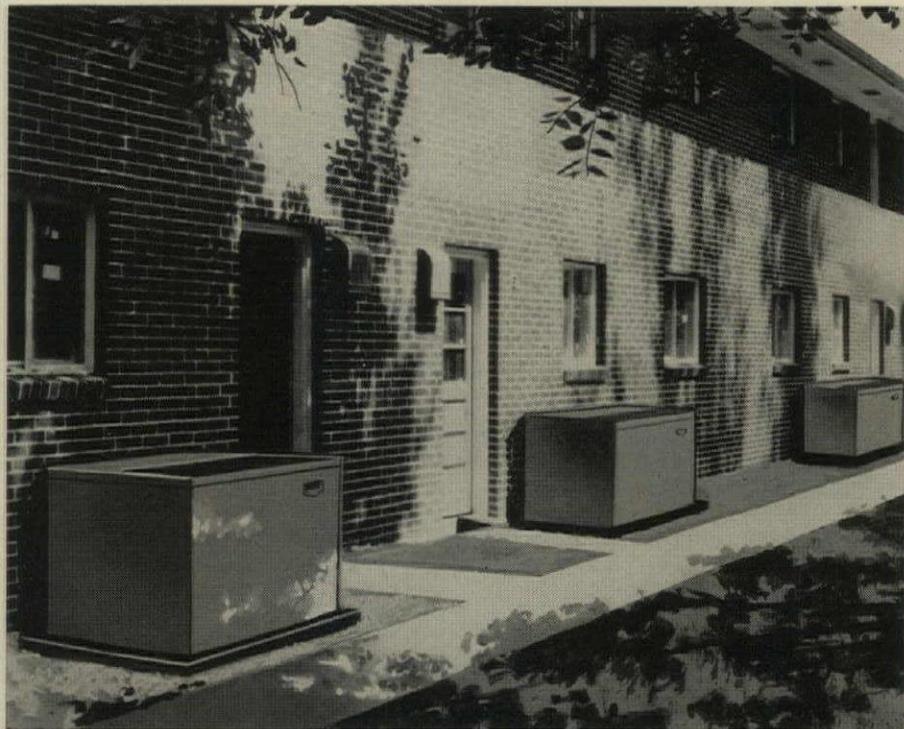
Brown & Kauffmann in Palo Alto, Calif. uses about 20 round metal braces in each house to support stud walls during construction. Says Production Manager Bill Clarke: "Our carpenters waste no time looking for bracing lumber or cutting it. They know these metal braces save time and take up less working space. We pay \$8 a brace, use them over and over, and save \$5 to \$6 a house." /END



Compact furnace 14"x25"57" puts out 50,000 Btuh, is approved for zero clearance, can be plastered into wall. Gas-fired unit has large blower, can work with ducts, as freestanding heater, or as ventilator. Belt-drive gives quiet blower operation. Unit is AGA approved for natural, manufactured, or Lp gas.

Dornbeck Furnace, Cleveland.

For details, check No. 5 on coupon, p 272



Year-round conditioners serve apartments

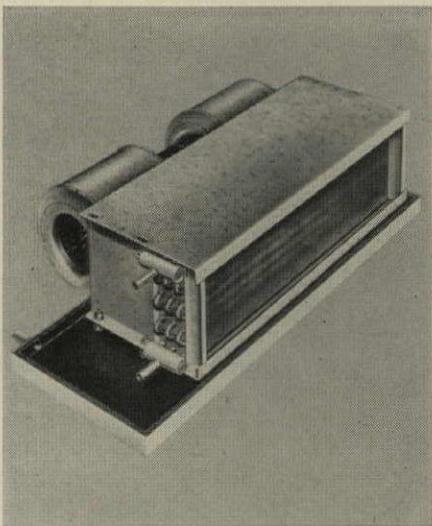
Bryant has rescaled their equipment to fit single apartments. Compact utility core, made up of furnace, cooling coils, and water heater, fits in closet-sized corner; remote condensing unit goes at rear of apartment units. Heating equipment is gas-fired; add-on air conditioning is electrically powered. Furnaces

have bonnet capacities of 60,000 to 160,000 Btuh; cooling systems handle 24,000 to 63,000 Btuh loads. Rubber-mounted blowers keep down noise and outside compressors get it out of the house.

Bryant Mfg Co, Indianapolis.

For details, check No. 6 on coupon, p 272

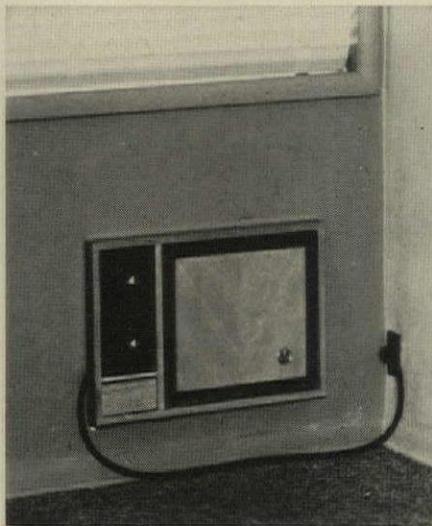
Products to heat, cool, and ventilate apartments



Hydronic heater-cooler is built to go into dropped ceilings or the top of a closet, leaving exterior walls free for full length glass, etc. Hot or cold water is piped from central boiler and chiller to Remotaire units. Room units have fan and coil assemblies and individual controls give zoned heating and cooling. No ductwork, compressor, or condenser is in the room. Operation is quiet.

American-Standard, New York City.

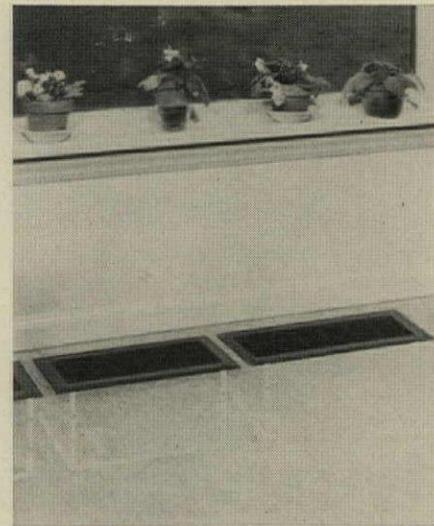
For details, check No. 7 on coupon, p 272



In-wall heat pump in bedroom, paired with second unit in kitchen-living room, handles heating-cooling load of 800 sq ft apartment in Hapeville, Ga. Installed cost, about \$500 per apartment; operating costs, about \$96 a year. Units are Mathes 1-hp room models, have 10,000 Btuh heating and cooling capacity, plus 6000 Btuh of supplementary heat. They operate on 230-v, draw 1410 watts.

Mathes Co, Fort Worth.

For details, check No. 8 on coupon, p 272



Unit floor heaters fit 16" stud spacings beneath cold glass or solid walls, need no central heater. Units come in 400 and 800-watt sizes for 120 or 240 volts, plug in or out automatically for safety. Special switch cuts off heat if anything prevents normal operation. 400-w model is 14 1/8" long; 800-w model is 30 1/8" long. Both are 6 1/16" wide. Finish is neutral gray enamel. Price: 400-w, \$23.50; 800-w, \$42.50.

Electromode, Rochester, N.Y.

For details, check No. 9 on coupon, p 272

continued on p 232

These appliances solve several apartment problems



New oven has cooktop that folds into side

This compact unit will be in production by January, 1960. Total width of the oven and control panel, into which burner section folds, is 32". New unit has usual Hotpoint features: Calrod oven and surface elements, removable door, "peekaboo" window,

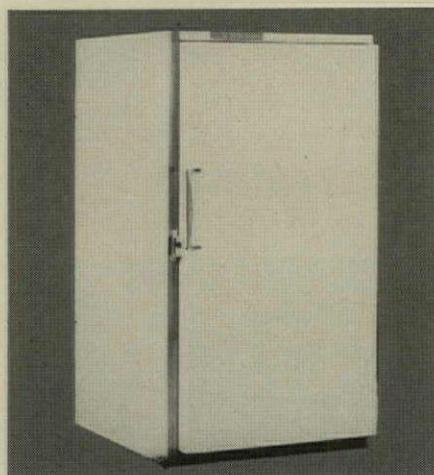
rotisserie, two-position rack. Oven has automatic time and temperature controls. Top burners work on pushbuttons. Unit has been tested for 19 months in 24 cities. Retail price: about \$450. Hotpoint, Chicago.

For details, check No. 10 on coupon, p 272



Quiet Disposer has diamond-hard Carboly cutters which cut quickly, efficiently, quietly; cutter section is insulated and cushion-mounted to muffle grinding noise. Sound Shield and Carboly cutters are on FC-80 continuous-feed and on FA-90 batch-feed models. General Electric, Louisville.

For details, check No. 11 on coupon, p 272



Small refrigerators for efficiency apartments work on thermoelectric principle, have no compressor, no moving parts, are completely noiseless. Four-cu-ft size draws 180 watts, six-cu-ft model draws 220 watts. Six-cu-ft model has zero degree freezer. Six-cu-ft model, 45 $\frac{3}{4}$ "x34 $\frac{5}{8}$ "x27 $\frac{1}{8}$ ", costs \$289.95 retail; four-cu-ft model, 34 $\frac{5}{8}$ "x21 $\frac{3}{4}$ "x25 $\frac{1}{8}$ ", costs \$239.95.

Norco, Inc, Los Angeles.

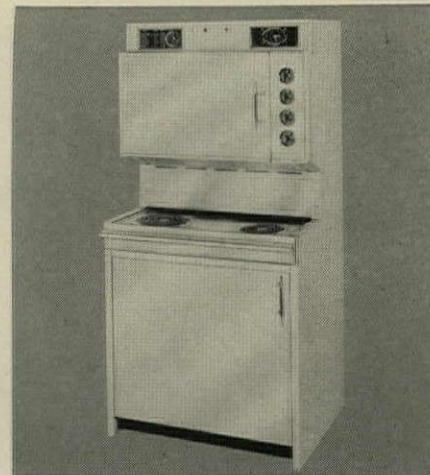
For details, check No. 12 on coupon, p 272



French door oven saves passageway space, is new in Frigidaire line. Doors need 10" less space to open than swing-down door. Standard features include automatic controls, timer, lights, easy cleaning features found in other Frigidaire ovens. Rotisserie and radiant wall broiler are optional. Unit fits standard 24" cabinet, has new quick-and-easy lever action mounting clamp.

Frigidaire, Dayton.

For details, check No. 13 on coupon, p 272



Freestanding range has all facilities in 30" width plus generous storage space. Tappan Debutante is smaller version of new 400 model, has all deluxe features in a single-oven model at a budget price. Base cabinet is optional: unit can be hung on a wall or built into a counter top. Unit alone is 30" wide overall, 25 $\frac{1}{2}$ " deep (with burners recessed), 34 $\frac{1}{2}$ " high.

Tappan Co, Mansfield, Ohio.

For details, check No. 14 on coupon, p 272

Heavy-duty disposer has a $\frac{1}{2}$ -hp capacitor motor. In-Sink-Erator's model 27 grinds food wastes quickly and easily, keeps noise level low. Cutters reverse whenever unit starts or heavy load threatens to jam action. Continuous or batch-fed versions of model 27 cost \$169.50 retail.

In-Sink-Erator Mfg, Racine, Wis.

For details, check No. 15 on coupon, p 272

Efficiency kitchens incorporate most kitchen services in a space as narrow as 39". Smallest unit includes sink, two-burner cooktop, 5 cu ft refrigerator and some storage space in 39" width. Biggest model is 72" wide, ceiling high, has three burners and oven, sink, 7 cu ft refrigerator.

Dwyer Prod, Michigan City, Ind.

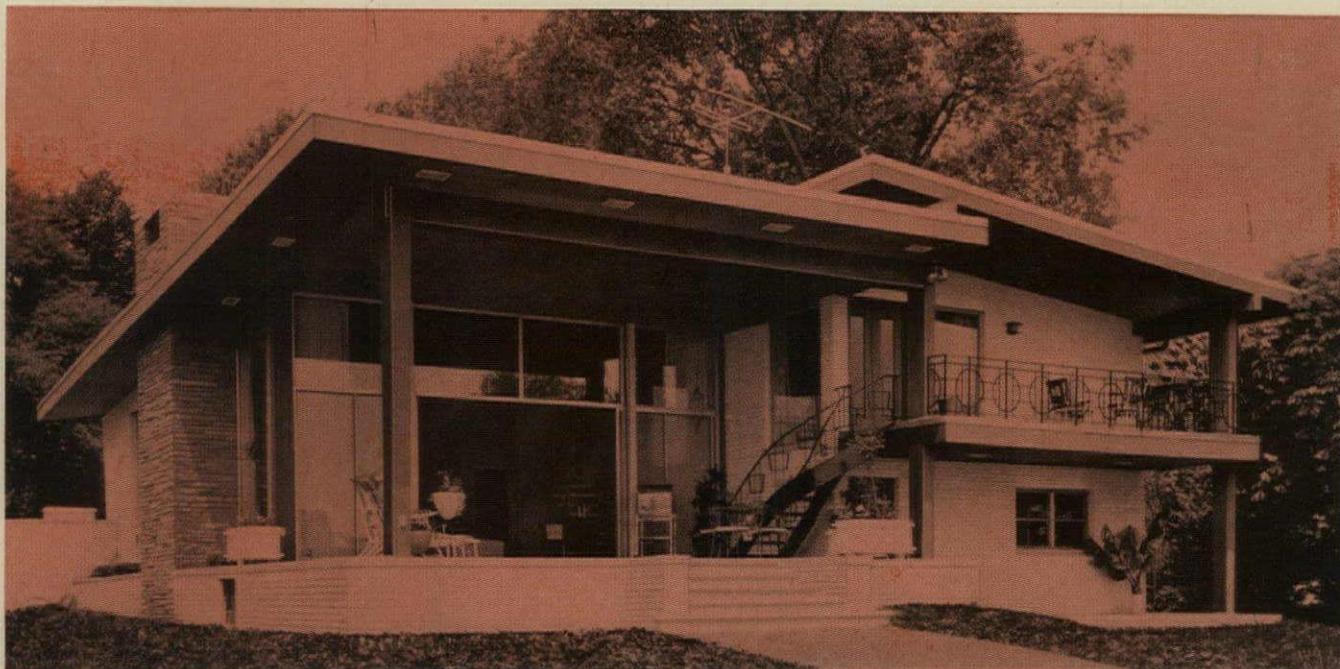
For details, check No. 16 on coupon, p 272

Compact refrigeration is supplied by Revco built-in refrigerators and freezers. In-a-wall models are 33" wide, offer 7.3 and 9 cu ft refrigerators and 5.7 cu ft freezer. Under-counter refrigerator is 7.3 cu ft, freezer is 5.7 cu ft. Units can be stacked or side-by-side, come in a wide variety of finishes.

Revco, Inc, Deerfield, Mich.

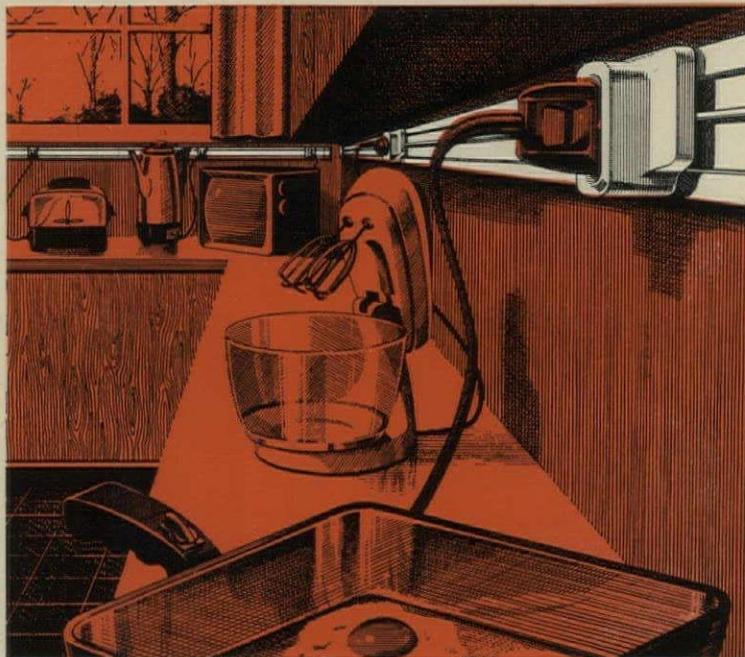
For details, check No. 17 on coupon, p 272

continued on p 234



House of Charm, Grosse Pte., Mich.

Added
convenience . . .
added buyer
appeal
for your homes . . .



Electrostrip

PATENTED ®

It costs you no more to give home buyers the very latest in electrical wiring . . . Electrostrip, the *movable* outlet system. And what a sales maker!

Hundreds of leading builders are giving their homes bonus sales appeal with Electrostrip. It installs quickly and easily . . . can be painted to match walls and woodwork . . . and completely eliminates the headaches of fixed outlet planning, because it's *every inch an outlet!*

Home buyers love the extra convenience of Electrostrip . . . in the kitchen, living room, bedrooms, all through the house. No more fixed outlets to dictate furniture and appliance placement! Outlet receptacles can be spotted

anywhere they're needed. And unsightly, hazardous extension cords and "octopus" outlets become a thing of the past.

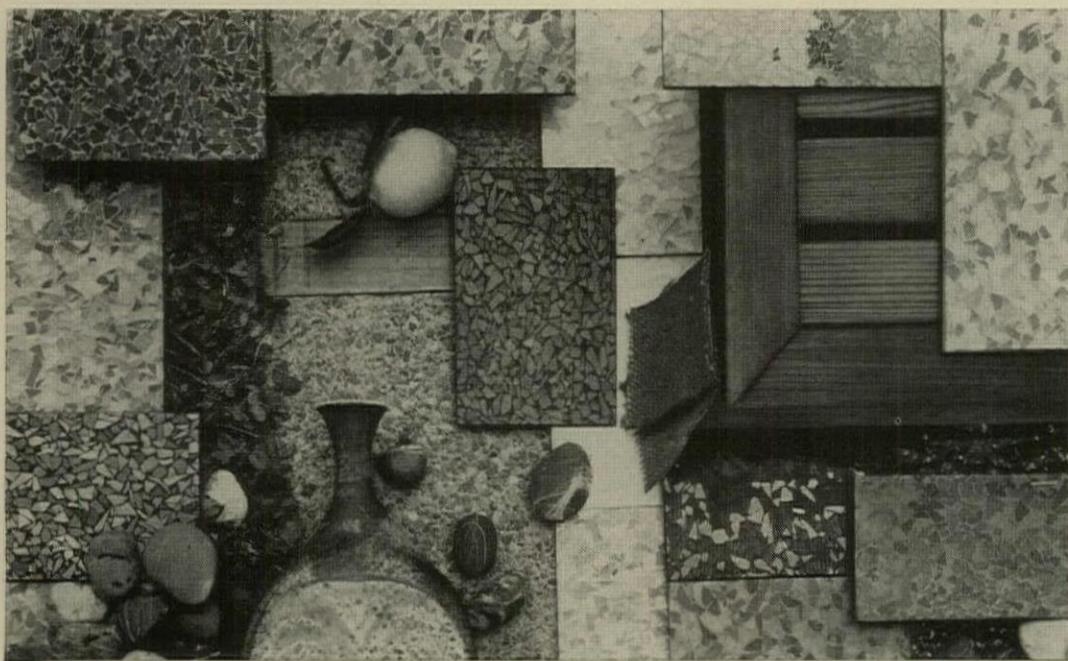
Install Electrostrip in your next model home and watch the enthusiasm it generates. Electrostrip is safe, tested, proved—listed by Underwriters' Laboratories.



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I-T-E CIRCUIT BREAKER COMPANY
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® In Canada: 80 Clayson Rd., Toronto 15, Ont. Export Division: 13 East 40th St., New York 16, N.Y.

Here are new materials for apartment exteriors

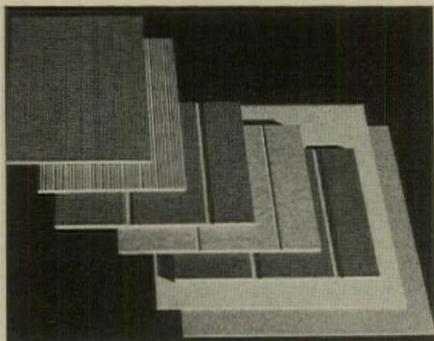


Here is a new mosaic wallboard

Mosaica, a new product from Soulé Steel, can be used on exterior or interior walls. Wall face is made up of glass tesserae in an inorganic grout, bonded to 3/16" asbestos cement board. Sheets are 2' or 4' wide, up to 10' long, with a nominal thickness of 7/32". Mosaica weighs about 2 lb per

sq ft, can be installed by carpenters. One hundred sq ft will go in place in about 1½ hours, total cost about \$2.25 a sq ft. It is impervious to rot and moisture, needs no maintenance. Initial marketing: 13 western states.

Soulé Steel Co, San Francisco.
For details, check No. 18 on coupon, p 272

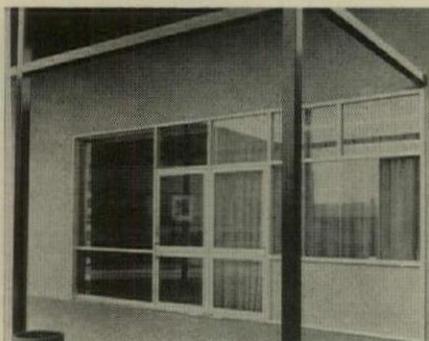


New exterior hardboards are tempered for increased strength and weatherability, come in striated or smooth finishes with 3/8" wide U-grooves on 4" or 8" centers or in random. Groove edges are eased to prevent chipping. Sheets are 1/4" or 5/16" thick, 4'x4' or 4'x8', have modified shiplap edges to conceal joints.

Weyerhaeuser, Tacoma, Wash.
For details, check No. 22 on coupon, p 272

New mineral-fiber formboard becomes the finished ceiling after lightweight gypsum deck is poured. Pyrotone is faced on the room side with plastic, has high acoustical absorption, high light reflectance. When laid on purlins 32 5/8" oc, it will support a 2" poured gypsum roof deck with minimum deflection. Neither facing or core is affected by moisture or mildew.

US Gypsum, Chicago.
For details, check No. 24 on coupon, p 272



New window-wall system from Ador combines sliding or swinging glass doors, sliding, projected, or casement windows, and solid panels. All aluminum system is designed for one, two, and three-story buildings of wood frame, steel, concrete, or masonry. System has special baffles for weepage. Units are shipped knockdown.

Ador Corp, Fullerton, Calif.
For details, check No. 23 on coupon, p 272

Tile-like spray creates a maintenance-free surface on almost any building material. Vitra-Spray is a compound of inorganic aggregates in chemical binders. When sprayed on a wall it cures into a continuous, hard, smooth, vitreous surface. The treatment is permanent; will not craze, peel, flake, or fade, is fireproof, resists chemicals. Cost depends on application.

Production Paints, Brooklyn.
For details, check No. 25 on coupon, p 272

Overlaid plywood is now available at prices comparable to exterior fir plywood. Royal Harborite has a medium density face on a base panel of silver fir veneers. It eliminates checking and minimizes grain rise. It is resistant to wear, weather, and water. Smooth patch-free surface takes paint well.

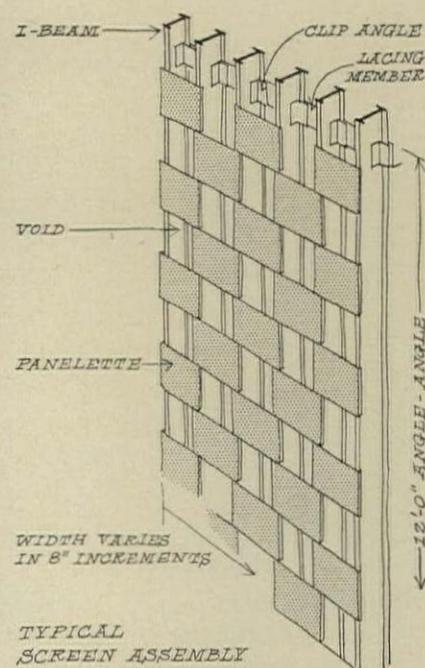
Harbor Plywood Corp, Los Angeles
For details, check No. 19 on coupon, p 272

Hardboard siding is fully oil-tempered and factory-sealed. Forest Panel is 3/8" thick, can be nailed directly to studs without sheathing where local codes permit. Panels come in sizes to 4'x16', in rough or smooth surfaces with grooves on 4" or 8" centers or with random spacing.

Forest Fiber, Forest Grove, Ore.
For details, check No. 20 on coupon, p 272

New two-color paint simulates metallic wallpapers for a materials cost of 3¢ a sq ft. Metalace Plextone is a two-cost system calling for a base coat (that can be rolled, brushed, or sprayed on) and a sprayed metal coat. Silver and gold metal sprays go with a wide range of base colors. Plextone can be used on plaster, brick, stucco, concrete, gypsum wallboard, asbestos cement.

Plextone Corp, Newark N.J.
For details, check No. 21 on coupon, p 272



Aluminum screen system allows an unlimited variety of sunshade designs. Alcoa's SolDec is assembled from three basic extrusions: 3"x3/4" I-beams, panelettes 8" c to c, a 3" clip angle to join I-beams. Beams can be laced with various bar, pipe, or channel forms. Panelettes come in color, in stock or custom shapes. I-beams can be set vertically, horizontally, or at an angle.

Alcoa, Pittsburgh.
For details, check No. 26 on coupon, p 272

Grand National Award Home
Gerholz Community Homes, Inc.
Flint, Michigan



Grand
National
Award Home
Features . . .



**PUSHBUTTON CONVENIENCE . . . EXCLUSIVE
WITH **PUSHMATIC****

Top builders across the country are adding safety, convenience and smartness to their homes with modern Pushmatic Electri-Centers®.

This up-to-the-minute service entrance equipment can be an important extra sales feature for you, too. Pushmatic guards every electrical circuit in the home, including heavy appliances, and provides capacity for future needs as well. You'll find home owners go for

this extra safety feature . . . and for the exclusive pushbutton convenience that replaces old-fashioned fuse changing. You'll clinch sales with the fact that your homes are equipped for the most

modern, convenient electrical living.

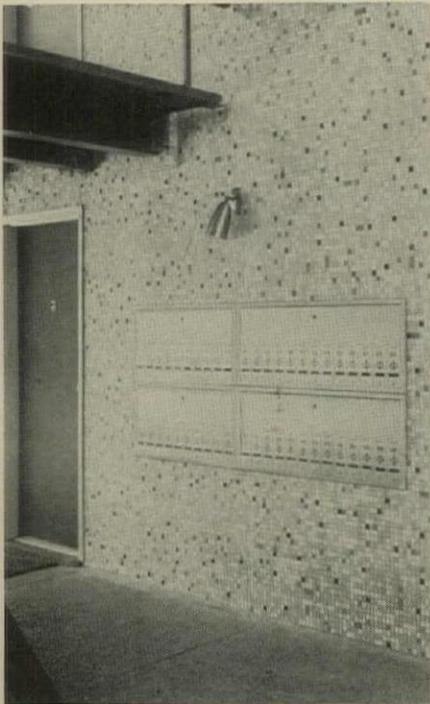
Specify Pushmatic . . . and you specify *proved* performance to complement your finest homes.



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Here are new finishes for apartment interiors



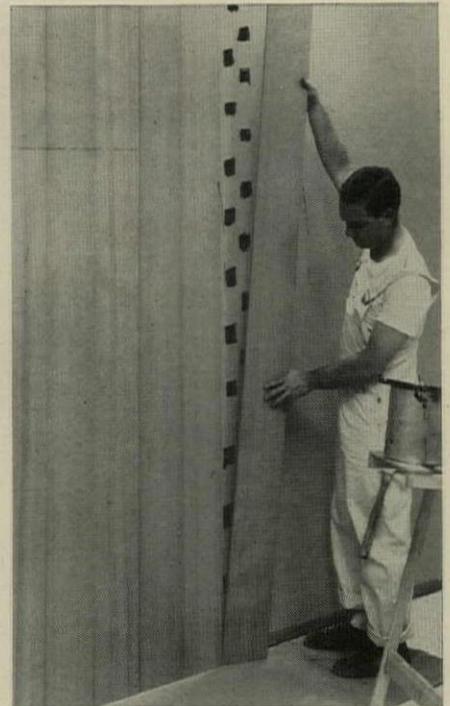
Ceramic mosaic tile offers low maintenance in a small-scaled pattern. Apartment lobby above is finished with Mosaic Tile Co's new 1"x1" modular mosaics. These have a vitreous body to combine with any ceramic mosaic inside or out. The field tile is unglazed; the accent colors are new Staccato bright glazes. Field tile cost about \$1.20 a sq ft, Staccato about \$5 a sq ft. Average costs: \$1.75 to \$2.

Mosaic Tile Co, Zanesville Ohio.
For details, check No. 27 on coupon, p 272



Vinyl wall tile gives a soft, durable, low-maintenance finish to interior walls. Tile is glued in place like wall paper with a special non-staining adhesive, can be cleaned with a damp rag and mild detergent. Impregnated colors are claimed to be fade-proof. A wide variety of new patterns is being produced.

General Tire & Rubber, Akron.
For details, check No. 28 on coupon, p 272



Thin redwood paneling gives a low-cost natural wood wall. La Honda panels are only 3/8" thick, 4", 6", or 8" wide in 8' lengths. Edges are t&g. Panels may be nailed or glued (above) to walls. One side of each panel is smooth milled, the other is resawn to give a choice of textures. Kiln-dried panels come in dust-tight cartons. One carton of 8" panels will cover up to 78 sq ft. Price: about 25¢ a sq ft.

Simpson Redwood Co, Arcata, Calif.
For details, check No. 30 on coupon, p 272

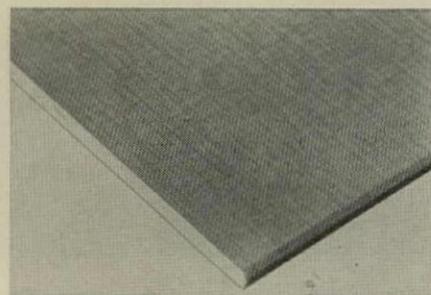
Acoustical fabrics are made of woven plastics in many textures including woven cane. Sound is not absorbed, but is broken up by open weave. Materials may be used as wall covering, dividers, upholstery, are non-flammable, non-fading, wear-resistant. Over 1400 patterns are now available.

Wendell Plastic Fabrics Corp, New York City.
For details, check No. 29 on coupon, p 272



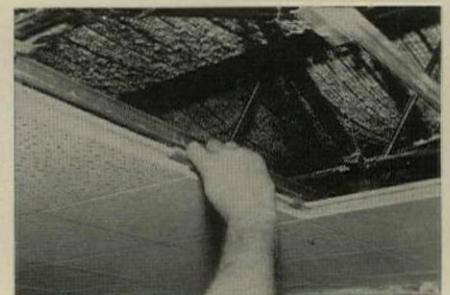
Decorated silent ceiling is new from Kaiser. Material is pinhole perforated Firtex on which a choice of six pastel colors have been printed. Ceilings come in all standard sizes with fir-lock or butt joints for stapling or gluing. Ceiling absorbs up to 70% of noise striking it manufacturer claims.

Kaiser Gypsum, Oakland, Calif.
For details, check No. 31 on coupon, p 272



New vinyl wallboard Durasan is gypsum wallboard wrapped in vinyl wall covering. Solid pastel colors—tan, green, gray, aqua, rose—are integral with surface. Sheets are 4'x8', can be nailed or glued directly to stud or to horizontal furring strip 16" oc. Joints may be left plain or covered with molding.

National Gypsum, Buffalo.
For details, check No. 32 on coupon, p 272



Fireproof acoustics are provided by Armstrong's Acoustical Fire Guard. Hung in mechanical suspension, these 5/8" and 3/4" tile give up to four-hour fire ratings, have noise reduction coefficients of .70. Tiles are factory finished in fissured or random patterns. Light reflectance is over 78%.

Armstrong Cork, Lancaster, Pa.
For details, check No. 33 on coupon, p 272

Fire retardant Koroseal now comes in suede finish and 39 colors. The material meets federal specifications as well as the fire specifications of California and Boston, Mass. Koroseal can be adhered to any clean, dry, smooth surface.

B.F. Goodrich Co, Akron.
For details, check No. 34 on coupon, p 272

New vinyl sheet is color-impregnated to blend with various tints of fluorescent and incandescent lights. Colors are permanent and resistant to all types of wear but color effects can be changed by changing lighting. Koveron comes in 44 colors.

Koveron Korp, Louisville.
For details, check No. 35 on coupon, p 272

New plastic laminate is deglossed to give woodgrain patterns the look of fine furniture. Kevinite has a mottle finish polyvinyl alcohol film to cut reflections. New finishes are Honey Birch and Cherry. Material comes 30" and 36" wide.

Swedlow, Inc, Youngstown, Ohio.
For details, check No. 36 on coupon, p 272



Extra quiet vent fans have 4¾" diameter squirrel-cage blowers and four-pole motors. This blower is used in three Ventrola ceiling models: 408, which is a ventilator only; 410, a ventilator plus light (above); 418, a ventilator-light-heater. It is also used in Model 806, a thin-wall unit for use in a shallow ceiling or a 4" stud wall.

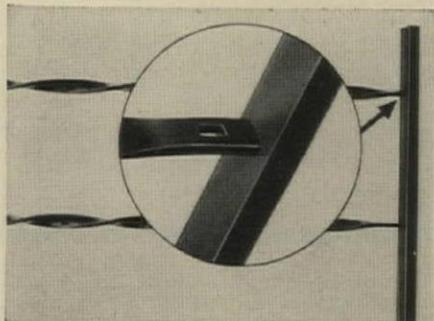
Ventrola Mfg Co, Owosso, Mich.

For details, check No. 41 on coupon, p 272

Master antenna systems for multi-unit television installations are manufactured by Entron, Inc. Systems include antennas designed to meet broadcasting conditions of the area, "head ends" to amplify the signal and feed it to the distribution network, and an assembly of coaxial cables and set outlets to distribute the signal. Makers claim high performance, easy installation, minimum maintenance, and adaptability for their equipment.

Entron, Inc, Bladensburg, Md.

For details, check No. 42 on coupon, p 272



Balcony and stair rails are electronically welded so spindles are permanently fused to top and bottom rails. Result is a better looking, stronger rail. Before welding, rails are cleaned for mill scale in a chemical bath. After welding, they are coated with iron phosphate to improve paint adhesion. There is no weld splatter or slag; flaking and oxidation are eliminated.

Versa Products, Lodi, Ohio.

For details, check No. 43 on coupon, p 272

New drawer slide has only one track, supports up to 50 lb. Slide saves space, needs only 5/16" vertical clearance. Drawer rides on two nylon rollers and two nylon guides. Automatic stop prevents drawer from being pulled out of opening by mistake, but drawer removes easily. Heavy-gauge steel track is zinc-plated, comes in four stock lengths: 18", 21½", 22½", 24½". Price: \$1.15 each in bulk lots.

Amerock Corp, Rockford, Ill.

For details, check No. 44 on coupon, p 272

continued on p 244

"A GREAT SALES CLINCHER" say

ROBERT and HARRY MEYERHOFF . . . of Jack Meyerhoff & Sons



Western Park Apts. is just one of three new apartment communities Jack Meyerhoff & Sons has added to the suburban Baltimore skyline in 1958-59. And all three are equipped with Float-Away Closet Doors. All-too-often both room and closet space is a decisive factor in the choice of an apartment. In Float-Away Doors our salespeople have a powerful selling tool—a great sales clincher! Float-Away Doors give easy access to the entire closet without the doors interfering, and without a lot of room space being taken by the door itself.



SAVES IN CONSTRUCTION COSTS TOO!

Float-Away Doors can actually *save* you one-third of the cost of every closet opening in every home you build. To prove this to yourself, add your costs for doors, hardware and jambs, plus the cost of framing down to door height and wall returns on each side. Compare this with the cost of Float-Away Doors large enough to cover the entire closet area from side to side and from floor to ceiling. Try this "Extra feature" that saves you money now!



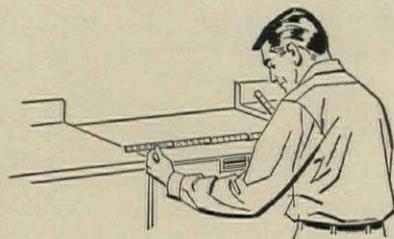
Phone or wire collect, TR 3-3111, or write for complete information and prices.

FLOAT-AWAY DOOR CO.

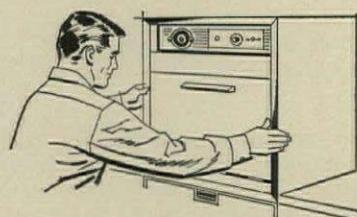
1173 Zonolite Road, N.E.
Atlanta 6, Georgia



Now...an oven so compact you can stack it on a dishwasher!



1. Select any 24" of counter space — even on top of a dishwasher. Oven is 24" wide, 25" deep, 25" high.



2. With 24" of counter top cleared, simply slide oven into place, hook up to ordinary 115-volt circuit.



3. Oven is ready for cooking. Takes only minutes to install.

New **PHILCO Citation** 115-volt oven fits flush on any standard 24" base cabinet...needs no cover-up cabinetry...runs perfectly on normal house current

Ideal for apartment kitchens. The new Philco Citation oven takes the squeeze out of planning small-space kitchens. Put it on top of a dishwasher, and you have a "cook and cleanup" center in just 24" of space — with no expensive cabinetry. The handsome coppertone finish on all sides blends beautifully with any cabinet décor — wood, brick, or standard catalog enamels.

Top performance on ordinary house current. Backed by years of research and

testing, this full-size automatic oven runs perfectly on 115 volts.

The Philco Citation can do anything any oven can do — heats to 400° in less than 9 minutes. Special reflective aluminum oven lining provides concentrated heating power, gives maximum efficiency on 115 volts.* What's more, this oven has full 20" cooking width in a cabinet only 24" wide. Top features include automatic timer clock, automatic variable thermostat.

Lowest-priced custom oven. Not only fits any apartment-kitchen blueprint, but it fits any price and quality specification, too. You can make this "penthouse" installation no matter what the rent range is. This Citation has all the custom styling and performance of top-priced equipment.

Perfect for gas markets, too. Costs less to buy — and is cheaper to run — than gas ovens with comparable features. Matching cook centers available in gas or electric.

*Also available with same performance in 230-volt model.

Send coupon today for complete information on Philco Citation Line! ▶

PHILCO

QUALITY FIRST!

PHILCO, Ext. 5141
Citation Custom Appliances
Philadelphia 34, Pa.

HH-592

Please send complete information on Philco's Citation 115-volt oven.

Name _____
Name of firm _____
Address _____
City _____ State _____

Bostitch Staplers Save Maryland Builder \$55.13 per House

\$33.75 SAVED ON ROOF ALONE

Stapling a 24' x 48' roof is a three-hour job for four men and a carrier. The same size roof was a six-hour job with hammer and nails. At \$2.25 per man, savings come to \$33.75. Stapler is Bostitch H4 Heavy-duty Hammer.



STAPLING CUTS SCREENING JOB \$4.50

Screening goes up 50% faster using a Bostitch T5 Tacker to fasten it to soffit supports. Hammer and tacks were used before. There's less fatigue with the powerful, spring-driven T5—and one hand is always free to position screening precisely on soffit supports.



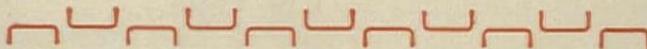
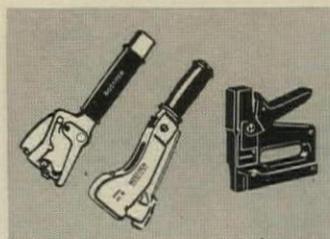
ONE-HOUR JOB DONE IN 15 MINUTES— \$16.88 SAVED.



Men in shop staple aluminum vapor barrier in side-walls in a quarter hour. This was a one-hour chore with hammer and nails. At an average of 10 panels per house, builder puts an additional \$16.88 in the profit column on each house.

WHERE ELSE CAN BOSTITCH STAPLERS SAVE YOU TIME AND MONEY?

Many places—installing ceiling tile, Cornerite, metal lath, insulation and low-voltage wiring—to name just a few. On a typical small house, your savings should equal or better this builder's. Stapling will save you even more if you use Bostitch staplers and staples on *all* the building jobs that they do better and faster. You'll find them at building supply dealers everywhere.



Fasten it better and faster with



530 BRIGGS DRIVE, EAST GREENWICH, R. I.

In apartment buildings...

CURTIS *I*NDIVIDUALITY *Q* and QUALITY

keep unit costs down, quality up

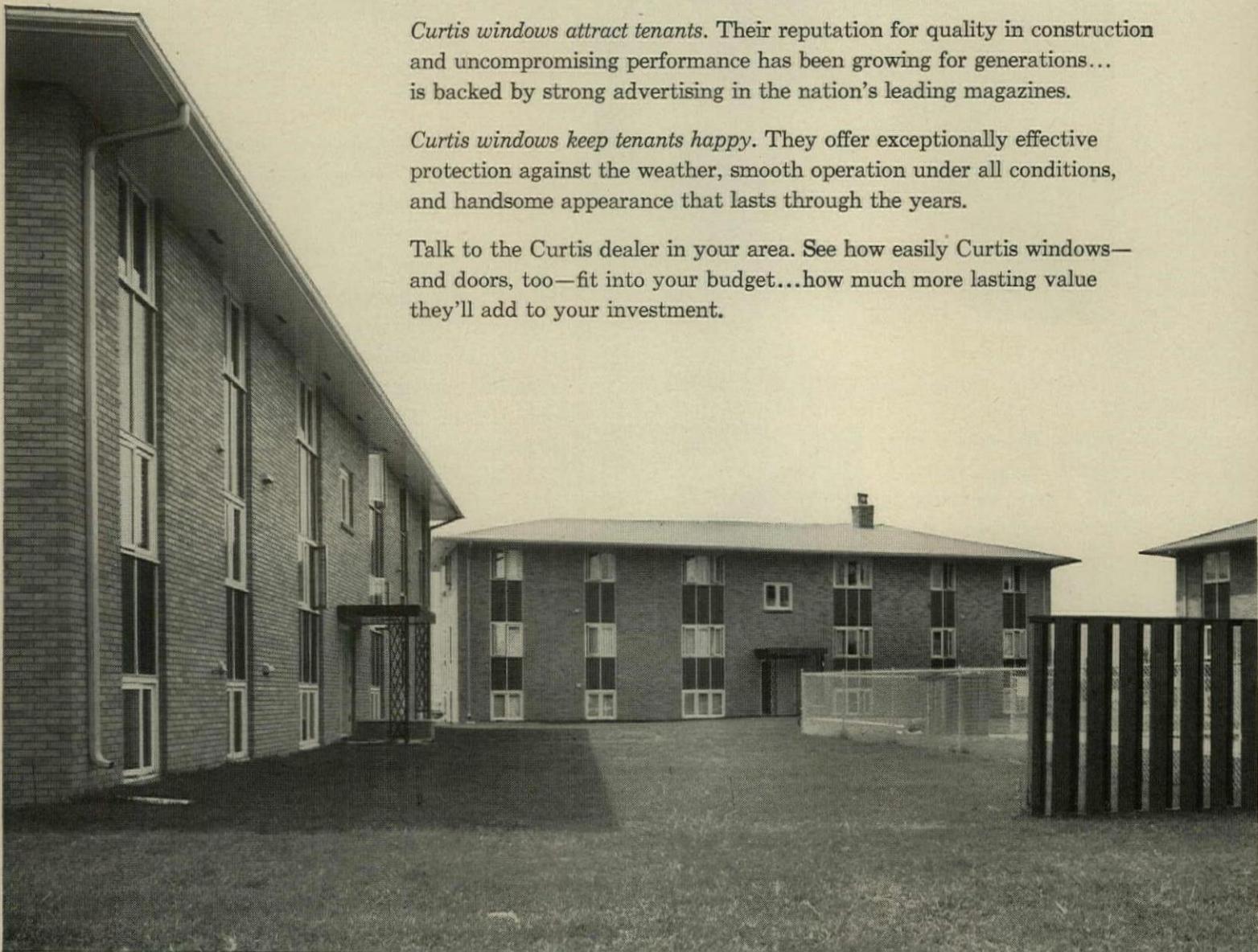
A tough assignment? Yes, but Curtis windows help apartment house builders and owners meet these requirements.

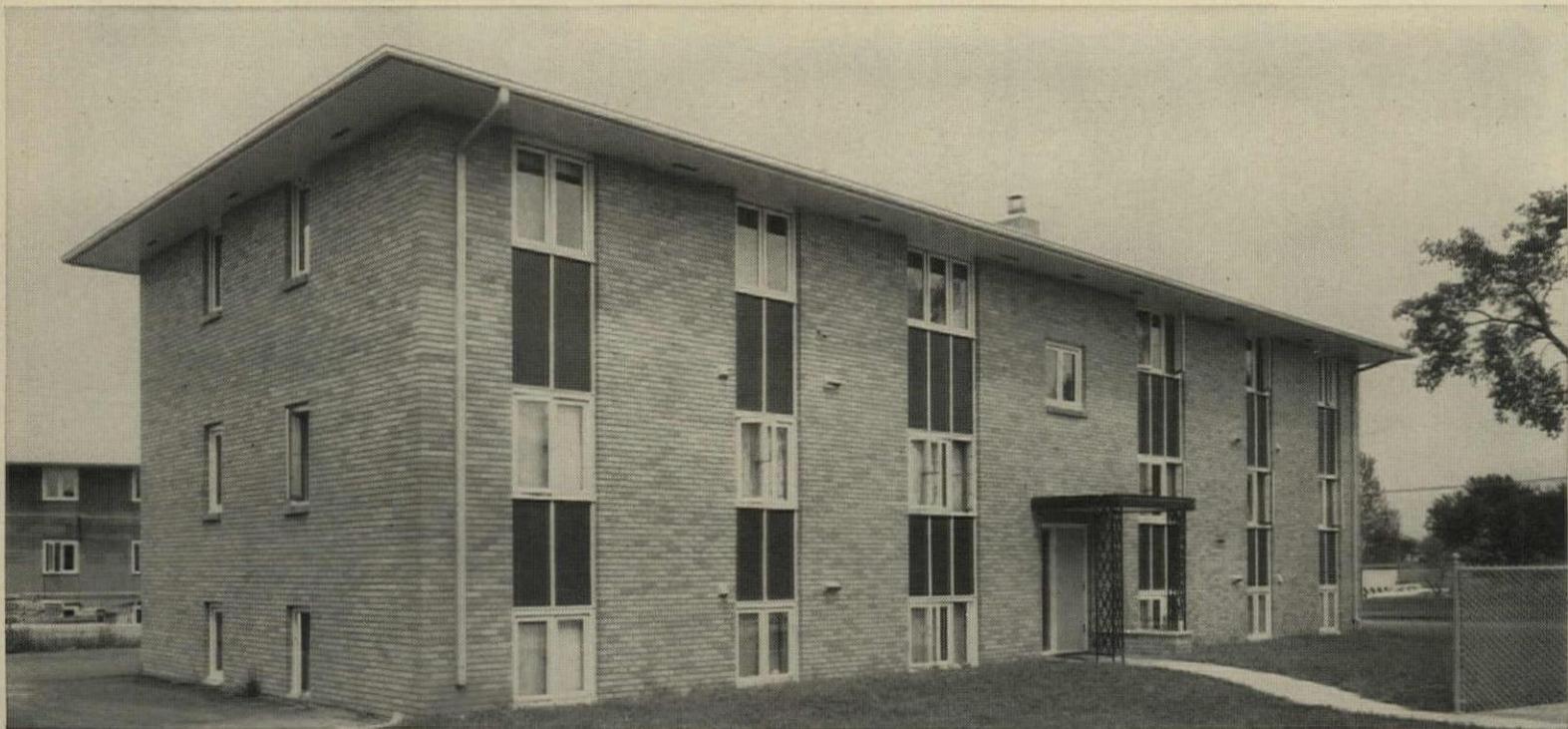
With the industry's broadest window line, Curtis offers you the *right* designs for your buildings—designs that have successfully added so much individuality and quality to single dwellings.

Curtis windows attract tenants. Their reputation for quality in construction and uncompromising performance has been growing for generations... is backed by strong advertising in the nation's leading magazines.

Curtis windows keep tenants happy. They offer exceptionally effective protection against the weather, smooth operation under all conditions, and handsome appearance that lasts through the years.

Talk to the Curtis dealer in your area. See how easily Curtis windows—and doors, too—fit into your budget...how much more lasting value they'll add to your investment.





Apartment building, Minneapolis, Minn. M. Loken, Inc., owner-builder. Another 11-unit apartment building, under construction, is shown below.

Minneapolis apartment builder chooses Curtis Convertibles—*again!*

"They did such a terrific job for us on our first project, and the tenants are so well pleased, there wasn't any question about using them on our second group of apartments."

That's how Mr. M. Loken, Minneapolis builder, feels about the Curtis Convertible. This versatile, weather-tight window can be used in any number of ways: casements, awning windows and flanking picture windows, as at right; ribbon windows; stacked windows; or in combination with other top-quality windows by Curtis.



Individuality and Quality in windows,
doors and FashionWood® cabinets

HH-10-59

CURTIS COMPANIES INCORPORATED
200 Curtis Building, Clinton, Iowa

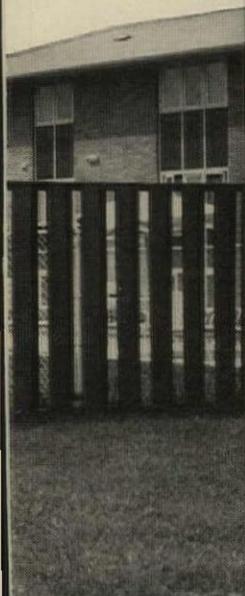
- Please send me more information about the Individuality and Quality of Curtis windows and doors.
- Send data on FashionWood kitchen cabinets.
- Please have a representative call.

NAME _____

ADDRESS _____

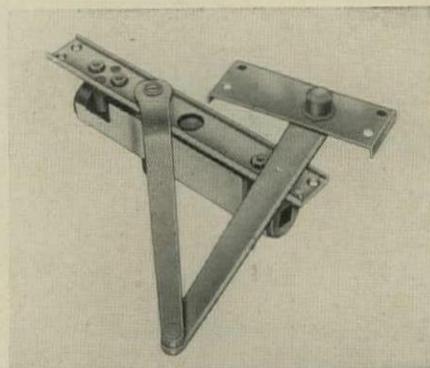
CITY _____ ZONE _____ STATE _____

It'll pay you to get all the facts about Curtis products and how they add individuality and boost quality in multiple unit buildings, as well as single homes. *Just Send the Coupon!*



New products

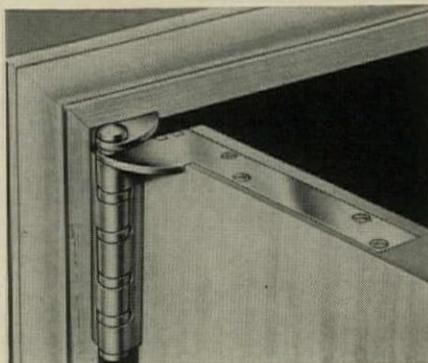
continued from p 239



Hidden door closer can be used for openings up to 180° from a single mortise in a single position, offers two spring strengths, two arm lengths. Adjustable backcheck stops door short of full opening to protect furniture. Similar closer for surface mounting is also available.

P&F Corbin, New Britain, Conn.

For details, check No. 45 on coupon, p 272



Pivot reinforced hinge saves wear on heavy doors in frequent use. Unit combines a pivot and a ball-bearing butt on a single pin. Door cannot move out of orbit, since the hinge cannot move unless the pivot does, but can be easily removed by extracting pin. Hinge sets come in bronze or steel for square or bevel doors.

Stanley Works, New Britain, Conn.

For details, check No. 46 on coupon, p 272



Ceiling-high doors that cut cost of overhead framing are now being made by Simpson Logging. Hollow-core flush doors are made 7'11" long and may be end-trimmed as much as 3" at the top to allow fitting. A 5½" lock rail extends the full width so lock can be set back as far as you wish. Doors are available in ribbon and rotary Lauan, rotary birch, and hard-board.

Simpson Logging Co, Seattle.

For details, check No. 47 on coupon, p 272



BELMONT TOP is designed for correct gas venting, weather-proofing and resistance to bird-nesting. It fits securely and quickly on any METALBESTOS vent pipe.

METALBESTOS

GAS VENTS ASSURE COMPLETE PERFORMANCE



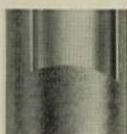
ROTA-LOCK COUPLERS are gas-tight, secure and permanent. They attach so quickly that installation costs are substantially reduced. An exclusive, patented METALBESTOS feature.



DOUBLE WALL construction keeps heat inside pipe to lift gases up and out of the system, assuring complete venting. Air Space between walls is nature's efficient insulation.



GALVANIZED STEEL OUTER WALL is weatherproof and gives strong, long lasting protection.



PURE ALUMINUM INNER WALL affords quick warm-up, is lightweight and corrosion resistant.

FURNACE

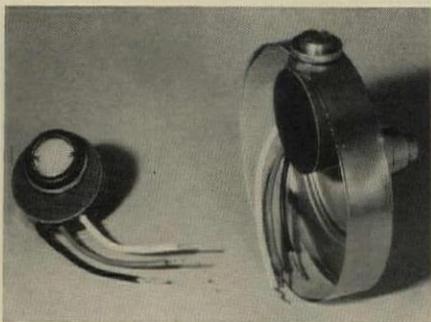
Years of experience in the manufacture of gas venting equipment assures you proven reliability. We will be happy to send you complete information and specifications promptly. Write Department D10

Manufacturing Plants in
Belmont, California
Logan, Ohio
Brockville, Ontario,
Canada



METALBESTOS DIVISION

WILLIAM WALLACE COMPANY - BELMONT, CALIF.



Light-operated switch is only 1 3/4" in diameter, can be installed inconspicuously. Unit will turn lights on when illumination falls to one foot-candle, turn them off at ten; will operate protective night lighting, safety warning lights, signs, etc. Each unit handles tungsten loads to 150 watts at 120 volts.

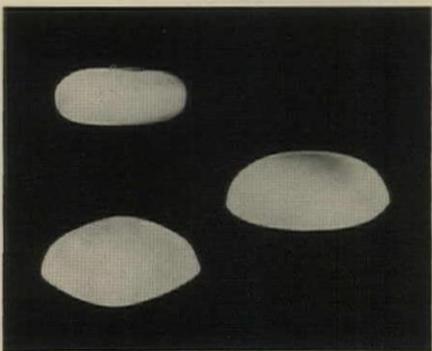
Schacht Electric Co, Houston.

For details, check No. 48 on coupon, p 272

Light acoustical plaster is being introduced by Bestwall. New plaster comes in two finishes, white and ultra-white. It has a noise-reduction coefficient of .55 to .60, a light-reflective coefficient of .67 to .70. One bag covers 8 to 10 sq yds with a 1/2" thickness. It can easily be applied by plaster gun or by hand.

Bestwall Gypsum, Philadelphia.

For details, check No. 49 on coupon, p 272



Luminous globes seem to float unattached to ceilings. Architectural line is achieved by a recessed ceiling pan. Inner ring supports shallow opal glass, makes light-tight seal with ceiling pan. Unit is insulated with asbestos-backed foil and fiberglass. Opalux projects only 4 3/4", round or square in 10 3/8", 12 3/8", and 14 3/8" diameters. 14 3/8" fixture is \$17.50.

Lightolier, Jersey City.

For details, check No. 50 on coupon, p 272

New acoustical tiles have been added to Simpson Forestone line. Starlite has star pattern pressed in soft surface. Driftwood has sand-etched pattern. Tiles are standard 12"x12", come with flange joint for stapling or butt edge for gluing.

Simpson Logging Co, Shelton, Wash.

For details, check No. 51 on coupon, p 272

Fire-retardant floor tile made of Koroseal vinyl asbestos meets fire requirements of US Navy. Tile body is homogeneous, has no coating or laminations to peel, curl, or wear off. The flooring resists oil, fats, greases, solvents, alkalis, and many acids; is highly resistant to fading, cracking, and indentation. Price: 47¢ a sq ft retail.

B.F. Goodrich, Akron, Ohio.

For details, check No. 52 on coupon, p 272

continued on p 250



Rich good looks...and real ruggedness, too...with

SOLID
paneling and siding of
ILCO

Philippine Mahogany

Ilco Philippine Mahogany can enhance the beauty of both the interior and the exterior of your homes. Walls paneled with Ilco take on the elegance and the endlessly intriguing appeal achieved only with genuine solid hardwood. As for exteriors, Ilco siding (vertical and horizontal) contributes warmth and individuality to any home. What's more, because of its remarkable durability, this sturdy natural siding withstands the assaults of all kinds of weather.

Another attractive feature of Ilco Philippine Mahogany is the fact that it can help give your homes a look of luxury at a very reasonable cost. So for outside and inside, insist on Ilco. It's not plywood or veneer, but solid hardwood.



INSULAR

LUMBER SALES CORPORATION

1405 Locust Street, Philadelphia 2, Pa.



8 ways to increase building profits with increased quality

Let's get down to dollars—on a 3-bedroom house—with 1200 sq. ft. of exterior wall surface, 3000 sq. ft. of interior wall surface, 960 to 1144 sq. ft. of floor area. Here's how Homasote Boards—with the highest quality in their field—can save you money over other standard building materials...

- 1 SAVE \$204 to \$929** with Homasote $1\frac{5}{32}$ " Board-and-Batten Exterior Walls... Provides high structural strength and top insulation value; holds paint 20% longer.
- 2 SAVE \$164 to \$889** with Homasote $\frac{5}{8}$ " Grooved Vertical Siding... Provides even greater insulation value than #1; beautiful in appearance.
- 3 SAVE \$103 to \$828** with Homasote $\frac{5}{8}$ " Reversible Siding—in 12" width, with 10" exposure. If used with clip, there are no exposed nails—no danger of rust stains.
- 4 SAVE \$270 to \$462** with Homasote Interior Walls. No need for door or window trim... Keeps out dampness—stops mildew, bathroom noises and glare... Makes the whole house quiet and rest-

ful... Ideal surface for paint or wallpaper.

- 5 SAVE \$32 to \$38** with Homasote $\frac{5}{8}$ " Sub-Flooring—in Big Sheets 8' x 12'. Adds insulation; reduces noise; keeps dampness away from finished flooring.
- 6 SAVE \$25 to \$37** with closet walls of $1\frac{5}{16}$ " Homasote. Keeps closet dry; provides added sound-deadening between rooms.
- 7 SAVE \$9 to \$12** with closet flooring of $\frac{3}{8}$ ", $1\frac{5}{32}$ " or $\frac{5}{8}$ " Homasote—instead of finished flooring. Increases mildew-protection.
- 8 SAVE \$19 to \$26** by making facia and rake molds from pieces cut out from door and window openings. (Two pieces of $1\frac{5}{32}$ " glued together make strong $1\frac{5}{16}$ " thickness.)

FREE — HOMASOTE'S COST-REDUCTION ANALYSIS

Send us one of your best-seller house plans. (It will be treated in strict confidence and returned to you.) We will be glad to give you the exact cost—in your area—for using each of these eight products on that particular house. You incur no cost or obligation.

Remember—Homasote products give you *new selling features* as well as lower costs.

Get the facts! Other progressive builders have taken advantage of our *free* COST-REDUCTION ANALYSIS. We haven't yet failed to prove our case to their great satisfaction. Send your house plan to Dept. K-10.

REDUCE YOUR COSTS BY \$458 TO \$1504 PER HOUSE

	1 Homasote Board-and-Batten	2 Homasote Grooved Vertical Siding	3 Homasote 12" Siding
	\$204 to \$ 929	\$164 to \$ 889	\$103 to \$ 828
4 Homasote Interior Walls	270 to 462	270 to 462	270 to 462
5 Homasote Sub-Flooring	32 to 38	32 to 38	32 to 38
6 Closet Walls	25 to 37	25 to 37	25 to 37
7 Closet Floors	9 to 12	9 to 12	9 to 12
8 Facia and Rake Molds	19 to 26	19 to 26	19 to 26
	\$559 to \$1504	\$519 to \$1464	\$458 to \$1403

Further savings occur, because application of materials is not included in above prices. Homasote Boards—in a wide variety of sizes, forms and thicknesses—reduce application costs.

HOMASOTE COMPANY

TRENTON 3, NEW JERSEY

Homasote of Canada, Ltd., 224 Merton Street, Toronto 12, Ontario





Free...from Caloric...

color-coordinated kitchens by

West
Beatrice West
West

Famous design and color consultant, Beatrice West, color-plans your entire kitchen free—from top to bottom—when you buy Caloric. She coordinates the colors of Caloric gas appliances with floor covering, wallpaper or paint, counter tops, and accent colors . . . creating kitchens where women feel "at home" . . . to work . . . to live . . . to entertain.

In addition to Miss West's expert color-planning, you have the quality and beauty of Caloric's built-in gas ranges selling for you. In a variety of sparkling decorator colors, they boast enticing Gold Star features like the Thermo-Set burner, meat thermometer, auto-

matic clock-controlled oven, and roto-roaster rotisserie.

Also, there are Caloric's twin-light ventilating hoods—easily installed without loss of cabinet space. They feature double-blower fans with built-in filters to remove cooking odors, banish grease, purify air.

And you can choose Caloric sinks in single- or double-bowl styles, all with smooth contours and acid-resistant porcelain-enamel finishes for easy cleaning. Both sinks and hoods come in colors that match the built-ins . . . to permit all-over color coordination.

Contract now for the extraordinary home-selling power of Caloric gas appliances coupled with kitchen color-coordination by Beatrice West. You'll be backed by a complete merchandising program . . . ideas for selling, aggressive public relations, and stimulating displays. Write today for more information, or contact your Caloric representative.

Caloric®

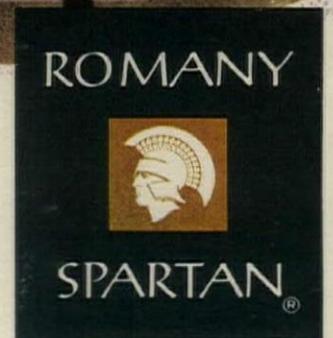


Fireplace Wall: Orsan Light Golden Oak 1" x 1"
 Wall Accent and Table Top: Ceratile Elipse 4 3/4" x 4 3/4"
 Hearth: Orsan Dark Green Paver 6" x 6"
 Fireplace Lining: 657 Matt Black

Plate No. 1066

Versatile Romany•Spartan ceramic tile adds a touch of sales magic

Today's home buyers expect ceramic tile in the bath—love it in the kitchen. Now, with Romany•Spartan's broad range of sizes, colors, shapes and finishes, you can turn buyer preference for ceramic tile into extra profit for you. At little or no added cost over conventional materials, you can create exciting new decorative effects throughout the house. This living room, with its fireplace wall and hearth of permanent, care-free Romany•Spartan is a striking example of tasteful individuality. Or how about a tile feature wall and floor in the activities room or living kitchen... or a tiled, built-in planter? The sales-making possibilities of Romany•Spartan tile are limited only by the imagination. Before you start another house, why not talk it over with your architect or tile contractor? United States Ceramic Tile Company, Department W-16, Canton 2, Ohio.



**GENUINE
 CLAY TILE**

*Write for these two color booklets
 —they're free: "Portfolio of
 Ideas on Home Decorating with
 Ceramic Tile" and "Color Harmony
 Guide", illustrating the complete
 Romany•Spartan tile line and
 including a helpful chart suggesting
 harmonious color combinations.*

UNITED STATES CERAMIC TILE COMPANY • THE SPARTA CERAMIC COMPANY

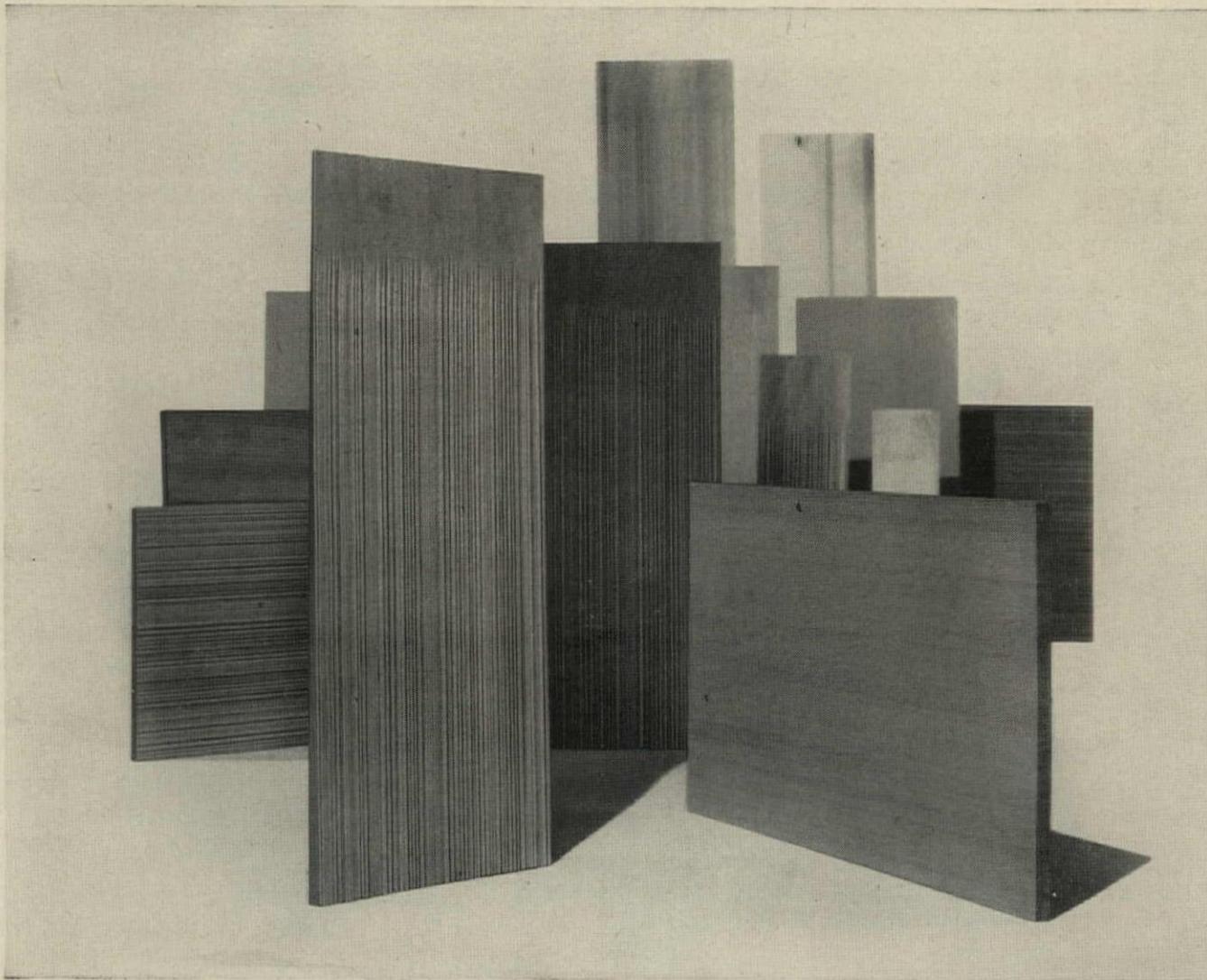
MEMBER: TILE COUNCIL OF AMERICA

the three dimensions of cedar

Cedar gives you thickness that tells prospects your homes are built to last. It gives you texture that dramatically shows your awareness of good taste in exterior finishing. And, it gives you visible quality that is unmistakable.

Whether featured on roofs, on walls, or in tasteful combination... red cedar shingles and machine-grooved cedar shakes provide a range of design possibilities unmatched by other exterior materials.

Let the thickness, the texture, the natural quality of cedar shingles and shakes add new dimension to your home-selling program.



For application details, see your current Sweet's File...or write...

RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Washington

550 Burrard Street, Vancouver 1, B. C.



BRIKCRETE
*GUARANTEED TO CONTAIN NO CLAY

MODERN MASONRY for the GREAT MASS MARKET

B-22

Millions of Brikcrete have gone into the building of homes, apartment units, motels, schools, churches—all types of residence and commercial construction. Not only because of economy, but for the more important reasons of beauty, comfort and modernity.

Brikcrete is the world's most modern masonry, with size, design, proportion and color range in line with today's style trends. Yet — material for material — it usually costs less than lumber. Far below that of ordinary brick. For example:

\$452¹⁰* Buys all Brikcrete
 for the "Brikadier"



*National average, including planters, excluding garage. May vary by locality.

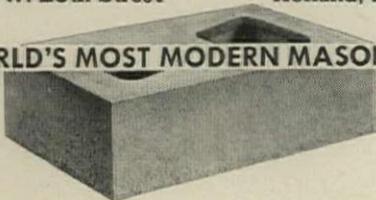
Basic Brikadier is 36' x 24'; 912 sq. feet; 2 bedrooms and dinette. Blueprints, \$15.00 per set.

The "Brikadier" is only an example of how little Brikcrete costs. The same low price per square foot applies to any houses you may be planning to build. Local manufacturing explains why Brikcrete can give more value for less cost. Local plants, using local raw materials enable factory-to-builder contacts. Eliminate costly freight and distribution costs. Ask for Brikcrete Book No. 1.

Growing demand for Brikcrete demands more local plants. Building contractors are in exceptional position as plant owners, not only for their own projects but also to supply other needs of the community. High profit-potentials are open to men alert to latent opportunity. Plants operate in franchise-protected territories. We supply all equipment, giving responsible operators up to 5 years to pay. If interested, ask for Brikcrete Book No. 2.

BRIKCRETE ASSOCIATES, INC.
 416 W. 25th Street Holland, Mich.

WORLD'S MOST MODERN MASONRY



New products

continued from p 245



Hide-away water heater can be built into dead corner space in cabinets and save long pipe runs. Tank is extra-heavy gauge galvanized steel, tested to over 300 psi. Extra thick insulation will keep water hot three days. Calrod units come in various wattages for 236-v systems. Heaters fit in 24" x 24" space, 26³/₄" high for 30 gal unit, 54 7/16" for 40 gal. Ten-year protection plan.

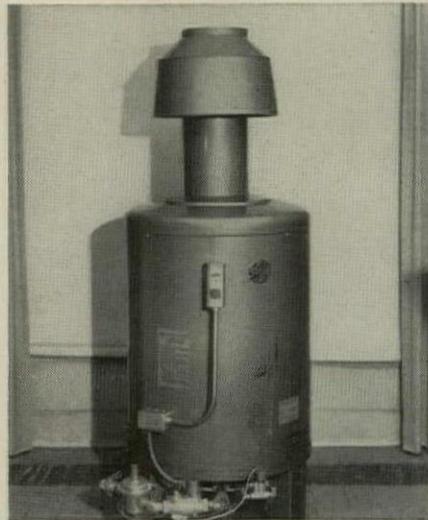
Hotpoint, Chicago.

For details, check No. 53 on coupon, p 272

Noiseless air conditioning is claimed for one series of room units in Philco's new line. Quiet is achieved through re-design of blowers, grilles, and air passages. Line includes one 1-hp, 115-v unit, two 1-hp, 230v units, and a 2-hp 230-v unit. Btu capacities from 10,000 to 14,400 handle areas of 710 to 1,180 sq ft. Compact units (16 1/16" high, 27" wide, 21 1/4" deep) mount flush with inner wall in file-drawer type case. Price: \$239.95 to \$399.95.

Philco Corp, Philadelphia.

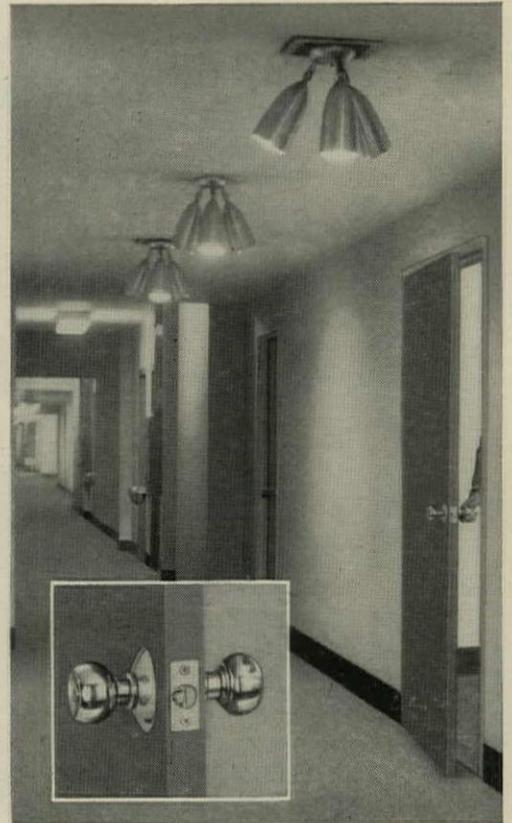
For details, check No. 54 on coupon, p 272



Multi-unit water heater is a new model from A.O. Smith rated at 300,000 Btu. Heater is approved for 180F service, has a recovery rate of 288 gph per 100° rise. Gas burners are made of copper, brass, or bronze wherever they touch water. Heat exchanger is copper fin-and-tube. With proper storage tank, unit can act as recovery heater or booster-recovery heater.

A.O. Smith Corp, Kankakee, Ill.

For details, check No. 55 on coupon, p 272



SENTRYLOCK DD DESIGN

Add value to your apartment building or motel with quality hardware.

SentryLock, ideally suited for fine apartment houses, motels, small commercial buildings and shopping centers.

High styled designs, with all finishes protected by an exclusive durable lacquer.

Built stronger than any other comparable lock set. The exclusive T-Zone construction and full 1/2" latch bolt throw guarantee greater security.

Crafted of quality parts for longer maintenance-free life.

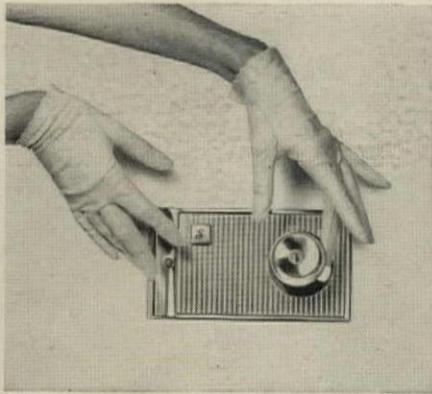
Quicker to install. Easier to operate. No knuckle scraping. A full 2 1/2" backset allows for lots of clearance. Conforms to federal specifications, series 160.

SARGENT

continued on p 254



EXCLUSIVE "T-ZONE" TOUGHNESS — Sargent AlignaLocks and SentryLocks are built stronger than any comparable residential locksets. Exclusive one-piece aligning tube and latch tube interlock, form bend-proof, slip-proof "T" in torque area. Screwless design. No other lockset installs easier or faster.



THE RIGHT DECOR FOR EVERY DOOR — Sargent's SentryLock and AlignaLock line knows no peer in lock design. Both come in a variety of handsome knobs, exciting roses and luxurious finishes to provide just the decorative effect you want. All units are interchangeable. Over 100 beautiful designs to choose from.



EXTRA SECURITY . . . NO KNUCKLE SCRAPING — Guarded latch bolts and extra latch projection assure unequalled security. A full 2½-inch backset prevents knuckle scraping. For a copy of the new award-winning full-color residential hardware catalog, write to: Sargent & Company, New Haven 9, Connecticut.

*Dreamhouse plans need the right finishing touch . . .
Sargent Residential Hardware*



SARGENT



YOUR LENNOX

Offers you service and experience



as a designer:

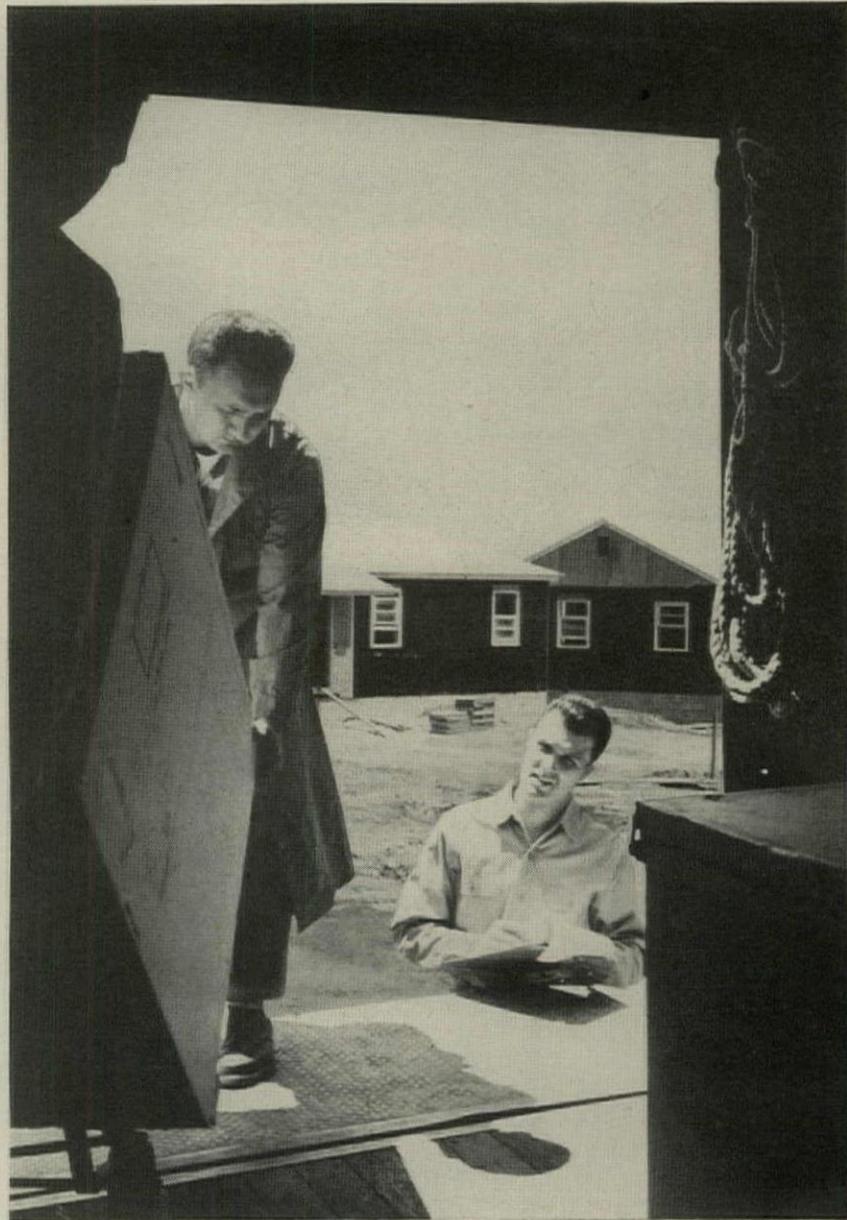
Your Lennox Comfort Craftsman's comprehensive training by Lennox engineers in factory schools qualifies him to pre-plan with you right from the blueprint stage. His knowledge of heating design can save you time and money. Because he's an expert, he *custom designs* each heating installation to satisfy the individual needs of each home that you build, based on style of house, climate—even the living patterns of today's families.



"Quality goes beyond quality product!"

"Customer satisfaction is as dependent upon service as it is on quality. That's why we are so particular in the selection and training of our Comfort Craftsmen.

"Their engineer training at Lennox factory



as a businessman:

Your Lennox Comfort Craftsman is in business to stay. He knows that prompt, perfect installations geared to *your* building schedules are important to his continued success. He *deals direct* with the Lennox warehouses and factories throughout the U. S. and Canada. This enables him to *get and give faster deliveries*. You can count on him to be on the job on time, and to stay there until the job is done exactly!

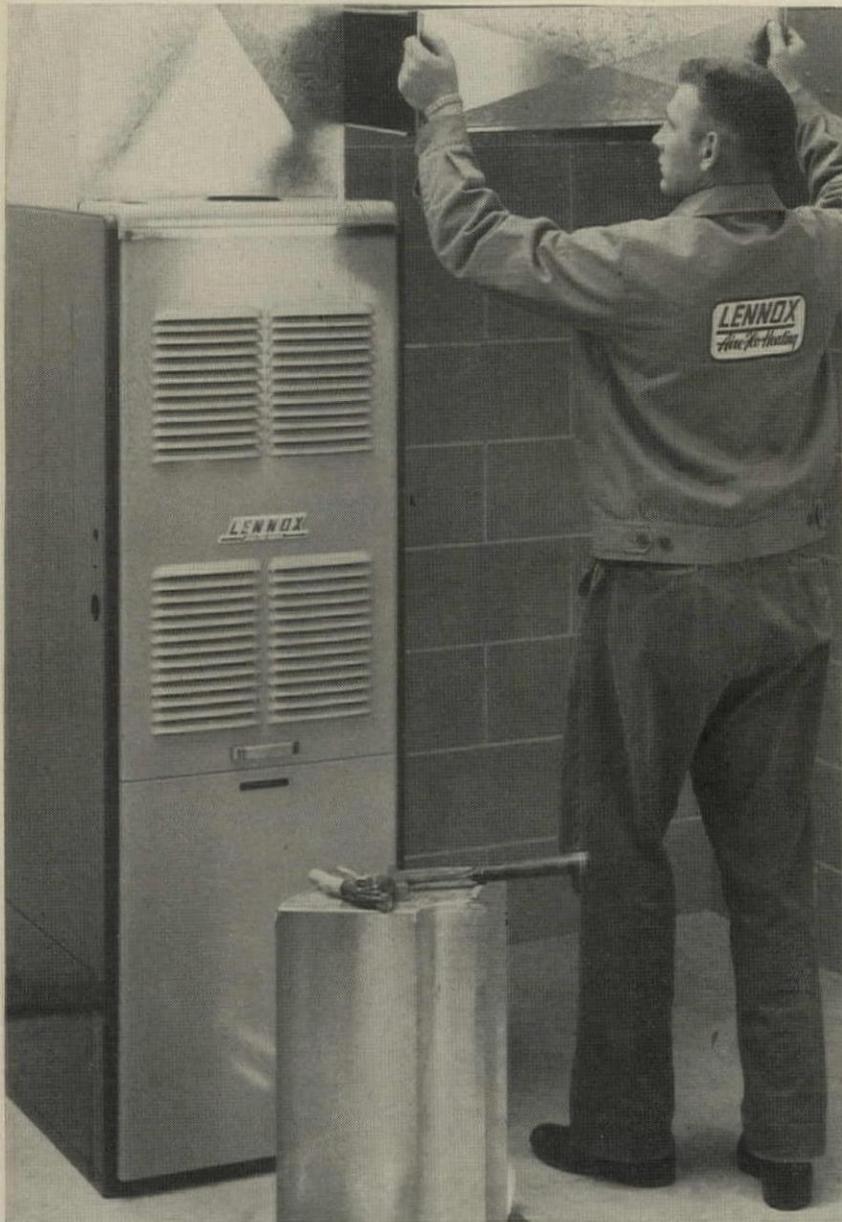
schools makes them experts in service, as well as experts in design.

"That expertness is your assurance of satisfaction when you deal with a Lennox Comfort Craftsman!"

John W. Norris
John W. Norris, President
Lennox Industries Inc.

COMFORT CRAFTSMAN

that will save you time and money!



as a craftsman:

Your Lennox dealer knows that installing a heating or air-conditioning system is more than a simple "plug in" job. Therefore, he personally custom-engineers each job with a Craftsman's dedication. That requires not only skill, but a complete assortment of heating or cooling units. *He stocks the world's largest heating and air conditioning line,* from which he selects the exact combination that is best suited to comfort condition your homes.



as a salesman:

Your Lennox Comfort Craftsman's job isn't done until you've made the sale. Even then, he helps you keep your customers sold with a follow-up service program that lasts until he's satisfied the heating unit is operating perfectly. He also supplies professionally planned advertising materials, in-home displays, *personalized* builder brochures and billboards. His service program and merchandising aids make home selling easier for you!

LENNOX

*World leader in indoor comfort
for homes, business, schools*



New Electric Sno-Melter

saves time and
money on underwalk,
underdrive jobs!

Rolls out easily! Pre-spaced heater wire is anchored in galvanized steel mesh 10' long, 18" wide.



SEE OUR EXHIBIT

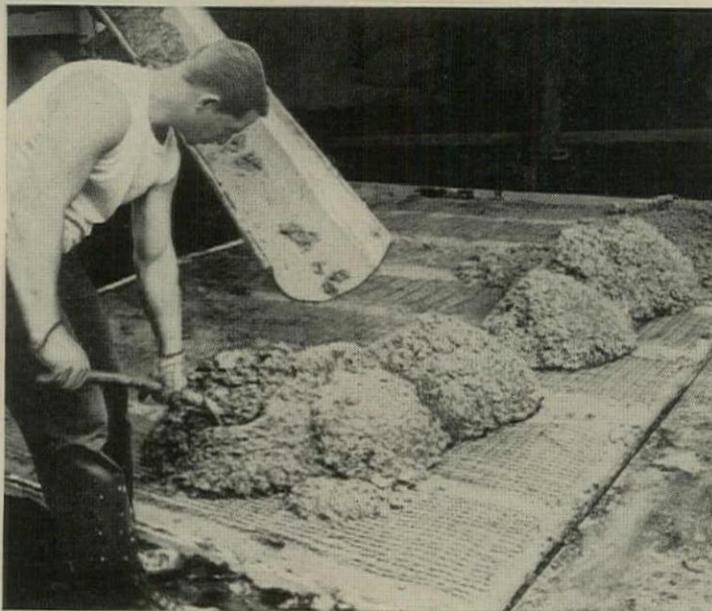


"NO MORE SNOW TO SHOVEL!"

This feature sells more homes

Wires won't float as concrete is poured. Uniformly even heat is assured!

SNO-MELTER, designed for 42 watts per square foot, puts a practical price on snow-free walks, tire tracks for the drive! Heater wire has pre-assembled lead wires and ground. "Roll-out" installation saves time, cuts cost. Write for full facts!

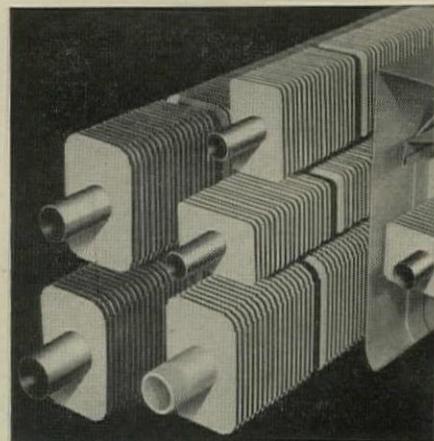


EASY-HEAT, INC., "Electric Anti-freeze Devices"

Dept. 2-H, Lakeville, Indiana

New products

continued from p 250



Five fin-tube elements fit a single cover in Rittling's 5-in-1 baseboard system, offer capacities to fit needs of individual rooms. Elements come with steel or aluminum fins on steel or copper tubing, range from 370 to 520 Btu/h per foot with 1 gpm of 150F water. Rollers in brackets let tube expand and contract.

Rittling Corp, Buffalo.

For details, check No. 56 on coupon, p 272

Embassy's Electrobases has 120/240-v elements to minimize inventory. Reversible nichrome-wire element is sealed in an aluminum tube to which fins are mechanically bonded. Six sizes are available: 500 to 2,000 w, 1708 to 6,832 Btu, 2' to 8' long. Honeywell line-voltage or low-voltage controls and relays are standard. Baked-enamel cover has no dustcatching crevices.

Embassy Steel Products, Brooklyn.

For details, check No. 57 on coupon, p 272

New 1/2" baseboard tube gives more heat than usual 3/4" tube elements, Edwards claims. New high-capacity units (or standard 3/4" tubes) come in factory-cut, 2' to 20' lengths. All baseboards have acoustic-lined covers, come in flat white, wood grain, chrome, or coppertone finish.

Edwards Engineering, Pompton Plains, N.J.

For details, check No. 58 on coupon, p 272

Forced-air baseboards with electric elements mount between studs flush with wall surface. Unit is 33" long, 13" high, 3 3/8" deep, contains centrifugal blower and motor as well as heating elements. Built-in thermostat senses floor temperature changes, anticipates heat demand. Thermostat controls fan and heat elements.

R&M-Hunter, Memphis, Tenn.

For details, check No. 59 on coupon, p 272

Ultra-thin baseboard is only 4 1/2" tall, 1 3/4" thick, has limit thermostat on every section to prevent overheating. Low-wattage units are made for 208-v or 240-v in 3', 6', or 9' sections, give 1,434, 3,140, or 4,847 Btu at 240-v. Higher wattage units are bigger—6" high, 2" thick—in 3', 4 1/2', 6', and 9' lengths, give 2,867, 4,573, 6,280, and 9,693 watts on 240-current. All use rod heating elements, can be installed directly against studs for minimum projection. Covers are baked enamel, chrome grilles.

Arvin Industries, Columbus, Ind.

For details, check No. 60 on coupon, p 272

continued on p 258

*the Sterling
of Sidings*

WESTERN CEDAR

... gives any architectural style the lift to quality. The miracle of Western Cedar blends practical workability with the genuine character that transforms "just another house" into a salable home. This is why Western Cedar is the Sterling of Sidings.

Unduplicated by science or nature, Western Cedar Siding – Bevel or Tee-Gee – has the "grown in" ability to perform better for you. This miracle wood decorates beautifully, saves important application money and gives you the warmth and individuality that creates the desire to buy.

Ask your lumber dealer about Western Cedar... the Sterling of Sidings... he knows.



*Write us today for our interesting
builder information packet...*

WESTERN RED CEDAR LUMBER ASSOCIATION

4403 White-Henry-Stuart Building
Seattle 1, Washington

SURE

It pays to point to THERMOPANE INSULATING GLASS

Thermopane



it's *Thermopane*[®]

...says so right on the glass!

The trade-mark is inscribed delicately (but plainly) right on the glass where house shoppers can see it. *Thermopane* insulating glass units made since August 3, 1959 have had this name in one corner as your protection against imitations.

It is our way of helping you merchandise quality to sell more houses.

People know that *Thermopane* is a sign of a more comfortable house, and of a house that's more economical to heat and air condition. They've read and heard about *Thermopane* for more than 16 years.

Now they're hearing about it—month after month—on TV's hottest suspense-adventure program, "Bourbon St. Beat". When they see proof that you've used *Thermopane*, they'll know you are concerned over their comfort.

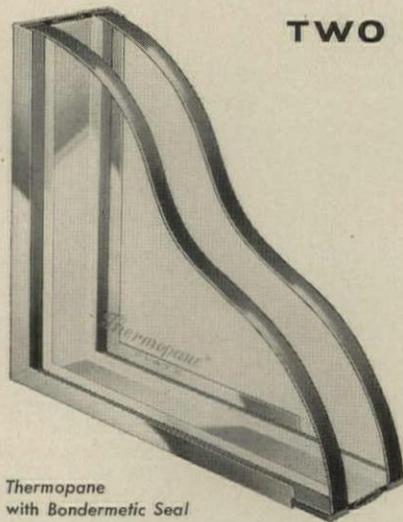
There's no better way to merchandise houses than to feature the quality, nationally advertised materials used in them. Now *Thermopane* helps you do just that with national promotion *and* with identification right on the product!

TUNE IN **Bourbon St. Beat** Monday nights*, ABC-TV Network

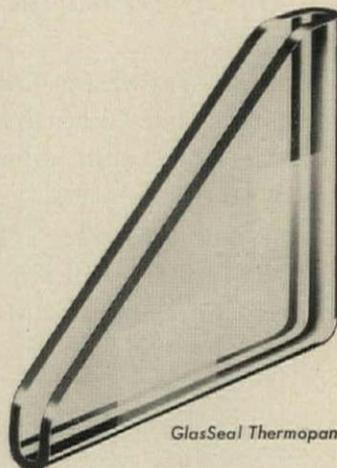
*In most cities,
(Check local station schedules.)

TWO KINDS OF THERMOPANE

GlasSeal[®] *Thermopane* for double hung, casement, awning—many types of opening windows. *Thermopane* with *Bondermetic Seal*[®] for picture windows, window walls and sliding glass doors.



Thermopane
with Bondermetic Seal



GlasSeal Thermopane

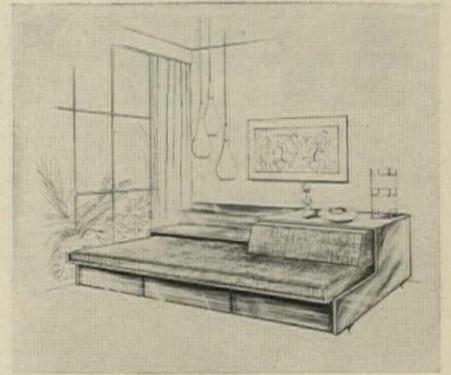
Thermopane
INSULATING GLASS

Made in U. S. A. by LIBBEY • OWENS • FORD only.

Libbey • Owens • Ford Glass Co., Toledo 3, Ohio

New products

continued from p 254



Built-in lounge bed for efficiency apartments, dens, motels, etc., makes up into full-size bed, slides out without touching floor. Pillows are stored in cabinets behind bolsters. Storage drawers under unit are available. Bed frame is helical-spring mounted; mattress is heavy-density foam rubber. Walnut wood cabinetry is plastic surfaced; upholstery may be washable fabric or elastic vinyl. Price: \$298.

Tex-Wood Furniture, Austin, Tex.
For details, check No. 61 on coupon, p 272

Reflective roof coating is a protective and decorative asphalt emulsion developed by Flintkote that contains a new stabilized aluminum pigment claimed to outlast any other form of bituminous coating. Aluminized Static has excellent water-proofing characteristics, will bridge small voids. It is non-flammable, will not flow in hot weather, nor stain, alligator, or crack over any asphalt subsurface. It will retain its reflectance five years or longer. It is self-priming, will adhere to metal, glass, masonry, rock, or asphalt-covered surfaces. Dealer list price in 55-gallon drums, \$3.60 per gallon.

Flintkote Co, New York City.
For details, check No. 62 on coupon, p 272



Folding dinette combines an upholstered bench with a movable tabletop. When table is folded up, top becomes a counter-height work surface; folded down it's a 30" high table; cabinet under seat gives 4 cu ft of storage. Spring-loaded mechanism is reversible for right or left hand installation, will take tops 24" to 27" wide, 42" to 48" long. Folded back, Peek-a-boo takes 19" less floor space.

Knight Enterprises, Palo Alto, Calif.
For details, check No. 63 on coupon, p 272



the lady goes for built-in conveniences!

Like power steering on her car—she wants fingertip convenience in her kitchen. Amerock's free-rolling drawer slides are low in cost—retail prices starting at \$1.25. Quick and easy to install. Center-mounting type shown above, side-mounting and bottom-mounting types also available.

Other convenience items include Amerock's Turn-A-Shelf and Hide-a-Shelf hardware, shown below. And she will appreciate Genuine Amerock Hardware on her cabinets—in Contemporary, Modern, or Colonial styling.

Ask your Amerock supplier or write Amerock, Dept. HH910.

Amerock Contemporary Pull No. 444-41

only **39¢** retail

convenient Amerock Turn-A-Shelves

easy-to-install Amerock

Hide-A-Shelf hardware

Amerock CORPORATION
ROCKFORD, ILL. • MEAFORD, ONT.

Mr. Builder,
LOOK for the "silver lining"
 ... home buyers
DO!

Look for double-hung wood windows with the "silver lining": They're equipped with Zegers Dura-seal Weatherstrip & Sash Balance featuring the exclusive, silvery Zelite finish. Dura-seal with Zelite helps sell your homes ... it's an eye-catcher that points out one of the extra-quality features your homes provide. Self-adjusting Dura-seal gives the most complete, efficient all-weather protection available. It seals out cold, drafts, dust... cuts heating and air conditioning costs. And you'll like the handy **Snap-Clips!***



*Pre-installed Snap-Clips let you remove and replace both window sash and Dura-seal at any time during construction!



Send for free booklet, "Look for the Silver Lining." Learn all about Zelite, Snap-Clip and Dura-seal.



ZEGERS, INCORPORATED, 8090 SOUTH CHICAGO AVENUE, CHICAGO 17, ILLINOIS

ZEGERS

MANUFACTURERS OF DURA-SEAL, DURA-GLIDE, TAKE-OUT, LUSTRELINE, SIMFLEX

OCTOBER 1959



NEW VESTA BUILT-INS DESIGNED TO CHARM EVERY PROSPECT!



SUPERB STYLING!
 Giant 24" or standard 16" double-oven.

A quick sale ... so close to the heart (and pocketbook) of every man who builds 'on spec.'

The beauty, convenience and sales-sparkle of Vesta gas or electric built-ins bring the "ooohs" and "ahhhhs" that sell homes faster!

Magnificence in every inch! Four beautiful porcelain enamel finishes or handsome stainless steel.

For full details, see your Vesta dealer or distributor now ... or mail the handy coupon.



SHALLOW COOK-TOP — only 2 3/4" deep. Allows extra drawers underneath!

SAVE UP TO 25% LABOR COSTS

- NEW! Tilt-in oven installs faster!
- NEW! Push-in frame always fits flush!
- NEW! Square-fit cook-top — no curves to cut!

GAS OR ELECTRIC!



Built-ins from the builders of famous Vesta ranges



Nationally Advertised in Leading Home Magazines!

the Luxury touch

ATHENS STOVE WORKS, INC., Dept. 2, ATHENS, TENN.
 I'm a builder. Rush me full details on new Vesta built-ins!

Name _____
 Address _____
 City & State _____

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Pietro Belluschi
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Edward H. Fickett
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George Fred Keck
R.A.



Joseph H. Orendorff



"The members of the jury looked for certain qualities which they believed to be very important in promoting higher standards of community planning. They hoped to find examples which could best be adapted to the requirements of the average housing development. They gave, therefore, more weight to economy and logic than to novelty."

1959 Awards

Reginald Roberts
A.I.A.



A. Gordon Lorimer
A.I.A.
Professional
Advisor



Mastic Tile Corporation of America

\$25,000

Annual Design Competition

to stimulate a major contribution to better living for the middle income family



9A574

**GRAND PRIZE
\$10,000**



Howard R. Meyer, F.A.I.A.
Dallas, Tex.



James Reece Pratt, A.I.A.
Dallas, Tex.



John Harold Box, A.I.A.
Dallas, Tex.

**SECOND PRIZE
\$5,000**



Manuel Dumlao
Birmingham, Mich.



John Buenz
Birmingham, Mich.



Robert Burley
Birmingham, Mich.



Edward Kovach
Birmingham, Mich.

**THIRD PRIZE
\$3,000**



Paul A. Kennon
Birmingham, Mich.



Chartier Newton
Birmingham, Mich.



Heinz-Henning Huth
Birmingham, Mich.



Philip J. Kinsella, Jr.
Birmingham, Mich.

**MERIT AWARDS
\$250 each**

Richard A. Miller, New York, N. Y.

Robert Zion, New York, N. Y.

Harold Breen, New York, N. Y.

Peter Bradford, New York, N. Y.

Larry E. Charity, New York, N. Y.

Hayahiko Takase, Birmingham, Mich.

Kyosuke Yoshioka, Birmingham, Mich.

Chih-Chen Jen, Glendale, Mo.

Paffard Keatinge Clay, Highland Park, Ill.

STUDENT DIVISION

**FIRST PRIZE
\$2,500**



George Ohanian
Pratt Institute



Fernando Gonzalo
Pratt Institute

**SECOND PRIZE
\$1,500**



Ernest G. Schweibert, Jr.
Princeton University



G. Mary Bulota
University of Illinois



William L. Miller
University of Illinois

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\$250 each**

Bill Batson, University of Illinois

David Lawson, University of Illinois

Charles A. Platt, Harvard School of Design

David I. Smotrich, Harvard School of Design

Charles P. Parker, Harvard School of Design

Philip Gold, University of Illinois

J. Stroud Watson, University of Illinois

(Special Commendation)

William J. Lindsey, University of Illinois

William H. Fosse, University of Illinois

CERTIFICATES OF ACHIEVEMENT

GENERAL: Michael F. Gebhart, Herbert A. Magoon, Calvin N. Lundquist; Thomas N. Larsen, Peter Woytuk; Thomas E. Tomsik, Robert Blatchford; Alan Hamilton Rider; Thomas H. Hodne, Dennis W. Grebner; Malcolm M. Davis, William Lindemulder.

STUDENT: J. Michael DeLapp, Ben W. Carr; Philip M. LeBoy, Ernest B. Phillippon; Ronald E. Ginn, Richard J. Paulin; William Holzbauer; Malcom M. Davis, William Lindemulder (also in General Competition).

MASTIC TILE CORPORATION OF AMERICA, Houston, Tex. • Joliet, Ill. • Long Beach, Calif. • Newburgh, N.Y.

New products

continued from p 258

For 1960 --
Davis Kitchens
presents the
MOST IMPORTANT
IMPROVEMENTS in
space saving kitchens
you have ever seen!

NEW styling details -- NEW
pull-out refrigerator drawer
-- NEW magnetic closure on
refrigerator doors -- NEW
modular construction on
larger units for ease of hand-
ling in installation -- NEW in
every way but still the highest
quality construction at realis-
tic prices!

Davis

See 1960 Sweets
Catalog File
No. 25-B



Specifically
designed for
apartment,
motel and
executive suite
application!



WRITE TODAY--

clip coupon to your letterhead for latest
available literature!

DAVIS PRODUCTS COMPANY Niles, Michigan

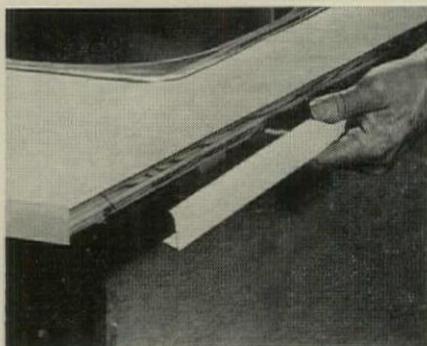
Gentlemen:

Please send me literature giving details on the
complete line of Davis Efficiency Kitchens in-
cluding the Console model.

NAME _____

ADDRESS _____

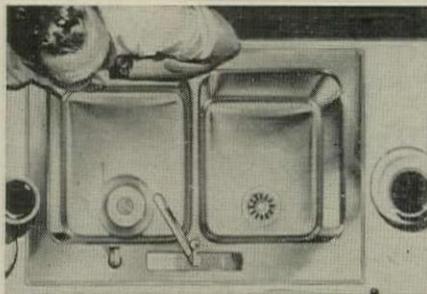
CITY _____ STATE _____



Matching counter edges are now
available for all plastic laminate counter-
tops. Kalwood moulding is made of ex-
truded aluminum to which plastic is
bonded. Provided in 8' lengths, it can be
cut to size with ordinary tools, goes in
place with a simple press fit. Installation
is sturdy, neat, gives counters a non-drip
edge.

Keller Products, Manchester, N.H.

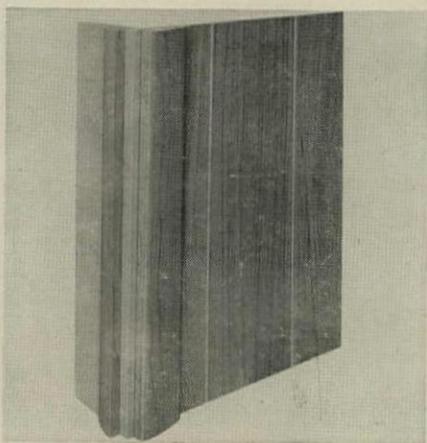
For details, check No. 64 on coupon, p 272



Sinks designed for disposers have
just been added to the Carlton stainless
steel line. The new sinks have drain out-
lets at the rear so prepared foods don't
drop in disposer, a recessed collar so
wastes can be disposed faster, heavy rub-
berized undercoat to reduce vibration
when grinder is working. Prices are in the
same range as regular Cartrim models.

Carrolton Mfg Co, Carrolton, Ohio.

For details, check No. 65 on coupon, p 272



Prefinished moldings to match Ply-
wall paneling are now available from the
maker. Nine new styles match the color
and grain of 12 Poly-Clad finishes, in-
clude outside and inside corners, ceiling
coves, batten strips, baseboards and shoes,
door casings and stops (above). All styles
come in 10' lengths, casings and outside
corners also come 7' long.

Plywall Products, Fort Wayne, Ind.

For details, check No. 66 on coupon, p 272



BLAIR HOUSE

BEAUTIFUL NEW FLORIDA APARTMENT HOUSE

**Equips All Apartments
With Luxurious, Lifetime**

NEVAMAR

carefree

KITCHENS



**Built With Maintenance-Free
NEVAMAR Surfaces Inside and Out**

NEVAMAR Carefree KITCHENS sell the job,
wherever they are installed. These kitchens
are completely different in design and in
precision construction. Their lifetime NEVA-
MAR surfaces never need refinishing and
their wealth of work-saving features make
them the most powerful selling asset you can
include in your building plans.

This is
NEVAMAR

- ▶ A HIGH PRESSURE LAMINATE
- ▶ RESISTANT TO CIGARETTE BURNS
- ▶ WITHSTANDS BOILING WATER
- ▶ DESIGNED FOR LONG LIFE AND LASTING BEAUTY
- ▶ WON'T CRAZE, CRACK OR PEEL IN NORMAL USE

NEVAMAR
has special 500 mesh

- ▶ NOT AFFECTED BY ALCOHOL, FRUIT ACIDS, AMMONIA
- ▶ ORDINARY INK ... OR TIME
- ▶ NEVER NEEDS PAINTING
- ▶ EASY TO CLEAN

Guaranteed by
Good Housekeeping

NEVAMAR
is not as advertised therein

**WRITE TO
DEPT. H-10**

for brochures on
**NEVAMAR
Carefree
KITCHENS.**

NEVAMAR carefree KITCHENS, INC.

ODENTON, MARYLAND

continued on p 266

Why W-M Hardwood Block Floors Are Ideal for Apartment Use!

Wood-Mosaic Hardwood Block Has Proved To Be the Answer To Flooring Problems in Apartments Like These.

1 LOW COST LUXURY APPEAL

Wood-Mosaic hardwood block floors *cost no more than ordinary floors*, and add the richness and warmth that only wood can afford, as well as effectively reducing sound transmission.

2 LONG LIFE-TOUGH, DURABLE FINISH

Wood-Mosaic hardwood block floors *stay beautiful* — protected by "Diamond Lustre", an exclusive W-M finish that resists indentations and laughs at scuffs and spills — is unaffected by alcohol, fruit juices water, nail polish, grease, etc.

3 FAST, CLEAN INSTALLATION

W-M hardwood blocks are ideally suited for both new construction and remodeling. The average apartment floor is easily installed with mastic in one day, over concrete or wood sub-flooring. Each W-M block is prefinished at the factory and when installed is ready for immediate use.

Write for all the facts to: Wood-Mosaic Corporation, Dept. HH-10, Louisville 9, Ky. In Canada: Woodstock, Ontario



Wellington Arms, Chicago, Illinois
Remodeling With W-M Block
Wirtz, Haynie & Ehrat



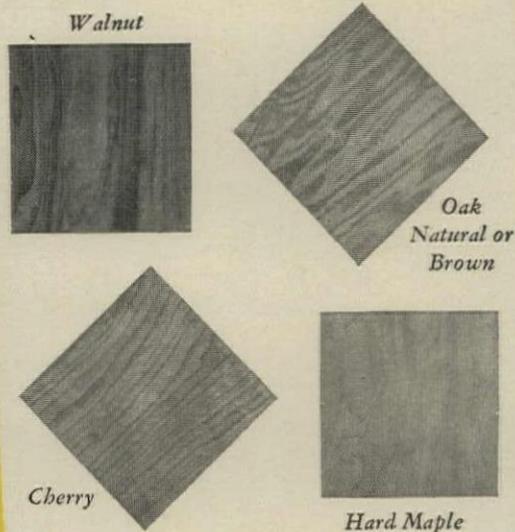
Inghram Homes, Washington, D.C.
Maurice Lipnick



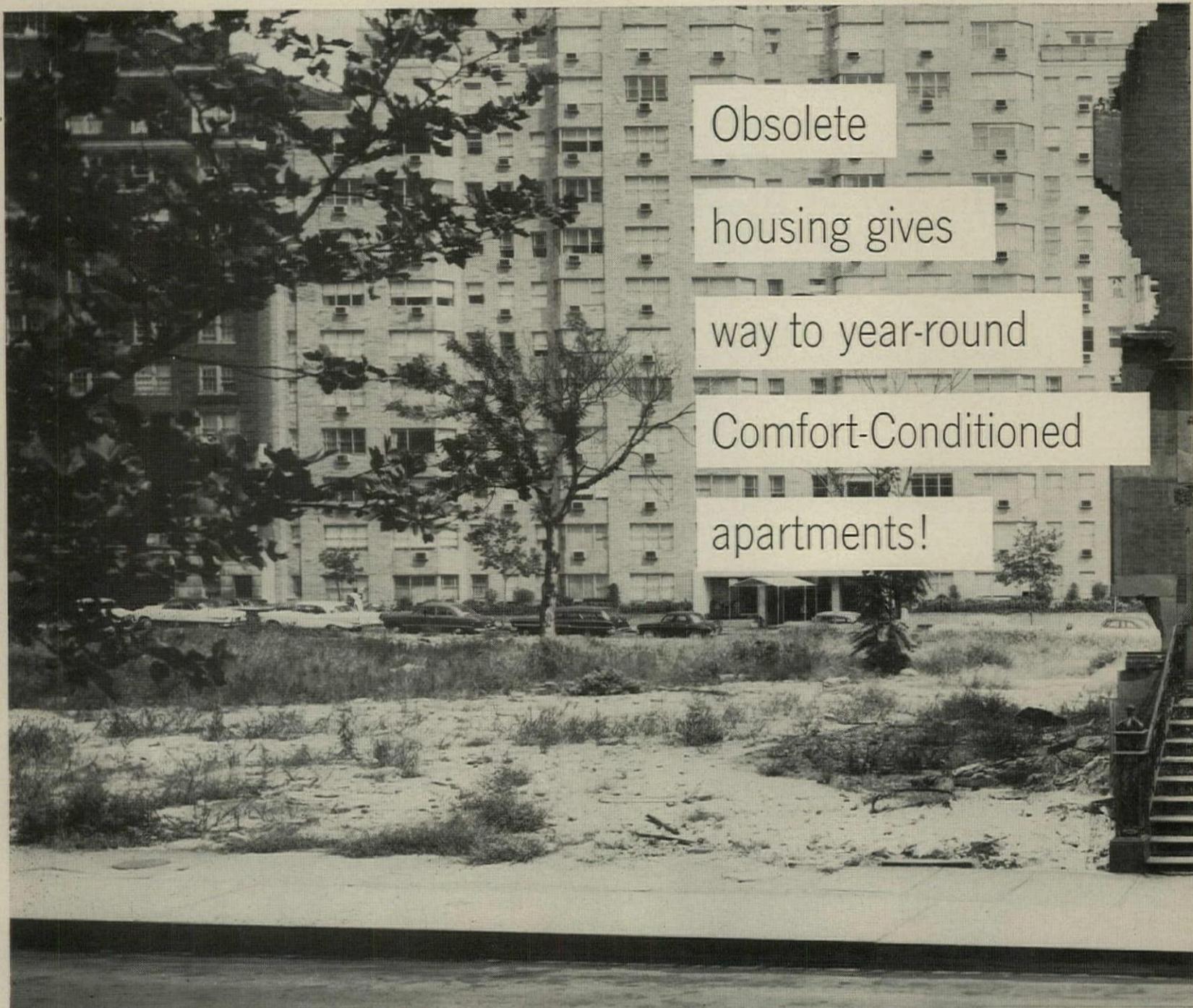
Elderly Program of Massachusetts
Dedham Housing Unit
Dedham, Massachusetts



Park Plaza Apartments
Pittsburgh, Pennsylvania
National Floors, Inc.



Wood-Mosaic
BLOCK FLOORS



Obsolete

housing gives

way to year-round

Comfort-Conditioned

apartments!

NEW APARTMENTS MUST

for air-conditioning, weather control, noise control,



FOR AIR-CONDITIONING. Supply tenants clean cool air at economical cost through use of Fiberglas flexible insulation blanket on cooling ducts and pipes. Other Fiberglas Insulations answer every thermal need of modern apartment construction.

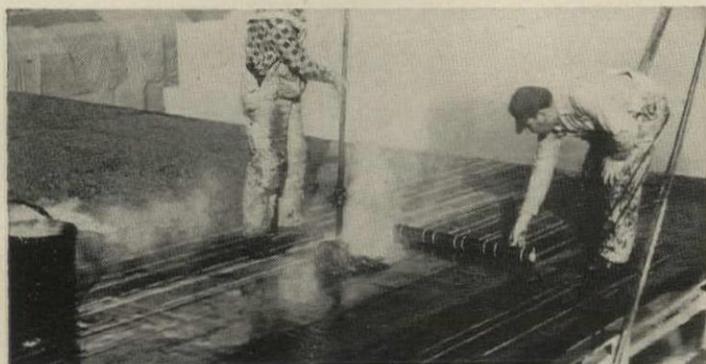


FOR CONTROL OF NOISE AND LIGHT. Reduce noise and clatter by sound conditioning with economical fire-safe Fiberglas* Acoustical Tile. Fiberglas Polarizing Light Panels control light by cutting off the discomfort of direct glare like a lens or louver—and reducing reflected glare like a diffuser.



BE COMFORT-CONDITIONED...

adequate wiring and efficient lighting



FOR WEATHER PROTECTION. Weatherproof with a Reinforced Monolithic Built-Up Roof of porous Fiberglas Perma Ply*. Successive applications of hot asphalt penetrate the Fiberglas mat and are bonded together into a one-piece, long-lasting roof.



Behind this sign—a new standard of comfort in homes and apartments all over America.

Whether you build high-rise or garden apartments, Comfort-Conditioning with Fiberglas Insulation cuts heating-cooling equipment and operating costs. With year-round air-conditioning now a "must" for new apartments, full Fiberglas Insulation can actually pay for itself in operating savings.

Call your nearest Fiberglas representative or write for complete data on how to Comfort-Condition apartment buildings. Write: Owens-Corning Fiberglas Corporation, Dept. 67-J, Toledo 1, Ohio.

OWENS-CORNING
FIBERGLAS
T.M. REG. U.S. PAT. OFF.

*T.M. (Reg. U.S. Pat. Off.) O-C-F. Corp.

Give your Homes
beautiful contemporary
Wood Finishes
in just

2
steps



COLOR TONES

1

Prepare the surface.

2

Apply REZ COLOR-TONES for tone on all exterior surfaces. REZITE for clear finish coat on siding.

REZ Color-Toned sealers are the easiest, most economical, most richly beautiful finishes for siding, garages, carports, fences, garden furniture, etc. Just two coats seal and color, and the wood is protected against weather, sunlight, changing humidity, rain, sleet, snow! REZ Color-Toned sealed wood retains its natural grain pattern... and your siding color can be maintained with long satisfaction merely by applying a single refresher coat. REZ will not peel, chip, crack or blister.

REZ COLOR-TONES can also give your interior wood literally dozens of soft, distinctive tones. The natural color of the wood itself will "shade" whatever color you apply. 13 basic colors to choose from, all of which can be "intermixed" for intermediate tones.

See your REZ "Sweet's Catalog" INSERT

For name of your nearest dealer, consult the YELLOW PAGES of your telephone directory or contact the leading paint distributor in your town.



SEND TODAY FOR THIS FREE 26 PAGE BOOKLET!

Here you'll find comprehensive information about the many uses of REZ Wood-Tone finishes. Also includes 13 color swatches of REZ Color-Tones.

REZ WOOD-TONES, INC.

Dept. 31, P. O. Box 142, Springdale, Pennsylvania

COVERAGE

One gallon covers a range of 300 to 600 sq. ft. of siding, clapboard and smooth surfaces. On shingles or other rough surfaces, one gallon will cover from 200 to 250 sq. ft.

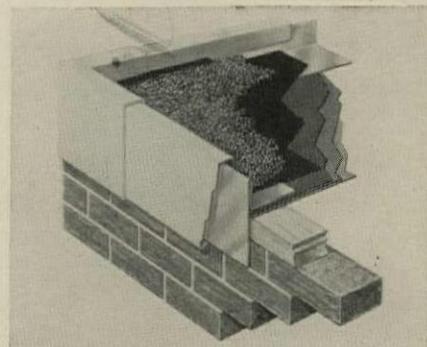
EXTERIOR APPLICATION

Apply two coats of any Color-Toned Rez to all unprimed exterior wood including siding, shingles, or shakes; the first coat within 24 hours, or as soon after erection as possible. Allow 24 hours' drying time between coats. Surface should be clean and dry and nails should be recessed and color puttied to match color of wood before brushing on Color-Toned Rez.



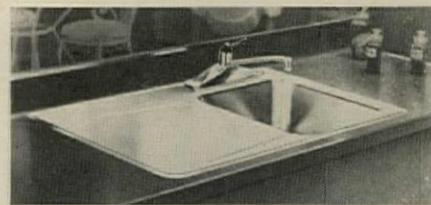
New products

continued from p 262



New gravel stop fascia adjusts to desired length without cutting or fitting. Special corner design lets adjacent panels telescope into the corner, assures weather-tight installation without field measurement. Fascia is porcelain enameled, comes in two sizes, model 750 with a 7½" face depth and 1050 with a 10½" face depth. Gloss, stipple, and satin surfaces are available in a range of one- and two-color finishes.

Davidson Enamel Prods, Lima, Ohio.
For details, check No. 67 on coupon, p 272



Stainless-steel apron sink comes in single- or double-bowl models. Stainless-steel apron is integral with the bowl so whole unit drops into countertop. Apron gives a countertop area that is immune to burns, blisters, cuts, or other scars. Durability and low maintenance of stainless steel make Elkay Sinkette a good choice for apartment use.

Elkay Mfg Co, Chicago.
For details, check No. 68 on coupon, p 272



Prefabricated shower is entirely self-contained. Drainpan is pre-cast terrazzo. Sandwich walls have Formica interior faces, foamed styrene insulation and stiffening, steel exterior shell, eliminate need for ceramic walls and floor; give long-lasting, low-maintenance surface. Styrene foam cuts sound transmission. Glass panels are factory glazed in anodized aluminum.

Fiat Metal, Franklin Park, Ill.
For details, check No. 69 on coupon, p 272

A suggestion of significance to:

the **1** builder in **4** who **SELLS FROM A MODEL**

Use these bonus values
of ALFOL insulation
as a selling "plus"

ALFOL reflective insulation gives your home buyers a real bonus in comfort and protection ... values they appreciate ... values you can merchandise to advantage.

Bonus summer comfort... up to 15° cooler is delivered by the sun-taming effectiveness of ALFOL reflective insulation. Air conditioning added now, or later, goes in for less ... costs less to operate.

Bonus winter heating savings... amounting to as much as 35% are effected by today's multiple layer ALFOL Blanket. The home feels warmer, too, as heat is reflected back by the aluminum foil.

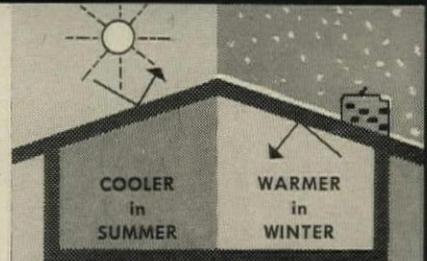
Bonus year 'round protection from costly condensation damage... is provided by the continuous and positive vapor barrier built into each ALFOL Blanket.

See for yourself the many merchandisable benefits which ALFOL insulation can give your homes. Use the coupon below to get full data.

Send for FREE merchandising ideas



ALFOL insulation
reflects ...
summer heat out
winter heat in
... controls
condensation



9295

REFLECTAL®

Please send REFLECTAL CORPORATION, Department A-11
Free ALFOL brochure: A subsidiary of Borg-Warner Corporation
200 South Michigan Avenue, Chicago 4, Ill.

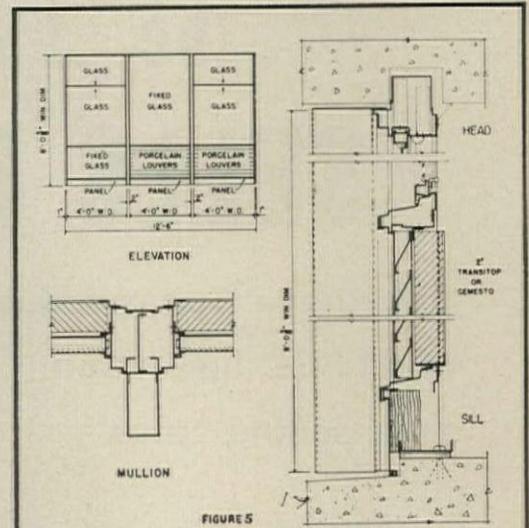
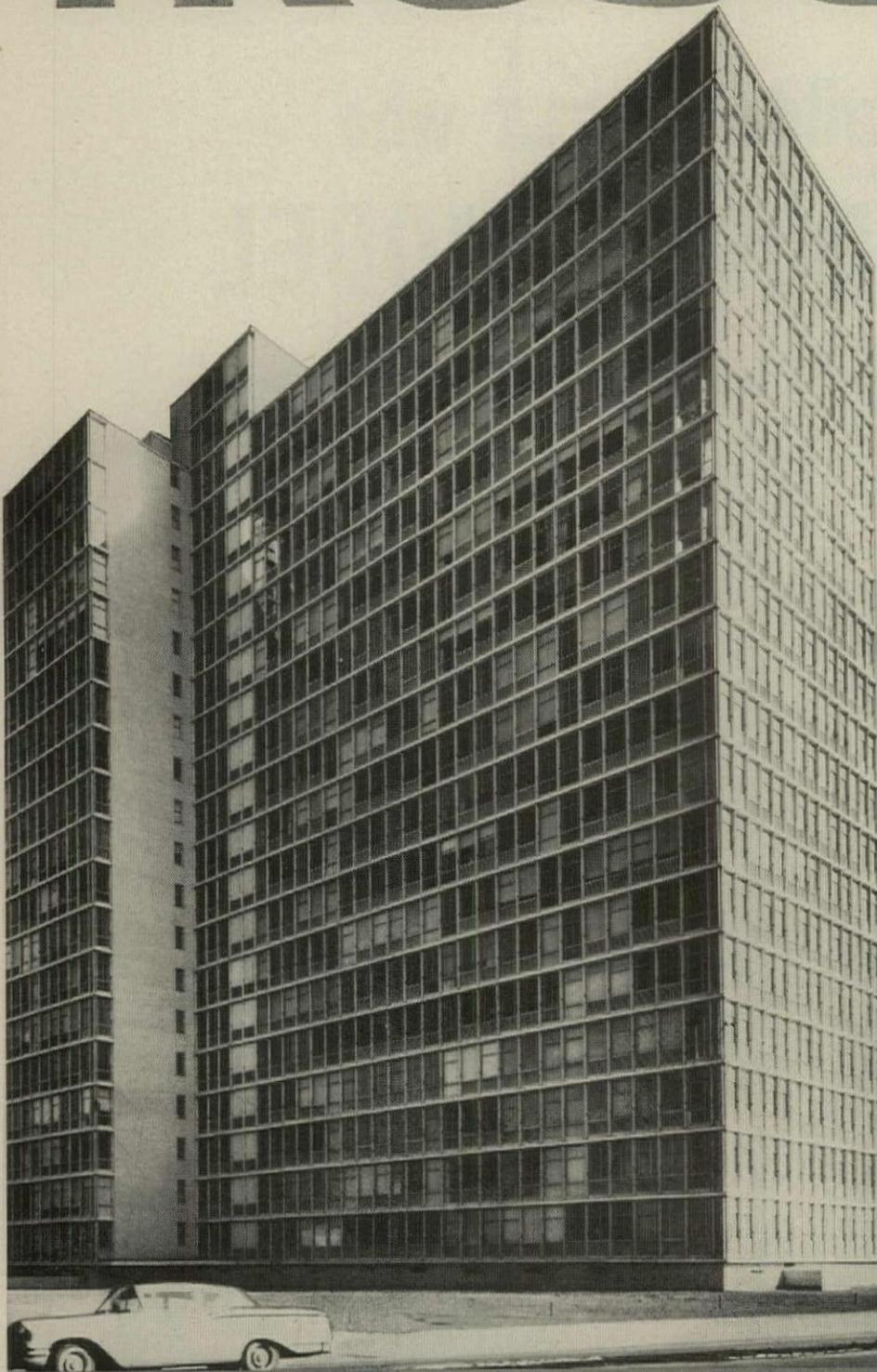
"5 easy ways to
merchandise your
insulation"

Name _____
Firm _____
Address _____
City _____ Zone _____ State _____



Borg-Warner®

TRUSCON..

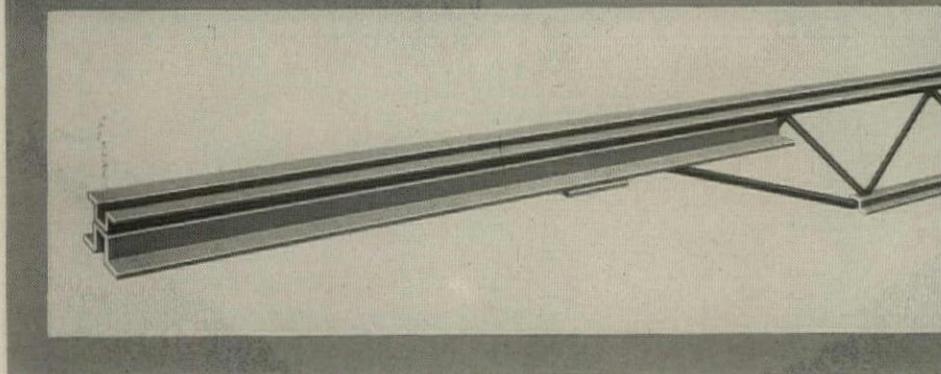


Construction details of Truscon VISION-VENT Window Walls with Series 138 Double-Hung Steel Windows as supplied for Prairie Shores Apartments, Chicago. Note the extended "eye-brow" slab.

Prairie Shores Apartment #1, Chicago, Illinois
 Architects: Loebel, Schlossman, & Bennett
 Contractor: Sumner Collitt Construction Company
 Products: Truscon VISION-VENT Window Wall Units—
 Series 138 Double-Hung Steel Windows



BIGGER KITCHENS...REPUBLIC STEEL KITCHENS complete apartment living with built-in features homemakers want most. Attractive sink centers, storage conveniences, cook and serve areas, designed to meet modern live and work habits. Easy-to-clean, stay-new Republic Steel Kitchens can't crack, splinter, won't warp, swell, or shrink. Bonderized to resist and restrict accidental damage. Baked enamel finish — white and colors — never need refinishing, never absorb odors, are a joy to live with year after year. Send coupon.



PROFITABLE BALCONIES...NEW TRUSCON "O-T"® STEEL JOISTS. Now designed to 20,000 psi working stress. New longer sizes, greater working stress, balanced design — in balance with all other structural elements. Straight bottom chord carries spandrels and columns. Produced to exceed the rigid standards of the Steel Joist Institute Quality Verification Program. Available in the longer 40- to 48-foot range. Ideal for apartment balcony design and construction. Send coupon for specifications and design data.

.. HELPS YOU BUILD BETTER APARTMENTS

Better apartments! Bonanza market of the 1960's. And Truscon products help you build them for long-term value and long-term livability. Truscon products adapt to both high-rise and garden type apartments.

Good design, executed in quality products, can combine the appeal of suburban houses with the convenience of close-in living. Truscon can help you achieve it. Truscon engineers and designers will work with your architects to design for good rentals, low vacancies, and minimum obsolescence.

Bigger rooms! Truscon Vision-Vent® Window Walls can give you more useable square feet of floor space at no increase in cost. Available in steel or aluminum with wide choice of window types, choice of color if desired.

Adequate lighting and ventilation! Offer this

with Truscon's big line of steel or aluminum windows. Types and sizes to fit every architectural design, every lighting and ventilating function. Built to be fully weathertight, and to assure air conditioning efficiency.

Sound resistance, fire resistance! Truscon Metal Lath and plaster provide both as no other wall and ceiling materials can. Truscon Metal Doors and Frames give you additional sound deadening and fire resistance.

Balconies and porches! Easy to achieve using Truscon "O-T" Steel Joists with economical extended end. Add much to tenant pleasure and increase property value.

Keep vacancies low, maintain value. That's the key to building apartments that pay their way. Truscon can help you build better. Contact Truscon, or send coupon today.

LARGER ROOMS...TRUSCON STEEL AND ALUMINUM WINDOWS and HOLLOW METAL DOORS exceed apartment building F.H.A. standards and requirements. Truscon Steel and Aluminum Windows are specifically designed for the economical needs of multi-family building. Easy to install. Never warp, shrink, stick. Practically no maintenance required. Full ventilation with full living space. Truscon Hollow Metal Doors—for both interior and exterior applications provide greater sound isolation, privacy, and greater fire-resistance. Write today.

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- Truscon Hollow Metal Doors and Frames

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Ceco issues six new brochures

Metal building products in several categories are shown in a series of brochures by Ceco Steel Products, Chicago.

Each gives catalog details on all products, sample specifications, and sectional drawings in full or half size.

Aluminum windows and screens in double-hung, projected, and awning styles are shown in a 28-page catalog.

For copy, check No. 70 on coupon, p 272

Complete line of steel windows with accompanying hardware, operators, casings, and trim are described in a 48-page catalog.

For copy, check No. 71 on coupon, p 272

Special installation instructions on aluminum and steel windows for the Pacific Coast are given in a 4-page bulletin.

For copy, check No. 72 on coupon, p 272

An introductory manual on new Electro-Channel joists, which include cable ducts in the top chord for underfloor wiring, gives step-by-step illustrations of how they are erected and how taps are made, 28 pages.

For copy, check No. 73 on coupon, p 272

Open-web steel joists and steel roof deck are described in a 28-page booklet and accompanied by a separate 32-page tabulation of acceptable loads, spacing, and dimensions.

For copy, check No. 74 on coupon, p 272

Hollow metal doors are the subject of a 32-page brochure. Besides complete data on doors, the brochure describes various types of locksets, bolts, closers, hinges, panic devices, etc.

For copy, check No. 75 on coupon, p 272

How to use interior colors

New Arco paints are shown in a just-released color card that contains a series of tips on what colors to use in natural light and artificial light; on ceilings, walls, and dados; on trim and accessories, for furniture and equipment.

Arco Co, Cleveland.

For copy, check No. 76 on coupon, p 272

Making use of wall areas

Masonite's Panelok system is illustrated in a new 12-page booklet that shows how to add storage and decor to any room in a house. A closet guide chart shows how panels and accessories can be combined.

Masonite Corp, Chicago.

For copy, check No. 77 on coupon, p 272

What is Wolmanizing?

The full story is told in a new 16-page booklet called *Safeguard Building Dollars*. The booklet tells how the wood is pressure treated, what the advantages are, when and where to specify it. Special applications for various industries are shown.

Koppers Co, Pittsburgh.

For copy, check No. 78 on coupon, p 272

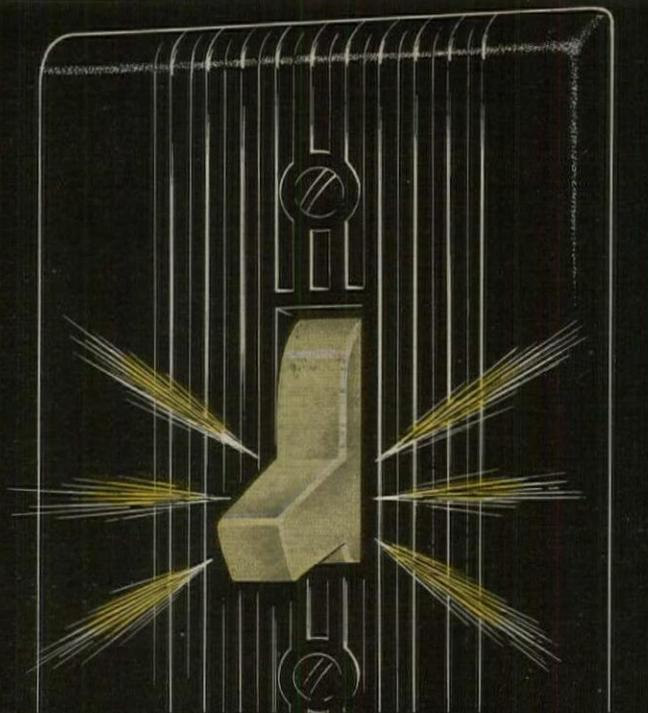
Ceramic tile specifications

Sample specifications for all sorts of ceramic tile work have been prepared by Ben H. Dyer for US Ceramic Tile. Sheets are made up in worksheet form to save time in specifying tile and setting bed.

US Ceramic Tile Co, Canton, Ohio.

For copy, check No. 79 on coupon, p 272

continued on p 272



Stop Switch-Groping!

LEV-O-LITE

ILLUMINATED HANDLE

silent mercury switch

No longer any need to fumble in the dark when looking for the light switch . . . no more dirty walls from groping for the switch. The answer? *Lev-o-Lite* with a tiny built-in neon light that illuminates the switch handle, costs only a few cents annually to operate and lasts a lifetime. The switch is sturdy with no moving parts to wear out, no springs to snap and as easy to install as any standard switch. Ideal for that dark spot — and silent too.

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Nathan S. Gumenick, largest apartment owner outside of New York City, now building Southgate Towers



MIAMI'S FABULOUS SOUTHGATE TOWERS

YORKTOWNE *Classic* KITCHENS HELP FILL 553 DELUXE UNITS WELL AHEAD OF SCHEDULE

"In order to make Southgate Towers Apartments a shining example of completeness, comfort and desirability, we took great care that all items and appointments were of proved highest quality and customer appeal," says Mr. Nathan S. Gumenick, owner.

"This applied particularly to the beautiful CLASSIC Kitchens by Yorktowne. A full-scale model of the kitchen was displayed in our Lincoln Road rental office. This merchandising plan, we found, aided materially in renting 90% of our apartments, *five months ahead of the opening date.*"

The strong sales appeal of CLASSIC Kitchens is helping to fill apartments and sell homes everywhere. Yorktowne warehousing and stocking distributors in 75 major market centers can furnish you with more than 100 different types and styles to fit your floor-space and cost requirements.

New illustrated brochure gives full details and shows many new cabinets now in use. Write for your copy now.

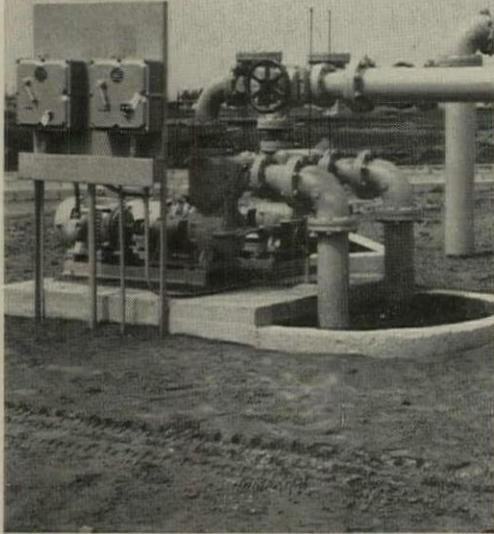
This CLASSIC Kitchen by Yorktowne was one of the primary attractions in Southgate Tower's renting office. Finished in new lifetime rose-champagne fruitwood lacquer, they also feature diamond-beveled drawers and panelled doors.



Classic
KITCHENS
by YORKTOWNE

... designed, produced and guaranteed by Colonial Products Co.,
Dallastown, Pa. Creators of the famous YORKTOWNE Natural Birch Kitchens

HIGH AND DRY!
... not way down in the pit



Twin installation of model 14A2-B at a sewage treatment plant, Clair-Mel City, Tampa, Fla. Controls alternate pumps at regular intervals.

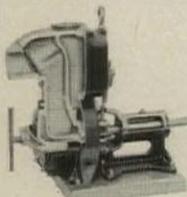
GORMAN-RUPP SEWAGE PUMPS

COST LESS TO BUY — Self-priming in lifts up to 15', positive in action, nearly completely non-clogging. High and dry, their installed cost has allowed savings of as much as 50%.

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PERFORM WHERE OTHERS FAIL — In lift stations and sewage plants, these Gorman-Rupp units have shown amazing records of savings . . . operating where others have failed. Let us show you examples.

2", 3", 4" and 6" pumps—connected to your power or ordered complete with power units. Write for complete specifications.



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END PLATE** — Exclusive end plate releases for access to impeller and wear plate. Two-vane open impeller specifically designed for handling spherical solids.

THE GORMAN-RUPP COMPANY
305 Bowman Street • Mansfield, Ohio

Publications

continued from p 270

Sliding door detail drawings

Daryl Products has a new architect's file of details on all their sliding door line and 25 tub and shower enclosures. The manual includes descriptions and features of all items made by Daryl. Detail drawings are given in full and half scale.

Daryl Products, Miami.
For copy, check No. 80 on coupon below

Here are more aluminum details

Reynold's fine series of architectural detail sheets is continued with a file on aluminum coping and gravel stops. Sheets contain scale drawings of products and

installations and a table of materials and accessories, for specifications.

Reynolds Metals, Richmond, Va.
For copy, check No. 81 on coupon below

New shingles rate as class-A risk

Carey Fire-Chex asbestos-plastic roofing shingles are described in a new 12-page brochure. The 325-lb and 400-lb shingles, which carry a class A fire rating and a 25-year guaranty, are shown in color and pattern. Type 325 comes in 11 colors, type 400 in four.

Philip Carey Mfg Co, Cincinnati.
For copy, check No. 82 on coupon below

Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

House & Home

Room 1021A, 9 Rockefeller Plaza, New York 20, N.Y.

NEW PRODUCTS • October

1. Compact Holly furnace
2. Waste-King quiet disposer
3. Glid-Tile plastic paint
4. Acoustical Soundshield
5. Dornbeck compact furnace
6. Bryant year-round conditioner
7. American Standard Remotaire
8. Mathes in-wall heat pump
9. Electromode floor heaters
10. Hotpoint cooktop and oven
11. GE quiet Disposall
12. Norco Pixie refrigerator
13. Frigidaire French-door oven
14. Tappan Debutante 430
15. In-Sink-Erator model 27
16. Dwyer kitchens
17. Revco refrigerators
18. Soulé Steel Mosaica
19. Harborite overlaid plywood
20. Forest Fiber Products siding
21. Plexstone Metalace paint
22. Weyerhaeuser hardboards
23. Adco window wall
24. US Gypsum acoustical formboard
25. Production Paint's VitraSpray
26. Alcoa's SolDec
27. Mosaic Tile Staccato
28. Bolta Wall tile
29. Wendell acoustical fabrics
30. Simpson's La Honda panelling
31. Kaiser Silent Ceiling
32. Gold Bond Durasan
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55. A.O. Smith water heater
56. Rittling hydronic baseboards
57. Embassy electric baseboard
58. Edwards hydronic baseboard
59. R & M-Hunter forced-air baseboard
60. Arvin electric baseboards
61. Tex-Wood built-in lounge bed
62. Flintkote reflective roofing
63. Knight folding dinette
64. Keller counter edges
65. Carrolton disposer sinks
66. Plywall Poly-Clad moldings
67. Davidson gravel stop fascia
68. Elkay stainless-steel apron sink
69. Flat prefabricated shower

PUBLICATIONS

70. Ceco aluminum window catalog
71. Ceco steel window catalog
72. Ceco Pacific Coast window guide
73. Ceco Electro-Channel joist catalog
74. Ceco open-web joist catalog
75. Ceco hollow metal doors catalog
76. Arco color guide
77. Masonite Panelok booklet
78. Wolmanizing booklet
79. Ceramic file specifications.
80. Daryl sliding door details
81. Reynolds aluminum details
82. Fire-Chex asbestos-plastic roof shingles

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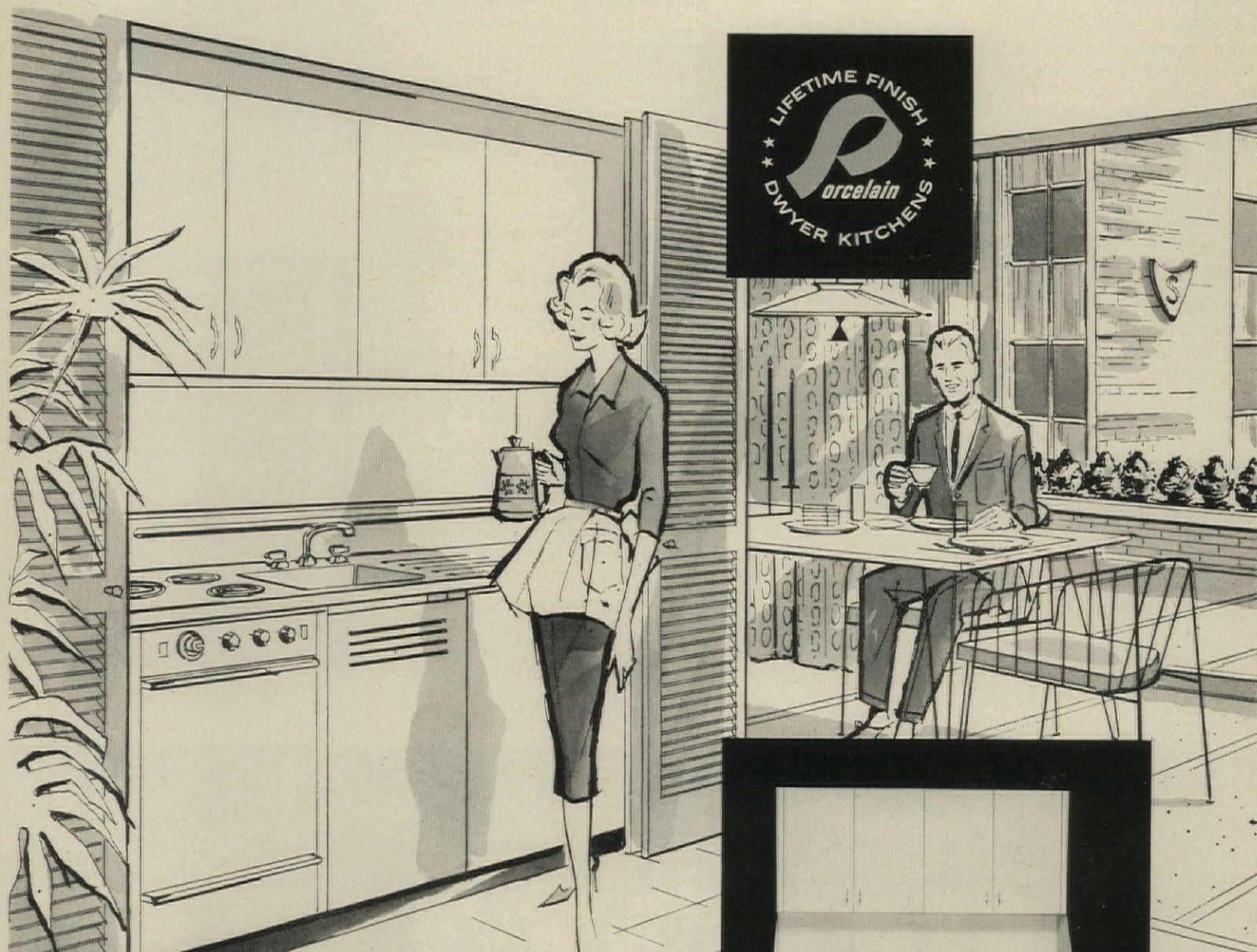
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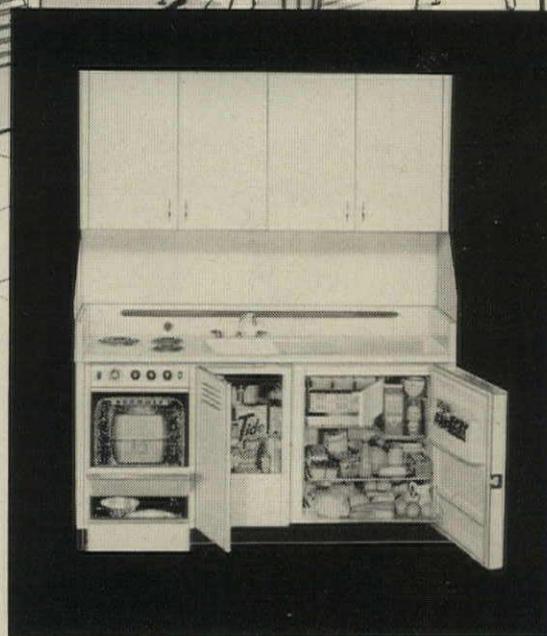
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Peterson windows and doors assure trouble free performance—make your homes easier to sell. More than that, the quality of Penguin windows and Daisy doors will enhance your reputation as a builder. Get the full story of why Peterson products set the standards by which all aluminum windows and doors are judged. Send us the coupon below.

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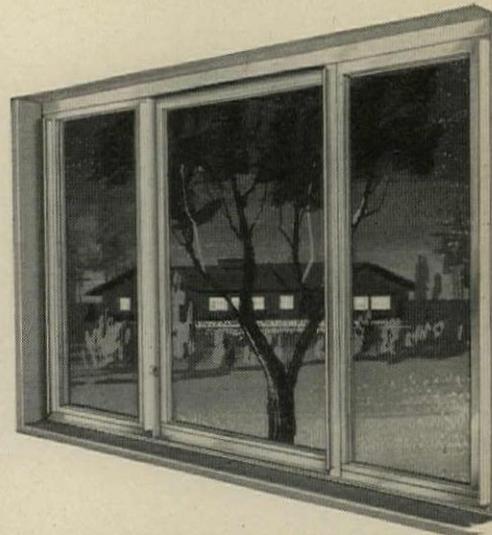
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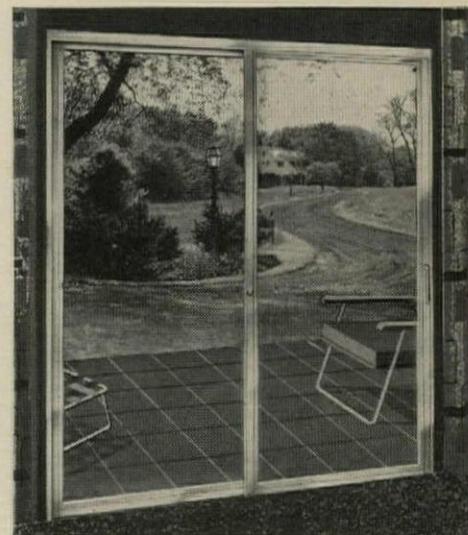
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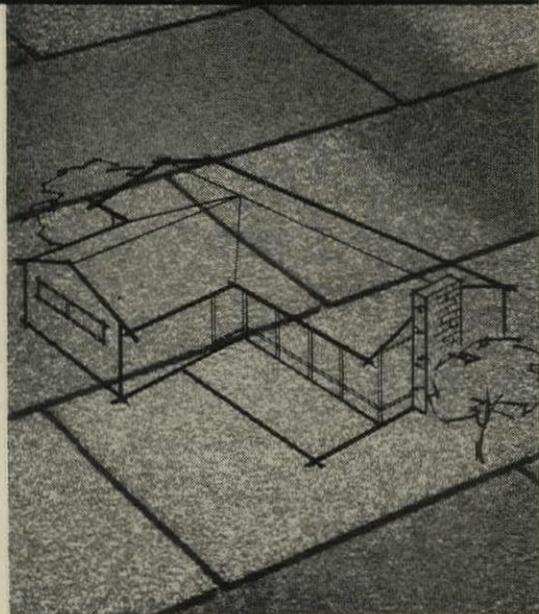
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Here, indeed, is a prime example of Carey progress in roofing shingles—the Carey Roofmaster Shingle which meets every present-day construction requirement. Its size is approximately 5 square feet of area . . . a real giant when compared to the 3 square feet of ordinary 12" x 36" shingles.

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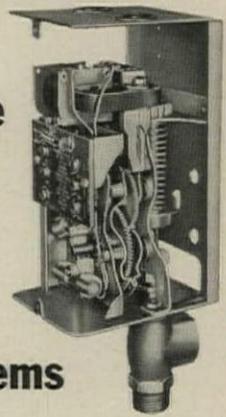
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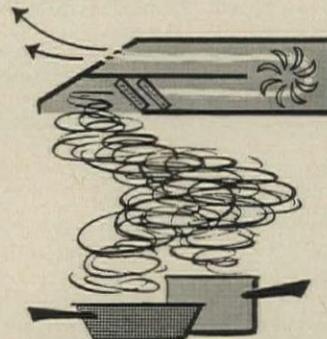
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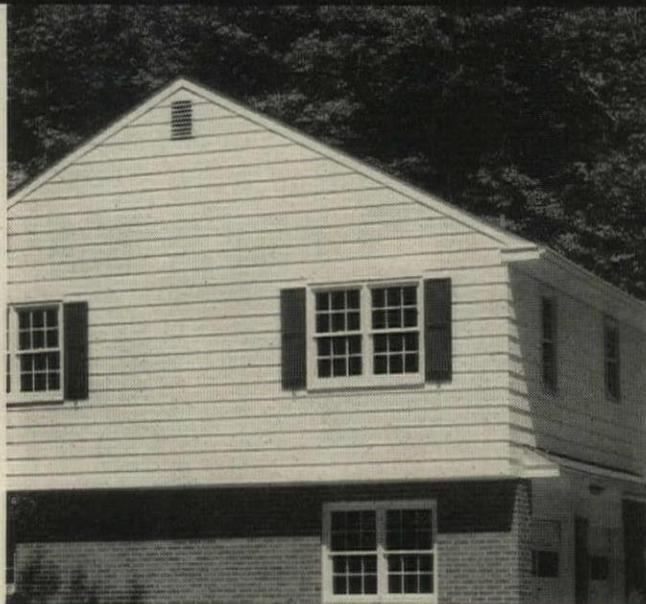
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Here is **Carey CERAMO** Clapboard with its long, narrow panels recapturing all the charm and beauty of traditional clapboard, yet with outstanding features that other sidings cannot match.

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CAREY CERAMO Clapboard is made of Portland cement and inorganic asbestos fibre which is autoclaved to assure dimensional stability. The result is a distinctive exterior wall material of the very highest quality and attractiveness. Ceramo Clapboard is described in a full-color Bulletin No. 6392-H. Write for a copy today or consult with your Carey Representative for further details.



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48	Lyon, Inc.	224, 225	Structural Clay Products Institute
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53	National Manufacturing Co.	255	Western Red Cedar Lumber Assn.
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2A, 2B	Nutone, Inc.	259	Zegers, Inc.
83	Orangeburg Manufacturing Co. (Div. of The Flintkote Co.)		
264, 265	Owens Corning Fiberglas Corp.		

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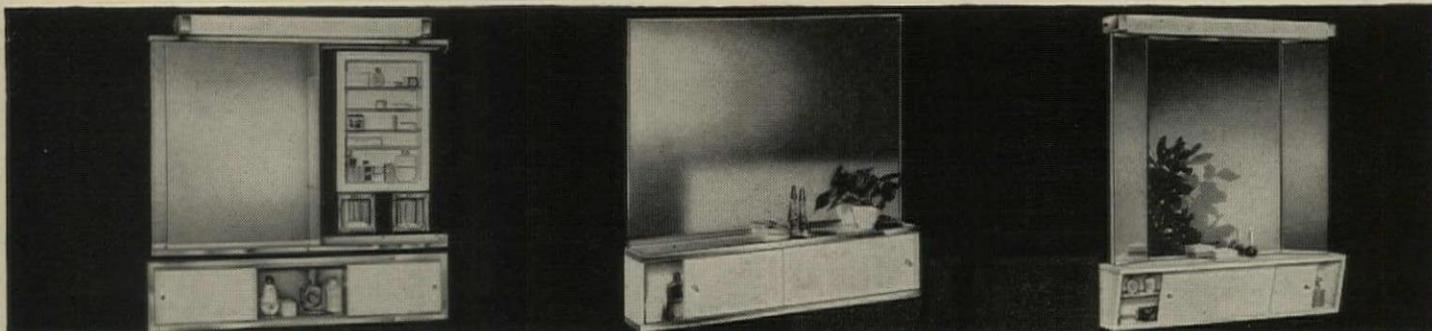
The versatile Broadview rolling mirror unit permits use of *all* the space behind bathroom mirrors. The Vaninet cabinet and light fixtures are also available. Recessed shelves, storage cabinets, and Miami-Carey accessories may be installed with this basic plan-it-yourself mirror unit.

New HOLLYWOOD

The picture-window mirror of The Hollywood brings a new depth and proportion in bathroom elegance. The surface-mounted unit combines a cabinet for toilet articles and cosmetics with the added convenience of a projecting shelf.

GRANDVIEW with COSMETIC

This full-view, winged fashion leader can be used alone, or as a lighted mirror. When the Cosmetic Cabinet is added (illus.) the Grandview is converted into an attractive winged mirror-cabinet with shelf. The flush-mounted Vaninet Cabinet can also be used with the Grandview.



Bordering the shoreline of Long Island Sound at Bayside, Queens, New York is Bay Terrace, a model community development for suburban living. It will ultimately include 60 apartment buildings like this, and provide country club and pool facilities.



Alex Danin, A.I.A.
Architect

Showplace Beauty for Bay Terrace-

3120 planned apartments

New York's newest,
largest, suburban
apartment development

features **PREWAY**[®]

Bilt-In Ranges



The PREWAY kitchen as shown in Bay Terrace model apartment.



Shown here in their office checking out plans are Lester Weindling and George Browne, members of the N. K. Winston-A. Holzer building organization, well known for its outstanding suburban community developments.

Foot for foot, the kitchen gets more hard wear than any room in an apartment — (or a home, too, for that matter.) Making it a SHOWPLACE and being sure that it will retain that showplace look over the years, requires more than good intentions. It *demand*s careful planning.

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extra measure of value in solid long-lasting construction. And back of this superiority was the best performance record in the New York area, as verified by the experience reports of other quality builders.

PREWAY makes both gas and electric built-ins to suit your building plans — provides dependable, on-time deliveries from reliable, carefully selected distributors who are always at your service. For the one nearest you, and for full information on the PREWAY Bilt-In Appliances of interest, write for full color specification bulletins.



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