House & Home

MANAGEMENT MAGAZINE OF THE HOUSING INDUSTRY

APRIL 1964

Three houses with daring new shapes Who made money in housing last year — and why ...Retirement housing: bonanza in your backyard A fresh look at the remodeling market



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Publisher's note

As will be apparent when you turn to *page 106*, the editors have done a lot of thinking about retirement housing. Not that they are coming close to retirement age and not that their readers are mostly senior citizens. Far from it. The average age of House & Home's 14 editors is a sprightly 41 years, and, according to a recent survey of subscribers, the typical reader is also very much in the prime of life: 44 years old.*

The reason for this month's big article on retirement housing is twofold: 1) this kind of housing is becoming an increasingly important part of the market, as medicine continues to lengthen our life span, and 2) this kind of story reflects the editors' dedication to the varied interests of their varied audience.

The latter reason explains why you find all aspects of housing reported in a typical issue of the magazine everything from money (p. 118) to merchandising (p. 71), everything from production (p. 140) to products (p. 185). It also explains why most of HOUSE & HOME's articles are in themselves edited to satisfy the wide range of special interests of its audience as well as its common interest in housing *per se*.

The HOUSE & HOME audience, you see, is not simply thousands of people like yourself. It is not just homebuilders, although they comprise the biggest part—almost 46,000. Among the 139,000 total are also 21,000 real estate men, 10,000 architects and designers, almost 10,000 material dealers and distributors, 9,000 lenders, nearly 8,000 subcontractors, etc.—the biggest audience anyone has yet assembled of the men who shape and control America's housing industry.

It is the editors' mission to inform and interest them all—not an easy task but one they seem to accomplish well month in, month out. I believe you will agree as you turn the pages this month. —J. C. H. JR.

*In case you want to compare yourself with other subscribers, here are additional figures from the subscriber survey. Nearly 80% have attended college, and more than half hold college degrees. Average annual income in 1961 was more than \$15,600. Six out of ten own stocks, bonds and other securities having an average 1961 value of \$45,000 and the typical subscriber owns \$46,000 of life insurance. More than half carry such weighty titles as chairman of the board, president, partner or owner of their companies.

For those who would like to know more about their fellow readers, copies of the subscriber-profile study are available for the asking.



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New Topic A: how to curb land speculation

Officials and builders alike are blossoming with new and old ideas for attacking land speculation.

Builder Edward Eichler used his testimony on President Johnson's housing bill to give some views congressmen hadn't expected (see p. 6). "The federal government has invited speculation," he charged, by making property taxes and interest tax-deductible and allowing capital gains on sales of raw land. Eichler also was a key man in getting the first new statewide political group in years to back a plan to let localities hike taxes on land and cut taxes on improvements (see p. 18).

Suburban officials in New York and California seem to be getting the message that bargain basement assessments on raw land inflate housing prices in the end (*see p. 18*). One Florida land dealer got a rougher message: a widely advertised land auction flopped (*see p. 18*).

Quality: apartment builders' overlooked sales tool

The apartment boom rolls on; new apartment permits for January ran 46% of total permits. For all of 1963, they account for 37% of total starts. Most of these units will come on the market in late spring and summer, when some doom criers fear a slowdown.

In Washington, D.C. now the nation's third-largest apartment market, 4,300 units will come on line in the last half of the year. HOUSE & HOME's latest soundings in California—where San Francisco and Los Angeles are two of the top four apartment-building cities—indicate demand continues strong for rental units even though mortgage lenders are growing choosier about projects (*see p. 30*).

Almost all private vacancy reports show new units filling up.

Why? In a word: quality.

One often overlooked fact pops out from Census vacancy figures: 61% of all vacant rental units are over 25 years old. Half of all vacant units can be rented for \$61 monthly or less.

All this means that consumers are willing to pay for quality apartments in good locations. One Phoenix apartment recently filled up and had a waiting list—in the face of 30% citywide rental vacancy—because the lender insisted on better site planning and amenities. The just-enacted tax cut will give consumers even more money to pay for quality (see p. 9).

New York Life's mortgage vice president says he is "shocked" by some of the floor plans builders submit. He urges mortgage bankers to pay more attention to design (*see p. 38*)—an admonition with teeth in it considering the source. FHA is going all-out to boost better apartments.

Data just compiled by NAHB lists five cities as the hottest apartment markets last year: Memphis, up 198%; Fort Worth, 159%; Birmingham, 137%; Sacramento, 121%, and Atlanta, 111%. Three cities lost over 25%: Hawaii, 44%; Jacksonville, 33%, and New York City, 29%.

The one-family house market: strong for quality

Early indicators point to a pickup in one-family house sales this year. In January, for instance, the annual rate of building permits ran 9% ahead of January 1963. And NAHB contends that Census-HHFA reports give no cause for alarm about unsold inventory, even though it is 12% above year-earlier levels, because new starts nearly match sales.

Top-price homes are selling fastest in more and more places—suggesting that consumers are ever more intent on quality, at any price. In an H&H check of 18 major cities last month, low-priced houses were selling fast only in two; upper-bracket homes were leading the market in six.

Sums up President Ed Mendenhall of NAREB: "People will have more money to spend this year. But they expect to get more."

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SPARSE ATTENDANCE found only three senators, Democrats John Sparkman (Ala.), Joseph Clark (Pa.) and Harrison Williams (N.J., circled, l-r) on hand to hear HHFA try to build support for land loans with testimony of Builder Edward Eichler, seated left. Empty press table is at right.

HOUSING POLICY

Land loans: Congress is cool

Industry opposition and Congressional qualms seem likely to kill plan for FHA loans for new towns-and perhaps for subdivisions

Major parts of the Johnson Administration's 1964 housing bill are running into trouble in Congress.

The sweeping plan for FHA-insured loans up to \$50 million for giant new communities is running into opposition from big segments of private industry plus disinterest by key senators and congressmen. It looks all but dead for this year.

A companion plan for FHA loans to develop large subdivisions (e.g. 300 lots up) may squeak through, but it faces stiff opposition. Proposals to revamp public housing and boost urban renewal spending are coming under strong fire, but seem to have a better chance of passage. Even Sen. Joseph Clark (D., Pa.), champion of more renewal and public housing spending, admits the final legislation "might even be unrecognizable" from President Johnson's proposals.

Two weeks of simultaneous hearings by the Senate and House housing subcommittees produced sparse attendance-and much more concerted opposition by industry groups than has been seen in recent years.

HHFAdministrator Robert C. Weaver presented Administration arguments for the two new land plans, which he aptly calls the "most significant new departure" in the bill. They would "eliminate the costly clutter of blindfold growth and blunderbuss expansion," he contended. Suburban tax loads are high now because past development did not include adequate water and sewer lines. "Wasteful land-use patterns have developed," and suburbanites are yielding grudgingly to pressure for higher density land use.

Too-secret secret? One reason the land plan for new towns is in so much trouble is that HHFA drafted it in military secrecy. The new-town plan was grafted by HHFA on top of an FHA plan for insuring small subdivision loans near urban areas.

The secrecy was dictated partly by the uncertainty over what course President Johnson would take when he took over the presidency last November. But it also meant foregoing suggestions from men who actually build housing.

Weaver sought to de-emphasize the novelty of his plan. "We have in fact drawn substantially upon prior suggestions," he testified. But group after group which normally backs Administration plans told the committees it had never discussed the idea or did not have enough time to analyze it, since hearings began only three weeks after the bill's unveiling.

"Since we have not fully analyzed and formally acted upon this matter, I cannot support this," said Milwaukee Mayor Henry Maier for the American Municipal Assn. "We have nothing in our policy statement nor have we ever discussed such an idea," added the National Association of Counties.

It was almost an anti-climax when the National Association of Home Builders, whose policy makers are sharply divided on the issue (NEWS, Jan.), testified the plan "is not fully understood in our industry." Added President Bill Blackfield:

"The views of the homebuilding industry were not sought during preparation. [The plan was] first publicly presented ... just a month ago. We submit the brief period of a month has been utterly insufficient for thorough study of these proposals and intelligent conclusion as to their impact.'

Privately, housing men say HHFA made little effort to explain the plan thoroughly but took the attitude that "we in our wisdom know best-just leave it to us.'

Even Chairman Albert Rains (D., Ala.) of the House housing subcommittee has confided to friends the new-town plan will wait until 1965-when "an even bigger housing bill" will be needed and when FHA's insuring authorization will be a hostage for passage as in 1961.

Hidden fears. But even brief study has turned up enough controversial proposals in the fine print to make Congress wary of hasty action. Biggest fears center on how the plan might use federal loans to promote racial integration.

The bill proposes a 10% bonus boost in loan amounts for new-town developers who build low- and moderate-income housing first-that is, housing aimed at price brackets where Negroes are numerous. The provision (which, curiously, was omitted from HHFA's original analysis of the plan) would work like this: FHA could let developers postpone principal repayments for perhaps two years and let loan balances go as high as 85% of the owner's equity in the land and total development cost. Normal loans under the proposal would be only 75% of the land value plus 75% of the development cost (or 90% of development cost when major utility lines are required). HHFA says this would let developers cut cash expenses in the early years of projects.

Housing men feel the plan is too vague. For one thing the bill puts no minimum size on new towns. Weaver foresaw most towns as home for 25,000 persons or more.

NAHB says the entire proposal would be unworkable if the Administration's plea to make development work subject to the Davis-Bacon minimum wage law is included. NAHB cites unrealistically rigid administration, burdensome reporting and "in many cases artificially high wage rates" in opposing this first effort to put individual homebuilding under Davis-Bacon.

The builders recall that two years ago they supported insurance for land improvements only, but "it did not make loans eligible for FNMA purchase and did not place the federal credit behind the vast undertaking of the construction of an entire new community."

HHFA counterattacks. As the new-town plan faded, HHFA rounded up supporters to testify. President Allan H. Lindsey of Sierra Pacific Properties, developer of El Dorado Hills (H&H, Feb. '63) outside Sacramento, pointed out that the proposal would save \$1,000 in land cost per house if it cut interest from 10% to 6% on a \$15 million town of 600 homes a year.

Edward P. Eichler, on leave as president of Eichler Homes, in Palo Alto, made a lonely trip to the hearing (*see photo*) to voice his strong support. Eichler also warned: "There could be considerable difficulty in administering this program." Then he urged Congress to probe real roots of the land-cost problem. Said he:

"From 1950 to 1960, the per-unit cost of raw land rose ten times more than the consumer index or the construction cost in California. By making property taxes and interest deductible from ordinary income tax and the profit on the sale of raw land taxable only at capital gain rates, the federal government has invited speculation. The cost of land is increased and sprawl is encouraged as land is held off the market for future gain. I strongly urge this committee to consider recommending changes in tax laws as well as other efforts to bring housing costs down."

A possible opening. The companion proposal to insure loans for subdivisions not connected with new towns drew somewhat less opposition.

The Administration proposes maximum \$2.5 million loans for either 75% of completed subdivision value or 50% of land costs and 90% of development costs. Loans could finance "several hundred lots," says Weaver.

The National Association of Mutual Savings Banks (only private housing group to back the new town plan) also backed the subdivision plan and suggested loans be for no longer than two or three years. (Maximum terms would be set by FHA regulation.) The American Bankers' Assn. favors the idea if loan to value ratios are cut to 50% on land, 75% on improvements, and 60% overall.

The Mortgage Bankers Assn. diasgrees. It says: "There is a lack of proven necessity for such a program; we consider it APRIL 1964 would over-stimulate activity and increase land prices [and] contains an unnecessary extension of federal controls."

What housing men favor. The hearings and HOUSE & HOME's soundings on Capitol Hill indicate substantial support for these proposals:

Higher FHA loans. Five major trade associations—NAHB, MBA, ABA, NAMSB and the National Association of Real Estate Boards—all support proposals to increase maximum FHA one-family mortgages from \$25,000 to \$30,000. MBA favors jumping to \$35,000. Commitee members are less solidly in favor. NAHB wants to cut the 25% down payment buyers would have to make on the \$5,000 increase.

FHA-backed vacation homes. The Administration's plan for financing vacation homes with Sec. 203i loans up to \$11,000 (vs. a \$9,000 top now) is supported by all five groups. MBA wants Sec. 203i loans upped to \$15,000 to provide rural housing instead of setting up a separate insurance plan in the Agriculture Dept. as proposed. ABA wants vacation home loans limited to 75% of value, but NAHB backs a \$12,000 limit plus \$2,000 in high-cost areas with 97% loan to value ratios.

Doubtful starters. Housing trade groups oppose several other changes to FHA's insurance system:

Mutual fund transfers. A virtually unnoticed three-line amendment to let FHA shift money from its mutual mortgage insurance fund (which covers most basic programs such as Sec. 203b) into other funds is meeting unanimous condemnation by housing groups. Weaver did not discuss the section in his 86-page statement.

MBA points out this could mean insurance premiums from sound programs could pay losses on funds like Sec. 221d3 for which no insurance premium is collected. "Continued promotion of such marginal activities can only result in jeopardizing FHA's reserves," MBA warns. Savings bankers contend special and exp. rimental programs should not be dependent on basic FHA programs, and commercial bankers "strongly oppose . . . any attempt to commingle separate reserve funds."

Renewal: grants or loans? Two other trade groups have joined NAREB in backing a plan now embodied in a Republican counter proposal: end federal grants for commercial downtown renewal, rely instead on loans alone. MBA backs the plan. ABA suggests that cities borrow money on their own for non-housing renewal.

But the Administration's call for \$1.4 billion for renewal for the next two years, including \$690 million for commercial renewal, is inadequate in the eyes of big city mayors and renewal backers.

NAHB and other private groups oppose boosting the percentage of renewal subsidies available for commercial clearance from 30% to 35%. Renewal's original purpose of improving housing "is being steadily forgotten," says NAHB.

Housing's united stand is making headway. Sen. Clark is suggesting that Uncle Sam cut its subsidy for commercial renewal from $66\frac{2}{3}$ % to 50% of net cost.

And Congress' joint economic committee urges a model property tax code to fight slums. Says the committee: "State and local governments have failed to make maximum use of the enormous potential in the property tax for either the prevention or the cure of poor housing... Those who permit their property to deteriorate . . . are rewarded with lower property taxes. Landlords who enhance the value have assessments raised."

FNMA pool sales: 'hockshop', 'baloney'

Democrats and Republicans alike are showing caustic scorn for the Administration's plan for FNMA to sell participations in a \$300 million pool of FHA and VA mortgages (NEWS, Feb. *et seq.*). Chances of passage are dim.

The Administration's idea was to raise cash to cut the overall federal deficit estimated at \$4.9 billion next year.

But Sen. Paul Douglas (D., Ill.), onetime economics professor, assails the plan as "bookkeeping legerdemain which concealed expenditures." To Douglas, the plan is not only "baloney," it also "is characteristic of the other political party."

But the other party's chief housing spokesmen in the House, Rep. William Widnall (R., N.J.), is even more opposed.

The exact language of the Administration bill is far broader than President Johnson's housing message said it would be, he charges, and would turn FNMA into a "federal hockshop." Widnall bases his charge on the fact the bill would let FNMA buy "all kinds of mortgages held by any or all other federal agencies . . . Fanny May could serve as a hockshop for Small Business Administration, Commodity Credit Corporation, or Export-Import Bank mortgage loans. Fanny May could be a hockshop for Area Redevelopment Administration second mortgage loans which may cover 65% of cost and are cushioned by a skimpy equity protection of only 10% or 15%." He charges:

"The pooling authorization for this polyglot agglomeration is also a fantastic provision . . . Since a pawn ticket is an evidence of a property right, the proposed authority would appear to be broad enough to let Fanny May sell guaranteed pawn tickets to the public to finance its federal hockshop operations.

"This is an unwarranted impingement on the good name and credit standing of Fanny May."

Six ways the new tax law affects builder operations

The long-heralded crackdown on fast tax writeoff for building, just signed into law by President Johnson, is more of a pinprick than a puncture.

For more than two years both the Kennedy and Johnson administrations have been contending that the 1954 Tax Act letting builders write off buildings at double straight-line depreciation had led to speculative excesses (and much shoddy construction) in the process of spawning the apartment boom beginning in 1959.

But the final version of the law is so much less stringent than President Kennedy's first plan (NEWS, Mar. '63) that housing men size up the law's impact this way: "For the in-and-outer, it is disastrous. For anyone investing for the long haul of a decade, it makes no difference." *Here is what to watch:*

1. Depreciation changes. The big reason this is true is shown dramatically on the graphs below: building owners will have to pay full income tax on all depreciation written off on a building resold within a year of construction or purchase.

After one year, the new law makes normal straight-line depreciation (which writes off a building in equal annual installments over its estimated economic life) the norm for deciding whether any gain from resale will be taxed as ordinary income or at lower capital gains rates of 25%. The rule:

Between 12 and 20 months all fast writeoffs beyond straight-line are taxed as ordinary income. For each month the building is held beyond 20 months, 1% of the accelerated depreciation may be treated as capital gain.

The law applies to all depreciation taken beginning Jan. 1, 1964 regardless of when the building was purchased.

The graph, based upon the resale of a \$100,000 apartment building at its original cost, shows how this rule throws much of the fast writeoff into the ordinary income category in the second and third years. Sums up Redeveloper James Scheuer of New York City, an apartment investor:

"The in-and-outer must forget the depreciation he claims if he sells within two or three years. He has to cough up the money when he resells, so in effect he is borrowing his depreciation interest-free for two or three years."

From three to seven years the depreciation recapture is fuzzy for investors. "If the owner keeps the property six or seven years, there is very little difference [from previous law]," says Tax Attorney Sylvanus Felix of Oklahoma City. "There would be very little impediment to selling if the property were held seven years."

For the investor holding property beyond seven years, the new rules make virtually no difference. Sums up one investor: "By taking depreciation you have the benefit of using the dollars for a decade interest-free, and that is almost as valuable as having full control of the dollars. It is really borrowing 50¢-dollars interest-free and paying them back in ten years with 25¢-dollars."

Will the new rules dampen the apartment boom? Housing men almost unanimously say no.

"If it had happened two years ago, it would have slowed things down," says Economist Miles Colean of Washington. But in the intervening two years, Colean and others point out, the speculative apartment builder's share of the total market has been shrinking fast. For one thing, the shakeout of syndicators has killed a big source of speculative money.

"The fly-by-night speculators have a tough time in today's market," says Scheuer. "Builders have to figure it will take up to two years to fill a large apartment, and that is unattractive for the in-and-outer."

2. Holding company trap. The holding company trap and its 70% tax that builders had feared (NEWS, Feb.) are now law. Advises Felix: "Make your projections for this year as soon as possible to see if you can be ruled in this category." And Felix points out: if a separate company that you have used to receive dividend, rental or interest income might be classed as a holding company, you can distribute its earnings *even after an* IRS *ruling* rather than pay the tax bite.

Under old law, a corporation avoided the holding company label if its gross income from rents was 50% of all income. The new law keeps this 50% limit —but redefines rent to mean net rent after all expenses instead of gross rent.

3. Multiple corporate snares. The law lays down new limits on multiple corporate setups commonly used by builders.

Separate corporations under 80% common ownership or control can no longer get separate \$25,000 exemptions from the corporate surtax, which the law cuts (ultimately) from 52% to 48%. Such related companies are now allowed only one \$25,000 exemption.

Companies may choose to continue their separate \$25,000 exemptions by paying a 6% surtax on their income. Even this is not foolproof, warns Felix. Merely paying the surtax "does not necessarily let the taxpayer escape," he says. "He must still prove to IRS that the separate corporations have a legitimate business purpose."

4. Lower tax rates. Rates of all companies with earnings under \$25,000 are cut from 30% to 22%. But for some the possibility of a 6% surtax (*above*) may dispel advantages of the cut.

5. Soured stock options. The new law makes stock options less attractive—a blow to many housing companies which have had to offer options to compete for executive talent. The new rules: options must be at the stock price when issued (instead of as low as 85% of price) and must be exercised within five years (instead of ten). Purchasers must hold the stock three years before reselling to get capital gains treatment instead of only the normal six months.

6. Interest on land. Builders can no longer persuade farmers to sell land cheaper in return for interest-free deals which let sellers count the whole price as a capital gain. The new law lets IRS impute an interest rate to all such deals which the seller must report as ordinary income. Likely result: farmers and other landowners will demand higher prices.



If you resell an apartment, here's how the tax bite will rise

The new tax law ends all capital gains treatment for depreciation on a building resold by the owner within one year. The graph shows how the ordinary-income share of depreciation shrinks 1% monthly for each month the building is held

beyond 20 months. The graphs are for both new and existing \$100,000 apartments resold at original cost, both depreciated over 40 years at the maximum rates: 200% of straight line for new units and 150% for existing apartments,

HOUSING MARKET

Three ways the new tax law should boost housing's market

Now that the biggest income tax cut in U.S. history is law, economists and housing market analysts are more certain than ever that the \$7.3 billion to be added to the economy this year will buoy housing.

The big question all along has been how consumers will spend their fatter paychecks (NEWS, Feb.). Many housing men say that housing as a basic part of the economy will benefit from higher business activity. Specifically, they see these gains:

1. Higher take-home pay. President Carey Winston of the Mortgage Bankers Assn. notes, for example, that the take-home pay of people at the \$10,000 income level will be up \$25 a month. He predicts higher take-home pay will encourage apartment renters to move up to better rental quarters or start an upgrading chain reaction in the homebuying market: renters can now move more easily into the used-house market, and this will make it easier for used-house sellers to recover their equity and buy new houses.

2. Tax break for oldsters. The new law encourages homeowners over 62 to sell their homes and move into apartments or smaller, more suitable houses. Until now the elderly, like everyone else, have had to pay a capital gains tax on any profit they made in selling their old homes (unless re-invested in another house within one year). If they had owned their homes for many years, the tax on the paper profit sometimes killed a sale.

The new law exempts the elderly com-

pletely from capital gains tax if 1) the sale price is \$20,000 or less and 2) they have lived in the house for five of the past eight years. If the sale price tops \$20,000 the proportion of the capital gain that \$20,000 bears to the sale price is excluded. For example, if a home originally valued at \$45,000 is sold for \$60,000, \$5,000 (or one-third of the \$15,000 gain) is exempt because \$20,000 is one-third of the \$60,000 sales price.

3. Tax break for job changers. The law gives better tax treatment to persons who move to take new jobs. Anyone whose new job would increase his one-way commute by at least 20 miles can now deduct from his taxable income the transportation costs for his family, meals and lodging en route, and costs of moving household goods. Under the old law only transferred employees got such deductions.

The law does *not* let employees deduct reimbursements from employers for losses in selling their old homes.

NAHB hunts for national registered builder format

Home builders are striving to devise a dramatic new way to give buyers more confidence in the quality of the homes they buy. In the works: a national plan modeled after registered builder programs in Minneapolis, Milwaukee, Oklahoma City, Tulsa, Lexington, Ky. and New Jersey. Builder Barney Cox of San Antonio, chairman of an NAHB committee exploring the feasibility of a national program, sees these difficulties:

• Should a local builder-buyer dispute which cannot be settled by an arbitration committee in the area be appealed to a committee on the state level?

• What do you do with a builder who refuses to abide by the decision of the arbitration committee?

• How will small associations which have no executive officer supervise members?

Cox' committee has decided the program should automatically include all present builder members of NAHB, although present members—like new members should meet some test of financial responsibility, including a credit check. New applicants for the registered builders' program, in addition, should have at least two years of experience as practicing builders and should contribute (in cash or by bond) toward an indemnification fund to protect buyers against non-performance.

Cox says his committee has explored a bonding program but that it is too early to consider costs and bonding amounts. Milwaukee is also considering a bond to give home buyers \$2,000 protection. Cox' committee advocated setting up

Cox' committee advocated setting up local ethics or standards committees to enforce the programs. In Milwaukee, a committee arbitrated 23 cases last year. It has ordered builders to make up to \$2,000 repairs in some cases.

FHA REGULATIONS

Tryout for new plan letting builders offer more models

FHA has started testing—in its Indianapolis and Santa Ana, Calif. offices—a plan to simplify merchant builder sales from model homes.

Heart of the new plan lets FHA approve one basic and four optional models for each lot in a subdivision. The aim is to let builders offer buyers more variety than FHA's present rules, which lock model types to specific lots; extra processing is required if the buyer insists on a model change.

If the new plan works in the test offices —which cover all of Indiana plus Orange, Riverside, and San Bernadino Counties in California—FHA will extend it nationwide.

The plan works like this: the builder picks a basic house plan for each lot in the subdivision as usual, adding up to four alternate models for each lot. All alternate models must appear as basic plans for other lots in the subdivision.

FHA, builder and lender must agree on the alternates during the pre-application

conference. The lots must have similar topography, development cost and valuation. The plan grew out of suggestions by NAHB's mortgage finance committee and NAHB is urging builders in the test areas to make maximum use of the plan.

Tighter appraisal rules hit windfalls in apartment land

FHA is telling its underwriters to add another step to evaluating apartment loans: find out what the site actually cost before setting land value.

The change is an outgrowth of General Accounting Office criticism that some FHA land values exceeded actual cost to sponsors by wide margins (NEWS, Feb.).

FHA Commissioner Philip Brownstein says he disagrees with GAO's stand that actual cost should equal appraised value. But to forestall future criticism, underwriters must now determine actual land cost, going behind straw men deals if necessary. Appraisers now must justify substantial increases over actual land costs.

Simpler rules aim to speed appraising existing homes

FHA is speeding processing time on usedhouse-loan applications by scrapping an appraisal procedure it says has too many time-consuming cost calculations. The faster decisions would aid builders whose sale of a new home hinges on a buyer reselling his existing house.

The old method required appraisers to compute replacement cost of used homes and then add the cost of extras like fireplaces, recreation rooms and second baths. The new method lets appraisers set an overall cost per square foot on the house and then reflect extras with high or low ratings from this norm.

NEWS continued on p. 12

APRIL 1964

URBAN RENEWAL

Myths of renewal: how Alcoa learned them the hard way

When giant Aluminum Company of America began investing in renewal projects four years ago, it did not hope merely to stimulate architectural use of aluminum. The company expected that holding the buildings would bring both short-term tax savings through depreciation and long-term operating profit.

So Alcoa stepped up its investment, bought a group of Webb & Knapp renewal projects and has now poured \$29 million in cash into 18,707 apartments and 562 town houses in seven cities.

So far, Alcoa has found out the hard way that it must unlearn a lot of cliches mouthed by renewal supporters. Executive Vice President Leon E. Hickman aired the story in a remarkable talk to the Chicago conference of the Mortgage Bankers Assn. in mid-February. In sum, he said that despite years of trying, neither cities nor the federal government have learned how to make renewal work and that even the basic financing tool, FHA, is impeding the effort. How he said it:

• "We have unlearned any faith in the seed-money concept of financing. The siren's song is to the effect that FHA in-



ALCOA'S HICKMAN Lessons unlearned by a giant

sures loans for better than 90% of cost of construction, that contractor's fees can somehow be plowed back into the project and that if some financial angel will supply seed money to cover 3%, 4% or 5%, the promoter is off and running."

But construction delays, proximity of slums, long rent-up periods and a host of other unanticipated costs can upset the plans. "We have seen enough to know we have had it."

• "We have unlearned any faith in put-

ting money into a redevelopment project without sharing in development and management. Money and management go together." Together, they make much sense, for combining real estate with the aluminum business "means the cash drain [duping start-up losses] is approximately half what it would be for a developer who had no other business."

• "We never did believe the yarn . . . That we can afford to construct buildings to put aluminum in them." A materials' producer must invest \$100 to make an \$8 sale with only 40e profit. "No thanks."

Hickman says Alcoa has these doubts:

• "Do local communities have the leadership and stamina to complete a project?" Only if both public and private leaders are organized to clean out all blight can renewal succeed, he maintains. "This is not a game for halfway measures and weakly-sponsored programs."

• *How effective is* FHA *financing*? Hickman contends FHA has such "serious limitations" that banks and other lending institutions could finance most renewal without FHA if Congress would raise the limits on loan-to-value-ratios.

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SEGREGATION

Vote kills two anti-bias laws; Rumford row splits California

Voters in Seattle and Tacoma, Wash., have just struck down ordinances against race bias in housing. The ballot reversing Tacoma's own city council was 23,026 to 7,470, or more than 3 to 1. The Seattle margin was 2 to 1—112,448 to 53,453. Civil rights proponents have now lost

all three public votes on housing race bias bans in the U.S.*

Berkeley, Calif., killed a similar ordinance after a bitter fight that brought out 82% of voters last spring (NEWS, May).

Tacoma's ordinance carried a \$250 fine or 30-day jail terms for brokers convicted of bias in sales or rentals. It applied to private sellers, apartment operators, hotels and retirement homes. A neighbor trying to persuade an owner not to sell out to Negroes would be guilty of a misdemeanor (NEWS, Dec.).

Negroes lose fight. Tacoma's council approved the ordinance, 7 to 2, at the behest of rights groups last fall. President

* Thirteen states, 14 cities and the Virgin Islands now have some form of law against race bias in private housing. Gordon C. Fors and the Tacoma Board of Realtors gathered 16,000 signatures, nearly four times the number necessary, to force a referendum. When Regional Vice President Jack Tanner of the National Association for the Advancement of Colored People lost a court fight to bar the petitions, he urged Negroes to boycott the primary. Tacoma has 7,800 Negroes in a population of 148,000—5%.

In Seattle, President Harold W. Cooper and the Board of Realtors led a month's campaign against an anti-bias ordinance demanded by the city's Commission on Human Rights. It not only forbade owners, brokers and salesmen to discriminate in sales but made it illegal for financial institutions to deny assistance on the basis of race. Conviction meant a \$500 fine. The city council dropped the hot potato by ordering a vote of Seattle's 557,087 population (8.4% non-white with 26,901 Negroes and 19,627 others).

Opponents of housing integration are now pressing a wide campaign for such referendums. Detroit homeowners got petitions for a ballot on a code to let a seller choose his buyer, but rights groups have so far balked it in court. In Illinois, a Property Owners Coordinating Committee seeks 510,000 signatures to force the whole question of open-housing laws onto the ballot in November (NEWS, Nov.).

National issue. California's explosive fight over a constitutional initiative to repeal the Rumford Fair Housing Act and bar all similar legislation has now created political complications on a national scale. The law bans bias in sale of publicly aided homes and in all apartments with three or more units. The initiative petition has qualified with 633,206* valid signatures, well over the 468,029 required, and the key question is whether Gov. Edmund G. Brown will put it on the June primary or November general ballot.

The repeal drive is led by the California Real Estate and Apartment Owners Assns. and by numerous builders. Brown has sounded off against it with regular frequency and ready epithet—"unconstitucontinued on p. 14

* Largest number of signatures ever certified for an initiative in California.

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CANADA

tional," "a bad day for California" and "they know not what they do"—but he has ducked the question of a ballot date.

Governor wants big turnout. Brown's Democratic machine is mindful of the tremendous Democratic turnout provoked by a right-to-work proposal in 1958. An aide says, "We figure the Rumford initiative will help President Johnson in the same way." No Democratic Presidential candidate has carried California since 1948, and Brown dreams of changing all that.

"The initiative will go on the general election ballot unless I call a special election," he says. "The only think I want to be sure of is that it's on the ballot when the greatest number of voters will be able to pass judgment."

But a Los Angeles *Times* poll has found voters divided almost evenly on the repeal. Democrats are beginning to question Brown's strategy.

Those 40 electoral votes. Rep. Donald Brooks Cameron has warned the White House that President Johnson can lose California's 40 electoral votes if the Rumford free-for-all spills over into the fall election. He wants the referendum put on the June ballot even at the risk of defeat in a light turnout.

Builders fear spring letdown

After bounding through the largest winter building boom ever, thanks to the dominion government's \$500 winter incentive bonus (NEWS, Jan.), builders fear the bubble will burst this spring.

Statistics are bearing out their fears: January housing starts plunged over 50% from December, from 7,994 to 3,980. But other events worry builders even more.

Less mortgage money. Private mortgage money from about 60 life insurance and trust companies for National Housing Act loans seems to be drying up. Mortgage loan approvals fell 63% in January. Reason: conventional mortgage rates yield between 7% and 7¹/₄%, higher than the politically imposed 6¹/₄% ceiling for NHAS.

The money drought began during the winter program. Private loan approvals for November and December trailed year-earlier levels by 43%. And with the end of the winter building plan, Central Mortgage & Housing Corp. ended direct builder loans, too.

Doubled sales tax. The federal sales tax on construction materials jumps from 4%to 8% April 1, and builders say this will hike prices on an average NHA home \$500. Conservative forces lost a motion in Parliament to overturn the Liberal government on the sales tax.

Builders are pushing for some relief in talks with Finance Minister Walter Gordon. Builders want the NHA rate freed to seek its own level. Failing that, they want NHA rates changed often enough to remain constantly attractive to private lenders. The government goes through the motions of reviewing the rate about every six months.

Builders also want the government to keep a close watch on spring housing performance. They argue that if the winter housing plan—which produced 32,000 housing starts in the last quarter of 1963 —slows spring building, it should not be repeated to boost winter employment.

Gordon has promised (without being specific) to ask Parliament for some changes. Insiders say Gordon will propose opening NHA loans to existing homes for the first time. Builders have sought this change for four years in hopes it will attract many owners into buying better homes. But Gordon may restrict the used house loans to rundown areas, thereby limiting effectiveness of the plan.



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MATERIALS & PRICES

Commerce Dept. bows to pressure from green lumbermen

Heavy political pressure from green lumber producers and Rep. James Roosevelt, (D., Calif.) has persuaded the Commerce Dept. to change its ground rules for putting the controversial dry softwood lumber standards to a vote of lumber users.

In keeping with the new political way Commerce handles technical standards, the changes were revealed by Rep. Roosevelt at a New York City press gathering. Roosevelt said he had talked Commerce into making them in huddles with Assistant Secretary Herbert Holloman and General Counsel Lawrence Jones.

• The list of 20,000 "acceptors" to be polled for comment on the standards already enlarged from 3,000 to 20,000 for this ballot will be reopened so "anyone with a legitimate interest can be put on the list." Roosevelt estimates perhaps 5,000 to 10,000 new names might be added.

• After Commerce has taken time to analyze the acceptors' comments industryby-industry, no action will be taken until after Roosevelt's House subcommittee has made time to hold public hearings on the economic impact of the standards. "They will be largely to give those who say the standards are not in the public interest a chance to state their reasons, but others can come forward too," says Roosevelt.

• The department will restudy the constitution of ALSC and perhaps ask court action to have the whole set up changed.

The proposal causing all the stir was prepared by the American Lumber Standards Committee last August after two years of study. It asks that lumber dimensions be related to moisture content, so lumber surfaced after drying will be the same size the lumber surfaced green will shrink to naturally. Dry 2x4s would be $1\frac{1}{2}x3\frac{5}{8}$ thick under the new standard instead of the present $1\frac{5}{8}$ "- $3\frac{5}{8}$; green would be $1\frac{17}{2}a-3\frac{11}{16}$.

Last month the ALSC removed Commerce's last legal objections to the proposal by adding a tabular appendix showing equivalent green sizes for each species.

Pressure on Roosevelt. Meantime, green producers buttonholed Roosevelt for help. Roosevelt flew off to listen to objectors in two meetings, one in San Francisco (open to the press) and another in Los Angeles (closed). Despite the two years ALSC spent arguing out the proposed changes, most of the objectors claimed their voice had not been heard by the ALSC and most of them betrayed almost complete ignorance of what the change really means to the housing industry. All most of them seemed to know was that green lumber would lose the advantage it enjoys under the present standard. Typical of the opposition was Lumberman John Prebble: "I run a mill in Eureka. We have talked to some of our customers and the new proposals for dry or green sizes would not be compatible with our industry. We would be eliminated with



"A thoroughly democatic process"

these new sizes from our export business. Even the large mills don't know the effect the new sizes would have. And the California Redwood Assn. is voting for it. It's hard for us small operators to find a voice to speak through."

Port authorities in Los Angeles, Crescent City and Redwood complained their cargo would drop off because most green lumber goes by ship while dry lumber travels by rail.

Back in Washington, Roosevelt took the House floor to call for a public hearing before his committee of economic issues raised. He argued (incorrectly) that "as a matter of pragmatic economic observation" the new standard would make the use of dry lumber compulsory.

Why interfere? In a lengthy memo to justify the intrusion of a political committee into the technical standard debate, Roosevelt maintained ALSC is not the right agency to hear objections "since many of the charges pertain to conduct" of ALSC.

His conclusion: "The controversy may be best resolved by a thorough examination of both the procedural and substantive questions involved."

How soon Roosevelt's committee will hold its hearing is unknown. He vows speed. Best bet is after elections. One green lumberman told him: "The big outfits have the money, but we have the votes," and Roosevelt's brother, Commerce Undersecretary Franklin D. Roosevelt Jr., let slip at a lunch that the issue would be shelved until after the election (see p. 132).

Performance standards boosted at ASA convention

Speakers at the American Standards Assn. 15th national conference on standards last month concurred that performance standards for 1- and 2-family houses are one of housing's greatest needs today.

President James L. Pease Jr. of Home Manufacturers Assn., Research Chief John S. Parkinson of Johns-Manville, Research Director Ralph Johnson of NAHB and Managing Editor Gurney Breckenfeld of HOUSE & HOME all spelled out that need. Consensus was that only the federal government has enough funds to do the research necessary to give industry and consumers the facts on which to base minimum performance standards.

Not even the three top men of the proprietary model code groups ventured to disagree. "We wish to consider statements made here this morning and at sometime in the future give you our views on the matter," said Managing Director Paul Baseler of Building Officials Conference of America, speaking also for Managing Director T. H. Carter of International Conference of Building Officials, and Executive Director Hubert Caraway, Southern Building Code Conference.

HMA's Pease called for a three-step program to create performance standards and make them meaningful:

1. The federal government should sponsor the huge volume of research needed to arrive at standards because no one else can afford it. This research would be directed and correlated by an industry-government-public commission.

2. Working with this basic research, the housing industry, through its trade associations, would draw up desirable and minimum performance standards for each part of a dwelling. Industry would also create adequate certifying agencies to pass on new systems and products.

3. With this workable standards program, industry and the public would push for its adoption by each political entity now administering its own code.

Johns-Manville's Parkinson pointed out that a good performance standard will approve an infinite variety of materials if they fall within the limits of the tests specified to be used with the standard. "At present, our lack of standards gives many systems a built-in protection against technological obsolescence," observed Parkinson. "Because we have no standards to back up a new product or systems, most innovations must now conform in general with existing practice."

NAHB'S Johnson urged that ASA be given the job of promulgating the standards once the technical work is done. Said ASA'S Deputy Managing Director Cyril Ainsworth: "ASA can do this and will be happy to when there is a community of interest — government-industry-consumer that wants such standards promulgated. We have not been able to do the job in the past, or work on it, because there was not a community of interest."

How North Carolina has partially solved the foot-dragging problem of local codes was told by Curtis R. Kennedy of Greensboro. Said he: "We've had for six years a state building code council that seats builders, manufactures, architects, building officials and government, which approves all local codes. No code is legal unless approved by the council, and we have no technical non-uniformity in our state. If the council approves a system, it can be used in any town."



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LABOR

A federal boost for featherbedding

The National Labor Relations Board has just opened the door to union-enforced featherbedding in construction. It ruled a building union can fine members for violating a union production quota.

NLRB, in this and a similar January finding in an auto workers case, ducked the basic issue of whether the quotas are legal, but its acceptance of the principle of the fines seems to condone the quotas the fines enforce.

The unions' victory is less than total. The board told unions they cannot divert dues to pay the fines and thereby deprive a member of his job for nonpayment of dues in union shops where union membership is required. This deprives unions of their most effective way to enforce quotas.

The Associated Home Builders of the Greater East Bay, had sought NLRB aid in ending a quota set by Shinglers Local 478. The quota restricted shinglers to ten squares of composition shingles or six squares of wooden shingles daily, enough to boost house prices \$50 to \$200 (NEWS, Aug. '62) in the Oakland, Calif. area.

The builders sought a clear finding on the legality of quotas, an issue argued by labor lawyers ever since the Taft-Hartley law left it in legal limbo.

The law lets unions prescribe membership rules, but says that members cannot be refused employment for losing union membership for any reason other than the failure to pay dues and initiation fees.

NAHB warns that the NLRB decision*, unless upset by the courts, "may stimulate union efforts to restrict worker productivity or the use of new materials or construction techniques found objectionable

* Case 20-CB-909.

by the union through the simple device of a working rule in their bylaws." It urges builders to continue to treat quotas as an unfair labor practice until a court rules.

Senate postpones action on fringe benefit wage bill

The Senate labor committee has put aside a House-passed bill to add locally prevailing fringe benefits to federal wage minima under the Davis-Bacon Act. It would boost costs for builders of FHA multi-family projects over 11 units in Secs. 207, 213, 220, 221, 231 and military housing.

The measure is expected to pass the Senate easily, but it must now wait its turn on the Senate floor until the civil rights dispute is resolved. The House cleared it by a landslide vote of 357 to 50 in late January in a double victory for crafts unions. They not only got the bill they wanted but also defeated amendments backed by the building industry to allow judicial review of wage decisions.

Builders win on precut doors but face import dispute

Philadelphia carpenters violated the Taft-Hartley Act by refusing to install precut doors on three jobs, a National Labor Relations Board examiner has just ruled.

The examiner found that the project owner's specifications required the doors, thereby depriving the employing contractor of control over their use.* Only when specs do not require precuts can carpenters invoke work contract clauses barring them, he held. His reasoning followed that of the full board in ordering carpenters to



PICKETS PROTEST LOW-PRICED IMPORTS

stop boycotting and threatening strikes to exclude prefab material, including doors (News, Oct.).

The door manufacturer in the Philadelphia case accused the union of boycotting his product and featherbedding. It takes eight minutes to an hour to cut a door on a job site as the union demands, but doors precut for hinges and hardware go up in a few minutes.

California carpenters have begun picketing the Japanese and Philippine consulates in San Francisco (*photo above*) to bar imported prefab door frames that are \$3 cheaper. Union President Chester Bartalini says the Bay area uses a million frames a year. About 1,500 Asian imports arrived three months ago and a trickle of deliveries continues.

"We're trying to stop it before it becomes a flood," says a union official.

"Some of the largest builders in the country use them," Bartalini complains.

*Cases 4CE9 and 4CC258.

ZONING

New Jersey court upsets confiscatory open space zoning

Builders and developers hobbled by zoning boards can take heart from a sand and gravel distributor who has just overturned restrictive zoning in New Jersey.

His case* is instructive in two ways:

• It clearly exposes the illegality of regulations that usurp private property by stripping it of its commercial value.

• It strikes a blow at local governments which use zoning to keep private land open for parks or other public benefit.

For developers of bypassed swampy lands, the action of the New Jersey Supreme Court in reversing a trial court provides an important precedent.

The details: Morris County Land Im-

provement Co. bought 66 acres of spongy meadow in 1952 in a corner of Parsippany-Troy Hills Township, N. J. In 1954, the township rezoned the land barring, in effect, any use but the growing of fish and aquatic plants.

Despite this, the company began filling in the bog. But the township, urged on by a conservationist group, stepped in and halted the land filling. In 1962, the township creating a special new zoning class, "meadows development," that all but turned the property into a sanctuary.

The company complained that its land was taken without compensation. The New Jersey Supreme Court agreed, reaching to 1922 for support from U. S. Supreme Court Justice Oliver Wendell Holmes, who said, "The general rule at least, is that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."[†]

The meadow, the Jersey court ruled, was a valuable natural habitat and functioned as a basin for flood control. But "both public uses are necessarily so allencompassing as practically to prevent exercise by a private owner of any worthwhile rights or benefits in the land." So, advised the court, "acquisition rather than regulation is required."

It recommended laws empowering the state and its subdivisions to condemn property for flood control or recreation, and cited the open-space land grants of the Urban Renewal Administration as a financial aid.

[†]Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 67 L. ed. 322, 326, 43 S. Ct. 158

^{*}Morris County Land Improvement v. The Township of Parsippany-Troy Hills and the Zoning Board of Adjustment of the Township of Parsippany-Troy Hills



MAJOR'S AUCTION of 4,062 acres in six tracts in West Florida attracted a crowd of 100 but only six acres were sold.

LAND

Florida gets a foretaste of trouble in land sale fiasco

A land auction in Florida, ballyhooed nationally as the largest in the country since 1923, has just turned into a sickening flop.

Major Realty Co., unhappy holder of 40,000 Florida acres, tried to unload 4,062 acres in February. It sold only 6.3. The fiasco describes better than anything else the state of the Florida land market.

Major's offering was a grab-bag of 27 parcels in six tracts zoned for residential, industrial, commercial and agricultural use (*see map*). The land carried a total price tag of \$5.4 million, which, according to Auctioneer Stephen A. McDonald, made it the most valuable auction bundle since the New York's Sheepshead Bay Race Track went for more than \$10 million 40 years ago.

But the auction attracted more worried observers than bidders. Four of the six tracts drew no bids at all. The only sale was for 6.3 acres of Tampa industrial land for \$60,000 cash. Buyer: Vero Lakes Investment Corp.

Major had to sell land to meet a \$160,000 semi-annual interest payment due Mar. 1 (counting a 30-day grace period) on its \$5.3 million in outstanding

6% bonds. It was either this or ask the bondholders to defer the interest payments or—as Major finally did—resort for the third time to high-cost loans secured by mortgages.

Major established no upset prices on any of the land it put on the block. But underlying mortgages created a floor for bids. Most bids were only a few dollars over these mortgages. The only sale was on unencumbered property.

Four tracts zoned for one- and twofamily homes (assessed for taxes at \$38,-700) north of Sun City drew one bid between them—a \$135,000 offer on 940 acres, with a mile of frontage on U.S. Rt. 301. This was just \$14,000 above existing mortgages. Major had been asking \$700 an acre for the land. The bid amounted to \$144 and was rejected.

A 649-acre tract—"last large tract adjoining the city of Sarasota, suited for housing and industry"—was appraised for \$1.3 million two years ago, according to Auctioneer McDonald. Major had been asking \$3,200 an acre. The land carried a \$737,487 mortgage and drew a rejected bid for \$750,000—or \$1,155 an acre. Mourns Major President Theodore U. Delson: the bidding was "ridiculously low." It gave Major "an indication of what could happen in case of forced liquidation." With surprising candor, Delson confided that, if the auction was any guide, a liquidation could wipe out much of the interest of Major's stockholders.

Major's plight, may well reflect the outlook for Florida land promoters generally. Major was pieced together in 1960 under the leadership of George Friedland, chairman and president of Food Fair Stores, large Eastern super market chain. Friedland tediously assembled \$25 million in land from more than 800 Florida owners.

For a while Major did well. Its stock price rose above \$5. But then came a drought in sales. Major, like other land developers, sank into a cash bind. Resorting to debt boosted expenses. Friedland left, and Major brought in Board Member Delson as president to "keep the company alive." Delson cut overhead, discontinued some unprofitable operations, and tried to shave his financial burden by selling off land. Meanwhile the stock price has dropped to $25 \notin$ bid.

Land taxation, assessment flare into a big new issue

At opposite ends of the nation, local and state political rows are developing over taxation of land and its assessment.

The California Democratic Council, which calls itself the largest grassroots political organization in the nation, has just endorsed a proposed state constitutional amendment to let cities put "a higher assessment on non-agricultural land value and a lower assessment on improvements on the land."

"The differential," says the council, "will encourage good construction and repair and will make long-term raw land holding for speculation, which skyrockets housing costs, unprofitable." A constitutional amendment opening the door to such site-value taxation has been kept off the ballot by California's legislature for two years in a row.

A committee headed by Builder Edward Eichler of Palo Alto drafted the plank. It was adopted without comment. Two statewide groups, the Statewide Homeowners Assn. and Incentive Taxation Committee, plan to ask the United Republicans of California to take similar action and to take their pleas before the platform committees of both national political conventions this summer.

Near Los Angeles, Supervisor Alton E. Allen of Orange County (pop. 703,925) is pressing for increased assessments on raw land. He claims homes are valued at 22% to 28% of value for tax purposes while raw land is assessed at only 5%. In suburban Nassau County on Long Island (pop. 1,300,171), County Executive Eugene H. Nickerson, a Democrat, is meeting bitter opposition to raising assessments on vacant land. Says Nickerson:

"Today homeowners are assessed at one-third of the value while vacant land is assessed as little as one-hundredth of the market value. Since 1939 the value of improved land has gone up three times while vacant land has increased 100 times."

To eliminate this "very serious and discriminatory tax burden" on homeowners, Nickerson began upgrading the value of 49,000 parcels of vacant land to one-third of market value. Assessments jumped \$3.9 million on the first 1,898 parcels.



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Price boost to 99 jars California; are old bond-mortgage spreads gone?

The nation's second largest mortgage servicer* has jolted the California market by boosting its price to 99 for FHA 30-year immediates and futures.

Explains Vice President Frank Ely of Western Mortgage, with a \$960-million portfolio: "Our over-the-counter spot deal price is 99. There is no particular pressure to get money out. We just decided to get back into the tract business with both feet. I made our last tract deal in southern California in 1960. We have been walled out for four years, and we can't get back in without offering a good price." Adds Western's San Francisco vice president, Joseph Walton:

"We're taking them at 99. We want volume."

That's half a point higher than most mortgage companies are offering builders or getting from Eastern investors on immediates and up to a point higher on futures. Western services for Metropolitan Life, and a price of 99 would shave the FHA yield close to 5% (with Met's standard 3%% servicing) for an insurance giant that has \$6½ billion in mortgages and will put \$1.1 billion into mortgages this year.

"It isn't mortgage rates that will change, but the yield spread"

Vice President Sidney Kaye of Advance Mortgage has that warning to the industry. Today's typical FHA mortgage on a one-family house yields 5.08% after servicing, a bleak 91 basis points (0.9%) above the 4.11-4.22% yield of government bonds of 20-year-plus maturity. That is the narrowest spread since the early 1930s—almost 35 points below the 125 that mortgage traditionalists insist is normal. Hence the currently popular theory is that such a phenomenon heralds a rise in mortgage yields and larger discounts on FHA and VA loans for builders.

Kaye argues precisely the opposite:

"As mortgage bankers, we have never been able to understand why insured mortgages should be expected to yield some 100 points more than bonds after allowing for the extra expense of mortgage investment, and apparently many investors now share our mystification."

Mortgage interest rates must always exceed bond rates by about 70 points because of such extra expense as local servicing and home office expense. Yet Kaye reminds that, even deducting the added cost, true mortgage yields average 110 basis points higher than bond yields for only 30 years before the spread began narrowing in 1963. Nor is today's narrow spread historic, for spreads averaged 20 points in the 1920s and true mortgage yields were below bond yields in 1920 and 1921.

But Robert Morgan of Boston says investors in his Massachusetts Purchasing Group of savings banks are holding firm for higher yields. The group posted ¹/₂-point higher discounts two months ago but now reports strong builder resistance to a price of 971/₂ for FHA Sec. 203b loans. "Our investors won't go to 98, even though it may be closer the market," insists Morgan. "They will go to government bonds first."

Elsewhere the outlook is for steady interest rates and discounts

HOUSE & HOME's monthly survey of 18 key cities finds mortgage men almost unanimous in forecasting level yields and discounts.

"Completely stabilized," summarizes Assistant Vice President William B. Curran of the Franklin Capital Corp., in Newark, N.J. "And prices should remain stable for the rest of 1964."

Price pressure by savings banks is producing an upturn FNMA offerings

Federal National Mortgage Assn. began to boost its mortgage buying last November after five months of negligible purchases. The trend is continuing into the new year. Offerings, authorizations and purchases continue at low levels in comparison with the most recent peak in 1961, but they were higher in January than for any month since early 1963. Mortgage men are wondering why the upturn at a time when the FHA-VA share of housing is dwindling. One mortgage banker says:

"Eastern savings banks have persisted in demanding a 5.12% yield on FHA merchandise. They have hammered the price to 97, figuring servicing at $\frac{1}{2}$ point on a 30-year loan. The net effective price from FNMA on the same loans is 971/4, and the quarter point is apparently looking better and better to more sellers."

High-ratio conventional loans by banks? Not now

Don't look for any immediate moves by commercial banks to make 90% conventional loans, backstopped by private mortgage insurance, despite a federal ruling permitting it.

Comptroller of the Currency James J. Saxon ruled that federally chartered national banks need not be bound by the 20-year, 75% limits on mortgage loans set by law *if* the loans are covered by "adequate" private insurance (NEWS, Mar.).

How much insurance is "adequate?" Saxon has declined to amplify the point. Most bankers interpret this to mean that the insurance must cover a substantial amount of the loan, and some say it should cover 100%.

The Mortgage Guaranty Insurance Corp., the nation's largest private mortgage insurer, insures 100% of a mortgage loan up to 90% of appraised value, but its policies contain a 20% escape clause. Hence upon foreclosure MGIC can 1) pay 100% of a claim amounting to all outstanding principal and interest plus foreclosure and management costs and take title to the house, or 2) pay 20% and leave title with the lender. Other private mortgage insurers use similar provisions.

Says Vice President James P. Furniss of Citizens & Southern National Bank in Atlanta (which asked Saxon for the original ruling):

"Private insurance currently available is not adequate to meet the ruling."

S&Ls and banks push hard for wider lending powers

The savings and loan industry has just won House approval of a bill extending the investment powers of the 1,968 federal s&Ls to mobile homes.

As part of a broad expansion of lending, the bill would also let s&Ls buy tax-exempt municipal and state securities and boost home-improvement loan limits from \$3,500 to \$5,000. s&Ls could put 20% of assets (vs. 15% now) into home improvements and could act as public depositories.

The Senate banking committee has the measure, and Chairman A. Willis Robertson (D., Va.) predicts passage but doubts passage of a companion bill to raise the insurance ceiling of the Federal Savings and Loan Insurance Corp. and the Federal Deposit Insurance Corp. from \$10,000 to \$20,000. The FDIC insures bank accounts, and the FSLIC underwrites accounts in 4,419 s&Ls. The Federal Reserve Board fears this could encourage risky lending practices.

Bankers back bigger loans. The American Bankers Assn. is pressing for passage of a bill to let commercial banks get into hotter competition with s&Ls on home mortgages. The bill would let banks make home loans up to 80% of appraised value



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The bankers told the Senate committee: "Since a significant function which commercial banks perform in the housing field consists of loan origination for sale to other mortgage holders, they should have the more flexible powers to provide loan terms which would more nearly match the requirements of the prospective borrower and the standards established by the ultimate holders of the mortgage loan."

Unions to pool \$100 million in mortgage investing trust

Leaders of the AFL-CIO are organizing a mortgage investment trust so their affiliates and labor-management and retirement funds can pool money to buy mortgages.

They are also establishing an Auxiliary Housing Corp., with \$1 million capital, to develop low-income housing.

President George Meany says the trust will begin operation almost at once. It will buy only FHA or VA mortgages initially but may also lend on construction. In choosing this investment path, the unions are emulating two successful real estate trusts-First Mortgage Investors and Continental Mortgage Investors of Boston-that have poured \$94 million into mortgages in the past two years (NEWS, Mar.).

Leaders hope to start with \$100 million and go to perhaps \$500 million. The trust can top union reserves of \$10 billion, but no effort will be made to bring that much into mortgaging.

Goal: more jobs. The executive council says the aim is to create socially desirable housing projects and to increase employment in construction trades and allied industries that provide material, furnishings and appliances.

Director Alexander Bookstaber of the AFL-CIO investment department notes that trust participants can count on higher yields from mortgages than from government bonds. The current average FHA Sec. 203b 30-year mortgage yields 5.08% vs. 4.11% to 4.22% for over-20-year U.S. bonds. Several unions have constitutions limiting investment to governments, but federation leaders hope to ease the rules.

Big unions in mortgaging. Organized labor's mortgage investment already exceeds \$500 million, but it is confined principally to the giant unions. The Ladies Garment Workers and the Electrical Workers have \$300 million jointly in federally backed loans.

Because the open-end trust will permit fund pooling for the benefit of each participant, unions with small amounts to invest will be able to move into mortgaging.

Some idea of the type of projects the unions might back comes in Action-Housing's pioneering East Hills Park in Pittsburg (H&H, Nov. '62). Three construction union pension funds are putting up \$1.3 million for the project-and slicing 1/2 % interest from the normal 51/4 % FHA rate.

MORT	GAGE	MARKET	OUOTA	TIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending March 6, 1964

	Conver					FHA 220	FHA 203 ^b
City	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Banks, Ins Cos. &	+ fees Savings banks, S & Ls	Firm Commitment	Firm Commitment 35 years	Min. Down 35 year Immed
Atlanta	1 51/2-6	53/4-61/4	6+1	6+1	a	a	971/2-98
Boston local	51/4	51/4 ⁿ	51/4-53/4	51/4-53/4	a	a	a
out-of-st.	-		-	-	a	a	961/2-97
Chicago	51-51/2	51/4-6	51/2-53/4+1-11/2	53/4-6+1-2	99-par	99-par	97-98
Cleveland	51/2 v	51/2-6	6+1	6+1	99-par	99-parb	971/2-981/2
Dallas	51/2-53/4	61-61/4	61/2-6+1	61/2-6+1	99-991/2	a	98-991/2P
Denver	51/2-6	51/2-61/2	6+11/2-2	6+11/2-2	99	a	a
Detroit	51/4-51/2	51/4-51/2	6+0	6+0	991/2-par	991/2-par	971/2-98
Honolulu	53/4-61/2	6-7	6+1-2	6+1-2	a	a	97
Houston	51/2-6	51/2-61/4	6+1	6+1	98-99	98 ^{bd}	98
Los Angeles	51/2-6	53/4 ^b -6.6	6+11/2	6-6.6+11/2-21/2	991/2	991/2	98
Miami	51/2-53/4	53/4-6	53/4-6+0-1	53/4-6+0-1	a	a	97
Newark	51/2-53/4	51/2-6	6+1	6+1	99-par	99-991/2	981/2 ^b
New York	51/2-6	51/2-6r	53/4-6	53/4-6 ⁸	993/4-par	par	par
Okla. City	51/2-6b	53/4-61/2	6+1-2 ^h	6 + 1-2	a	a	971/2-981/2
Philadelphia	5-53/4	51/4-6	51/2 + 1	$5^{3/4} + 1$	par	par	99
San Fran.	51/2-6h	53/4-66.6	53/4-6+1-11/2	6-6.6+11/2-21/2	99-991/2	991/4-993/4	981/2
St. Louis	51/4-6	51/2-61/4	51/2-61/2+1-2	51/2-61/2+1-2	a	a	a
Wash. D.C.	51/2-53/4	51/2-53/4	53/4+1	6+1	99	par	99
	FHA 51/4s	(Sec. 2	03) (b)		VA 5	(***) - ()	onstruction

		1	New Constru	uction Only	1	Existing*		(Only
City	FNMA Scdry Mkt##	Minimum D 30 year Immed	Fut	10% or mo 30 year Immed	Fut	Min Down 25 year Immed	FNMA Scdry Mkt*v	No down 30 year Immed	Fut
Atlanta	971/4	98-981/2	971/2-981/2	981/2b	985	971/2-981/2	971/4	971/2-981/2	971/2-981/2
Boston local	981/4	par-101	par-101	par-101	par-101	par-101	981/4	par-101	par-101
out-of-st.		97-971/2	971/2	a	a	97-971/2		97-971/2	971/2
Chicago	971/4	981/2-991/2	971/2-99	98-991/2	98-991/2	99-100	971/4	98-99	971/2-99
Cleveland	971/4	981/2-99	98-981/2	99-991/2	981/2-99	98-981/2	971/4	97-981/2	971/2 ^b
Dallas	971/4	971/2-981/2	97-98	981/2-99	981/2-99	971/2-981/2	971/4	971/2-981/2	97-98
Denver	963/4	98-99	971/2-981/2	98-99	97-99	98-99	963/4	971/2-99	971/2-981/2
Detroit	963/4	981/2	a	99-991/2	a	981/2	963/4	981/2	a
Honolulu	963/4	97-971/2	961/2-97	971/2-98	97-971/2	97-971/2	963/4	971/2	97
Houston	971/4	971/2-99	971/2-99	99	a	971/2-99	971/4	971/2-98	971/2-981/2b
Los Angeles	963/4	98	971/2	98bc	981/2	981/2	963/4	98	971/2
Miami	971/4	97-971/2	a	98"	a	97	971/4	97-971/2	a
Newark	973/4	99-par	99	par	99	par	973/4	99	99
New York	981/4	par	par	par	par	par	981/4	par	par
Okla. City	963/4	971/2-99	971/2-99	98-99	a	97-99	963/4	971/2-99	97-981/2 ^h
Philadelphia	973/4	par	par	par	par	991/2	971/4	991/2	991/2 ^b
San Fran.	963/4	981/2-991	98-99n	99	981/2	98-981/2k	963/4	981/2-99 ⁿ	98-99"
St. Louis	971/4	971/2-99	971/2-99	98-99	98-99	97-99	971/4	95-99	95-99
Wash. D.C.	973/4	99	99	99	99	99	973/4	99	99

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

*3% down of first \$15,000; 10% of next \$5,000; 25% o Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert M. Morgan, pres., Boston Five Cents Savings Bank; Chicago, Robert Pease, pres., Draper & Kramer Inc.; Cleveland, David O'Neill, vice pres., Jay F. Zook Inc.; Dallas, Aubrey M. Costa, pres., Southern Trust & Mortgage Co.; Denver, Allen Bradley, asst. vice pres., Mortgage In-Mortgage Corp.; Honolulu, Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, vice pres., J. Bettes Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell, Co.; Miami, Lon Worth Crow, Jr., pres., Lon Worth Co.; Newark, William W. Curran, Franklin Capital Corp.; New York, John Halperin, pres., J. Halperin & Co.; Oklahoma City, M. F. Haight, first vice pres., American Mortgage & Investment Co.; Philadelphia, Robert S. Irving, vice pres., First Pennsylvania Banking & Trust Co., St. Louis, Sidney L. Aubrey, vice pres., Mercantile Mortgage Co.; San Francisco, Frank W. Cortright, sr. vice pres., Bankers Mortgage Co. of California; Washington, D.C., Hec-tor Hollister, exec. vice pres. Frederick W. Berens Inc.

Footnotes: a—no activity. b—limited activity. c—for local portfolios. d—on spot basis. f—98 for loans over \$20,000. h—limited 6%, j—some 5½ and 5¼ available. k—for 25 or 30 years. I—in isolated circumstances on choice loans. m—no fee if permanent loans included. n—higher price offered by correspondent for one insurance company. p—l½ point differential has generally disappeared. r—depending on % of loans. s—no fees to 1%. v—limited 5¼, w—interest charged to borrower. x—FNMA pays ½ point more for loans with 10% or more down. y—plus 1% stock purchase figured at sale for 75c on the \$1. z—on houses not over 30 years old of average quality in a good neighborhood.

Immediate covers loans for delivery up to 3 months, future covers loans for delivery in 3 to 12 months.

· Quotations refer to prices in metropolitan areas, discounts may run slightly higher in surrounding towns or rural zones.

Quotations refer to houses of typical average local quality with respect to design, location and construction.

NEW YORK WHOLESALE MORTGAGE MARKET

EHA VA 51/45

Immediates: 97-971/2 Futures: 97-971/2

Note: prices are net to originating mortgage broker (not nec-essarily net to builder) and usually include concessions made by servicing agencies. Majority of loans being sold today by servici are spots.

NET SAVINGS DEPOSIT CHANGES

(in millions of dollars)

	Jan. '64	% change from Jan. '63	Year to date	% change from 1963
Mut. sav. banks*	430	89	430	89
&Lsb	405	(-59)	405	(-59)
Commercial Bankse	2,700	29	2,700	29

FHA,	VA	51/4	spot	loans	(on	homes	of	varying	age
				a	nd c	onditio	n)		

Immediates: 97-971/2

Prices cover out-of-state loans, reported the week ending Mar 6 by Thomas P. Coogan, president, Housing Securities Inc.

	November	December	January
New homes	5.82	5.80	5.83
Existing homes	5.97	5.98	5.98
(interest charged by var	ious lender	s, new hom	es)
S&Ls	5.93	5.91	5.92
Life Ins. Cos.	5.49	5.52	5.53
Mortgage Companies		5.75	5.78
Commercial Banks		5.62	5.67
Mut. Sav. Banks	5,55	5.53	5.61

California's S&L cliffhanger

If price inflation has stopped in the nation's No. 1 housing market, is California's giant S&L industry vulnerable to serious trouble? One grand jury fears so.

"Price inflation in residential housing has, for the present, come to an end."

This sobering intelligence has just been relayed to an already troubled s&L industry by Commissioner Frederick E. Balderston of California's savings and loan division.

His caveat has significance for housing men everywhere, for since World War II California has ridden the nation's biggest building boom. Last year 18.7% of the country's new homes and apartments were started in the Golden State.

Balderston's words carry ominous warning for the industry because so many of the s&Ls' most extravagant appraising and lending errors up to now have been converted into dazzling profits by inflation.

No more free rides. Now the escalator has stopped.

"This means that the quality of loans will not be improved by future increases in the value of the underlying property security," Balderston cautions, "and that the lender must exercise due caution concerning the value of loan security at the time when he makes his lending decision."



CALIFORNIA'S BALDERSTON "Lenders must exercise due caution"

Some evidence is already apparent. In Sacramento, 789 new houses, nearly half the 1,594 reported unsold at the last inventory in June, had been on the market a year or more. Over 5,000 of the San Francisco Bay area's 25,635 new units were listed as unsold, 20% of current production.

In Los Angeles the ratio of population increase per new dwelling unit authorized has tumbled from 2.52 in 1960 to 1.73 in 1963 for Los Angeles County—30%.

"In 1963, homebuilding was at the highest level in relation to population growth for any year since 1950, when the shortage of housing growing out of the depression and World War II was in the final stages of correction," warns Vice President Conrad Jamison of Security First National Bank, Los Angeles.

The big risk. Balderston's statement comes amid a hue and cry over charges of overlending among California s&Ls. To such accusations, now supported by jury indictments, s&L leaders have replied with metronomic regularity: improprieties are

the work of a small number of small s&Ls. But in the context of s&L troubles in Maryland in 1961 and Illinois last year, the excuse misses the point. The Federal s&L Insurance Corp. holds only \$1.13 of assets for each \$100 of exposure. It has had to put in \$63 million of its \$945 million reserves (with cash payouts of \$8 million) to clear up the Illinois debacle (NEws, May '63 *et seq*).* Yet almost all the troubles have been with small s&Ls.

Now all eyes are on California. All but six of its 204 state-chartered associations are insured. Any widespread failure of s&Ls—even small s&Ls—might eat up FSLIC assets so fast that the agency would have to run to Congress or the Treasury for help. Such a move might perhaps undermine public confidence in the state's free-wheeling s&L industry.

Crusading jury. Scandal among S&Ls themselves has added to the industry's public troubles. Some of the developments: **1.** Sacramento County's grand jury has just handed Gov. Edmund Brown a blistering report on S&L evils and demanded 17 fundamental reforms. "They ought to do something quick," warns Foreman Norman L. Callish. "What we want is action. We want to prevent a political whitewash."

2. Former President Robert L. Joseph of the \$82-million West Coast s_{&L} is already behind bars for seven months after being convicted on charges of overlending, brought by the same jury. West Coast itself and four individuals are under indictment (NEWS, Nov.).

 The executive vice president of Trans-Bay Federal s&L, San Francisco, and the former president of General s&L, Sacramento, are under indictment for fraudulent lending—to each other (NEws, Jan.).
 Touche, Ross, Bailey & Smart, one of the nation's Big Eight public accounting firms, has been barred from auditing an unnamed state-chartered s&L's books for 1963. A state examiner testified that the firm's 1961 audit of West Coast failed to disclose the highly pertinent fact that 17.6% of the association's loans were delinquent. The California s&L League has begun a study of s&L financial reporting. **5.** General Manager Robert P. Sutton of Los Angeles radio station KNX has charged in public broadcasts that s&L charter were awarded as political prizes.

Evils below the surface. The court cases and the broadcasts are surface indications of deeper troubles. Three fundamental maladies afflict the California industry—a highly visible complex of 70 federal associations with \$7 billion in assets and 204 state s&Ls with \$13 billion:

• An almost irresistible tendency toward generous appraising and lending.

A sharp rise in delinquency and foreclosure rates despite a prosperous economy.
Politics.

Overlending. The state's s&Ls comprise less than 1/20th of those in the U.S., but their assets comprise one fifth of the total.



GRAND JURY'S CALLISH "Prevent a political whitewash"

They have been among the highest savings-dividend payers, and pressure to make loans of doubtful quality to pay these high rates is consequently heavy.

Former President Joseph of West Coast told the jury that indicted him that when he failed to make enough loans he got a call from his parent Great Western Financial Corp. in Los Angeles telling him: "You've got a lot of money out there sitting. Get it out!"*

"I mean, it's pounding, pounding, pounding," Joseph testified.

Troubles for the smallest. The pressures to lend combine against smaller s&Ls, whose managers feel more acutely the need to grow. President Philip R. Collins testified that Guaranty s&L of Yolo lent \$80,000 to a builder without checking his credit. The builder conceded he had been turned down by four of the biggest s&Ls in the Bay area.

^{*} Illinois has just seized the \$9.3-million Leyden s&L in Franklin Park because of financial difficulties. It is the sixth Chicago area association seized by a state or federal agency in ten months.

^{*}Great Western, with assets of \$630 million, owns seven associations and is one of the Big Three holding companies in California. It denies making such a statement to Joseph.

Too, the tiny s&Ls are targets for newcomers, who sometimes buy them with borrowed bank funds. Repayment requirements can often force the s&L to seek higher earnings than its capability warrants. The owners' lack of know-how then compounds the difficulty. San Francisco franchise hearings disclosed that a young New York couple, Mr. and Mrs. Herbert M. Sandler, bought Golden West s&L via a bank loan. Attorney Tom Clarke, representing the big Lytton Financial Corp., a holding combine, told the hearing:

"They came with little or no experience in the s&L industry."

"There's a lot of innocence running loose in the industry," says Prof. Edward S. Shaw of Stanford, an s&L critic.

Overappraising. One principal recommendation of the Sacramento jury was state licensing for appraisers. Another was a legal definition for appraised values. Noted the jury: "Some appraisals have been made to fit the loans."

By way of corroboration, a southern California s&L leader (who understandably prefers anonymity) explains why builders there have shied away from FHA: they can get bigger 80% mortgages from an s&L than 90% mortgages from FHA, and they can get s&Ls to bid up the loan by telephone whereas FHA insists on serious appraisal.

Profit twice over. "Here's how prices are figured in Orange County," he points out.

"First you put your 50x100-foot developed lot in for \$7,500. Then you put in \$1,500 for your cost of construction financing. Then you figure what the house will cost you to build at, say \$7.50 a sq. ft., which for a 1,500-square-foot house would be \$11,250. Then you put in \$500 a house for advertising, \$500-a-house for selling and, say, \$2,500 for profit.

"That brings you up to \$23,750, so you get an s&L to take a \$24,000 first mortgage. If the s&L takes a \$24,000 first, that can be only 80% of the sales price, so you have to get \$30,000 for the house. You

	Total	%	Net	%	Per
	Revenue	Change	Incomeª	Change	Share
Company	(000)		(000)		
First Charter Fin.	\$95,961	18	\$21,706	7	\$2.87
Great Western Fin.			15,811		1.93
Financial Fed			11,854		5.07
San Diego Imp			7,640	5	1.03
Lytton Fin.		637	4,195	26	2.70
United Fin. of Calif		46	5,787	13	2.91
Wesco			6,261	(-3)	4.49
Gibraltar Fin.	19,394	28	3,716	7	3.55
First Western Fin.b.			5,867	72	2.05
First Lincoln Fin			3,752	31	2.67
Trans Coast Inv	16.328	25	3,884	3	2.05
Trans-World	15,925	24			1.95
Far West Fin.	15,834	45	3,739	4	2.81
California Fin	14,110	32	2,496	(-8)	.88
Equitable S&L	11,270	5	2,101	(-42)	2.93
First Surety			2,545	9	2.16
Midwestern Fin			1,240	(-2)	.53
Brentwood	6,427	41	1,631	7	1.2
American Financial			1,618	20	2.01
Hawthorne Fin				(-10)	1.3

company owns 99.4% of stock.

mortgage out on the first mortgage and take a second for the balance, and (having already taken your normal profit on the first) you hope you can sell the second in a few years for 60ϕ on the dollar. But if not, you've had your profit out of the first mortgage anyhow."

Delinquencies. No one has acknowledged publicly that s&L appraisals are this carefree. But evidence points to faulty lending and appraising as a contributor to delinquencies. A study by Prof. Leo Grebler of the University of California at Los Angeles cites Home Loan Bank Board figures to show that from 1952 to 1962 California's state-licensed associations experienced far faster growth in foreclosures than California federals or the U.S. industry as a whole.* Conventional foreclosures were 10.9 per 1,000 loans for the year ending Sept. 30, 1963, second only to Nevada's 16.95 and twice the U.S. average of 4.10.

Dr. Grebler, a former consultant to the White House council of economic advisers, ascribes the delinquency increase to the declining quality of mortgage credit. He calls the tendency to higher-risk loans today's most serious concern in the mortgage market. Such lending is the target of the HLBB's new regulation requiring S&Ls to increase reserves as scheduled items rise (NEWS, Feb.). Scheduled items include delinquencies, foreclosures, property sold on contract and loans to sell realty.

The ratio of scheduled items to risk assets is rising among California's statechartered s&Ls. It leaped from 1.35% for 1960 to 2.02 for 1961 to 2.77 for 1962. Balderston's latest report shows it at 3.95 last Sept. 30, up from 3.54 on Sept. 30, 1962. (For individual ratios, see map.)

Politics. But the greatest concern among California's s&L executives is politics.

"The state gives a fortune with every new charter," wrote Prof. Shaw. "It supplies charters monopolistically and it limits the supply so tightly that market value is much higher than initial capital."

Says Manager Sutton of KNX: "A charter, depending on location, may be worth up to \$1 million the day it is issued. Until recently these tremendously profitable charters were a matter of patronage."

Balderston denies that political considerations are now an item in charter grants.

Interested parties. Sutton does not stop with charters. He demands a conflict-ofinterest law to curb the activity of legislators and state officials. He lists President Pro Tem Hugh Burns of the State Senate and Lt. Gov. Glenn Anderson as S&L directors along with several assemblymen and congressmen. Gov. Edmund Brown was an S&L stockholder before his election. Half of California's legislators, says Sutton, are probably S&L stockholders.

The Sacramento jury cited the fact the state exempts holding companies' from s&L regulations as a major weakness of

WHERE TROUBLES CLUSTER FOR STATE-CHARTERED S&LS



HIGH-RISK associations among California's statechartered s&Ls have more than 5% of their assets tied up in delinquent loans foreclosures and sales contracts. Comparable reports on federal s&Ls are not made public.

the California industry. These giants make the managerial decisions for more than a third of the state-chartered associations and had big revenue gains in '63 (*see box*).

The jury is pleading for legislation to bring the holding companies under the state code, but just such a bill was bottled in committee during the 1963 session. One of its chief opponents was Sen. Burns, whose s&L is a holding company subsidiary. Balderston hopes to win passage this year.

Scant chance for cleanup. Balderston, in a reply to the jury, welcomed its support on holding company legislation, but he seemed rather less enthusiastic about its other 16 recommendations. He opposed a recommendation for a loan limit in overbuilt areas, and he defended the appraisal regulations now in use. Several jury suggestions, Balderston said, "parallel present procedures of the regulatory agency."

If Jury Foreman Callish wants somebody to do something quickly, then he and those deeply concerned about the industry—will probably have to look elsewhere.

The elsewhere is likely to be Washington, where HLBB Chairman Joseph Mc-Murray is preparing to ask Congress to let his agency monitor the holding companies. —EDWIN W. ROCHON

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^{*}Savings & Mortgage Markets in California, Grebler and Eugene F. Brigham, California s&L League, Sept. 1963.

Which are you hiding...



QUALITY OR...CUSTOMER COMPLAINTS?



If you are a builder, or in other ways concerned with building today, your goal is clear cut—customer appeal and continued satisfaction! This can only be achieved by excellent design, fine workmanship and highest quality products.

Your dealer can supply you with Nichols Aluminum Hy-Tensil Nails for every use with a strength found in no other aluminum nail on the market. Nichols Aluminum Nails are now formulated with a new alloy balance and incorporates a new metallurgical process giving approximately 15% greater strength than ordinary aluminum nails. Greater strength means better drivability, less waste and more holding power.

So, whatever type of structure you are building—be it the smallest single dwelling unit, apartment house, office building, etc., wherever your specifications call for protective metal, choose Nichols quality aluminum. Can you afford the customer dissatisfaction connected with coated nails that stain in a few short months giving a "leopard spot" appearance to a beautiful finish. No, and the same is true of building corners, valley, rain carrying equipment, chain link fence, etc. When it comes to exposure to moisture, you just can't afford less than the best—Nichols Aluminum!



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Nichols Aluminum Hy-tensil Nails, along with their complete line of Aluminum Building Products assures you of lasting customer satisfaction. For further product information, see your nearest Nichols dealer today or write the pacemaker in the Aluminum Building Products field.

HOUSING STOCKS

Housing companies turn to private placements for funds

Housing's publicly owned companies are relying less and less on Wall St. and more and more on large institutions for the cash they need.

Their experience parallels that for most publicly owned companies, whose \$6.1 billion of privately placed bonds, notes and debentures in 1963 for the first time exceeded the \$4.7 billion of securities sold to the public.

Housing companies raised \$20 million from this source in the last half of 1963, with DEL E. WEBB CORP. selling a \$15 million note issue at $5\frac{1}{2}$ % to dominate the market. So far this year Lytton Financial Corp. has raised \$990,000 by selling privately 35,900 shares of unregistered common stock it held in its treasury to unnamed institutional investors.

Offerings drop. Only nine housing companies offered stock to the public in the last half of 1963 vs. 16 who did so in the first half of the year. They registered \$35,771,878 of stock in the second half, down 32% from the first half's \$54.2 million (NEWS, Aug.).

Five of these were existing companies, and two of them issued stock to finance expansions. PALOMAR MORTGAGE issued \$971,718 to buy Central Mortgage & Investment of Atlanta and FIRST WESTERN FINANCIAL sold \$3,393,570 of stock to buy Nevada Bank of Commerce in Las Vegas. Both offerings were oversubscribed.

Secondary offerings of the other three existing companies were fully subscribed: AMERICAN REALTY TRUST for \$1,455,300; GREAT LAKES HOMES for \$594,600, and MACCO REALTY \$4 million debentures.

Trusts popular. Realty trusts continue as the most popular of the newcomers: three of the four new public offerings were by trusts. POTOMAC REAL ESTATE TRUST'S \$2 million offering has not been offered publicly. SHAKER PROPERTIES' issue netted \$2,007,000 which the trust used to buy a shopping center and 147-unit apartment complex in Cleveland. The offering was sold the first day.

B. C. MORTON Trust registered \$9,125,-000 but after buying Empire House, a Denver apartment with 101 units with initial proceeds, it has asked SEC to approve a revised prospectus.

The \$559,260 issue of AMERICAN MORTGAGE INVESTORS of Raleigh, N. C., third private mortgage insurer to go public, (NEWS, Oct.) was oversubscribed.

The trend continues into 1964. Two realty trusts already have registered with Securities & Exchange Commission \$4 million of stock: FIRST WESTERN trust of Denver with a \$1 million issue and B. F. SAUL trust of Washington, \$3 million.

Stock prices rebound. After a drop in February, HOUSE & HOME's index of housing stocks jumped 9% last month to hit 10.32. At the same time the Dow-Jones Industrial average rose 2% to a new high of 802.75.

APRIL 1964

s&Ls lead the advance, with all but two of 23 companies showing gains. Wesco Financial leaped 7 points to 473%, Financial Federation rose $7\frac{1}{2}$ to 533%, and the biggest s&L, First Charter, shot up 73% to $43\frac{1}{2}$ (For S&L earnings, see p. 30.)

All other housing categories advanced except realty investment concerns, down 2%. The trend toward listing on exchanges continues. Latest: JIM WALTER CORP., now on the New York Stock Exchange. Here are HOUSE & HOME's averages of selected stocks in each housing group:

	Jan. 6	Feb. 7	Mar. 2
Building	6.36	6.31	6.32
Land development	5.07	5.36	5.58
S&LS	19.17	18.67	21.26
Mortgage banking	8.88	8.67	9.13
Realty investment	6.01	5.94	5.83
REITS	10.78	10.87	11.43
Prefabrication	7.03	6.94	7.18
Shell and Pre-cut homes.	8.98	9.28	9.83
AVERAGE	9.59	9.47	10.32

HOUSING'S STOCK PRICES

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SEC SUMMARY

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Date Company	company	securities.
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 $^{\circ}\text{--}\$100$ of debentures and 20 warrants to buy shares at \$100 per unit.

PROFITS AND LOSSES

Company	Fiscal year ends	1963 revenues (000)	change from '62	1963 net	change from '62
Kern Co. Land Real Props. Corp. a—after a non-re property. b—net 1	_Dec. '63 curring ga	1,046 ain of \$1	9	86,040 from the	a b



"ELECTRIC HEATING IS SURE THE THING," says Hobart Smith, left, as he inspects one of his projects with construction manager E. E. Rousseau, right, and Duke Power Co. representative Terry Morton. "I'm amazed how many prospects come right out and ask for it."

"WE GET BIG SAVINGS WITH ELECTRIC HOME HEATING BECAUSE IT'S SO EASY TO INSTALL"

Prominent builder Hobart Smith of Charlotte, North Carolina, finds electric heating really moves his \$13,500 to \$20,000 houses

"We're completely sold on the total electric concept," says Hobart Smith. "In fact, we're so convinced we schedule electric heating for every house unless the customer insists on some other system.

"But most of our customers really want electric heating. I've been amazed at the number of people who come out to our projects and specifically ask for it. It's pretty clear to us that it's *the* coming thing.

"From a builder's standpoint, electric heating is easy to install, and that means big savings. Even better, there's less maintenance after installation, no callback due to heating complaints."

Like Hobart Smith, builders all across the country

are discovering how well it pays to install and promote electric heating in their homes. This year, for example, it is estimated that one out of every five new homes will be heated electrically.

Chances are you can profit by using flameless electric heating in your homes. Why not find out now? Talk to your local electric utility representative first chance you get.

THE TOTAL ELECTRIC HOME that displays this Gold Medallion * helps you to capitalize on the fast-growing customer preference for total electric living. And because a Gold Medallion Home uses a *single source of energy* for heating, cooling, light and power, you will profit more.



LIVE BETTER ELECTRICALLY · Edison Electric Institute, 750 Third Avenue, New York 17, N.Y.





SPACE-SAVING BASEBOARD UNITS were chosen by Hobart Smith for construction savings. Quick and easy to install, they help cut labor and costs.



RECENT HOBART SMITH DEVELOPMENT featured 140 Gold Medallion Homes. In 1964, plans call for 200 more electrically heated homes priced from \$13,500 to \$20,000 and from \$25,000 up.



PROPER INSULATION builds in economy and comfort. Here Hobart Smith and construction manager Rousseau check on the installation of full-thick batts in outside walls.



Douglas Fir Plywood Association has outgrown its name



The industry we represent has undergone some big changes in recent years. Our old name no longer fits.

Instead of making plywood only from Douglas fir—and only on the West Coast—the industry now makes a wide range of products from some 20 different species of wood-and in plants in many parts of the country.

The new name reflects our members' growth and progress.

Even though the name is new, you can still specify DFPA plywood. These familiar letters still stand for quality in plywood certified by the association and you'll continue to see them in our grade trademarks. Instead of Douglas Fir Plywood Association, though, they now stand for Division For Product Approval.

And we're still headquarters for all kinds of plywood information. Write us at Tacoma, Wash. 98401.

AMERICAN PLYWOOD ASSOCIATION

(DFPA

The new name for Douglas Fir Plywood Association, Quality certified by the Division For Product Approval. PEOPLE



FLORIDA'S WHATLEY Cash from an oil empire



DELAWARE's MacDONALD Selling out to a bank

Lubitsh & Bungarz



DELAWARE'S MELICK "You've got to get big"

H&H staff

CALIFORNIA'S LAPIN Tapping a supermarket of finance

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Three mortgage bankers sell to an oil company, a finance giant, a bank

Three mortgage banking deals underscore the newest way mortgage men have found to raise the capital they need in increasing amounts (NEWS, Mar.).

Instead of going public, mortgage bankers are merging with larger companies both inside and outside the money field so they can draw upon their much bigger lines of credit. Two of the three mortgage companies keep their separate identities in the bargain.

Colonial Mortgage Servicing Co. of Upper Darby, Pa, was among the first to test this route when it merged into Atlas Credit Corp. (NEWS, Nov. '62), Three others now follow suit:

• General American Oil, Dallas, has just bought Stockton, Whartley, Davin & Co., Jacksonville realty and mortgage banking company with a \$500-million portfolio.

President J. (for Jaquelin) James Daniel, 47, of Stockton, Whatley says his shareholders will receive 315,000 shares of General American tax free—one for each 2.64264 shares of swp. So each share of swp rates .378409 of a General American share. It was a \$10.8 million deal because General American's common was selling on the New York Stock Exchange at \$34.25 the day after the merger was announced. Stockton, Whatley shares have been \$9 to \$10.

The moving force behind swD, itself a product of several mergers, has been Chairman Brown L. (for Lee) Whatley, 64, past president (1953) of the Mortgage Bankers Assn., who is also president of Arvida Corp., the Florida land developer. President W. L. (for Lewis) Perryman of General American is recommending that Daniel, Whatley, Executive Committee Chairman James R. (for Roosevelt) Stockton, 71, and Secretary Joseph W. Davin join the parent board.

Daniel says swd's after-tax income has averaged \$596,000 each year for the last five but that the merger should add \$1 million a year to General American's earnings—\$7 million in fiscal 1963 on the company's crude oil and natural gas operations.

• Wilmington Trust Co. is acquiring T. B. O'Toole, Inc. Milton T. MacDonald, MBA president in 1951, is chairman of O'Toole and owns it 50-50 with President Herbert A. Melick. MacDonald, 68, becomes a consultant and Melick, 44, a Wilmington Trust vice president.

"You've got to get big," says Melick. "The future is in merging, either with another mortgage company or with a bank. We were a pioneer in land development and will go further. The bank will provide much of the capital. It is a principal reason for our move."

The bank is Delaware's largest (assets: \$377 million). O'Toole is the state's largest mortgage banker (servicing: \$50 million). Purchase price is 10,000 shares of bank stock selling at \$102 or about \$1 million.

 President Raymond H. Lapin has completed sale of Bankers Mortgage Co. of California to Transamerica Corp., San Francisco-based holding company and self-styled department store of finance. Lapin will receive up to \$7 million Transamerica stock over five years under a formula based on BMCC earnings. Lapin, onetime research economist for the Chicago Federal Reserve Bank, started his company in San Francisco eight years ago with no mortgage experience and \$10,000 of borrowed capital.

The deal will let Bankers Mortgage (servicing \$450 million) make a bid to become the nation's largest mortgage company, a feat Lapin hopes he can accomplish in five years. Transamerica's \$350 million of capital gives him access to cash for expansion. The parent corporation already generates earnings of \$13 million a year and has been eager to build a diversified financial empire since the courts excluded it from commercial banking in 1958. Explains Lapin:

"When mortgage bankers are facing the moment of truth-unprecedented competition from savings and loan associations and commercial banks, insistent demand by investors for higher yield and profit-cutting competition from fellow originatorsthis relationship with Transamerica appears to offer solutions to many problems current in the industry." Transamerica had \$6 million revenues from land development in 1962 and owns title insurance companies in Denver, Phoenix and San Francisco.

Lapin rejected going public as "costly and cumbersome."

Chairman Philip Zinman an-

for undisclosed cash and stock. Southern Mortgage is the fifth company taken over since Associated organized in 1962. President Lonnie A. Garvin Sr., 55, of Southern Mortgage joins Associated's board and other officers retain their posts. Southern's servicing of \$18 million, confined to South Carolina, takes Associated to \$544 million. President Kenneth H. Grove announces that Grove Mortgage

announces that Grove Mortgage Corp. of Los Angeles, originating \$30 million a year in mortgages for outright sale, has bought the \$125-million servicing portfolio of Allied Concord Financial Corp. of Los Angeles.

OPINIONS AND INSIGHTS

Attorney Stanley Neyhart, on why Plumbers Local 38 in San Francisco quit taking membership applications a year after negotiating a \$7.55 hourly contract (NEWS, Aug. '62): "Everyone's after that big money [average pay: \$10,000 yearly]. This is one of the plushiest jobs around and you'd be surprised how many big-name citizens have cousins who'd just love to be plumbers, and how many would-be plumbers have cousins in City Hall."

Architect Nathaniel Owings of Skidmore, Owings & Merrill, commenting on trends in contemporary architecture: "The glass building was an intermediate step, a discipline which seemed to make sense. You have to purge yourself before you go on. But we're way past that now."

Publisher Paul Hornsleth of Better Homes & Gardens, re-

porting features 192 women said they want in a new house (such as lights in closets, full-length mirrors, hard-surfaced entry ways): "Before you builders write to tell me that most of these ideas will cost more money, I can only tell you that all of our multi-time purchasers know this; and two-thirds of them would be willing to pay more for the next house if it had the qualities they seek."

Mortgage Vice President Richard Baker Jr. of New York Life, on how mortgage bankers should evaluate new apartments: "We have been shocked by some of the apartment plans . . . We are giving increasing attention to layout and type of construction . . . Layout will be an increasingly vital feature in keeping present tenants and attracting new ones . . . It would probably profit all of you to have someone in your organization specialize in layout."
New boss for FHA fixup loans

Harry A. Finney, top legal official in FHA's Title I repair loan section, has just been named to fill a post FHA has held vacant for three years—assistant commissioner for Title I loans.

Without leadership since the Kennedy Administration took over in 1961, the Title I program has floundered. Loan volume tumbled to 736,000 last year, down from 798,000 in 1962 and 855,000 in 1961.

In 1960 and before, in the Eisenhower Administration, more than 1,000,000 Title I loans were insured yearly. Under Title I borrowers get up to \$3,500 for single-family remodeling with five years to repay\$2,500 per unit for multi-family with seven years to repay. The program does not include the more liberal Sec. 203k loans, which the administration pushed as a substitute in 1961. It has flopped (see p. 124).

In other FHA changes, Associate Deputy Commissioner for Management **Carlos Starr** moves to associate deputy commissioner for operations, a post left vacant by Lawyer **Stanley Berman**, who returns to New York to join Pearce, Mayer & Greer, a real estate agency that is opening an FHA department. Starr's job has been filled by **Ray Niblack**, former assistant commissioner for public affairs.

Alexander heads Canada builders

A small town custom builder who does as much commercial work as housebuilding in any given year, **Ernest R. Alexander**, 36, is 1964 president of Canada's National House Builders Association.

A small volume builder who seldom completes more than 20 houses a year, Ernie Alexander has been in NHBA affairs since 1954, the year he started his own company in Barrie, Ont., after working in his father's general

MANFACTURERS: Warner Co., Philadelphia producer of construction materials, lime and limestone, has picked Builder **Robert A. Fox**, 33, as new president. He is the youngest man ever to head the 168-year-old publicly held company. Fox succeeds his father, **Fred Fox**, who becomes board chairman. To take the post Robert Fox resigned as president of Fox Construction Co., one of Philadelphia's largest building companies.

Howard L. Spindler is new vice chairman of the National Housing Center's advisory committee. He is public relations vice president of American-Standard.

BUILDERS: Former Memphis Builders Wallace Johnson and Kemmons Wilson, organizers of Holiday Inns, have their own plan to tap another hot market. They have leased 500 apartment units within one mile of New York City's World's Fair site from Builder Samuel Lefrak. They will rent the units to fair visitors at \$113.50 weekly for units with two double beds.

NAHB President Bill Blackfield has picked Walter L. Hodorowski, formerly production manager for

APRIL 1964

contracting company there. He has worked up from secretary of the association (1959) to first vice-president (1963).

Mainly a methods man in background, Alexander will find the backing he needs in other fields in his two vice-presidents, **Charles B. Campbell**, of Hamilton, a housing legislation expert, and **W. G. Connelly**, of Ottawa, a land developer and former administrator for Central Mortgage & Housing Corp.

Place Homes in South Bend, Ind., as project manager in his Hawaii subdivisions.

ASSOCIATIONS: David J. Evans Jr., former assistant treasurer of the state of Ohio, is first executive director of the Association of Mutual Savings Institutions, organized in 1962.

Douglas Fir Plywood Assn. is changing its name because plywood now comes from 23 species. Best bet: American Plywood Assn.

DIED: Lorimer Denner, 51, senior vice president of the guaranteed title division of American Title Insurance Co. and in 1954 president of Lawyers Mortgage & Title Co. of New York City, Jan. 31 in New York City; Francis Kriney, 57, second vice president and residential mortgage manager of Equitable Life Assurance Society, Feb. 11 in Plainfield, N.J.; Builder Louis G. Meltzer, 49, one of the largest volume builders of homes and small apartment buildings in suburban Maryland and Virginia, and a past president of the Suburban Maryland Home Builders Assn., Feb. 25 in the crash of a DC-8 jet in Lake Pontchartrain, La.

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The Emerging Giants—effect of the industry's managerial revolution on building operations of all sizes.

Upheaval in the Market Place—changes in the demand for the industry's products and services.

Fresh Pools of Capital—new sources of funds for a notoriously under-financed industry.

The Many-Fingered Federal Puppeteer—are all the governmental strings attached to housing really necessary?

The Hope for Better Architecture—why home designs aren't better, and why they soon may be.

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An estimated 9 million Americans will tour the World's Fair House in person during the next two years. Other millions will view replica houses in more than 150 major metropolitan areas.

On the next 15 pages you'll get a preview through the largest single housing industry promotion of its kind. You'll see top-of-the-line products of prominent manufacturers—products to be displayed both at the Fair and in the replica houses across the country. We invite your attention to these products, which your home-buying prospects will be asking for during the months to come.

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FORMICA V-32* laminate surfaced cabinets give homemakers lasting beauty, no fingermarking, no refinishing . . . give you freedom from after-installation refinishing; and a quality feature your buyers will want. and . . .

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AND ALL THROUGH THE HOUSE

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IN THE FAMILY ROOM

Bars surfaced top and front with FORMICA laminate and walls of beautiful, easy-to-install FORMICA V.I.P.* paneling give homemakers a carefree fun center that shrugs off glass rings, spills and abuse ... give you an extra selling point that marks your house as "something special". **avant garde.** A new kind of lock opens the door of the World's Fair House. The Yale Push-Button Lock needs no key. It opens at the touch of your fingertip. You simply press each letter, Y-A-L-E, the number of times required by your particular combination (like a safe or bank vault, except you push buttons instead of turning dials). It is designed to be used with any Yale mortise lock, past or present, and the number of combinations is virtually unlimited. The Yale Push-Button Lock beautifully combines maximum security in the Yale tradition with tomorrow's concept of lock engineering. It's the latest example of what we mean by Yale integrity of design. For the *avant garde* look in locks, specify Yale. VALE & TOWNE



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... even those heated by electricity, hot water or steam?

- A: Specify a new Carrier Quick-Coupled Weathermaker[®] System with fan-coil units.
- Q: How do I save money?
- A: In the first place, the air ducts to each room will be extremely short and easy to install. You simply hang the fan-coil unit in a central location in the apartment or home.
- Q: Did you say hang?
- A: Yes. This unit is so light and compact it easily hangs overhead. It can go over a closet, above a furred-down hall ceiling or even in the attic.
- Q: What about the compressor and the condenser?
- A: They are in a separate cabinet that installs outdoors or through a wall. See the diagram.
- Q: How do you connect the two units?
- A: With precharged tubing fitted with quick couplings. No refrigeration experience is required. And the power and control connections are equally simple.



- Q: Sounds good, but what about quality?
- A: The fan-coil unit is remarkably quiet, moves plenty of air and can easily be equipped with a filter and humidifier. So you gain the benefits of air cleaning and winter humidification at very low cost-big features not available with electric heat or wet heat.
- Q: Is the cooling system completely independent of the heating system?
- A: Yes, it can be. This makes it ideal as a means of adding cooling to homes and apartments that already have good heating plants.
- Q: What do you mean-"it can be"?
- A: In places where the winters are mild and you don't need perimeter heating, you can save money by tying the cooling and heating systems together. Just add an electric strip heater or wet heating coil at the outlet of the fan-coil unit and eliminate baseboard heaters, radiators or convectors. The fan will circulate the warm air through the ducts.

- Q: How do you handle two-story or splitlevel situations?
- A: Simple as ABC! Use two systems with two fan-coil units for easy installation that gives your customer unbeatable zone control. The low cost will amaze you.
- Q: You keep harping on low cost. Are these stripped-down cheapies?
- A: Definitely not! These are Carrier units, with Micromite[®] compressors, Weather Armor cabinets, staggered coils, centrifugal blowers, fully factory-wired, 24-volt control circuits, ARI capacities, UL approved, certified by Good Housekeeping and Better Homes & Gardens. Next question!
- Q: Where do I get complete information?
- A: Call your nearest Carrier representative and ask him about 38GA Quick-Coupled Weathermaker Systems with 40CA fan-coil units. Or write us for Bulletin No. 38GA243. Carrier Air Conditioning Company, Syracuse 1, New York.

See a complete Carrier residential air conditioning system in the Traditional Home of the "House of Good Taste" at the New York World's Fair.



Air Conditioning Company HOUSE & HOME

Stiff land controls in Puerto Rico chafe builders; one sues

Plagued with land-price inflation and urban sprawl, the island government has imposed such strict development rules that low-priced private housing is vanishing from the market. And land expropriation has raised a constitutional issue.

Last December, Builder Jorge I. Rosso of San Juan, Puerto Rico, bought a full-page ad in the Chicago *Tribune* to present an ominous message to NAHB convention-goers.

SOMETHING STRANGE IS HAP-PENING IN PUERTO RICO, his plea warned. And he went on: "In Puerto Rico, island of sun and rum, economic life is under government control, with all develsubordinated to the opment wishes and recommendations of such government agencies as the planning board and the public land administration . . . Would you support a state government which imposes its own methods for land development; condemns land owned and being developed by a bona fide builder to sell it to other builders for the development of low-cost private housing which the original builder was willing to build; decrees who should build homes, when, how and where . . . If we do not want this to happen in the United States, such a beachhead should not be allowed in Puerto Rico.

Behind these angry words lies not only a tangle of lawsuits in both island and federal courts, but also an issue which concerns Puerto Rico builders now and may well foreshadow problems mainland builders could face in years to come.

Big Builder Rosso, who has built \$20 million worth of public housing on the island since 1947. owns 338 acres of choice subdivision land in the San Juan suburb of Bayamon. He plans to build homes there. But the island government decided that Rosso's gentle slopes should be used for low-priced housing (below \$8,000). It suspects that Rosso plans to build high-priced homes since his land is surrounded by them. And it has no power to force Rosso to build cheap homes as long as he owns the land.

So the island government decided to expropriate Rosso's parcel, then offer 120 acres of it back to him on condition that he build the kind of housing the government deems best. The island expropriation court agreed in December.

Rosso appealed, charging that

the court was under political pressure from the administration of Gov. Munoz Marin, that the assessed price of \$,1381,676 was not enough and that the government's action was unconstitutional to begin with. When the expropriation court called a hearing on the appeal, Rosso asked for another judge. Last month the case awaited the judge's appointment.

Meantime, Rosso hired famed Attorney James B. Donovan of New York to take his case into federal court-on constitutional grounds. Rosso alleges that government can lawfully expropriate land only when it intends to use it for public purposes. The government, he contends, cannot seize raw land from one private owner with the intention of selling it to another private owner. Rosso points out that he had submitted plans to Puerto Rico's planning board to build homes before the government acted, so, he says, the net effect of the government action is to pick who will build the homes-and the expropriation is unconstitutional.

Question of timing. The courts will in time decide who is right in Rosso's case. But one item that may make it hard for him to win is that he did not file his development plans until after the island government let him know it was *considering* expropriation. Indeed, he once asked to have the 338 acres rezoned industrial—and was turned down. But the Puerto Rico home-

builders association is clearly worried that Rosso's case-today's exception-may set an ugly precedent for tomorrow. And it is fearful-as a recent policy statement noted-that the Land Administration which seized Rosso's property will abuse its powers, build up a stockpile of condemned land and fail to use it for lowpriced housing. "This agency was set up for the explicit purpose of obtaining land which would be funneled into the housing market, primarily for low-cost houssaid the association stateing, ment. "[But] up to the present, the Land Administration has taken no positive action to provide the land to the building industry . . . Yet the Administration is still expropriating additional land. Other government agencies are holding thousands of acres which could be used for housing . . . The HBA is opposed to expropriation of lands belonging to qualified builders or developers who have notified by certified mail to the president of the planning board their intention to develop such land."

Wrong remedy? Even amid Puerto Rico's peculiar blend of capitalism and socialism, the creation of the Land Administration in 1962 sparked a sensational controversy. Many Puerto Ricans saw it as a decisive step toward so much state control over the economy that it would tip the balance toward socialism.

When Gov. Munoz recommended setting up the Land Administration, he said it would aim at the best possible use of what unbuilt land is left in the island's larger cities. He also touted it as a lever to deal with San Juan's inflation. spiraling land-price (Subdivision acreage has doubled from about \$3,000 to \$6,000 an acre in the last six years, say San Juan mortgage men. Naturally, expropriation has done nothing to control land price inflation; if anything, it has only driven prices higher on parcels left in private hands. But the Land Administration has proved a powerful tool for direct government control of how land is used. Munoz ordered a study to see what "other measures" could be taken to control land price inflation. One study, submitted to him in January, urged that Puerto Rico's 25% capital gains taxes on land sales be boosted substantially. But the governor did not mention this idea in his state of the commonwealth message.

Government cost-boosters. While Puerto Rico expropriates land for public housing, it simultaneously drives up the minimum prices at which private builders can build. Under its celebrated 1963 guidelines, private housing developments must include a galaxy of community facilities (libraries, parks, playgrounds, shopping centers, pools). These have boosted costs of a typical FHA house by \$1,300 to \$2,000, say builders. FHA-which dominates the Puerto Rico housing market-so far will allow only \$800 extra. One result: no guideline projects have been built. And so nobody knows whether the market will accept the extra cost. continued on p. 64



Two-story is Levitt's best seller in San Juan

Levitt & Sons has sold all the houses it can build this year in Levittown de Puerto Rico, a 3,500-house development opened last September, six miles from downtown San Juan. This stucco two-story (\$15,000, four bedrooms, 2½ baths, 1,291 sq. ft.) accounts for more than a third of Levitt's 858 sales through 1964. Four other models are all one story and all lower in price. The lowest priced model, a 738-sq. ft. row house, for \$9,500 is the slowest seller.

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HOUSING ABROAD

starts on page 63



IBEC'S HOUSES in Santiago have 700 sq. ft. with three bedrooms, one bath. Four-bedroom, two-bath model, introduced after start of 760-unit project, has 820 sq. ft. Precast concrete houses use only Chilean materials.

Chile inflation cripples IBEC profit

"I doubt that any American builders are making money in South America. I know we're not."

So says Rodman C. Rockefeller, vice president of International Basic Economy Corp. (IBEC), after a discouraging year building in South America. His experience sheds fresh light on the vicissitudes besetting U.S. builders in Latin America.

First inflation wiped out the company's profits from a 760-unit, one-family house project in Santiago, Chile. Then mortgage capital dried up in Peru, halting a 1,500-house project in Lima.

In Chile, inflation tripled prices between August 1961 and the end of 1963. IBEC tried to cope by raising prices of its three-bedroom houses in Santiago (*see cut*) from 8,700 to 22,000 escudos. Despite this 270% boost in prices, inflation sliced the price in dollars from \$8,500 to \$7,000. And construction delays coupled with firm prices prevented IBEC from recouping its costs.

Out of this frustration has come new opportunity. IBEC is in line to become contractor on a low-price housing project in Concepcion, Chile, financed by a loan guaranteed by the U.S. Agency for International Development (AID).

IBEC worked out details of the loan with Compania de Acero del Pacifico, a Chilean steel company which admired IBEC's Santiago houses. The company, faced with union demands to improve workers' housing, agreed to sell land at cost to employees. Connecticut General Life Insurance Co., through IBEC's urging, will lend \$10 million to Caja Central de Asociaciones de Ahorros y Prestamos, the Chilean equivalent to a Federal Home Loan Bank, AID has authorized (but not yet signed) a contract to underwrite 100% repayment of this loan.

Caja Central, in turn, will

make available \$12 million in mortgage financing to the steel workers. IBEC stands ready to build 2,000 houses and sell them directly to workers.

Meantime, conditions in Chile and Peru are improving. Inflation has slowed in Chile and mortgage money is again available in Peru.

Growing market:Virgin Island resort homes

The Virgin Islands have come of age as a tourist haven (tourist spending tripled in the last six years). Now the islands are emerging as a ripe market for second-home buyers and retired mainlanders thirsting for dependable sun.

Three recent land purchases testify to the growing awareness of this potential by U.S. developers and architects. Developer Herbert Mandel has snapped up 300 acres at Bugby Hole on St. Croix, largest of the Virgins, for 300 houses priced at \$30,000. A syndicate led by Attorney George Becker of New York put together one of the biggest land deals on St. Croix since the U.S. bought the islands from Denmark in 1917. The syndicate paid \$1,750,000 for 333 acres of vistaed Herman Hill which it plans to turn into a combination hotel-apartment-home community.

Architect Walter Marlowe paid \$400,000 for an entire island— 500-acre Hans Lollik Island, fifth largest in the group. He plans a luxury, second-home villa patterned after Mediterranean seahugging villages.

Besides the natural attributes of sun and sea, low taxes and generous customs treatment, the Virgin Islands offer developers a lure few Carribbean islands can match. Says Becker: "The Virgins have the U.S. flag. I wouldn't buy land anywhere in the Caribbean without that behind me."



This fine two-story colonial home has been planned to blend in with the rich historical heritage of the surroundings in builder Jack Blackman's Brinton Lea development, Thornton, Pennsylvania.

Near Philadelphia, this house sold for \$35,500

("...and concealed telephone wiring is an added prestige factor," says builder Jack Blackman)

"We're proud to include concealed telephone wiring along with the many other features we offer in our houses," says Mr. Jack Blackman, builder.

"With concealed wiring, we can offer our customers an added advantage: a telephone practically anywhere they want it." Mr. Blackman uses concealed wiring in *all* his homes, and plans to continue to capitalize on this feature in the future.

He also offers other modern telephone developments, such as panel phones in all his kitchens. "Prospects are delighted," he says, "with the newness of flush-mounted panel phones, and their practical disappearing cords."

*

For help in telephone-planning your homes, call your Bell Telephone Company, and ask for the Architects' and Builders' Service. Also, see Sweet's Light Construction File, 11c/Be. For commercial installations, Sweet's Architectural File, 33a/Be.



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Again, in its second magazine advertisement of 1964, the National Wood Promotion Program is promoting more home starts for you. The above photograph, reproduced in full color across two pages of LIFE, is persuasive in itself . . . showing the progress of a new home of wood from unfinished framing to finished living room.

The accompanying message urges millions of families to do what they can afford to do . . . build

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LIFE reader in your community

new Unicom system of modular construction can help raise your profits as well.

Successful builders know that wood is what gives your customers the best homes . . . gives you the best-*selling* homes...in your community. For latest technical information on building better and more profitably with wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION Wood Information Center, 1619 Massachusetts Ave., N. W., Washington, D. C. 20036

UNICOM MANUALS 1 & 2: "Design Principles" (122 pages) and "Fabrication of Components" (248 pages), graphically detailing the Unicom method of house construction, are available at nominal cost to those associated with or supplying the home building industry. For free booklet describing UNICOM, write to: UNICOM, National Lumber Manufacturers Association, 1619 Massachusetts Ave., N. W., Washington, D.C. 20036.



Quiet Conditioned Living scores again as a sales clincher



Exterior view of Redwood Garden Home, pioneering concept in modern living developed by First Construction, Inc., Kansas City, Kansas. Homes combine the cost advantages of multi-unit construction with the benefits of single-family home ownership. James L. O'Bryan, F, A.R.A., Project Architect.



Quiet Conditioned Living begins with

Acoustical Ceilings by Celotex. In model homes or apartments, prospects can see and *feel* the benefits of quiet, as these ceilings absorb and hush irritating noise. Little wonder that Celotex acoustical ceilings dramatically, convincingly demonstrate extra value! Choose from a wide variety of exclusive Celotex patterns, designed especially to give homes added decorative appeal. **Partitions that reduce sound transmission:** This sturdy 2-layer construction provides Sound Transmission Loss vastly superior to ordinary partitions.

Both sides have $\frac{1}{2}$ " Celotex Soundstop* Board nailed to studs and laminated facing of $\frac{1}{2}$ " Celo-Rok® Gypsum Wallboard. Sound Transmission Class (STC): 46. With $\frac{5}{2}$ " instead of $\frac{1}{2}$ " Celo-Rok wallboard, STC is 50. (Ordinary single layer construction with $\frac{1}{2}$ " gypsum board has STC of only 33.)

*Trademark

Sound-deadening ceiling-floor

assembly. This 2-layer ceiling reduces transmission of both airborne sound (e.g., loud voices) and impact sound (e.g., footsteps, dropped objects). Sound Transmission Class (STC) for airborne sound: 42. On ceiling side, ¹/₂" Celotex Soundstop Board is applied to floor joists, with facing of ¹/₂" Celo-Rok Gypsum Wallboard.

Kansas City Redwood Garden Homes Feature CELOTEX Reg. U.S. Pat. Off. QUIET CONDITIONING PRODUCTS AND RATED CONSTRUCTIONS



Builders Walter Klassen and Paul Hansen.



Model family room offers the "comfort of quiet" with Celotex Acoustical Tile ceiling. Walls are Celotex Woodgrain Hardboard Paneling.



THE CELOTEX CORPORATION 120 So. La Salle Street - Chicago 3, Illinois

Subsidiaries: The South Coast Corporation . . . Crawford Door Company . . . Big Horn Gypsum Company . . . O. P. Grani, Inc. . . . Canadian Celotex Gweco Industries Limited (Canada). Affiliates: South Shore Oil and Development Company . . . Celotex Limited (England). "Here is a new type of house with all the features of homes selling for much more," say the builders of Redwood Gardens. "One of the most important of these is Quiet Conditioned Living. All party walls are built with Celotex Soundstop* Board and Celo-Rok[®] Gypsum Wallboard on both sides, to provide the utmost privacy. Prospects like the 'solid' sound of this double-layer construction. And they are quick to appreciate the extra value of Celotex Acoustical Tile in the family room. Sales have been excellent."

Quiet Conditioning in single family homes, town houses, apartments, and garden homes, can range from the primary need—acoustical ceilings to complete treatment, including partitions and ceiling-floor assemblies. The Celotex Corporation has pioneered new products and quiet-rated constructions to meet builders' needs. Send coupon today for free brochure showing variety of quietrated assemblies.

*Trademark



Dept. HH-44, THE CELOTEX CORPORATION 120 S. La Salle St., Chicago 3, Illinois

Please send me, without obligation, the FREE 8-page brochure, "New Building Techniques for Quiet Conditioned Living."

My Name		
Firm Name		
Address		
City	Zone	State



Both Provided With Hunt Electronic Dimming Controls

Take two, they're small. (The low-cost PC-6-I, 600 watt capacity unit pictured above fits standard 2" deep single gang box.) Install one in the dining area and one in the nursery or children's room ... Hunt provides the "Hard Sell" with the clear plastic wall guards to keep face plate areas clean and at the same time call attention to the modern lighting flexibility you have added in your home design. The "Soft Light" from Hunt Dimming Controls is available at low intensity settings; a romantic, candle light effect for the dining area...a soft, glowing night light for the nursery. Full brilliance, or any desired level of light, for any activity, is of course available with Hunt Dimming Controls, and so is economy, too. (Incandescent bulb life is extended over 1000% when burned at 75% of maximum rated wattage.)

Chances are, that later on you will have other ideas about where Hunt Dimming Controls should be used, but right now start with two... two Hunt Electronic Dimming Controls, fully guaranteed and ruggedly built for long reliable operating life.

For complete information and specificational data on the complete line of Hunt Electronic Dimming

> Controls and Systems for residential and light commercial lighting control, contact your local Electrical Distributor, the Hunt Representative in your area, or write: The People Who Bring You The Brightest Ideas in Dimming.

2617 ANDJON DRIVE / DALLAS, TEXAS 75220 SEE OUR CATALOG IN SWEETS

ELECTRONICS

COMPANY



Alfred Levitt introduces a new expansion-attic house

Alfred Levitt, who designed 18,000 expansionattic houses in the first Levittown 17 years ago, has come up with a new version for his latest Long Island development. Designer Levitt, who left the family building company, Levitt & Sons, eight years ago, builds under the name of Levitthouse Inc. His new \$19,990 model outsells (at 30 to 15) two lower-priced raised-ranches, priced at \$16,990 and \$17,990. The new model has 1,936 sq. ft., a two-car garage and is built on a slab. It is zoned into, 1) a formal livingdining area, 2) family room, kitchen and twobath core, and 3) a three-bedroom wing. A 20' x 44' unfinished attic provides room for expansion. Buyers like the open-b -ed 3" sloping ceilings (photos below), formation roof decking with an integral vapor burner.



s: Richard Averill Smith



FAMILY ROOM adjoins the kitchen and patio.



PLAN has a central plumbing core. The bedroom closets are movable



BEDROOM CEILING is underside of roof deck.



LIVING ROOM, dining room and den run the length of the house, with folding doors dividing the area.

Chicago builders rank appliances as necessities, not luxuries

Two Chicago-area builders are convinced that appliances and other items, once optional at extra cost, have become necessities for today's homebuvers.

Says Joshua Muss of Winston-Muss Corp.: "Since 1950 the automatic washer, dryer, dishwasher, garbage disposer, refrigerator and built-in oven and range have become requirements in new houses."

w-M offers a choice of clothes washer and dryer, refrigerator or dishwasher and garbage disposer packaged in the price of three of five new models in its subdivision in suburban Palatine. The three models with the choice of appliance packages accounted for 600 of 900 sales since a 1961 opening. The 300 other sales were on higher-priced models aimed at secondtime buyers, most of whom had all the appliances. Given their choice, 80% of the buyers took the clothes washer and dryer, 15% took a refrigerator, and 5% took a dishwasher and garbage disposer. Many buyers took each of the three separate appliance offerings.

Buyers demand for items that were once optional at added cost contributes as much as 10% to the price of today's ever-costlier houses, says Builder Benjamin Sears. At his 600-house development in Northbrook, Ill., he figures appliances and other equipment uncommon in the price of houses two decades ago now raise the prices of his \$32,000 to \$40,000 models more than \$3,000. The breakdown: appliance package, \$700 for dishwasher, range, oven and refrigerator; furniture-finish kitchen cabinets, \$450; second bathroom, \$475; carpeting, \$900; landscaping, \$500.

Realtor adapts card sorter to get 1,000 listings a minute

The machine age has come to the real estate office in the form of a card-sorting machine that cuts the search for a specific house to a one-minute operation by sifting all available listings.

Donald E. Grempler, a suburban Baltimore Realtor, developed the machine from a basic IBM card sorter, which he then refined to accept as many as 17 specifications of homeseekers.

By pushing appropriate buttons on a master control panel, a salesman feeds into the machine all customer preferences (e.g. new or old house, price range, number of bedrooms and baths, style of house.) Geographical areas are put on cards of different colors. A customer indicates which of these areas he would like searched. At a touch of a button (aptly lettered "sale"), the machine analyzes cards at a speed of 1,000 per minute, seeking houses that fit the requirements. These drop into a separate compartment, and are turned over to the customer for further consideration.

If his demands have been unrealistic, such as asking for a low-priced house in a highpriced area, the machine, of course, kicks out no cards. In such cases, Grempler urges the customer to revise his demands, and the cards are re-run.

As a member of the local Multiple Listing Bureau, Grempler has more than 5,000 cards on file that are updated each morning to add new listings and drop those that have been reported off the market.

Marketing roundup continued on p. 73



This lightweight, lower priced plate glass for patio doors meets all FHA and VA safety standards

New Tuf-flex[®] 200 Tempered Safety Plate Glass is only .200" thick, 20%thinner than regular $\frac{1}{4}$ " plate glass—is less expensive, and makes a lighter weight door.

L·O·F supplies Tuf-flex 200 to slidingdoor manufacturers in standard sizes: 28" x 76", 34" x 76" and 46" x 76". L·O·F makes both Tuf-flex 200 and $\frac{1}{4}$ " Tuf-flex of clear Parallel-O-Plate®, sun

Libbey · Owens · Ford

Toledo, Ohio

heat- and glare-reducing *Parallel-O-Grey*[®] and *Parallel-O-Bronze*[®]. All are twin ground for greatest clarity, and meet the safety standards for tempered glass established by the FHA and VA.

New Thermopane[®] insulating glass units made from Tuf-flex 200 will fit sliding-door frames formerly restricted to the use of $\frac{5}{8}$ " insulated glazing made from sheet glass.





Associate Member of the Architectural Aluminum Manufacturers Association, an organization composed of quality aluminum window and door manufacturers.



Condemned houses are trucked across town to create a used-house subdivision



BEST TRUCKER cost more than the cheapest but saved money by delivering houses undamaged. Highway construction in Birmingham, Ala. proved a bonanza for Real Estate Broker Burton D. Olshan, who bought 35 houses in the path of a new expressway, sold 21 of them to individual buyers on their own lots, moved another 14 to a new subdivision he developed, brought them up to new city code requirements, and sold them all within a few months.

The economics are as impressive as the sales record: the two- and three-bedroom houses cost Olshan \$600 to \$2,000; moving charges ranged from \$800 to \$1,200; the finished lots cost \$1,100; and new foundations and complete renovation averaged \$3,000. Total cost per house: \$6,200 to \$6,500. Sales prices ranged from \$9,250 to \$11,000.

Olshan sold houses to individual buyers (delivered at the foundation) for only \$4,000 to \$5,000. But for these, Olshan paid only the acquisition cost plus moving expenses. On 14 remaining lots in the subdivision, Olshan plans to build new houses priced several thousand dollars higher to upgrade the neighborhood and to eliminate the stigma of "the street where they moved all those old houses"—a stigma that slowed sales at first. Next time, Olshan says, it might be better to put the houses on scattered lots in existing neighborhoods rather than group them in a development.

Foundation and renovation work was done by the Olshan-owned Add-A-Room Remodeling Co., which charged costs-plus-20%.



Humorous postcards give buyers and prospects the word

To keep buyers posted on construction progress of their houses, salesmen for Denver's Perl-Mack Construction Co. mail a series of four oversize postcards (*left*). The cards forestall the petulant "When will my house be ready?" and, in a light vein, remind buyers the salesman is taking a personal interest in the completion of the house. Salesmen also find when customers feel construction is proceeding, they are less likely to visit the site, taking up salesmen and workmen's time.

In Norfolk, Va., Viking Construction's salesmen use a series of eight messages in the form of humorous greeting cards (*right*) to follow-up all model-house visitors, and as thank-yous to buyers. The series was the salesmen's idea. They wanted a light-touch mailing piece, not hard-selling letters.



Free sleigh rides woo buyers in the dead of winter

A snowfall that would ordinarily have killed all traffic was turned into five sales by Past NAHB President, Edward R. Carr, at his project in Springfield, Va., nine miles from Washington, D.C.

For \$200, he hired a team of horses and an old-fashioned sleigh, then ran two ads in local papers inviting families to come out for a free ride around the property. More than 350 families turned up and were shown around roads impassable by car. Next weekend, Carr offered no sleigh rides and only 35 people turned out. Carr has sold 47 of his 78 houses (\$23,500 to \$24,950) since his October opening.

Letters start on p. 83



More fresh new ideas from PONDEROSA PINE

THE ATRIUM TOWNHOUSE

designed for outdoor-living on in-town lots



Built around an open patio --the Atrium--these units offer a spacious living room, controlled

traffic, flying stairs, fireplace, three bedrooms, two baths and many other sell-appeal features. But the overall warmth and beauty is the result of the artful use of Ponderosa Pine Woodwork. Standard Ponderosa Pine louvered doors, panel doors, sliding doors and folding doors provide flair and drama for closures and pass-throughs ...as well as wall paneling. Lots of windows, lots of light. Plenty of places to put things. Everything that's been missing in Townhouses until now.

LIVABILITY AND SELL-APPEAL

However, the really big feature is the Atrium. Privacy and sunshine. Barbecues and buffets. All major rooms open on to it through gliding, draft-free glass doors of warm, precisioncrafted Ponderosa Pine. Summer heat and winter winds are locked out. But not the view. All this gives the Atrium Townhouse more livability and more sell-appeal than most single family detached houses.

The Atrium Townhouse is truly a trendsetter. Send the coupon today and get full details and marketing plans. If you would like working drawings, include \$10.00 check or money order.

WOODWORK OF Pondenosa Pine



Fireplace: Doors on either side of this unique paneled fireplace open to permit free movement for entertaining. **Stairwell:** Here is a design feature that is generally found in higher priced homes. Dramatic suspension and paneling add excitement and flair.



Ponderosa Pine Woodwork 39 South La Salle Street, Dept. 000 Chicago, Illinois 60603

Please send me FREE Marketing Plans for the Atrium Townhouse containing merchandising and promotional material.

□ Please include working drawings at \$10.00.

Please include _____ extra sets of drawings at \$2.00 each.

Name_____

Company____

Street Address

City_____

_____ State_____ Zip Code_



The Bienville. A superb example of Kingsberry value, combining tremendous curb appeal and ingenious design into low construction cost, high profit potential. Four bedrooms, $2\frac{1}{2}$ baths, large family room, custom features throughout. 1966 square feet to sell for about \$18,500 plus lot—real value at a profit!

Kingsberry means VALUE...



and value means **BUSINESS**!

Kingsberry homes sell *fast*. That's because there's much more to the Kingsberry Value story than big-name architects, precise manufacture, brand-name materials throughout every house. Only Kingsberry has a *Total* Marketing Program to back every builder. From initial market research to sales training, Kingsberry helps you with planning, budgeting and cost control, national advertising, and the industry's most liberal cooperative advertising plan—*everything* to help you create and sell value at a profit in today's tough market. It works. To start it working for you, just mail the coupon below.

KINGSBERRY	Jerry Nowak, General Sales Manager Kingsberry Homes Corporation — Dept. HH-1 — 5096 Peachtree Road, Chamblee, Georgia Yes, I'm interested. Please rush me more information on the Kingsberry Value Story.
HOMES	Your name
5096 Peachtree Rd., Chamblee, Ga. Phone Atlanta: Area Code 404, 457-4301	AddressZoneState



1. Score it on the back.



3. Seal openings with vinyl tape.



tion requirements are met. Each panel is 4' x 11' x 1/2"

thick, with gypsum core surfaced with factory-sealed,

continuous, waterproof vinyl coating. Continuously tested

for one year (equal to 1,000 showers) with such excellent

5. Caulk corners and around fittings.



2. Snap it . . bend it.



4. After nailing, cover joints with vinyl tape.



6. Apply ceramic or other nonabsorbent tile.

The Gold Bond difference: The only Vinyl-Surfaced Backer Board approved by three model building code organizations

Now you can use Gold Bond gypsum drywall construction results it has won acceptance by three model building code with ceramic tile in bath and shower areas confidently. It's organizations. Gold Bond Vinyl-Surfaced Backer Board is approved as a satisfactory alternate for backing speciavailable through your Gold Bond® Building Supply Dealer. fied in the Uniform Building Code, when proper applica-Ask him to give you full

technical information. Or write National Gypsum Company, Department HH-44, Buffalo 25, New York.



See Research Recommendation No. 1699-1 of the International Conference of Building Officials

BONDERMETIC SEAL[®].... MORE VAPORTIGHT

ONLY *Thermopane* INSULATING GLASS has the dependable metal-to-glass seal

Insulating glass is only as vaportight as its seal. Every component of the *Bondermetic Seal* in *Thermopane* has zero permeance for air and water vapor. Zero. This is why *Thermopane's* metal-to-glass seal is more vaportight than other insulating glass with a seal made of organic adhesives. For windows of more conventional size, $L \cdot O \cdot F$ also makes *Thermopane* with a fused all-glass seal. It is called *GlasSeal*[®].

When you install *Thermopane*, you assure yourself of greater customer satisfaction, fewer call-backs. Your customers enjoy clearer windows, more comfort and fuel savings. *Thermopane* is well worth the investment. Whether you choose the bonded *Thermopane* metal-toglass seal or the fused glass-to-glass seal—or both—you're assured of backing by a great name in glass—Libbey Owens Ford.



Libbey · Owens · Ford

The name for confidence. In a survey by an independent research organization at the National NAHB Convention in December, 1963, 500 builders were asked:

• Which brand or brands of insulating glass would be the greatest help in selling houses? 54.7% named only one brand. In these answers, *Thermopane* led the next brand 6 to 1!

• Which brand or brands of insulating glass would be more likely to gain referral sales for you? 49.1% named only one brand. In these answers, *Thermopane* led the next brand 6 to 1!

• Which brand or brands of insulating glass are best known to prospective home buyers? 73.6% named only one brand. In these answers, *Thermopane* led the next brand 9 to 1!

Behind you – 21 years of consumer advertising. Your prospective customers know *Thermopane*. They know it from extensive $L \cdot O \cdot F$ advertising in consumer magazines. Capitalize on *Thermopane's* undisputed leadership. It's good business.





What makes this builder break away from kitchen appliance packages when it comes to dishwashers?

Robert D. Sawyer is a pace setter among Salt Lake City's builders.

He designed and built the nearly completed luxury condominium, Oak Crest Gardens, where every major appliance but one is part of a "package".

The exception is dishwashers. They're KitchenAid top-of-the-line Superba Vari-Cycle models.





Why? For one thing, Mr. Sawyer has been using KitchenAid dishwashers in his custom homes (\$25,000-\$40,000 range) for the past five years. He's so sold on KitchenAid and its reputation with owners that he didn't want anything else for Oak Crest. As he puts it, "A quality kitchen deserves a quality dishwasher". And Oak Crest *is* quality.

Service has never been a problem; the KitchenAid dishwashers have operated quietly (especially important in apartments) and efficiently—and will for years to come.

In Oak Crest, KitchenAid Vari-Fronts let the tenant-owners match, accent or complement their preferred kitchen decor and have made a big hit. Mr. Sawyer feels this feature particularly has helped to sell the ladies. Kitchen design varies from Early American to contemporary.

Why don't you take a fresh look at breaking the kitchen appliance package and put extra feminine appeal into *your* kitchens.

There are a lot of other good reasons for installing KitchenAid dishwashers in your apartments and homes. Ask your KitchenAid distributor. Or write KitchenAid Home Dishwasher Division, Dept. KHH-4, The Hobart Manufacturing Co., Troy, Ohio.





See them at the Better Living Center, New York World's Fair



This emblem brings action



Display this Yellow Page emblem freely: It means business...it reminds prospects to look for your ad when they're ready to buy. And people who read the Yellow Pages <u>are</u> ready to buy. (Aren't <u>you</u> when <u>you</u> look in the Yellow Pages?)

*That's if you're in the Yellow Pages. If not, call your Yellow Pages man - he's in the Yellow Pages under ADVERTISING - DIRECTORY & GUIDE.

It's a great year to be selling glamorous new Crane Sunnyday Stainless Steel Sinks.



How luxurious can you get?

Not much more, we bet, than when you offer your customers these jewel-like new beauties now available for the first time from the most famous name in plumbing. Yet they're definitely competitively priced! Beside their prestige appeal, Crane Sunnyday Stainless Steel Sinks have many advantages to anyone buying, building or remodeling. Rounded corners for easy cleaning. Lustrous swirl finish in the bottom of the bowl for long-time good looks.

Sunnyday Stainless Steel Sinks are carefully manufactured with a specially developed stamping process. This means uniform thickness throughout. They are backed by the Crane name, famous for quality for more than 100 years. More facts: single or double units...with or without self-rimming feature...18 or 20 gauge 302 or 430 stainless steel...choice of single lever, Crestmont or Capri fittings.

Crane Sunnyday Stainless Steel Sinks are one more new and profitable reason for selling Crane in '64 and for writing for more information to Crane Co., P.O. Box 780, Johnstown, Pennsylvania.



PLUMBING - HEATING - AIR-CONDITIONING GROUP, BOX 780, JOHNSTOWN, PA.

Will FHA land loans inflate land prices? ... Code troubles ... Mid-income housing

The housing bill of 1964

H&H: President Johnson's housing objectives are commendable, but we have reservations about some features. The program for starting new towns and new subdivisions seems primarily designed to help large builders or land developers who could obtain loans up to \$50 million. This would seem to hurt small builders. This program also seems to encourage more bureaucratic control over local problems which we think can be better and more safely met by local financial institutions in a better position to measure need. Experience with urban renewal bears this out: tremendous acreage lies unused . . . FHA insurance of land development loans would probably result in a land development boom followed by a surplus of building sites and ultimately a decline in values and increase in foreclosures of development loans.

Before the government substantially expands public housing, a program for absorbing existing [foreclosed or vacant] properties should be studied. One method might use FHA and VA funds, on a low down payment basis. If down payments on more expensive properties were higher, this should give impetus for the reduction of existing older properties. For persons who do not have sufficient funds even to make a low down payment, the aggregate of rent paid over a period of time could later be credited in the form of such down payment. This should reduce the number of older properties and encourage pride of occupancy and ownership.

The proposed increase in the size of FHA loans is probably warranted, but we hope FHA's credit standard will not be lowered. Excessive FHA and VA foreclosures are undoubtedly due to credit standards far too liberal.

OSCAR R. KREUTZ, president First Federal s&L Assn. St. Petersburg

H&H: We are especially encouraged that congress is addressing itself to the problems of land development. . .

HAROLD BOESCHENSTEIN, chairman Owens Corning Fiberglas Corp. Toledo

The albatross of localism

H&H: I enjoyed reading "The albatross of localism" [Dec.] but some statements were misleading or untruthful by inference.

The article contends that the national proprietary building codes are good (amen) and should not be amended or revised extensively by local pressure groups. The blame for chaotic conditions created by local pressure groups and special interests is placed on everyone except the homebuilder. He is set aside as the prince of all that is good and fighting for only the righteous. Let's face facts: the homebuilder represents another pressure group demanding changes advantageous to his cause. Many changes are urged and requested, even forced, by the homebuilding industry.

The article continues to state that most code troubles come in cities of less than 50,000 population where "the whole governmental office is made up of milk drivers,

bread clerks and insurance salesmen, running the city on a part-time or weekend basis. Many cities, including those of less than 50,000, are run by competent, well trained city managers and department officials...

The model code organizations are doing a tremendous job. They certainly are continuously pressured by groups in the industry, each jockeying for code changes to give their organization an advantage. The code organizations are to be commended for the contributions they have made in producing up-todate regulations. The average building official is working toward and hoping for code uniformity as much as, if not more than, other interest groups... LOUIS J. KRUEGER, architect

Topeka, Kan.

Reader Krueger misses one point. Many small cities are well run, but many more aren't-on such technical items as building codes. H&H applauds the valiant attempts by model code groups to improve codes, but their staffs and budgets are too small to cope with the giant job they face, and 15 years of efforts to unify their provisions have all ended in failure.-Ed.



Waste in building codes

H&H: Pages 102 and 103 of the December 1963 issue contain a roster of 20 codeenforced wastes which can make a \$1,500 difference in the sales price of two identical houses. The words "waste" and "saves" have been indiscriminately applied. Any uninformed or inexperienced builder studying this list would conclude that these saving techniques could produce a high quality building \$1,500 cheaper, that only the code-enforcing ogres stand between him and this dream. It ain't necessarily so, for many qualifications must be applied

Each of these wastes or savings must be studied on its merits for a particular application. For the code or building official to prevent the use of properly engineered construction technique is one thing. To insist that quality be maintained is another.

EDWARD F. DIEKMANN, civil engineer Gilbert Forsberg, Diekmann, Schmidt San Francisco

A house exactly like the one shown in our December issue has obviously never been built and probably never will be. This drawing is intended to dramatize code wastes as we point out in the caption: "Practically no builder would be confounded by all \$1,500 of the code waste shown in the composite horror above."-Ed.

Professional teamwork

H&H: Your reports on housing's team concept are exciting news. It has long been apparent that a satisfactory product could only come from a team of professionals. Have housing experts considered including on the team a home economist whose specialty is the needs and desires of people in relation to housing?

RUTH H. SMITH, assistant professor College of Home Economics Pennsylvania State University

Tack-on architecture

H&H: You are one of its greatest perpetrators. Your leitmotif seems to be: steal a good idea, produce it at 10% of its original cost, just so it looks the same, and then sell it, sell it, sell it. If not your leitmotif, it is certainly that of a lot of the builders whose houses you publish.

> HANS C. KAUFMAN Seattle

Middle-income housing

H&H: The myth overlooked in your middleincome housing story [Mar.] is the one that has stirred the general public most: the allegation that cities are turning into places for the very rich and the poor.

For ten years mayors have been pointing at the suburbs, wailing that the middle class has abandoned the city for the pleasures of crab grass. City planners and urban renewal specialists have hopped on the bandwagon saying that slums must be cleaned and cities made safe for the backbone of America, the middle class

In more than a dozen major cities selected at random I found the proportion of families in the \$5,000 to \$10,000 range actually increased between 1950 and 1960. This is slightly above the middle third of income groupings, but mid-income housing programs usually aim at helping families in the \$5,000 to \$10,000 bracket.

PROPORTION OF FAM		n \$5,000
то \$10,000	INCOME	
City	1950	1960
Chicago	26.6	49.2
New York	21.8	45.6
Los Angeles	23.3	44.4
Philadelphia	18.7	46.6
Pittsburgh	17.9	44.4
Cleveland		50.8
Detroit	27.5	45.7
St. Louis	16.3	44.2
Boston	17.4	47.5
Baltimore	18.3	43.7
San Francisco	26.2	46.8
Buffalo	18.1	47.8
Washington, D.C	25.7	38.4

The suburbs obviously have grown in the last decade, but the \$5,000 to \$10,000 group was 45.6% of city families in 1960 and 51.7% in the urban fringe-not an appreciable difference.

The big difference in migration is that upper-income families left the city in large numbers while the poor did not.

Even in Manhattan, the proportion of the \$5,000-to-\$10,000 income group increased

continued on p. 99



SCATTERED LOTS

Here is a striking example of the adaptability of Western Wood Products to the building of a distinctive home on a scattered lot. In this case the lot was already leveled and landscaped, and minimum disruption of the plantings took place during construction.

quired setback from the lot line and still provides 1360 sq. ft. of living space. The view is to the sheltered rear of The lot is only 50 x 115, yet the house is built with the rethe lot and the garden that was already present. The designer brought the suburban feeling into this smart taking advantage of the privacy at the rear of the lot. The front portion houses the kitchen and sleeping areas. The ground floor windows in front and all side windows have town house by moving the living areas off the street and been eliminated to obtain maximum privacy. The standard sizes and grades of Western Lumber were used for the entire house. The ready availability of Western Wood Products from your lumber dealer makes the building of scattered lot homes practical and economical.



The interesting two-story has an amazing 1360 sq. ft. of living area.



DESIGNER: WILLIAM J. HAWKINS III BUILDER: SAMUEL B. VAHEY

Western Red Cedar 1"x4" tongue Western Keu

WAL TO Douglas Fir 2"x4" wall framing;

Western Hemlock 2" x6" tongue Western Hemlock Z"xb" rongi Reference, acoustical pattern.

WILL T25

Douglas Fir 2"x6" for window frames. Also used in various sizes for trim. MIL 729





P. O. BOX 2845

WEST COAST LUMBERMEN'S DIVISION

















Secluded back yard at the rear becomes part of the living pattern.



Douglas Fir beams and dimension lumber simplify framing.



Street side is an example of contemporary simplicity.

ONE REASON SCHOLZ HOMES IS NOT ONLY OUTSTANDING BUI









SOUTHERN COLONIAL No. 2





Quality-conscious builders with a concern for the "custom" look in their developments never worry about monotony in their Scholz communities They never need to repeat an exterior.

And they could do it with ONE HOUSE. All of these architectural masterpiece elevations ... 20 of them ... are one house. This happens to be just one top selling Scholz design, the "Briarwood" . . . a \$25,000 to \$30,000 ranch, optional with three or four bedrooms.

But above all . . . they do it with a house that is different . . . that intrigues . . . THAT SELLS!

Scholz Homes builders set unprecedented sales records in '63. They did not do this by offering that "POINT-OF-NO-RETURN" for the builder, the most square foot for the money! They did this by offering something unusual . . . something better. Scholz builders work on bigger profit margins









FRENCH PROVINCIAL No. 3

Send for Your Copy of The **"FAMED SCHOLZ DESIGN COI**

SETTING NEW GROWTH RECORDS TREMENDOUS VARIETY IN A







One House!

than 90% of the industry . . . because they are able to give people what they have been searching for!

Scholz also provides the most comprehensive program for the sale of the custom quality house in the industry ... land financing ... model financing ... display model decorating ... detailed sales instruction ... "closing" picture films ... 4,000 preindoctrinated, profitable sales leads each month to its builders from consumer advertising.

30,000 quality Scholz Homes have now been built in every part of the country. Scholz builders accounted for 50 million dollars in completed homes last year. It can work for YOU. We are everywhere in the continental United States.

Send coupon for your copy of the "Famed Scholz Design Collection." Call or write today.





CLASSIC No. 1

LECTION" Now!





FRENCH PROVINCIAL No. 2



CLASSIC No. 2



NEW ENGLAND COLONIAL No. 2



SOUTHERN COLONIAL No. 1

Please forward the 36-page, full color "Famed Scholz Design Collection."

NAME		STREET	
CITY	ZONE	STATE	PHONE
re interested in building	in the		are

Mail to: SCHOLZ HOMES, Inc., P.O. Box 3355, Toledo, Ohio 43607.

HH 4-64



a powerful selling tool ...

the convenience and safety of circuit breakers in your homes

Circuit breakers add only a microscopic amount to the cost of the complete electrical wiring job—as little as ½ of 1%. Yet the appeal of this modern convenience to today's electrically-minded home buyers is tremendous.

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LETTERS

start on p. 83

from 15.8% to 34.5% between 1950 and 1960.

There is no substance to the contention that housing for middle-income groups must be subsidized to keep them from going to the suburbs. The 1960 Census shows that a healthy proportion have cast their lot with the city despite wolf-crying mayors.

But middle-income voters suffer from the same delusion as the rest of us—the belief that they deserve gifts and aids. In face of this they will be hard to convince that the need is not urgent.

ROBERT DENNIS, research associate Pratt Institute school of architecture Brooklyn, N.Y.

Who master-planned Reston?

H&H: You are certainly to be congratulated for your February article on suburban planning (New Towns for America) and we are happy to see Reston was so favorably treated. But I wonder if Harland Bartholomew is as embarrassed as we are stunned to see our work published as being that of his firm....

Yes, Harland Bartholomew & Associates prepared a master plan for Reston in 1960... It was not adopted. Our commission for a master plan followed and was adopted in 1962, and Reston is being built according to it.

JULIAN WHITTLESEY, FAIA Whittlesey & Conklin New York City

H&H: We're thrilled . . . The entire piece was very timely and represented a valuable synthesis of the new town field.

ROBERT E. SIMON Jr., developer Reston, Va.

How to sell open occupancy

H&H: Congratulations on publishing the interview with Ned Eichler on open occupancy (Feb.). His remarks go far to dispel some of the notions builders and others in the housing industry have about this issue. This sort of personal experience report can be very helpful in convincing the industry that open occupancy doesn't have to hurt anyone.

EDWARD L. HOLMGREN, executive director Baltimore Neighborhoods Inc.

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EDITORIAL

Land legislation: inflationary time bomb?

Proposals in the Administration housing bill for FHA mortgage insurance on large subdivisions and complete new communities* amount to an attempt to solve three problems at once with the same tool.

Problem No. 1 is what HHFAdministrator Robert Weaver aptly describes as "the costly clutter of blindfold growth and blunderbuss expansion" around U.S. cities that is, suburban sprawl.

Problem No. 2 is the high and rising cost of land for housing.

Problem No. 3 is the tendency of the nation's astonishing crop of new towns (H&H, Feb.) to concentrate on housing priced too high for low-income families and thus perhaps to reinforce patterns of racial segregation.

The Administration proposes to solve al three of these problems by using FHA insurance to make it easier and cheaper for builders to buy land, and easier and cheaper for builders to finance the high cost of land development.

This is an attempt to do so much with so little that it's easy to understand why President Bill Blackfield of NAHB, testifying before the Senate housing subcommittee, urged Congress to postpone action on the whole scheme until the housing industry can study it much more thoroughly (see p. 6).

HOUSE & HOME would be the first to agree that this is a proposal noble in purpose. But HOUSE & HOME has grave doubts how many, if any, of its objectives it would achieve. And HOUSE & HOME agrees that the twin plans should not be rushed into law. For they involve the most basic change in federal housing policy since the government got into urban renewal in 1949. If the two schemes work on a large scale (there is some doubt about this), they would thrust the federal government into *directly* guiding and controlling the development and use of raw land around the growing edges of U.S. cities.

There is no need to rush. The immediate impact would be nil. Today's vacancy rates and growing stock of foreclosed homes show that housing is in plentiful supply (H&H, Feb.). Conventional money for land development is plentiful for builders of sound reputation and adequate capital (H&H, Mar.)—though conventional money usually costs 9 to 18%, not the 6% FHA would charge. And, regretably, it is not only land developers from Dixie for whom FHA's anti-race bias clause is enough to make even a 6% FHA land loan look singularly unattractive.

So Weaver holds forth a great promise for a federal solution to a pressing series of local problems. It has much appeal. But so did urban renewal (now bogging down). So did public housing (now far short of reasonable expectations). And so did the very fact of federal home loan insurance itself (now steadily declining). The Administration's housing bill doesn't really come to grips with any of these existing problems. Still more reason, then, for not rushing *new* proposals into law.

As for Problem No. 1, HOUSE & HOME has long decried the waste of sprawl and urged steps to combat it. But the major reason for sprawl is that bypassed land is too costly. So there is a real question whether sprawl can be cured without doing something about its cause. As long as close-in land costs too much, builders will leapfrog to cheaper terrain.

As for Problem No. 2—bringing down the price of land—experience and pretty much everything else has shown that making a purchase easier to finance usually makes it more expensive. For instance, in New York City, the most immediate result of the state's Mitchell-Lama easy-financing program for middle-income housing has been to inflate the price actually paid for land under some projects from 50ϕ to \$2 a sq. ft. Even HHFA officials will concede privately that the land-loan proposals "may result in added inflationary pressures on land for a few years." Weaver contends that if there is a big increase in the volume of developed housing sites, competition will then deflate lot prices throughout metropolitan areas.

HOUSE & HOME doubts that this is so. For not only the first but the continuing effect of Weaver's plan would be to underwrite easy financing via Uncle Sam and to reduce sharply the amount of capital developers need (and so increase the number of bidders for acreage).

Economist Weaver seems to have forgotten the economic axiom that easy terms in any industry are a device to make overpricing acceptable. Moreover, the proposals involve a questionable expansion of federal paternalism into setting standards and ground rules for what the government thinks the *total* environment of new housing should be. Puerto Rican builders are getting a taste of this kind of medicine (*see Housing Abroad*, p. 63), and it leaves them fearful.

^{*} In brief: For new communities, FHA would insure land-development loans up to \$50 million for private developers of new towns "in areas now largely underdeveloped." Loans could not exceed the lesser of 1) 75% of the value of the completed development or 2) the sum of 75% of raw land value plus 75% of development costs (90% if developers bring in transmission lines or water and sewer lines). Maximum: \$50 million. For subdivisions: loans would be the lesser of 1) 75% of the completed value or 2) the sum of 50% of raw-land value and 90% of development costs. Maximum: \$2.5 million. For both proposals, interest could not exceed 6%.



The elderly people enjoying their retirement years (opposite) are a sampling of a potentially big market that could be sold today. Many in the housing industry have let the problems of serving this market obscure the opportunities it offers. This raises the question:

Is retirement housing today's best bet for boosting sales and profits?

This big market is literally up for grabs.

Some builders are growing big on it, but churches and nonprofit groups are getting the lion's share because 1) they get many tax and mortgage breaks private builders don't, and 2) a lot of builders and developers are still neglecting it entirely.

Consider these two important facts:

1. In the last three years profit-oriented builders erected only about 20,000 units for retirees.

2. In the same three years, the number of people over 65 has increased by more than 1 million—and another 1 million have been added to the 55-to-64-age group, generally considered a prime retirement target.

Housing aimed especially at old folks has been neglected partly because our youth-oriented society avoids thinking about the aged and their problems. And too many housing men see virtually all the elderly as poor, infirm or psychologically unwilling to move into more suitable housing—especially old-age ghettos as some sociologists label today's retirement communities.

Some builders blame the government for rigging the rules so pseudo nonprofit operators—as opposed to churches, unions and other legitimate sponsors—can wheel and deal in retirement housing without risk. Example: Builder Samuel R. Geddes of Napa, Calif. (who is also a state senator) has just testified before a U.S. Senate subcommittee: "The super-duper suede-shoe boys have taken over, and they're serving greed, not need. It's time we stopped subsidizing greed. . . . These promoters have nothing to lose [thanks to U.S. loans] even if they don't sell a single unit, and many projects aren't selling. They say they're nonprofit and they get 100% loans and pay themselves enormous salaries."

Three years ago when HOUSE & HOME first examined the retirement housing market in detail, builders who had ventured into it were scarce as hen's teeth. Today's retirement builders are more numerous—but not numerous enough to tap all the market. Builders who have clicked in this market have planned their moves carefully—and know just what kind of design, what kind of communities, what kind of financing and what kind of amenities to offer.

The successful retirement builders you will read about on the following pages are finding that the retirement market is filled with opportunities and sown with tough obstacles. But the opportunities are huge: Ross Cortese, one of the nation's five biggest builders, builds nothing but retirement houses. For his story, turn the page.



Leisure World No. 1

Three clubhouses like the one above

and nearly \$2 million other commu-

nity facilities were built when the 541-acre Seal Beach retirement proj-

ect opened in August 1961. The

6,470 apartments, all with the same

exterior design, have one or two bedrooms, first sold at \$9,750 to

\$11,100, later at up to \$13,900. Monthly payments, including medi-

cal care, average \$120.



Leisure World No. 2

An \$850,000 clubhouse, big pool and more than \$2 million in other facilities were in place for the Laguna Hills opening late in 1963. Here the units are larger one- and two-bedroom apartments priced at \$11,400 to \$16,400. Eighteen thousand units will be built on the 3,600acre tract. Average monthly payments of \$163 include hospitalization as well as other medical care.







Ross Cortese's first two Leisure Worlds show a giant demand for retirement housing . . .

Ross Cortese has become one of the nation's five biggest builders by building for the retirement market—people 52 and over.

His 1963 volume at Rossmoor Leisure World Seal Beach alone was 3,000 co-op units—about \$36 million in sales (*for a look at other giants, see p. 118*). This year he expects to sell 6,000 to 8,000 retirement units—for a volume of about \$100 million which will likely propel him into the No. 1 spot. Says Cortese: "I hope to have projects under construction this year which, when completed, will amount to \$1 billion in homes and facilities."

How does he do it?

One answer, obviously, is that a market exists for housing and services good enough to draw retired and about-to-retire people from existing homes.

Another answer is apparent in the photos above of Cortese's

first three Leisure Worlds—the first two south of Los Angeles and the newest at Walnut Creek east of Oakland. All offer luxury community facilities and well designed co-op apartments at relatively low prices on high-priced land close to major cities. And as the photos show from left to right, the designs have improved from good to better to best.

Another answer is that buyers get extensive medical services. Their payments cover 80% of the cost of almost any medical need except nursing home care. And each Leisure World, except the first, will have its own hospital.

But the basic answer is that this longtime California homebuilder (who built the walled city of Rossmoor) is one of the best in the business. He knows construction, land use, financing, merchandising, design, and you-name-it—and is a wise enough





Leisure World No. 3

At Walnut Creek, too, retirees are offered a wide variety of facilities built before the opening. The 2,000acre project is planned for 10,000 units priced at \$15,000 to \$18,000. At left is an art studio adjoining craft and meeting rooms, at right one of five community halls. But the accent is strongest on designand greater variety in dwelling units. as evident above. All buildings are related carefully to each other and the rolling terrain, for visual impact and maximum privacy. Architect Warren Callister's skill is apparent in the use of unpainted wood, strong beams, delicate window treatment and other details.



and now he has opened a third in a chain that may later extend as far as Europe

manager to pay well for a good staff and many professional consultants.

Cortese has been a success in the highly competitive Los Angeles market for years. But he has expanded faster than ever since he grasped the idea of creating retirement communities big enough and complete enough to draw masses of elderly people.

Yet skeptics still wonder if he can keep expanding. Can he? As of early March, the only answer seems to be that sales are mounting higher almost monthly. Six weeks after Laguna Hills' Jan. 22 opening, 879 sales were closed. At Walnut Creek the 465 units in the first mutual co-op sold out on opening day, Feb. 26. Cortese expects to sell all 10,000 units at Walnut Creek in two years (he is already looking for more land in the San Francisco Bay area). He forecasts it will take five years to sell out at 18,000unit Laguna Hills and is confident he can sell out the last few hundred Seal Beach units as soon as the last mutual is ready for sale.

Meanwhile he is going ahead with more Leisure Worlds across the country. Next to open (probably late this year) will be a 1,000-acre project in Montgomery County, Md. Townhouses and medium-rise apartments designed by Architects Collins & Kronstadt will aim at Washington-area tastes. After that (in early 1965), Leisure Worlds are scheduled to be launched in the Chicago market and northern New Jersey. And in the past two months Cortese and his top aides have traveled in Canada and Switzerland looking for other locations. Says Cortese: "I'll build retirement communities like these in any large metropolitan market. There's a demand wherever people live. Most don't



want to move far from their present homes."

Cortese's designs, geared to local acceptance, vary from market to market. His own staff did the designs at Seal Beach (better than average by Long Beach-Los Angeles standards) and at Laguna Hills, where he so successfully captured the area's old Spanish flavor that many buyers think his main community center is a restored Spanish mission. Then he decided to use local architects and chose Charles Warren Callister for Walnut Creek after seeing an H&H article (July, '62) on Callister's San Francisco style.

Picking Callister made the difference between a good project and a great one. Walnut Creek is the most talked-about community in the West today. And the word is spreading across country.

Past NAHB President Alan Brockbank, hearing about it, rushed

1,000 miles from Salt Lake City to see it. Says he: "Walnut Creek is the greatest thing [in housing] that has ever been done."

Says Vice President Perry Prentice of Time Inc.: "Walnut Hills' design standards are as good as the design standards of 99 out of 100 architect-designed, custom-built homes. In model after model I heard the same excited comment from the elderly families going through—'I never saw anything like it.' The comment was 100% correct. The parts are good, and the whole is much greater than the sum of its parts. And the most exciting news is that the project manager says Callister 'helped us get lower costs than we could have gotten without him'—a dramatic example that the right architect can help a merchant builder build better for less."

Part of the credit for Walnut Creek's success goes to Land Planners Mott & Hayden, who worked from the start with Callister



'Strong, bold form'

Architect Callister has given each Walnut Creek design the same solid strength and 'unique eclecticism' of his expensive custom-built houses. The model shown here has a clerestory entrance that is at once highly distinctive and effective in making the high entry seem much larger than it is. Plan shows ample storage, good circulation and an atrium open to the kitchen and living room.





and Cortese's staff to capitalize on the spectacular site, the 2,100-acre Stanley Dollar ranch. Community facilities costing \$12 million will include an 18-hole golf course, stables, roque and tennis courts, a large pool, numerous community buildings (many already built), a shopping center and a large hospital. These facilities, and the one- and two-story apartments, are sited to leave much of the surrounding hills unchanged as permanent grazing land.

Cortese sells all his units under FHA Sec. 213 for co-operative housing. At Laguna Hills, for example, a buyer of a \$13,795 two-bedroom unit pays \$1,360 down, which includes \$416 for his share of stock in one of the many co-op mutuals (of 400 to 500 units each). Monthly payments of \$165 cover principal, interest, taxes, insurance, exterior maintenance and landscaping,

use of all community facilities and medical care.

Medical care includes 80% of the cost of these services: calls to doctors' offices, in-home nurse calls, hospitalization, laboratory and therapeutic services and prescription drugs. The 80% limit was set partly to discourage residents from abusing the medical plan by asking for unnecessary care and partly to equalize costs between individuals and couples owning the units. Blue Cross administers the plan. No benefits are provided during the first six months for pre-existing conditions, and benefits end when a patient requires long-term nursing home care. (Seal Beach has 18 doctors, though no hospital; Walnut Creek will have about 50 doctors, Laguna 64.)

Builder Cortese personally oversees every part of his rapidly expanding operation

He works over floor plans, looks for new products and features for kitchens and baths, seeks out land and negotiates to buy it, negotiates with local planning boards for required zoning, picks key men for each new project and handles the multi-milliondollar financing deals involved in everything he touches. He is both the idea man and the detail-picker. To cover so many bases, Cortese gets up shortly after 5 A. M., works via radio-phone as he drives 40 miles to work, sprints around sprawling Los Angeles by helicopter-and works seven days a week. In or out of his office he is all business. He rarely drinks or smokes, has no hobbies, avoids trade group meetings.

Key staffers include Executive Vice President Murray E. Ward, who has charge of construction; Attorney Harry Harper, who handles the important and complicated Sec. 213 paperwork; Sales and Advertising Director William G. Brangham; Public Relations Director C. Jay Mercer-but they seem agreed that without Cortese nothing much would be apt to happen.

Three corporations are involved in Cortese's operation. Rossmoor Corp. is the construction company (headed by Cortese). Golden Rain Foundation is set up as the non-profit sponsor of the co-op communities. And New Horizons Inc. is the selling agent. When the New Horizons completes 90% of the sales in a co-op mutual, Golden Rain contracts with Rossmoor Corp. to build the units and manage them.

Sales are handled by New Horizon's own staff-headed by Brangham, a former advertising agency executive. There are 31 salesmen at Laguna and 25 at Walnut Creek; only a few remain at nearly-complete Seal Beach. Salesmen are paid flat commissions when a mutual is closed. So they sometimes must wait a couple of months for their pay-but they don't mind since each earns \$25,000 or more a year. Thus far women salesmenand people with door-to-door sales backgrounds in various fields -have made the best records. Weakest records are usually made by former real estate salesmen. Asked why his salesmen are so well paid, Cortese says: "They're as important as anyone. No matter how much you offer the public, people have to be sold."

What next? Cortese's plans for more retirement communities will keep him busy for years. He believes strongly that owning one-family homes on big lots is no longer an easy way of lifethe taxes and costs are going higher; the chores of keeping up the homes are too difficult. "All that most adult couples have is a house and lot and the taxes to prove it," he says. He may in time build one-family homes again "but only in well-planned communities of 1,000 acres or more and where some sharing of transportation, recreation and other costs cuts down on each family's expenses."

A close look at the retirement-housing market reveals profit potential-but also

First of all, a close look should be directed at the words "retirement" and "market." They mean different things to different people. Taken together they unfortunately imply there is a specific, clear-cut, easily identifiable segment of the population at which the housing industry can aim its output. This is simply not the case.

The retirement market is made up of unknown millions of people, some not retired, some not elderly, some poorly housed but others already well housed, some willing to move to warmweather climates but most unwilling to do so, some infirm but most in good health. In short, it defies a simple description as to size or type of group—and is made up of a remarkable variety of (largely elderly) people who may well have more differing housing needs than any other segment of society.

This variety of needs creates great difficulties for the industry and needs are not easily translatable into effective demand. What may look like a large potential, based on need, may turn out on investigation to be a minuscule potential in terms of economics. But the opposite also is true. For example, perhaps only 5% of the retired or about-to-be-retired couples and individuals in the nation are willing to relocate in Florida or Arizona—but they represent an enormous potential to builders who offer retirement housing in those states.

Nevertheless, housing-industry experience in the past few years has produced indisputable evidence that there *is* a market thus loosely identified—and that it offers great opportunities.

There are six clear-cut (though frequently overlooked) guidelines to the retirement market potential

1. The retirement market is wherever retirees or nearly retired people live. Most older people want to stay in their old neighborhoods or in the same general area where they have lived for years.

2. Survey after survey has shown that most older people want to live near their children—which is the main reason behind the first factor but also means that older people will move to be close to children who have moved far away.

3. The retirement market is far more than the 65-and-over market. Best sales bets are people who have not yet retired, who still work, whose main expenses like college education for children have ended, who are able to afford housing more suited to their needs than the homes they've lived in while their families were growing. Small wonder, then, that Ross Cortese has set a minimum buyer age of 52 (*see p. 108*).

4. The market is growing fast in numbers of people willing and able to buy or rent housing designed for their later years. People over 60 are forming an increasingly larger segment of the adult population. They are retiring earlier and enjoying higher incomes thanks to pension funds and government programs.

5. The market can be met with many kinds of housing. Ross Cortese's co-op apartments in giant communities are only one of myriad ways to appeal to retirees. Big builders and small builders almost anywhere in the nation—and in many metropolitan areas—can successfully offer low-price or luxury units, for rent or for sale, with or without health-care plans and with or without recreation facilities.

6. The market is wide open—and, in most cities, under-tapped by the housing industry—even in the few markets where retirement building has started.

Not one of these six items is a new discovery. HOUSE & HOME spelled them out three years ago. And builders who are making hay in the retirement market are well aware of them. But when it comes to planned retirement communities, a key question arises:

Should retirement communities be limited to older residents or opened to people of all ages?

However much sociologists decry housing projects that cut off retirees from younger adults and children, the fact remains that many older people prefer to live with other people their age. Del Webb proved this four years ago at his first Sun City in Arizona, and developers like George F. Brice Jr. in Oregon are still finding it true.

But most of the evidence is on the other side, and the trend is toward communities with housing for various ages. This is certainly in the wind for the many big new towns now being developed across the country (H&H, Feb.). For example, in Volk-McLain's 4,500-acre, 9,500-unit San Ramon Village near Oakland, Calif., one central section—with its own recreation center—has been set aside for 600 houses and condominium apartments for people 50 and over. Since last summer, 209 of these units have been sold, at \$11,950 to \$20,950, to buyers averaging 60 years old. Some are retired, some work. Many have bought there to be near their children and grandchildren—but not too near.

Even the big retirement cities like Webb's later Sun Cities, General Development's Port Charlotte and other Florida developments are not planned solely for retirees. A Webb spokesman points out that 14,000-acre Sun City, Calif. is planned for 52,000 dwelling units, "and we could never fill it with 52,000 elderly families." Most big lot-by-mail developers who have converted lot-buyers to home-buyers have found many of their new owners are in their thirties and forties. And some communities planned mainly to attract retirees—Florida's Lehigh Acres, for example now set aside land for schools.

Many elderly people have the income and the assets to buy or rent good housing

Census figures in 1962 showed there were 2,219,000 families and individuals in the 65+ age group who had annual incomes of \$5,000 or more. And in 1960 41% of all elderly people had assets of \$10,000 or more.

Builders, in fact, are finding that they have underestimated buyers' assets—and that many older buyers prefer to make fullcash payments.

A case in point is Woodburn Senior Estates, a retirement community of single-family homes 30 miles south of Portland, Ore. George F. Brice Jr., president of Security Bank of Oregon, opened Woodburn a little over two years ago expecting it would attract retirees hard-pressed for money. He offered low-down-payment, FHA Sec. 203 loans on small houses priced from \$8,975 to \$11,250 (photo p. 114). But 60% of the 500+ buyers thus far have paid cash in full—and for homes now priced \$500 higher. A survey of the owners reveals these income and asset groups:

ANNUAL INCOMES	NET WORTH				
\$4,000 or under	Under \$15,000				
\$4,000-4,999	\$15,000-30,000				
\$5,000-6,999	\$30,000-50,000				
\$7,000 or over14%	\$50,000 or over				

Other Census data suggest that many of the elderly could use better housing. Two out of five live in houses built more than 50 years ago, two out of five in houses built 30 to 50 years ago. Many of these old houses are too big for their present owners, too big to take care of inside or out. They often have steep stairs and high heating and tax bills, are often in decaying neighborhoods.

a host of problems

But the need for better housing does not necessarily make a market for better housing. Most elderly people who have serious housing problems have low income. Half of the older couples have incomes well under \$3,010, which, says the Bureau of Labor Statistics, allows them a "modest but adequate" budget. What's more, nearly half of today's 18 million 65+ population are single, and 1960 figures show individuals in this group had incomes averaging less than \$1,055—although the figure is somewhat higher when only non-farm population is included.

It is also true that most elderly persons with assets of \$10,000 or more have them in the form of free and clear home ownership, which has not always been easy to convert to cash. But the new tax law (*see p. 9*) helps the elderly get their money out of their old homes by forgiving the capital gains tax one time on profit they make when they sell. So it should prompt many to sell and then rent or move to more suitable housing. HOUSE & HOME suspects that this tax change may prove to be a major shot in the arm for housing built for the elderly.

Much of the retirement market has been going by default to church groups and other non-profit sponsors

And most non-profit housing has been built for people with moderate to high incomes who might have been just as willing to buy or rent in profit-motivated retirement projects.

There are good reasons to believe that churches, unions, and other non-profit groups will continue to compete strongly for the market even after the housing industry takes more interest in it. And this competition will continue to be stiff because non-profit sponsors have seven advantages over other builders:

1. They get 100% financing under FHA's highly flexible Sec. 231 program vs. 90% financing for profit-motivated builders.

2. They have automatic tax relief in many taxing jurisdictions.

3. They enjoy more good will from civic authorities and the public, who assume they offer more for the money plus long-term interest in their projects.

4. They enjoy better relations with the press and local agencies.

5. They draw on free time and talent from local professionals.6. They often receive contributions for charitable purposes to help underwrite their costs.

7. They usually are dedicated to serving long-term basic needs of their church or union members or whomever they try to assist in their projects. They're in it to stay.

But they also have handicaps: they usually plan and build inefficiently for they are dealing in unfamiliar fields.

Prompted in part by the success of non-profit projects, more builders are moving into retirement markets

And, as the photos on the next pages show, they are offering a variety of houses and apartments both for sale and for rent.

The best place to see this variety is in warm-weather areas like California where more than 300 retirement projects are newly built or planned. Builder Joseph Bolker's Hueneme Bay (*photo*, *top right*) has produced 350 sales at \$15,950 to \$21,950 since last fall. EX-NAHB President Nels G. Severin has sold hundreds of houses at \$14,250 to \$20,150 at Springtown USA (*right center*), though sales slumped at his Palm City community before he sold it in January to Oakland Builder Frank Goodman. Builder Del E. Webb's Sun City near Riverside has had 2,000 sales since June 1962.

Among builders serving the California market, several are making good use of FHA Sec. 231, which insures 40-year, 90% (100% for non-profit sponsors) loans. Set up by the 1959 Housing Act,



BIG CLUBHOUSE, 3-par golf course, other facilities are shared in condominium project for 1,000 townhouses at Hueneme Bay, built by Joseph Bolker west of Los Angeles.



SHUFFLEBOARD is popular in most retirement communities, as shown here at Springtown USA, Livermore, Calif., Builder Nels Severin's 1,000-acre city planned for 3,500 people.



MOBILE-HOME PARKS appeal to retirees in many markets. This 468-space Denver park, restricted to adults, has filled up in a year. Owner: Holiday Mobile Home Resorts, Phoenix.

continued



ARIZONA APARTMENTS at Tucson Green Valley south of Tucson are for rent to people 50 and over. Much of the 10,000-acre community will later be open to all age groups.



FHA SEC. 231 PROJECT in Claremont, Calif., has 343 oneand two-bedroom units renting from \$125 to \$200, swimming pool, putting green, clubhouse, and other facilities.



OREGON HOUSES on 4,500 sq. ft. lots have been sold almost wholly to fully retired people at Woodburn near Portland. They were built by Leo Rush for Senior Estates Inc.

Sec. 231, like many new sections, was slow to catch on and had bugs which took time to work out. Only 19 profit-motivated 231 projects with 2,858 units have been completed. But 46 more are now under construction or awaiting mortgage approval. (There are also 212 non-profit Sec. 231 projects in active status—67 complete and 145 under construction or awaiting approval.)

FHA Sec. 231 offers a good way to tap the market if builders watch every step carefully

This means the location must be right, the quality of residential units and recreation facilities must be high, construction and maintenance costs must be low, and (in rental projects) managers must know how to keep tenants happy. Two case histories from California tell the story:

1. Danmour Associates, Los Angeles, opened Claremont Village Green (*photo, left center*) two years ago on 18 acres close to downtown Claremont, a college town. The original 119 units filled up within six months, vacancies have been under 1% a month (though no one needs to sign a lease), and another 125 units are now being added. Partners Daniel Alvy and Seymour Sohn are also completing a similar 106-unit project in Redlands and hope to start a third in Ventura. They plan to retain ownership of all three projects for long-term income.

Says Alvy: "We paid \$30,000 an acre for our Claremont site—three blocks from shopping and the colleges in a town that caters to retired people. We wouldn't go into a town that doesn't offer the kind of facilities older people like. Our apartments are small but are planned like single-family homes, with front and rear doors and patios."

Alvy points out that most retirement markets are local markets: "The big majority of our people came from Claremont and nearby towns and only a few from as far as Los Angeles 30 miles away. A survey of our tenants showed that most of them are living there because they want to be near their children.

"They are also happy at Claremont Village Green because our manager-and-wife team does a good job without seeming to give them too much direction. A manager can make or break one of these projects."

2. San Francisco Builder John P. Boswell has finished two Sec. 231 projects, 260 units in Sacramento and 368 units in Phoenix, and is building a third, 418 units in Walnut Creek, Calif.

He stresses top value—both in housing and community facilities: "Tenants may not use recreational facilities very often, but they want to show them off to visiting friends and relatives. A fine clubhouse is important, too, because you can take prospects there, introduce them to residents, and then let the residents do most of the sales job."

But Boswell also stresses low construction and maintenance costs: "You have to hold down costs to compete with non-profit projects that don't have to earn 73/4 % on investment or pay real estate taxes (monthly taxes are \$20 a unit at his Walnut Creek project)."

To reduce maintenance costs, Boswell landscapes to eliminate hand trimming of lawns and hand watering. And he installs central heating and cooling systems (the only moving part in each housing unit is a small fan), so one engineer can maintain everything.

Like Los Angeles Builder Alvy, Boswell says most of his tenants come from the immediate area. So he thoroughly researches local markets. But he warns: "Even good local market studies can't guarantee success. Our studies showed Walnut Creek was the best place to build another retirement community. So we got started, and what happened? Ross Cortese has come in right beside us. But I figure this will help rather than hurt. He'll bring the traffic, and a lot of retirees will prefer to rent from us."

Non-231 rental projects are also reporting success in the retirement market. Items:

In Moline, Ill. Builder Peter Paulsen is building a 59-unit in-town garden apartment that is renting fast (at up to \$300 a month) before completion of construction. Facilities include a pool and recreation area.

In Laconia, N. H. Builder William F. Caterino's new garden apartments are attracting retirees who want to live in a resort area but not too far from friends in Boston and New York.

And throughout the South, William A. James, ex-chairman of NAHB's retirement housing committee, is setting up projects with a unique opportunity for retirees: tenants of apartments in different towns will be able to exchange quarters for limited periods. James is building 66 units in Myrtle Beach, S. C. and 120 units in Knoxville and planning other communities in Norfolk, Palm Beach, St. Petersburg and other southern cities.

Condominium financing is also becoming a potent aid in selling to retired buyers

The eat-your-cake, have-your-cake advantage of condominiums —home ownership without the responsibilities of home maintenance—appeal strongly to retirees because most of them (72%) of people over 60) are home owners. So far, few builders have opened condominium retirement projects, but those who have report rapid sales. Three examples:

1. Builder Robert J. Schmertz of Robilt Inc. has sold several hundred of his Leisure Village townhouses (*right top*) in Lakewood, N. J. since opening last fall. He invested \$2 million in community facilities before opening. Buyers will share ownership of an auditorium; a 38-acre, man-made lake; a 9-hole, 3-par golf course; swimming pools, and other facilities. Most buyers have moved from homes they sold for more than their new units cost. People 50 and over are eligible, but most are in their 60s.

2. Transwest Growth Equities reports "immediate acceptance" of its Dreamland Manor in Mesa, Ariz., had to rush completion of the first section and recreation facilities to meet market demand —much of it from winter vacationers. Condominium financing and Spanish design (*right center*) are the project's big appeals, says Transwest President D. Thomas Stapley. He expects to sell all 194 units by June. Like many retirement builders, Transwest used a team of outside professionals—Architect Victor Lamar Shill, Economic Consultant Robert Fournier, Western S&L (for financing advice) and CPM (Critical Path Method) Expert Karel van Reusen to speed construction without boosting costs.

3. Sponsors of Denver's Windsor Gardens sold 300 condominium units last year although sales in the rest of the Denver market were off 25% from 1962. The 140-acre community has a 9-hole golf course, auditorium and other facilities. Plans call for 2,500 one- and two-bedroom units at \$10,950 to \$16,950 (*right bottom*). Two-thirds of the early buyers (who must be 50 or over) are former homeowners, and many traded in their old houses on Windsor Gardens units. Western Federal Savings, which pioneered condominiums in Colorado, launched the project and has worked closely with Builders Werner Livingston and Howard Farkas on planning, design, scheduling and sales.

The upshot? The housing industry is finally starting to grasp its retirement-market opportunities. But it takes top methods and a top product to succeed. And there's always competition from non-profit sponsors. How stiff is this competition? You'll see some on the next page.



NEW JERSEY CONDOMINIUM project of attached one- and two-story units priced at \$12,500 to \$18,500 is first big retirement community in the East. Robilt Inc. plans 5,000 units.



ARIZONA CONDOMINIUM offers 194 one- and two-bedroom units at \$11,290 to \$15,390. Twelve units were sold two weeks after Feb. 15 opening. Builder: Transwest Growth Equities.



COLORADO CONDOMINIUM of 2,500 units priced at \$10,950 to \$16,950 chalked up 300 sales in 1963, its first year, for Denver Builders Werner Livingston and Howard Farkas.

continued



This idyllic nonprofit village offers what many retirees want-life care in

For a cash entrance fee of \$8,500 to \$28,000, plus monthly-payments of \$180 to \$202 per person, the 229 residents of Carmel Valley Manor in Carmel, Calif., can live out their lives in this remarkable new retirement community with virtually no other day-to-day expenses to worry about.

A fulltime staff of 52 employees tends to their needs. Their payments cover meals, utilities, laundry of flat linens, heavy housekeeping, maintenance of buildings and grounds, transportation seven miles to downtown Carmel on the Pacific Ocean, recreation facilities and programs, medical care, hospitalization and surgery, and even nursing if ever needed. They are also assured of congenial neighbors because applicants, 62 or older, must pass not only a physical exam but also a thorough interview by the community administrator (persons of any religion or race are accepted).

The 170-unit project is owned and operated by Northern California Congregational Retirement Homes Inc., a nonprofit charitable organization sponsored by the Congregational Church. Its administrator is a former minister, the Rev. William David Pratt. But the church has no economic relationship with the project and will not benefit financially from it at any time in the future.

Carmel Valley Manor cost \$4,833,000. A mortgage loan provided \$2,897,000, and \$1,936,000 came from entrance fees totalling \$2,600,000. About \$700,000 of these fees was set aside as a liquid reserve fund to protect the buyers (as required under California law).

General Contractors Williams & Burroughs built the project from designs by Skidmore, Owings & Merrill. Says Pratt:

"We picked s-o&M because it had experience designing retirement projects, it was large enough to get the job done right, it does top work, and its prestige could be counted on to help us get cooperation from lenders and government agencies. Incidentally, we owe much of our success to Mortgage Banker John E. Austin of Securities Intermountain. He gave us guidance we couldn't get from top banks. Morgan Guaranty Trust bid successfully for the loan and then placed it with two large pension funds."

The architects adopted a design style reminiscent of California's Spanish heritage (the Spanish governor made his headquarters in nearby Monterey). Buildings are paired to look like one struc-



58 SEPARATE BUILDINGS for 170 units are paired to look like only 29 on the 24 acres. Photo below shows how apartments in facing buildings open on interior courts and walks.

non-institutional surroundings

ture and arranged in clusters. Rear patios face wide lawns; front doors open on walks leading through other pairs of buildings and courts to the church, clinic, pool, library, community hall, and other facilities. Units range from 405-sq. ft. efficiencies to 1,035sq. ft., two-bedroom apartments and 1,035-sq. ft. two-bedroom, two-bath cottages. Each unit has wide doors, large baths, 18"high electric outlets, closet lights and several other features important to elderly people. (Two oversights: one unit lacks enough inside storage, and many are far from parking spaces.)

Buyers lose their equity (right to a refund of entrance fee) after $8\frac{1}{3}$ years. If they die or leave earlier, they or their heirs get back the entrance fee less 1% a month. Says Pratt: "This works like an annuity fund or prepaid rent. Our buyers have an average age of 72 and a life expectancy of at least $13\frac{1}{2}$ years. So they're getting these units at \$52.50 to \$173 a month for 162 months. Eventually, we will be taking in older buyers at reduced fees and some charity cases unable to afford any fee."

Carmel Valley Manor, like most life-care projects initiated by churches, has filled up in six months. Builders are bound to see more and more of this competition in today's retirement market.



Building companies

company of revenues

Vearendi

1	Del E. Webb†	Dec.	1963	\$ 89,993	80	\$7,109,101A	8	\$3,154,021	9	12	\$.48	14/1P
2	Webb & Knapp	Dec.	1962	64,706	-36	-19,625,151	—30	—19,625,151B	Т	-264	60	S
3	Levitt & Sons	Feb.	1963	39,250	25	2,759,574	7	1,389,574	58	9	.46	14/1
4	Kaufman & Broad	Nov.	1963	31,840	41	2,308,568	7	1,250,568	39	28	2.06	12/1
5	Cons. Bldg. (Can.)	Feb.	1963	23,126	107	1,806,649	8	1,806,649B	26	32		19/1D
6	S. V. Hunsaker	Sept.	1963	22,755	39	1,642,094	7	803,094	8	18	1.00	5/1
7	Pacific Coast Prop.	The second second	1962	21,675	83	1,352,235	6	402,235	-16	15	.02	S
8		Dec.					3			8		
	Eichler	Dec.	1963	18,812	-18	489,333	1.45	245,333			.53	13/1
9	Lusk Corp.	June	1963	15,490	23	200,098	1	137,598	—79	4	.12	7/1EE
10	Louis Lesser Ent.	June	1963	12,556	41	1,256,000	10	547,000	n.a.	7	.14	32/1
11	General Builders	Dec.	1962	10,683	-31	829,363	8	614,323	-1	13	.56	S
12	Kavanagh-Smith	Oct.	1963	9,390	-2	325,321K	3	197,122K	—51K	8	.43	8/1
13	Dover Construction	Mar.	1963	8,972	42	1,064,600	12	594,600	21	25	.85	5/1
14	Capital Bldg. (Can.)	Dec.	1962	8,289	13	480,656	6	537,301BB	21	21	.51	6/1
15	Hawailan Pacific Inds.	Mar.	1963	6,372	10	175,722	3	175,609	Q	14	.33	12/1
16	Dev. Corp. Amer.	Dec.	1962	6,242	52	89,863	1	30,910	83	3	.03	S
17	First Natl. RIty.	Mar.	1963	5,418	-29	940,521	17	480,521		11	.30	32/1
18	Edwards Eng.	May	1963	4,377	234	399,252	9	199,252	76	22	.79	36/1
19	U.S. Home & Dev.	Aug.	1963	3,575	14	302,499	8	198,036	55	16	.35	3/1
20	Edwards Inds.	Mar.	1963	3,171	8	100,204	3	64,204	218	5	.22	3/1
20	Edwards Inds.	War.	1903	3,171	0	100,204	2	04,204	210	5	.22	3/1
She	all and precut home	compan	nies									
1	Jim Walter	Aug.	1963	\$141,820L	283M	\$7,748,046N	5	\$3,877,661	114	17	\$ 1.99DD	15/1
2	Modern Homes	Sept.	1963	28,332	12	2,872,404	10	1,460,404	-16	16	.88	6/1
3	Albee Homes	June	1963	22,681	8	2,399,491	11	1,079,491		13	.61	6/1
4	Nationwide Homes	Mar.	1963	3,900	-17	27,211	1	47,415C	-74	2	.06	13/1
-1-	Hadonwide Homes	wich.	1900	0,000				,		-	.00	10/1
Prefabrication companies												
1	Harnischfeger	Oct.	1963	\$ 87,104Z	-3	\$1,936,605	2	\$1,312,605	-7	4	\$ 1.14	19/1
2	National Homes	Dec.	1963	68,922	-13	1,341,498	2	704,498		2	.15	23/1
3	Madway Mainline Homes		1963	13,107	26	1,085,206	8	519,206	7	22	1.85	8/1
4	Great Lakes Homes	June	1963	9,545	38	693,990	7	335,094	35	18	1.01	6/1
		Section of the sectio			-15		5	and the second s				Say March
5	Swift Homes	Mar.	1963	7,151		326,321	1	197,821	64	4	.18	4/1
6	Hilco Homes	Mar.	1963	6,483	22	87,501		54,319	14	5	.06	13/1
7	Inland Homes	Jan.	1963	5,440	6	551,322	10	284,322	—18	10	.90	7/1E
8	Steel Crest Homes	Aug.	1963	3,142	70	787,327	25	410,627	127	34	.69	12/1
9	Admiral Homes	Dec.	1962	2,218	-11	1,550	V		Т	V	02	S
Lan	d development compa	anies										
1	Gulf American	Aug.	1963	\$ 69,676	5	\$14,032,595A	20	\$6,565,961		2	\$.71	7/1
2	General Development	Dec.	1962	60,067	-18	-514,766A	-9	-515,892C	Т	-1	08	S
2		Dec.	1962	28,247	-1	1,124,596	4	601,043	-47	4	.26	S
3	Forest City Ent.		1963	27,803	71	4,111,191	15	4,111,191B	27	19	.65	10/1
4	Sunset Intl. Pet.	Aug.										
5	Macco Realty	Dec.	1962	19,752	2	2,820,014	14	1,391,014	1	18 32	.93	S
6	Amer Rity. & Pet.	Apr.	1963	14,207	21	5,435,247	38	2,615,247	1		1.02	7/1
7	Arvida	July	1963	12,200	—8		—3	—379,000	Q	-1	06	U
8	Christiana Oil Corp.	June	1963	11,118	W	2,661,916A	24	962,127	Q	11	.43	14/1
9	Holly Corp.	July	1963	10,577	-27	1,602,479	15	1,568,930	-17	44	.20	5/1
10	Deltona Corp.	Dec.	1963	10,530F	Н	1,227,393F	12	983,017J	н	9	.75	14/1
11	Horizon Land	May	1963	8,506	-20	45,865	5	4,865	AA	V	х	U
12	Crawford Corp.	Dec.	1962	7,229	-9	16,462	V	2,338	96	V	X	S
13	Coral Ridge Prop.	Apr.	1963	6,156	-26	1,378,494	22	1,011,494	-41	17	.22	34/1
14	All State Prop.	June	1963	5,762				-3,509,838C	G		-1.29	U
15	Lake Arrowhead	Oct.	1963	5,485	37	1,471,638	27	836,638C	Q	25	.39	22/1
16	Cousins Prop.	Dec.	1962	5,136	15	459,686	9	228,686	24	21	.91	S
17	American Land	Dec.	1962	2,211	-15	-125,208	6	-54,708C	T	-1	04	S
18	Major Realty	May	1962	4,519	297	-1,021,482	-23		-39	-11	04 30	U
			VERSIA STREET									
19	Laguna Niguel	July	1963	4,393	68	900,056	20	602,056	Q	7		13/1R
20	Canaveral Intl.	Sept.	1963	3,169	-38	438,527	14	205,571		5		21/1
21	Consolidated Dev.	Jan.	1963	1,220	-1		-35	-366,505C	Т		-1.03	U
22	Garden Land	Aug.	1963	1,213	28	465,759	38	375,759	CC	12		23/1
23	Atlantic Imp.	Dec.	1962	744	-22		-35	-277,709B	Т	6	25	S
24	Florida Palm-Aire	June	1963	587	-2	-106,860	-18	-106,860B	Q	-3	08	υĮ

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common stockholders' equity calculated at end of fiscal year data cover nine months of fiscal year (subject to audit) includes minority interest paid no taxes in latest year after tax credit based on estimated earnings of 60c a share for 1964 based on estimated earnings of 91c a share for 1964 includes only revenues from real estate operations loss of \$231,960 in previous year no comparable data available for previous year includes special tax credit and income from subsidiary not reflected in revenues and earnings before taxes

K does not include \$20,072 net earnings after taxes from

K does not include \$20,072 net earnings after taxes from sale of utility subsidiaries in 1963. \$52,760 in 1962
 L includes/97,829,000 from The Celotex Corp. which is 61.3% owned by Jim Walter
 M increase without The Celotex Corp. is 19%
 N does not include \$1,344,353 minority stockholders' interest
 P based on estimated earnings of 63c a share for 1963

Q loss in previous year R based on class B stock only

S not calculated because of lack of current earnings figure T gain in previous year

U not calculated because of loss in latest year, or earnings of less than 1¢ less than 1% V

W

XZ

revenues only \$436,354 in 1962 less than 1c includes revenues from all divisions of Harnischfeger Corp.

AA net income in 1962 was \$1,664,251 BB includes income from affiliates

CC net income in 1962 was \$20,443 DD includes 50c from The Celotex Corp. EE based on estimated earnings of 40c a share for 1964 **n.a.** not available

Who's making money in housing—and how

Housing's publicly-held companies present a mixed picture in this second annual review by HOUSE & HOME. They show little of the breakthrough in profits that has undone seven years of profit squeeze for the nation's corporations as a whole.

Where BUILDERS diversified into apartments, profits were generally higher. Witness Kaufman & Broad, Hunsaker and Levitt (which is gathering almost half its earnings in fiscal 1964 from apartments in France). Where builders and home manufacturers relied on one-family housing, profits are down. Others, like Lusk, Eichler and U.S. Home, have put aside today's profits in favor of expansion for tomorrow. For as Lusk observes, more and more housing men are coming to feel that "the residential construction industry is in a period of significant transition, and that only the largest and most flexible organizations will be successful." Profit margins for builders cluster in a narrow range— 6% to 10%. But return on equity varies from 4% to 32%, where current data is available.

Among HOME MANUFACTURERS, five companies out of nine report lower earnings. Five manufacturers earned 5% or less before taxes. Return on equity ranged from 2% for National Homes to 34% for Steel Crest. But giant National led the group with Wall Street, which paid 23 times earnings for its stock, twice as much as for most other prefabbers.

Thirteen LAND COMPANIES (out of 24) bleakly reported lower earnings; eight lost money. Profit margins varied widely from -100% to +38% as did return, -52% to +44%. Investors accord land companies the same reception as builders: their stocks are selling between 5 to 34 times earnings; the range for builders is 3-to-36.

Surviving SHELL HOME PRODUCERS are bouncing back from their industry-wide shakeout—but only Jim Walter, the giant of shells, shows a pickup in profits.

Levitt leads publicly-held builders with \$39 million sales—a 25% jump

Levitt & Sons, largest of housing's publicly-held home builders,* is making geographic diversification yield rising profits.

That is just what President William J. Levitt predicted he would do two years ago. The key to housing profits for big companies, he told New York security analysts, is more sites.

Last fiscal year (ended Feb. '63), Levitt opened two new branches, announced another and increased sales 25% to \$39 million. Profits rose to \$1.4 million, or 46ϕ a share—up 58% over fiscal 1962. (In fiscal 1961, Levitt lost \$763,000.)

Until 1960, Levitt built one project at a time. Today, the company is building in New Jersey (three projects), on Long Island, in Bel Air, Md., near Cape Kennedy, Fla. and in Puerto Rico. Overseas, the company has an interest in six multifamily projects around Paris.

Sales are continuing to climb in Levitt's current fiscal year (ended Feb. 29). For the first half of it, latest figures available, Levitt reported \$16.6 million sales against \$14.7 million for the same period the year before. First half earnings after taxes (\$604,600) were 15 times better than in the corresponding period the year before (\$39,300). Per common share, these earnings were equal to 20ϕ . Of this $8\frac{1}{2}\phi$ came from investments in France.

In Puerto Rico, Levitt is completely sold out for 1964 and has taken orders well into 1965. This year he will de!iver over 800 houses in San Juan.

Reflecting rising earnings, Levitt in December announced the company's first dividend since going public in $1960-12\phi$ per share. The dividend was payable only on 918,871 out of 3 million shares outstanding. Levitt's own 1,644,895 shares may draw no dividends until Dec. 1, 1965.

Shift to townhouses boosts profit by 39% for Kaufman & Broad

Despite a setback in contract sales, Kaufman & Broad's net income rose 39% to \$1,250,568 in its fiscal year ended Nov. 30, pulling earnings per share up from \$1.49 to \$2.06.

The rise in earnings reflected K&B's climb to its seventh consecutive new high in sales—\$31,829,848, a 41% gain over the year before. Two-thirds of the sales gain came from townhouse projects in Orange County, Calif. where sales reached \$5.7 million in 14 weeks. K&B has \$7.5 million in additional townhouse units under development in Orange Co.

In Detroit last year, sales rose 33% to

*Del E. Webb and Webb & Knapp, both with considerable revenues from nonresidential operations, lead Levitt in total revenues. See chart opposite.

continued

\$13.7 million, with townhouses accounting for 56% of the volume. In Phoenix, K&B's sales tumbled 31% to \$3.4 million, paralleling a 32% decline in single-family starts there. K&B turned to higher density housing by opening a 156-unit condominium apartment project.

In a single year, says President Eli Broad, K&B's sales of townhouses and apartments rose from less than 2% to 46% sales volume.

K&B began withdrawing from contract housing because, says Broad, of increased competition, and waning opportunities. Says Broad: "An increased number of military housing contracts were set aside for small business concerns. Much of the public housing work offered was either too small to warrant consideration or else failed to meet our criteria [for character, location and profitability]." Broad is already shifting workers out of contract operations into sales housing. Last year, the company increased its contract sales 26% to \$8.9 million. But gross profits fell almost to zero after defaults by two critical subcontractors and wet weather which delayed construction.

Despite this reverse, K&B's gross profit margins rose from 13.0% to 13.3%.

K&B continues to be one of homebuilding's most profitable companies for stockholders. It earned 34% on stockholders' equity (calculated on equity at the begin-

ning of the year, 28% for year-end equity). It has virtually no long-term debt and \$12.7 million of its \$13 million total assets are classed as current.



Earnings at Eichler Homes decline, failing to reflect new apartments

Eichler Homes suffered a marked setback in net income last year-from \$512,024 to \$245,333-despite a near tripling of gross profit from land sales to \$609,765.

The decline in earnings was caused partly by a falloff in sales from \$19.1 million the year before (a company peak) to \$18.0 million in 1963. Eichler thus slips to sixth in sales volume among publicly-owned house builders. In recent years Eichler has been passed by upstart Kaufman & Broad and by veteran S. V. Hunsaker. Snapping at its heels is Lusk Corp., which grossed \$7.9 million in the first half of its fiscal year (ending June 1964). Eichler Homes began three new subdivisions on the San Francisco Peninsula last year, but reaped no sales from one, an 83-home development 50 miles south of San Francisco, until this February. All three projects involved start-up costs, which contributed to falling income.

A bigger cause of lower earnings last year were four high-rise apartments which added to overhead-but failed to contribute to revenues.

Two of these were near completion at year end: a 15-story, 150-unit rental project in San Francisco and a redevelopment project in San Francisco (н&н, Feb.). Two other high-rise apartments are under way in San Mateo and San Francisco.

In Los Angeles, where Chairman Joseph Eichler reports the company suffered "increasingly burdensome" problems, Eichler sold off 150 remaining lots.

But says Eichler: "In our two other Southern California locations (in Ventura and Orange Counties) sales and construction are now progressing quite well."



Swings in buyer preferences keep profits down at Kavanagh-Smith

This North Carolina builder fell heir to a problem that besets many builders as they grow in size and lose flexibility. Kavanagh-Smith's product mix failed to keep pace with demand.

As a result, profits plunged 51% from \$406,000 to \$197,000 last fiscal year (ended Oct. 31), carrying earnings per share down from 91ϕ to 43ϕ .

Last year, buyers favored ranch homes in K-s's North Carolina markets, while the company concentrated on split levels. Only two years before, k-s found itself lagging behind a trend toward splits and, it says, "went overboard" trying to catch up.

Product mix has been corrected for 1964, says President Roger P. Kavanagh Jr. The company is concentrating on ranch homes now. In addition, K-s is expanding into a new market-Columbia, SC

Increased competition (particularly in Charlotte, N. C.) and delays in installing utilities at two subdivisions, cut into sales. They slipped from \$9.6 million to \$9.3 million. Unit sales fell from 638 to 594, the second year in a row of decline. In 1962, this was offset by rising prices. Last fiscal year, average prices per unit rose again, from \$14,947 to \$15,726, but not enough to override the reduced number of units sold.

While sales fell, cost of sales increased, reducing average gross margin from 17% to 14%. The decrease in profitability is attributed partly to the relatively higher costs of split-level houses.

Overhead also rose as K-s beefed up its architectural, planning and clerical staffs in anticipation of a large sales volume that did not, as it turned out, materialize.



ROGER KAVANAGH

Consolidated Building raises net income 23% under tax umbrella

Growing sales from houses—and a tax shelter that let it escape income tax entirely-gave Consolidated Building \$1,806,649 in net profits last year-compared with \$1,438,326 the year before. Earnings per share rose 10¢ to 50¢.

Canada's largest house-building company, headed by President Noel Zeldin, 44, grossed more than \$23 million last year, twice as much as the year before. This included non-recurring sales of com-

Is Wall Street overlooking homebuilding stocks? Many sell for less than book value

	Common					
Company (000)	shares (000)	Equity per share	Price (3/2/64)			
Kaufman & Broad\$ 4,532	606	\$7.48	\$26.25			
Eichler Homes 3,162	453	6.91	8.00			
S. V. Hunsaker 4,464	800	5.58	4.63			
Levitt & Sons 15,238	3,000	5.07	6.63			
Kavanagh-Smith 2,334	503	4.64	3.63			
Edwards Ind 1,246	292	4.27	.75			
Edwards Eng 889	253	3.51	2.88*			
Dover Construction 2,359	700	3.37	4.13			
Lusk Corp	1,151	2.89	3.00			
U. S. Home & Dev 1,111	552	2.01	1.13			
Consolidated Bldg. (Can.) 5,585	3,549	1.57	11.50			

STOCK PRICES of top builders have not enjoyed the recovery that has swept the Dow Jones average above 800. Many sell below book value (equity per share). Yet book value is, in many cases, considerably understated because it fails to

* reflects 50% stock dividend in late 1963.

reflect the appreciation in the value of land held for investment or later development. Only Kaufman & Broad among U.S. builders (using this yardstick) is held in high regard by Wall Street, yet K&B has no investment in land.

mercial properties and \$31/4 million from sale of land in a joint venture.

For its fiscal year ended in Feb. 1964, the company forecast revenues of \$33 million, which would put it in the running for first place among U.S. companies (*see chart*, *p*. 123). Zeldin expects this year's higher revenues to pull net income to \$2.4 million after taxes (or $60 \notin$ a share).

This will be the first year Consolidated has paid Canadian income taxes. Earlier, the company shielded its earnings by depreciation write-offs on two buildings it leases for its headquarters with options to buy. Consolidated's 5% capital cost allowance on its \$33.5 million capital obligation far outstrips the \$333,000 rental payments and so wiped out tax liability on all earnings.

Canadian legislators, with Consolidated in mind, punctured this shelter last June by repealing part of the allowances on rentals with options to buy. Zeldin, undaunted, says: "We are continually searching out measures to save tax dollars."

Next fiscal year (ending Feb. 1965) the company predicts it will pay only 25% of its earnings in taxes—instead of the 50% rate for high-income corporations. Zeldin has not hinted how.

Consolidated grossed \$17.1 million (of its total \$23.1 million) from house sales last year in subdivisions in Quebec, Ontario and British Columbia. Meanwhile, the Canadian giant has been moving into U.S. markets.

Despite its success at boosting sales and escaping taxes, Consolidated has failed to discover the secret of profitable remodeling. Its remodeling operation lost \$66,413

on a volume of \$365,-000 sales last fiscal year. Remodeling is expected to do no better than break even this year, and may be dropped altogether soon.



NOEL ZELDIN

Hunsaker, in first year as public company, increases profits 8%

This 26-year-old California homebuilder scored record sales and earnings its first year in the public arena. Led by secondgeneration President Richard C. Hunsaker, S. V. Hunsaker & Sons turned in an 8% profit increase (to \$803,094), lifting earnings per share 7¢ to \$1. (Income per share rose 18% to 27¢ for the first quarter of its current fiscal year ended December 1963.)

It was a good year on all fronts:

• House sales rose from 767 to 918 units (average prices rose: \$17,957 to \$19,913), boosting gross revenues 33% from \$13.8 million to \$18.3 million.

• Multi-family housing brought in \$623,-

709 in rental revenues, 16 times as much as in 1962. Hunsaker expects gross rents to increase to more than \$1.2 million this year. Fast tax write-off from apartments rose 22 times to \$300,985 last year, producing a tax loss of \$163,250. Hunsaker diversified into apartments in 1961, in keeping with the regional trend which saw apartments rise from 41% of starts in 1958 to better than 58% in 1963 in 14 counties of southern California. Since 1961, Hunsaker has built more than 1,000 apartment units.

• A wholesale-retail lumber division, organized in 1961 primarily to satisfy company needs, turned in \$2 million in sales last year, up 68% from 1962.

• Interest income rose 23% from \$1.3 million to \$1.6 million. Hunsaker shuns FHA and VA, takes second mortgages on most of its new house sales (at $6\frac{1}{2}\%$ to 7% with a balloon payment after five to seven years). This approach reduces down payments for buyers, but it can be risky for Hunsaker. Second trusts have resulted in 761 repossessions over $6\frac{1}{2}$ years—20% of the company's sales.

Hunsaker went public last year partly to attack the high cost of raising money to carry mortgages (borrowing costs have dropped from 15% to 10%).

Dover's new developments help increase sales and profits

Dover Construction Co. pushed house sales to an all-time high in fiscal 1963— \$8,759,600, up 25% from \$6,184,800the year before. This increase helped pull net earnings up by more than \$100,000from \$492,000 to \$594,600. Net per share climbed from 70ϕ to 85ϕ .

For the fiscal year ended in March 1964, Board Chairman Henry Lefkowitz foresees a still greater climb in revenues to \$11 million. Earnings per share are already moving up to 52ϕ a share at the end of six months, compared with 50ϕ during the same period the year before.

Besides revenues from house sales, Dover grossed \$157,800 from interest income last year, up from \$118,000 in 1962. Dover took back second mortgages on some 80% of its house sales last year. Terms: 20 to 30 years at $6\frac{1}{4}$ % to $6\frac{1}{2}$ %. At fiscal year end (in March '63), Dover had more than \$2.9 million in second mortgages—the largest single asset on the company's books.

Dover has since begun trimming its capital tied up in mortgages as more and more of sales are financed FHA with lower down payments. In the fiscal year ending March 1964, only 35% of Dover's houses were sold with second mortgages.

Dover attributes much of its current success to its Wentwood development in New Orleans, which opened in November 1962 with 300 sales in two weeks. But before sales could be made in New Orleans, 300 lots were developed, boosting Dover's inventory of land and land improvements from \$689,000 to \$2.9 million.

Dover has just opened two other projects, in Akron and Minneapolis. To finance expansion, Dover doubled its longterm debt. Mortgages payable on land alone rose from \$98,000 to \$1,184,000 (chiefly reflecting the New Orleans operations). By the end of fiscal 1963 Dover's debt-equity ratio stood at 45% compared



with 32% the year before. Increased debt can bring greater risk, but it also increases the chances for profit. Last year, Dover reported earning 25% on equity.

Expansion cuts Lusk Corp. net despite 52% jump in sales

Lusk Corp. increased sales from houses, apartments and lots by \$5 million last fiscal year—to \$14,942,000—yet suffered a sharp drop in net income. Earnings after taxes slipped 64% from \$654,091 to \$137,598.

President Robert F. Lusk Jr. blames the downturn on two items:

1. Pushing to expand into new rental markets, the Tucson-based company incurred unusually big start-up expenses for garden apartments in Chicago, Indianapolis and Albuquerque.

2. The market for land in Tucson and Phoenix slumped so much that the company rejected almost all offers for its investment holdings of commercially-zoned land there. Result: land sales plunged from a record \$2,689,000 a year earlier to a mere \$480,000 in the fiscal year ended last June 30.

Overall, Lusk sold 716 garden co-ops last fiscal year—up 160% from 275 the year before. Co-ops accounted for 43% of sales (23% a year earlier). And Lusk sold some \$2,400,000 of garden-apartment components through its Construction Components subsidiary (to the parent company and independent dealers). The gross was about the same as a year earlier, but the company sliced manufacturing costs 14%.

During the first half of its *current* fiscal year (ending June 1964) Lusk's revenues rose to \$7.9 million on rising apartment sales. Profits bounced back to \$206,000—more than the company earned all last fiscal year. Estimated earnings for this fiscal year are 35ϕ to 45ϕ a share, vs. 12ϕ last year.

Says Bob Lusk: "This decision [to increase multi-family housing] was based on the country's changing population growth pattern which results in an increasing demand for low cost, low maintenance I apartments."

Lusk plans to keep expanding mainly with low-priced coops. He has optioned land in San Francisco, San Diego and St. Louis. In Chicago Lusk has FHA approval for a 26-story Sec. 221d3 cooperative.



ROBERT LUSK

Land sales help lift earnings 76% for Edwards Engineering

Edwards Engineering is a company in flux. Last fiscal year (ended May 1963), revenues jumped 234% from \$1.3 million to \$4,376,709-more than it had grossed in the previous four years. This pulled earnings up 76% to \$199,252. Earnings per share rose 40¢ to 79¢.

But as Chairman Clarence M. Schwerin III suggests, last year does not fully indicate where the company is heading.

Most of the 1963 increase in revenues came from \$21/4 million in sales of undeveloped land, chiefly to Cousins Properties, which gave Edwards a \$1 million 6% note for 525 acres in Atlanta. The note is due in equal installments of \$100,000 through 1973. The sales sliced Edwards' land holdings from \$2.1 million to less than \$600,000.

Edwards also traded an apartment house in Queens, N.Y. (worth \$625,000) for land, leased it back for a while, then dropped its lease. It continued to hold a Seattle apartment which, together with rents from the Queens apartments, added \$304,535 to income-"enough to pay much of the corporate overhead," says Schwerin

Edwards' aim, savs Schwerin, is to be "a well-qualified, fully integrated land developer and builder." Accordingly, Edwards stepped up its house production (houses under construction jumped from \$555,000 to \$916,000) and accelerated land development. It completed sales of developed lots in Armonk, N.Y., a suburb of New York City. It then turned away from New York entirely to concentrate on more profitable projects in Prince Georges Co., Md., next to Washington, D. C., and in Atlanta, where it is both building and selling developed land. Combined sales of houses and lots totaled \$1.2 million last year. In 1962, Edwards sold neither houses nor lots.

Repurchase of lots pushes All-State loss to \$5.7 million

All-State Properties incurred a huge nonrecurring loss last year, which contributed to a net loss of \$5,730,712 or \$3,509,838

after credit for previously paid federal taxes.

All-State bought back 2,300 building lots in Lauderhill, Fla., which alone accounted for \$3 million of the beforetax loss, President Herbert Sadkin had sold land in bulk at Lauderhill-a 4,000 acre development Sadkin says has more elements of a city than any Florida project built in the last ten years. Three or four of the builders who purchased land in bulk at Lauderhill failed to keep up with their land payments after the Florida boom collapsed in mid-1960. Instead of foreclosing, Sadkin negotiated repurchase from all builders (even from those not crippled by the break). All-State thus stepped in as the only builder at Lauderhill so it could introduce its Leisurama concept (H&H, Dec.).

Leisurama involves package sales of houses, land and furnishings at a single price with FHA financing. Between October and December last year, All-State sold \$2.5 million (137 contracts) under the program at Montauk, L. I.

Over all, All-State so'd only \$5.8 million in land and houses last year (down sharply from \$11.3 million in '62). But it spent \$7.5 million doing it, including \$1.4 million for selling and administrative

overhead. The disproportionate cost of sales resulted in part from an adjustment for inadequate costing in prior years, says a company official.



HERBERT SADKIN

Deltona Corp., new Mackle venture, nets \$1 million in first year

Florida's Mackle brothers-Elliott, Robert and Frank Jr., who pocketed some \$6 million when they sold General Development Corp. in 1962-netted a paper profit of \$983,017 last year (75¢ a share) with their new company, Deltona Corp.

Deltona is the outgrowth of a year-old merger between The Mackle Bros. Inc. and C.K.P. Developments. The Mackles were looking for a corporate framework for their Deltona project, a 15,000-acre planned community near Deland, Fla. C.K.P. had much cash, 17,000 acres of Florida land and a listing on the American Stock Exchange.

Like many young land-development companies, Deltona had expenses in excess of its cash flow. But President Frank Mackle Jr. is driving to lick this problem via what he calls a "controlled sales program" aimed at "cash-producing apartment sales, cash-producing outside construction and cash-producing home sales." Results:

1. Down payments have been upped to \$108 per lot, monthly collections to \$21.50 per lot-in contrast with the \$10 down and \$10-a-month formula they exploited at General Development. This yields an average 61/4 year payout.

2. The ratio of houses vs. lots sold has been boosted from 1-to-15 to 1-to-13 -a ratio that some land companies have achieved only after a development has been on the market for as much as five vears.

3. To cut development costs, land is sold in concentric circles from a starting point; buyers cannot pick lots at random.

4. The construction division bidding on work outside the Deltona development has won \$2 million in contracts.

Deltona grossed \$10,529,917 from residential sales in its first year of operation -\$8.1 million of it on land. From this, the net income reached \$687,393 after taxes. And Deltona picked up another \$295,624 from tax credits and earnings from a truck trailer maker that was a subsidiary of C.K.P.

Irony at Inland: profits stay high while sales stagnate

Ohio-based Inland Homes, firmly planted in the low-price home market, remains one of home manufacturing's most profitable companies even though its sales and earnings have been on a plateau since fiscal 1960.

Last fiscal year (ended January 1963), it turned 10.13% of revenues into \$551,-322 of pre-tax earnings. Earnings after taxes were \$284,322-5.23% of revenues or 90¢ a share. This was a slight drop from fiscal 1962 when Inland netted a record \$346,774-5.97% of revenues.

Inland's sales peaked at \$5.8 million in fiscal 1960, and, after hovering near that level, slipped to \$5.4 million in fiscal 1963. Things remained about the same for the nine months ending September 1963: \$4.7 million sales, \$254,907 earnings.

Inland President Eugene E. Kurtz banked on FHA Sec. 221d2, put on the books by the 1961 Housing Act, to open up what he calls "a vast new market" via 35-year, 100% FHA loans for moderateincome families. "This has not occurred," says Kurtz. Moreover, he says, in many areas "FHA has not implemented the program and in a few FHA has rejected the program in its entirety."

National Homes' sales and profits slip in sluggish FHA, VA market

National Homes, hit by a decline in FHA and vA starts last year in its 30-city market, suffered a 58% downturn in earnings to \$704,498.

Total revenues for the nation's largest home manufacturer fell \$10.3 million (13%) to \$68.9 million, the lowest since 1957. Most of the decline was in sales of prefab house packages and materials, off \$8.1 million (12%) to \$62.1 million. Besides prefab packages, National sells completed houses with lots. These sales fell \$1.7 million (25%) to \$5.1 million.

Chairman James R. Price says National's performance last year reflects the sluggish market for single-family housing both nationally and in the company's 30 markets, particularly in moderately (\$17,000) priced homes. Increasing family formations have not yet made themselves felt in the demand for houses, he notes. Typically, young couples are ready at 29 to buy a National Home, but the first wave of U.S. population surge will not reach this age for another two or three years, says Price.

Meantime, says Price, National will concentrate on increasing its market penetration through by increasing builder-dealers and will try to cut costs in line with the lower sales. Last year, National's cost of



to its 13% decline in sales of houses and packages. But costs of selling, general and administrative overhead held close to 1962 levels.

sales fell 12%-close

Jim Walter's 61% interest in Celotex helps double earnings

Jim Walter Corp. has climbed away from the 1960-62 shell-home shakeout by continuing an ascent begun in mid-1962.

Sales of houses throughout the company's 38-state market rose 20% from \$30,096,675 in 1962 to \$36,081,066 last fiscal year (ended Aug. 31). Earnings, reflecting a tight rein on expenses, rose 59% to \$2,898,451, after taxes. This resulted in a 50% rise in earnings per share to \$1.49. Of the shell-home outlook, says Chairman Jim Walter: "The inexperienced and underfinanced firms have left the scene and once again a few responsible firms are supplying a great market with properly built and financed housing."

Jim Walter pushed earnings $50 \notin$ to \$1.99 by increasing its holdings (now at 61.3%) of Celotex Corp. Combined sales totaled \$141.8 million, combined earnings \$4.8 million. Walter got \$3.5 million profit from Celotex. Beside the boost from Celotex, Jim Walter added to its revenues with a 13% increase in interest



lion. This plus the increase in shell-home sales and other income pushed revenues to \$43,990,843 (excluding Celotex) up 19%.

income to \$7.5 mil-





GROWTH COMPARISONS of revenues of top U.S. house builders and Consolidated Building of Canada point up the sharp rise of the three

leaders. Two companies, Eichler and Kavanagh-Smith, reported declining revenues last year. Figures are based on fiscal-year reports. Many housing professionals have abandoned efforts to tap the remodeling market and are eager to tell why. Others have capitalized on special areas in remodeling and cite figures to show it is profitable. Here is a yes-and-no look at a highly touted market.

Remodeling in 1964: many opportunities

Like a siren song, the residential remodeling market has lured hundreds and hundreds of housing professionals onto the rocks. At the same time, imaginative and management-oriented professionals in every segment of the industry—builders, architects, realtors, lumber dealers and investors—have found opportunities for profit and growth in different approaches to modernizing America's 62 million existing housing units.

How big is the market? Many a remodeling promoter—and some sober-sided seers who ought to know better—have put it as high as \$20 billion annually. Census says it is no more than \$11.3 billion—and that includes maintenance. Census, which last year confessed its old figures on fixup were 20% too high, now puts the true residential remodeling market at \$6.3 billion—\$3.7 billion spent by owner occupants of one-family housing for additions, alterations and replacements and another \$2.5 billion spent by apartment owners for improvements. Despite such deflation of the figures, residential remodeling is almost a third the size of the \$20.2 billion new-housing market estimated for 1964. If homebuilders could add it to their share of the new construction market, it would be equivalent in dollars to an overnight jump to 2 million housing units annually. No wonder remodeling attracts companies looking for profitable diversification.

The incentive is big, and the publicity and encouragement has been endless, yet many of the most widely publicized remodelers (including famed Herbert Richheimer, who is now a remodeling consultant for a major materials manufacturer) and a long list of the nation's top homebuilders who expanded into this field during the past few years, have abandoned their remodeling efforts. Even the successful American Housing Guild (*see p. 127*) told HOUSE & HOME:

"We hope you're not going to report how easy the remodeling business is to get into these days or how profitable it is for everyone who goes into it. We're in the black now, but it was a tough two years getting there."

The drain on management time

Says Mandell Shimberg of Tampa's Lamonte-Shimberg, which dropped its remodeling division January 1, after a two-year effort had built up \$400,000 annual volume:

"With the same effort and the same people, we can go into

new houses or apartments and make more money. Remodeling just doesn't show an acceptable return for us for the management time it takes."

This experience is echoed by Los Angeles' M. J. Brock & Sons, which spent two years trying to sell pre-priced standardized remodeling packages to families living in the 12,000 houses it had built since World War II in California, but which gave up last March. Mourns Vice-President Richard C. Chenoweth:

"Our remodeling customers were very demanding and each job took too much personal service and management time. Each family wanted its own version of our package, and we couldn't standardize at all. Every job turned out to be a custom one, and sales people had to be out all day and night."

Competition from the no-overhead operator

A constantly cited problem is competition from pint-sized remodelers who work out of their backyards for little more than wages and with almost no overhead. Builders who gave up remodeling usually mention the difficulty of bidding against such operators. Examples:

"There are too many people in this business who work out of their garages and we cannot compete with them," says Chenoweth.

"Tight price estimating against gypsy operators was the problem. We never learned to recognize all of the costs and contingencies," says Thomas Ritchey, formerly of F&R Builders in Miami.

Remodelers are unanimous in blaming too-low markups of labor and materials for most business failures. The successful companies have a standard 40%-45% markup that they insist is necessary to realize a 5%-10% profit (although all admit that they shave this markup on bigger jobs). San Diego's American Housing Guild, while reluctant to reveal its exact markup, does say how it allocates it. Overhead gets a full half, advertising 20%, and profit 30%. If AHG's markup is in line with most modelers, it means AHG is aiming at a profit of just over 10%.

For those who have learned how to offset the gypsy operator's wages-plus bidding, how to perfect their estimating technique, how to live with the drain on management time, and who have developed a special area of expertise, remodeling has been a fast-growing profitable business.

The key idea is: specialize. The one thing remodeling can't be



is a sideline, a utility infielder to give capital and work crews something to do when sales of new houses are slow. Those who make money in this field are specialists who know that remodeling is not one market but many: urban and suburban, residential and commercial, for customers or for their own equity investment, in single family housing and rental property. And most important of all: they divorce remodeling from their new house building.

Consider this diversity of opportunities:

• Former slum areas. Major cities (especially the older eastern cities) usually offer opportunities for rejuvenating rundown neighborhoods. We have not yet seen our last Georgetown, even in Washington, D.C.

• Obsolescent apartment houses. Investors and builders are looking hard at the supply of past-their-prime rental apartments, many in prime locations that will bring today's rental prices when they are upgraded to today's living standards (p. 131).

• *Trade-ins*. Many traders give only a shoeshine to houses they take in, but others like Oklahoma City's Joel Coley are making major improvements in the houses they take in to give them an undreamed-of economic value.

• *Commercial.* William Beaman of Greensboro, N.C., already doing \$277,000 in residential remodeling, is taking dead aim at downtown commercial work by offering firm-price bids against the cost-plus bidding of general contractors.

• *Premium quality work*. In Norman, Oklahoma, Custom Builder W.T. Jameson has a remodeling business that grosses \$200,000 a year, based mainly on the fine cabinet work and finish carpentry turned out by his eight highly skilled men (who can even build fine furniture to order).

• Department store tie-ins. The excellent consumer reputation of established merchants can help offset the low bidding of a



question marks

price-only competitor. In Cleveland, Remodeler Eugene Squires has set up Planarena to sell remodeling in Higbee's downtown department store, and he has franchised local contractors to operate similar departments in major stores in Toledo, Montreal and Buffalo, using the Planarena trademark and management methods for a fee.

Squires analyzed his 1963 contracts and found that his smallest jobs (under \$1,000) were yielding the best profit margins. His findings:

	LABOR & MATERIAL
COST OF JOBS	AS % OF PRICE
Up to \$1,000	56.8%
\$1,000-\$2,000	71.7%
\$2,000-\$3,000	62.8%
\$3,000-\$4,000	77.4%
over \$4,000	74.7%
···· · · · · · · · · · · · · · · · · ·	Cast full warm of a

During Squires' first full year of operation, he paid a rental of \$15,596 to Higbee's, as a percentage of volume. (All vendors and stores are tight-mouthed about their deals, but fees generally range from 5% to 10% of gross.) This represented an annual net to the store of some \$13 ft remedaling dianley. Since there is no

psf. for the 1,200 sq. ft. remodeling display. Since there is no outlay by the store of capital and staff, the return compares favorably with many other departments (e.g. typical annual *gross* of department store housewares: \$73 psf.; toys and games, 66 psf.)

Financing major residential remodeling, especially the expansion and alteration of the post-World War II house, still is a problem unless the price is big enough to justify a new mortgage. The much touted FHA Sec. 203k set up in the 1961 Housing Act, has foundered under the triple handicap of slow FHA processing, 6% interest ceiling that is significantly below what lenders are getting on other remodeling loans and contractors' historic dislike of FHA paperwork and inspections. In 2½ years, only 1,237 loans totaling \$6.8 million have been made under 203k.

Nevertheless, there are opportunities in today's remodeling market. On the next six pages, a close look at six successes.

se building.



A management lesson from

REHABILITATION SPECIALISTS:

A record of performance can open doors to bigger ventures

Lawyer Thomas Van Arkel and City Planner Urban Moss first saw a potential in restoring slum property when they rebuilt homes for their own families in center-city Philadelphia in 1959. In 1960, they joined efforts in a rehabilitation project (10-houses-around-acourt) that sold out before completion at \$22,500-\$29,500. The team has done about ten houses each year since.

"We learned a good lesson at the very start," says Van Arkel. "Our job was to be one of management—to create an idea, administer the project, and keep the books. We would hire an architect, a contractor, and a sales agent for the nuts and bolts."

Their imagination and skill in creating well-related vest-pocket housing so impressed the city Redevelopment Agency—and attracted capital backing from giant Atlas Credit Corp.—that they were picked in a design competition to redevelop two blocks of the Society Hill area. Idea: a blend of new construction and restoration of the best of the existing old buildings, both residential and commercial (*see rendering, above*).

As a result of mistakes which have produced remodeling at a loss, they have developed these rules for profitable rehabilitation: 1. Avoid houses with skimpy framing and too-thin party walls.

- 2. Use plaster to level off uneven walls and sagging ceilings.
- 3. Emphasize landscaping. (They spend up to \$150 on a good job in front and rear courts, and always plant street trees.)
- Budget \$500 to \$1,000 to prepare the house for remodeling.
 Fit your plan within the existing structure and fenestration whenever possible. Adding new structure to old is expensive.
- 6. Use your own carpenters; subcontract everything else.
- 7. Save and refinish old flooring: it has sales appeal.

HUMAN SCALE renovation in the Society Hill urban renewal area will replace three decayed wholesale business structures with a plaza flanked by restored shops on ground floors with apartments above The cluster of houses shown restored at left are now vacant hulks (*below*).





FIRST JOB (shown before, during and after remodeling) is a good example of remodeling mistakes that lose money. Roof was raised, fenestration revamped, floor levels changed—all too expensive. Arcade through building leads to interior court onto which ten houses open.



By treating remodeling as a separate business

A HOMEBUILDER

grosses \$750,000 from a 21/2 year-old subsidiary

San Diego's American Housing Guild has gone into the remodeling business the right way: it set up a subsidiary divorced from its \$18.5 million, 1,000-new-houses-a-year business. Then AHG put an experienced remodeling expert in charge, and backed him with remodeling-wise crews. Result: a volume that has now reached \$750,000 annually in less than three years.

General Manager Sol Raikow (a former remodeler) has an opinion on why so many builders flop in remodeling:

"When a builder sets up a remodeling division, he must accept the fact that the subsidiary be so well managed and aggressive that it will compete against his new house sales. For example, our slogan is 'Don't move, improve,' and we're out to take every sale we can away from the new-house builder—even from AHG."

The remodeling subsidiary has separate offices in the heart of the city (AHG is in the suburbs), complete with a showroom of mocked-up sample rooms, but it uses AHG's buying power for materials purchasing. Four salesmen under Raikow sell about 200 jobs each year, at an average price of \$4,000 per job. They sell one out of four leads, a high score. Method: impress prospects by telling them that if bids are being taken, AHG's will not be the lowest—that responsible, quality work by an established company cannot be the cheapest. "We sell responsibility," says Raikow, and all advertising carries the AHG name prominently to benefit from the parent company's reputation.

Added family rooms and baths are AHG's most frequent jobs. Garage conversions are on the rise. All construction is done by remodeling-only subs. Raikow prefers small subs, with do-it-themselves skills. They are not fazed by unexpected job problems. **TO GENERATE BUSINESS,** AHG agreed to move an about-to-be-demolished house (top)—which it got free. Trucked to a shopping center parking lot, the house was modernized and used as a showroom for six months until permanent headquarters were ready.



TEMPORARY SITE in parking lot helped draw prospects during remodeling.





AFTER PUBLICIZING remodeling, house was sold to an employee and moved to a new tract.

continued





LUMBER YARD OFFICE (*left*) has 1,400 sq. ft. on a lower level, draws prospects from the yard. Showroom (*above*) includes a mock-up kitchen, plus an idea center where customers can study plans and photographs of finished jobs, choose materials and make color selections.

A new remodeling contractor ties in with

RETAIL LUMBER DEALER

to build customer confidence and develop leads

When the then-new Denver remodeler, Multicrafts Inc., tied in with the 40-year-old University Park Lumber Co. in 1961, the arrangement had unique advantages for both. Multicrafts got: 1) some of the status of a long-established business, 2) proximity to a principal supplier, 3) access to proved mailing lists and 4) floor traffic generated by the lumber yard. The dealer got: 1) an important and exclusive materials account, and 2) a reliable contractor to handle customer inquiries.

President Wendell B. Bell has built Multicrafts' annual residential volume to \$400,000. He plans to expand no more because "we just can't take on more residential business without adding personnel—which wouldn't pay. But we will take on more commercial remodeling. It takes less management time for the dollar volume it brings in. We don't have to hold hands with a commercial customer the way we do with a homeowner."

Bell has devised six "rules on how not to go broke":

Don't start with an overhead above 17% to 20% of gross.
 Don't worry about, and don't match bids with, back-alley competition. ("Our carpenters are remodelers who went broke.")

3. When asked to bid a job, get permission for *your* architect to draw up plans, so everyone bids on the same specifications.

4. Set a payment schedule. He gets 50% upon framing or delivery of items like kitchen cabinets, 40% on finishing or installation, leaving 10% as a final payment upon completion.

5. Develop a price book and unit-cost system. (Multicrafts has been within 2% of estimates since such books were established.)

6. Ask homebuilders for referrals. They get constant requests to do remodeling jobs that most don't want.



DISPLAY HOUSE (*above, with plan*) is a basic subdivision house remodeled to show what can be done. Family room, patio and entry were added; the kitchen, laundry and two bathrooms were modernized. The house is held open weekends to attract potential customers.



ROOM ADDITIONS are the most popular job, with kitchens and bathrooms next. Multicrafts counts heavily on satisfied customers to show off their remodeling to friends and build up referrals, which remodelers agree are the easiest-to-sell prospects.



To supplement his new-house and apartment practice,

AN ARCHITECT

turns to remodeling for his own account and for clients

Architect George Hay's first venture into remodeling for profit was an \$8,500 row house in Media, Pa., that he bought in 1957 and changed into a combination office-plus-apartment for \$8,500 (*see plan, above*). It now rents for \$2,700 a year. Since then, while carrying on his new-house and garden-apartment practice, he has bought, restored and rented three 19th century Philadelphia houses just minutes from the heart of the city.

As an example of remodeling's possibilities, Hay cites the three-story slum house (*above right*) which he was able to buy with Builder George McClure for \$7,000 two years ago; it was then generating rentals of under \$1,000 annually (if and when they could be collected). After spending \$25,000 to create three modern apartments, Hay's income on the property is now over \$4,000 a year, with no collection problems.

Says Hay: "I'm on the conservative side and don't mortgage my rehabilitated houses for all I could, but the rents plus tax depreciation give me a satisfactory return."

He has also drawn plans for other investors' remodeling projects. For a local doctor who invested \$13,000 in a corner house, its stable and an adjoining 20' lot, Hay replanned the house into an office suite and three apartments (cost: \$20,000) and the stable into a two bedroom house. As lagniappe, the owner still has the 20' lot for either new apartments or direct sale.

On a plans-only basis, Hay took a client's dreary post-World War II up-and-down duplex in downtown Philadelphia and turned it into a two-story one-family townhouse with a private rear garden. It cost \$19,000, and the remodeling cost another \$6,000, but on today's market the home would probably bring \$35,000.

ROW HOUSE (*plan, left*) was close to business center of county seat, where office space was scarce. Structural changes were minimum. Most of \$8,500 remodeling bill was for plumbing, heating and electrical work, plus a completely new kitchen for the upstairs apartment.



TOWNHOUSE from the 90s was remodeled in partnership with a builder in the area who oversaw construction. Upgraded houses will be left intact under West Philadelphia's renewal plans to demolish buildings on a selective basis and avoid total clearance.



Remodeling continued

Faced with dwindling brokerage in an old neighborhood

A REALTOR

turns to remodeling and revives his business

In the deteriorating University section of West Philadelphia, the real estate company of Taylor & Son used remodeling as a lever to turn the trend around. They set up a remodeling subsidiary that has, in less than three years:

1. Created new real estate activity by providing a market for both sales and rental property that once stagnated for lack of buyers and renters.

2. Stabilized values and attracted long-term mortgage funds previously unavailable.

3. Provided modern, moderate-priced housing for faculty and graduate students at the nearby University of Pennsylvania.

4. Seen its original \$8,000 capital grow to \$450,000.

Realtor James Taylor bought his first four row houses in 1961 for \$40,000. He commissioned Architect Walter Weissman to draw new plans, on the basis of which a local s&L gave him an 80% mortgage on his acquisition cost plus a \$38,500 construction loan for the remodeling. All were sold—before completion—for prices ranging from \$22,600 to \$26,000. The buyers got 80%, 20-year, 6% mortgages, previously impossible to obtain.

Taylor also finds rundown houses for clients to buy, then does the remodeling as a contractor. The buyers get the same mortgage-plus construction loan and avoid double settlements. Taylor gets the sales commission, plus an 8% remodeler's profit.

Biggest problem: buying rundown housing priced low enough to remodel before speculators do. Speculators move in at the first sign of a comeback, buy up houses, and sit on them. "Don't tip your hand when buying," says Taylor, "or the speculators will rush in and take all the profits." **TYPICAL STREET** of three-story row houses is remodeled inside, but facades and fenestration remain as is. To date, most buyers are University faculty, but nonschool families are becoming interested in the area.

Photos: Walter M. Faust







AFTER

BEFORE

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FHA Sec. 207 rehabilitation loans let

AN INVESTOR

buy and modernize old units, raise rent roll 260%

"In major cities, high land costs, the desirability of close-in locations and the availability of FHA Sec. 207 loans make remodeling of selected rental properties a profitable investment-even though FHA is just learning how to process these loans."

So says Investor Sidney Z. Mensh of Washington, D.C., who has just converted the 40-year-old, 230-unit Park Plaza apartment into a completely modernized 276-unit project and so increased its gross rent from \$230,000 to \$597,000. Cost: \$2 million, remodeling: \$2 million. The new FHA mortgage: \$3.55 million.

Construction was done by Elmer Klavens' Property Redevelopment Corp., which now accounts for a \$5 million annual volume in remodeling commercial space (11/2 million sq. ft.), and apartments (3,000 units) in the Washington area. Klavens' architect, John Hallett, retained corridor walls, but rearranged most of the floors to get 46 extra units. Added amenities: off-street parking, swimming pool, air conditioning, new kitchens, high-speed elevators and a wide range of commercial services.

While negotiations were going on with FHA (21 months from start to commitment), a small building (43 units) next door was used as a pilot to test the market for higher priced apartments. With a \$550,000 mortgage from Equitable Life, Mensh put 70 apartments in the same space and got clues as to what size apartments were in highest demand (two-bedroom suites).

Mensh points to 1960 census figures to measure the potential in remodeling rental housing: 74% of the nation's 7,703,019 three-or-more-family buildings were more than 20 years old then, and most are obsolescent in kitchens, baths, mechanical equipment and layout-in terms of 1964 housing standards.

FIVE-WING SHAPE of this 1924 apartment allowed section-by-section remodeling, with minimum dislocation of tenants. Plan (below) shows new pool and new parking added behind building, and how better use of space produced 46 additional apartments.



FUER

Political meddling with technical standards

How to discredit the whole idea of federal aid to building research Month after month since last September, the Department of Commerce has been stalling the new technical standard for lumber of $1\frac{1}{2}$ " dry—a change that would let lumber be surfaced dry to dimensions no bigger than lumber surfaced green will subsequently shrink to. (This change was voted almost unanimously by the American Lumber Standards Committee on the advice of the U.S. Forest Products Laboratory.)

Month after month since last September, the Assistant Secretary for Science directly responsible has been giving our industry the run-around, and in January Secretary Hodges himself got into the stalling act. To a protesting group of industry leaders, including the president of NAHB and speaking for the 14* industry associations most directly affected, he solemnly insisted that "legal objections" made it impossible at that time to follow the customary procedure for standards revision by letting the department's own list of "acceptors" vote on the change.

What applesauce! Or, in the words of famed Trustbuster Thurman Arnold, now retained to suggest legal action to force the government's hand . . . "What balderdash! The objections raised by the green-lumber lobby are legal imbecilities."

And eventually the department's own general counsel admitted in writing that his only "legal objection" was that the new standard did not include a table showing in precise fractions of an inch the smallest of the many sizes to which green equivalents could be surfaced (e.g., 1.17/32''x3.11/16'' green Western pine $= 1\frac{1}{2}''x3\frac{5}{8}''$ dry).

If the Secretary of Commerce wanted anyone to believe his "legal objection" plea, he should first have muzzled his own under-secretary, who gave the game away at a fairly open luncheon meeting by saying: "Oh, I told Herb [the assistant secretary] to bury the whole thing until we get by the election," because he had promised Congresswoman Edith Green not to let the new standard go through before November.

Small wonder, then, that the discouraged ALS chairman protested formally and in writing that "apparently a small dissident element representing a very small segment of the industry have so much political influence that all ALS precedents can be broken . . . The committee feels that the problem, instead of being resolved on its merits, has become a political football . . . Our efforts to obtain meaningful standards for the protection of consumers are being thwarted by people who do not know the problem, or do not wish to know the problem, or are inspired by politics."

In six months after the ALSC voted in the new standard, the Commerce Department used four different delaying tactics: 1) it waited weeks before even asking the Department of Justice for an opinion, 2) it stalled many more weeks over its own "legal objections," which turned out to be minuscule, 3) it challenged the membership of ALSC and called for new appointments, and 4) it spent weeks developing a new acceptors list with seven times as many names.

Now the department has promised Rep. James Roosevelt of the small business committee three more delays that may well run into next year: 1) it will study the scope of representation in ALS and may submit to the courts a proposal to reconstitute it; 2) after the acceptors have at long last had a chance to pass on the new

^{*}The 13 other associations include the American Institute of Architects, the United Brotherhood of Carpenters & Joiners, the Home Manufacturers Assn., the National Lumber & Building Material Dealers Assn., the National American Wholesale Lumber Assn., the National Lumber Manufacturers Assn, and the five big species associations.

standard (probably this month) it will evaluate the comments industry-by-industry (including the trucking and maritime industries); 3) it will turn this evaluation over to sBC and hold up action until sBC holds full hearings and submits its findings.

Are construction standards to be decided, not by scientific research, but by a popularity contest in which the trucking and shipping industries will vote along with the housing industry? Is the small business committee taking over functions the American Lumber Standards Committee was set up to perform? Can't we change our construction standards if the change will result in somebody selling more and somebody selling less?

All this trouble began 12 months ago when the green-lumber faction found how easy it was to intimidate FHA. At HOUSE & HOME's industry Round Table on the engineered use of wood an FHA spokesman said: "FHA would have no choice but to accept $1\frac{1}{2}$ " dry as a new nonstandard size if properly grade-marked," just as FHA was already accepting 1 9/16"; but in practice it needed only two or three phone calls from senators and congressmen in the green-lumber area to make Commissioner Brownstein overrule his technical subordinates. This knuckling-under to the small, green minority was all the more surprising (and perhaps shocking) because dry lumber is so much better and so much stronger that (in theory but alas! not in practice) FHA's own minimum property standards have never accepted the use of green lumber in any new house covered by FHA insurance.

Getting the new $1\frac{1}{2}$ "-dry standard approved promptly is important for its own sake, because all the industry leaders and technical experts at HOUSE & HOME's Round Table agreed it will save close to \$100 million a year now wasted cutting and shipping oversized or overweight lumber.

But the political stalling and shenanigans have now raised a question that makes the \$100-million-a-year saving a minor issue. The big question now is:

Can politicians and political appointees in Washington be trusted to handle technical problems on the basis of scientific fact, or will they decide too many technical questions on the basis of political expediency and how to get the most votes?

The help we need most of all from the federal government is help in financing the research and experimentation needed to develop national performance standards for homebuilding that can be incorporated by reference in all local codes and all proprietary (model) codes, just as the national standards developed by Canada's FHA are being incorporated by reference in codes there. These standards would save homebuyers at least 10% of our construction costs (or \$1 billion a year) now wasted by the chaos of conflicting local codes or perhaps nearer 20% (\$2 billion a year), the price code chaos estimated by Herbert Hoover 40 years ago.

Homebuilding is no longer a local handicraft ruled by local conditions. It is a national industry tragically frustrated by the lack of national standards to let us develop and market cost cutting standard components that can be used everywhere.

But how can we trust the federal government to help us get sound and cost-saving standards for everything when the politicians in Washington won't even let us use this better standard we have already agreed on—a better standard for lumber worked out with and by the government's own justly-honored Forest Products Laboratory (whose tests show that lumber trimmed $1\frac{1}{2}$ " dry is both stronger and stiffer than lumber surfaced $1\frac{5}{8}$ " green to the same depth).

Building product producers have more to gain from national standards than anyone else, for national standards are almost the first essential if they are to enjoy a national market for many of the components they make. But the producers have long been so suspicious of federal action that they have done more than anyone else to block the adoption of the national standards that might do them so much good. Instead of pressing for national standards, some of them have spent thousands of dollars to perpetuate code chaos, and last fall they massacred even the suggestion that the federal government should spend a few million dollars for building research. At the time their fears may have sounded a bit hysterical, but after watching the Commerce Department, the Justice Department and FHA play politics with the new lumber standard those fears seem tragically justified.

Re-establishing faith in the federal government's willingness and ability to keep politics out of its building research program and its handling of construction standards is now a matter of paramount importance. So the scandal of how FHA and the Department of Commerce are playing politics with our lumber standards deserves the President's personal attention to stop it before the smell gets any worse.

Background to the battle: how dry lumber cuts costs

Within eight weeks after HOUSE & HOME's Round Table on the Engineered use of Wood (Mar. '63) the American Lumber Standards Committee voted 9 to 2 to make 11/2"-dry lumber-19% moisture content - the new American standard, replacing the existing standard of 15/8" for both wet and dry lumber. The ALS cannot become a recognized industry standard, and therefore an approved government standard, until the Department of Commerce accepts it.

Here are five big reasons why $1\frac{1}{2}$ "-dry lumber would cut housing's cost to consumers:

1. Requiring the same dimensions for dry lumber as for green wastes enough stumpage for at least another billion board feet.

2. Dry lumber's lighter weight would save \$40 million per year in freight charges.

3. If all dimension lumber had to be kiln dried, the premium prices we now pay for kiln-dried would drop significantly.

4. Dry lumber would cut the cost of callbacks for builders and make customers happier. A green 2x4 (moisture content above 19%) will shrink at least 1/32" across the grain as it dries out in the wall of a house. Result: nails may pop and crack drywall finish, headers may shrink and put horizontal cracks throughout the wall, and on open stairwells drywall may buckle off the wall.

5. Dry lumber would cut design costs and make standardization easier. Any layout man who has juggled 15%" through countless details knows how difficult it is not only to check the exact dimensions on paper, but to have details work in the field when the lumber may actually measure 11/2", 1 17/32", 1 9/16" or 1 19/32" instead of 15%".

Everybody has agreed for years that dry lumber is much stronger than green lumber—so much stronger that until World War II and the war-born lumber shortage, green lumber always had to be dressed oversize so when it shrank it would shrink to the dry size. All the new standard proposes now is to let producers surface lumber dry to the size green would eventually shrink to.

3 HOUSES

with daring new shapes

Architecture worthy of the name never leaves the viewer bored. It is dynamic, exciting and often daring because the juxtaposition of shapes and volumes sets up a flow of space related to the textures, patterns and colors in the house. Often, it artfully contrasts a sense of openness with the security feeling of shelter. Too many of today's houses are familiar, static and so impersonal they hardly qualify as architecture. Not so the houses shown at the right and on the following pages.

Architect John Rex designed the umbrellaroofed rectangular house at right to fit into the surrounding foothills and canyons in Madera County, Calif. Innate simplicity of design and strong structural handling of native wood and local stone combine to make this house a logical part of its setting and a beautifully detailed architectural experience. The house won a 1963 honor award from AIA's southern California chapter.

Architect Paul Rudolph's beach house in Jacksonville, Fla. (p. 136) has a threedimensional facade of concrete block that spells out the interior arrangement of rooms and floor levels. The *working* facade—some architectural critics believe it has started a whole new trend in design—is a series of deep squares and rectangles that look out on the sea and shade the interior. Inside the house, seven floor levels follow the pattern of the facade and help define the flow of space.

Architect Eric Defty's striking wood house (cover and p. 138) is peculiarly suited to its locale—New Canaan, Conn., which is renowned for its pre-revolutionary houses and celebrated for its outstanding examples of contemporary architecture. Defty's house echoes the past because it combines the shapes of early New England houses, the lofty interior spaces of New England barns and the scale and appearance of New England siding and timber. Yet it is as much a statement of modern design as any of the more obviously contemporary houses in the area.



Standing tall and square in a grove of oaks and buckeyes, Architect Jon Rex's house is enclosed by glass, vertical cedar siding and local granite.



Plan shows how roof umbrellas (dotted lines) dictate a basic 14'x14' module: living room is 28'x28'; master bedroom and kitchen are 14' wide.



Cross-section perspective shows how 15 woodframed umbrellas, each with its own column, make up the roof of the rectangular house. The umbrellas—14' on each side—overhang an 8'deep wood deck surrounding the house. The living room at the right is two stories high while the bedroom and kitchen space at the left is split into two levels. All framing, including intermediate columns in the glass walls, is Douglas fir.



Roof umbrellas overhang glass and granite walls. Redwood on the under side of the roof contrasts with dark-stained framing of the umbrellas.

Soaring living room has a conversation pit in front of a pylonlike granite fireplace. Fireplace hood and circular stairs at the left are black iron.





A seven-level house defines its functions vertically

Changing levels and varied ceiling heights emphasize the different uses of space in Architect Paul Rudolph's concrete-block beach house. For example: the floor plane drops to form a big conversation pit in the high-ceilinged living room, then rises two steps in the rear to the open dining room and rises another three steps to an intimate, low-ceilinged inglenook. Space flows smoothly from one area to another.



Plan orients the active living areas and master bedroom to the sea (*photo*, *right*). The basic planning module is the length of a concrete block.



View of ocean, seen here from the dining room, is framed by deep sun-breaks. The conversation pit is in foreground, the inglenook at right.

View of living and dining areas from the inglenook in the foreground shows variety of floor levels and ceiling heights. Floors are terrazzo.


Facade on the sea is a geometric arrangement of sun-breaks, or brise-soleils, that hint at the interior arrangements of space. Sand-colored concrete-block rectangles are deep enough to shade the interior and help keep the house cool without drapes which would block the magnificent ocean view. The lowest sun-break, at lower left, frames a utility room; the highest makes a roof-top lookout—a widow's walk in a modern idiom.

Photos: J. Alex Langley, TIME





R

ends and horizontal panel sections on the facade —give the house the mood of a New England vernacular barn and keep it in character with its rural setting.

The steeply pitched roof and massive chimney of Architect Eric Defty's New Canaan, Conn. house are reminiscent of early New England architecture. But the offset roof planes make for a distinctive contemporary look. Stained naturalfinish siding—vertical t&g boards on the gable ends and horizontal panel sections on the facade —give the house the mood of a New England barn and keep it in character with its rural setting.





Classic simplicity is evident inside as well as out. Items: big beams, wood ceilings and white plaster walls. This is the master bedroom.

Plan treats the parents' wing (*yellow*) and children's wing (*blue*) as two almost separate houses, each with its own living room.



Living room in the children's wing repeats the spatial design—sloped ceiling and upper gallery —of the parents' living room (*facing page.*)



Cross-section of the house shows how it works as two houses (*see plan, facing page*)—one for the adults and one for the children. Architect Defty's client wanted to be near the children and yet enjoy privacy. The client also wanted a barn-like structure—a desire that gave Defty great latitude in handling open spaces defined by beams as well as walls. This drawing and the photographs below show how he succeeded.



Stark lines of heavy wood beams frame the spaces in this view along the gallery overlooking the parents' living room (*photo right*).

Main living room, with pegged oak plank floors, looks out on the lawn through floor-to-ceiling glass. Big beams accent the high vaulted ceiling.





Here's a factory in the field that almost any builder can use. It cost so little it could turn a profit at ten houses a year, yet it can panelize 250 houses a year. And for one of Connecticut's biggest builders . . .

This \$3,550 investment

The bargain-basement factory shown above has been operating just five months. And already it is saving an average of \$398 on every house built by Lifetime Homes of Old Saybrook, Conn. (see box, right).

"This is the best investment we ever made," says Curt Sykora, Lifetime's executive vice president. "At our present production rate—180 houses a year—the factory is paying for itself every three weeks."

This performance is particularly surprising in view of these facts:

1. All the savings are in the shell alone—a part of the house that cost \$1,000 in pre-factory days. The factory produces nothing but interior and exterior panels—the latter sheathed but not sided.

2. Savings so far have been in the winter when field erection is at its slowest. Lifetime expects to save at least \$60 more per house in good building weather.

3. Savings have been wrung out of an already efficient operation. Lifetime has always been a cost-conscious company that insisted on knowing where every dollar was spent and on getting its money's worth out of that dollar (H&H, April, '62).

The factory's low cost stems from a combination of ingenuity and stark simplicity.

Here is how the \$3,550 investment was spent:

\$2,000 for a 1,200 sq. ft. ranch house foundation and shell. At 7% interest, this part of the facility costs \$140 a year, and, of course, it ties up some working capital. But this cost will be more than offset when the factory is moved elsewhere because the shell will be finished and sold as a house.

\$250 for a 312 sq. ft. slab and roof over it. Again, some of the cost will be recovered because the slab will be sold as a patio. \$200 for shop-built jigs to make and move panels (see p. 142).

\$1,100 for six flat-bed farm trailers (two are partly visible at right above) to move panels and other materials.

The factory itself is not the direct cause of all the savings it has produced. But it is the key to Lifetime's cost-cutting construction system. Says James Downie, the ex-TAMAP work-study engineer (see p. 145) who set up the system and now runs it: "What the factory does is to give tight control of our building



Where this low-cost factory saves \$398 on a \$12,000* house

Framing lumber\$147.0	0
Sheathing	00
Pilferage 25.0	00
Direct Labor 132.0	00
Supervision 42.0	0
Equipment 13.0	0
Tools 6.0	0
Callbacks 7.0	0
TOTAL\$398.0	0

 $^\circ\text{Price}$ of a 1,200 sq. ft. ranch model excluding land costs, financing costs, sales commission.

is paying back more than \$50,000 a year

process. All raw materials for the house shell are delivered there. Much of the construction is done there on an efficient assembly line with a minimum of waste. Panels and other materials leave the factory in precise packages, so on-site waste is almost eliminated. And because the packages are standardized, we can schedule site work almost nail-by-nail (see p. 144). It used to take us two days to close in a ranch shell; now it takes one."

The factory is saving money not only in the subdivision where it is located but also in other projects. The bulk of Lifetime's 180-house-a-year volume (price range: \$15,000 to \$20,000) is now concentrated in the project where the factory is located. But a second project—10 houses in an area about 30 miles away—is nearing completion, and it, too, is using factory-built panels.

"It took about seven more man-hours to complete the houses at the new site," says Downie. "That, plus \$25 to ship the package over the road, was the only extra cost. And we expect to get rid of the extra man-hours in short order."

Adds Vice President Sykora: "This efficiency-at-a-distance is very important to us right now. We're just starting a third subdivision even further away than the second, and before the end of the year we expect to have half a dozen going. It looks now as though we'll be able to supply all of them from our present factory, which means a minimum of high-priced site supervision."

Lifetime's factory is made to order for smaller builders

"If I were building ten houses a year," says Downie, "the first thing I'd do would be to set up a smaller version of what we have now. The cost would be about \$900." He suggests:

A roofed patio (\$250). "The house shell isn't necessary for a small operation," says Downie. "We use it to store tools and materials, and we prefab some plumbing walls in the garage. But a small operation could get by without this space."

A storage shed for tools and supplies (\$250). "You have to lock things up," he notes, "but the shed could be very small."

One flat-bed farm trailer (\$200).

Panel and cutting jigs (\$200).

"With this basic plant, I could expand to 50 or 100 houses a year," Downie says, "by adding trailers as volume increased."

To see how Lifetime's low-cost factory does a high-efficiency panel-building job, turn the page.

FACTORY IN THE FIELD continued



59 CUTTING JIG has wooden guides (*below*) which hold a standard power saw. Guides are bolted to a long plywood table (*above*) which has a 2x4 side guide. Adjustable stop is held with a C-clamp. Cost does not include saw horses.





\$105 PANEL JIG is made of angle irons that are gunned into the slab (*below*). Marked steel straps are panel templates; laid in the jig, they mark positions for each stud and for the window and door openings.





Panel-building equipment in Lifetime Homes' factory cost less than \$200 . . .

"Most people think of a factory in terms of a lot of expensive machinery," says Engineer Downie. "We started from the other end—decided what we wanted to do in our factory, then figured out the cheapest way to do it."

Downie set six goals for the factory operation:

1. Produce all interior and sheathed exterior panels for a house in one day. The factory does this consistently, has also turned out all the panels for a 3,200 sq. ft., four-unit apartment building in two days. (Lifetime uses roof trusses in only two models, thus doesn't find it economical to fabricate them.)

2. Operate with the smallest possible crew and minimum supervision. The standard crew is three men—a carpenter, a helper and a foreman. But two can turn out panels in a pinch; and if faster production is necessary, four or five men can work efficiently. The foreman schedules production and does layout work; the rest of the crew does nothing but cut, nail and lift. (This is especially important because many of Lifetime's workers are French-speaking Canadians who can neither speak nor read English and have trouble reading fractions on a rule.)

3. Produce a variety of panel sizes. Lifetime builds four standard models but is also experimenting with several prototypes in its new subdivisions. Moreover it builds two-story houses with short second-story exterior walls. So the factory's panel jig was designed to handle any panel up to 20' long and 8' wide. No adjustment is needed for different sizes; frames are nailed up against the bottom rail, and the side rail is used for squaring and as a reference point for laying out. Templates, used for standard house panels, are simply lengths of steel strapping with stud and



\$53 PANEL CARRIER is simply two barn-door tracks screwed to the roof. Chains are hooked to the sliding trolleys, and steel hooks (*below*) hold panel ends. Two men can lift the free end of the panel for loading.



\$185 TRAILER is loaded with panels in the factory dock. Lifetime has six trailers, does not list them as factory equipment. Simple trailer hitch on the back of a jeep (*below*, *right*) cost \$8 installed.



yet it operates so efficiently three men can panelize a house in just one day

window and door positions painted on them. The straps are laid lengthwise inside the jig. Then the panels are laid out and framed on top of them.

4. Operate with low-cost tools. A hand power saw and a pneumatic stapling gun are the only power tools used, and since Lifetime already owned them, no extra outlay was involved. In fact, the factory has cut down on the number of power tools the company needs. Since most cutting operations have moved from the site to the factory, one saw does the work of many.

5. Operate with inexpensive jigs. The factory's three special pieces of equipment—the cutting jig, panel jig and panel carrier shown above—are so simple they were made right on the job. Together with about \$33 for miscellaneous labor and materials, they cost \$200.

6. Require no more than two men to lift and move any panel. A double track-and-trolley hoist lets two men load the heaviest panels (over 200 lbs.) on trailers, which are backed into a recessed loading platform. (*above, right*).

Although the trailers are not part of the factory itself, they are the key element in the materials-handling phase of the operation. Their primary function is moving panels from factory to site, and Lifetime also uses them to deliver trim and millwork. However, they are not licensed for over-the-road travel, so for hauling to distant projects Lifetime hires a local trucker who leaves his trailer at the factory for loading, picks it up at a scheduled time, then drops it at the site.

To see how the factory has speeded Lifetime's site work, turn the page.



TRAILERLOADS OF PANELS arrive at site behind jeep, one of five vehicles equipped with trailer hitches. Semi-trailer, shown below with a complete house on it, is used for over-the-road hauling to distant subdivisions.



	and the second second			1 1011 1
1.2	MANI	MAN 2	MAN 3	MAN 4
8:00	ERECT EXTERIOR WALL PANELS	SAME	C.u.e	EALIT
8:15	NAIL SHEATHING	AS MAN I	SAME AS MAN I	AS MAN 1
8:30	NAIL PAPER AT SILL		1.5 7 1.1.1	
9:00	PLUMB & BRACE	AS MAN I	FIT TOP PLATE	AS MAN 3
9:15				
9:30	ERECT GABLES	AS MAN I	AS MAN 1	AS MAN I
9:45	TRUSSES			
10:00	FRAME FOR	INSTALL	AC MANDO	BRACE GABLE EN
10:15	CHIMNEY	SOFFITS,	AS MAN 2	
10:30	LAY CAT WALK	FASCIAS,		LAY & TACK
10:45		RAKES		ROOF
11:00	STAIRWELL			SHEATHING
11:15	CHIMNEY			
- Watching and the second second second	REMOVE BRACES			
12:00				
12:15	LUNCH	Lunicit	LUNCH	LUNCH .
12:30	LUNCH	LUNCH	LUNCH	Lonen ,
12:45				
1:00	ERECT	CONTINUE	AS MAN 2	AS MAN
1:15	INTERIOR	SOFFITS,		
1:30	PARTITIONS	FASCIAS,		
1:45		RAKES		
2:00	CEILING- BACKERS,			AS MAN
2:50	ETC.			
2:45				CUT OUT DOOR SIL
3:00	PLUMBING		Sector and the sector	FRAME BATH TUB CI
3:15				
3:30	FUR CLOSET DOORS, DOOR FRAMES, ETC.		· ·	
3:45				
4:00	REST & DELAY	AS MAN I	AS MAN I	AS MAN I
4:30	CLEAN UP	AS MAN I	AS MAN I	AS MAN I
and the second		Calif. Contraction	Statistical and	251240.23

Factory-built panels—key to a \$398-per-house saving—let Lifetime erect

At 8 A.M. panels are waiting at the site. By 4:30 P.M. a fiveman crew has closed in the shell, erected interior partitions and applied roofing paper.

"And if bad weather is coming," says Engineer Downie, "we can add men in the afternoon and shingle the roof. From this point on, except for trimming, we turn the house over to subs."

The speed and efficiency of Lifetime's site crews is due to a job schedule that is worked out in exact 15-minute segments (above). And the schedule in turn is made possible by the factory operation. Says Downie: "Site crews go fast because they do almost no measuring and cutting, and they work with a few big components instead of a lot of little pieces."

Here is how the combined factory-site operation rolls up the \$398-per-house saving itemized in the box on page 140:

1. It saves \$173 in lumber and sheathing because waste is cut to a minimum. Says Downie: "Site crews used to burn up or throw away small pieces. Now the factory crew saves these pieces and uses them for cripples, jacks and small sections of sheathing. We never toss out 2x4s over 12'' long. After the first 16 houses were built in the factory, we found we had enough studs left over from our old take-off list to frame an entire ranch."

2. It saves \$25 in pilferage because everything delivered to the site in the morning is built into the shell by that evening.

3. It saves \$132 in direct labor because it reduces waste motion by both factory crews and site crews.

4. It saves \$42 in supervision because a field supervisor who used to spend 70% of his time overseeing framing jobs at the site is now freed for other duties.

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STAPLE ROOF SHEATHING LAY & NAIL ROOFING PAPER	
STAPLE ROOF SHEATHING	



CLOSED-IN SHELL is the result of one day's work by the five-man crew whose schedule is shown at left. Floor deck was already completed when the crew started work. Roof shingles, piled in the garage area, will be applied next day.

SHELL-ERECTION SCHEDULE shows the exact order of jobs done by a five-man crew and time allotted to each job. Man No. 1 is the top carpenter and crew leader, man No. 2 is second in command, and the other three are listed according to skill and experience. If the crew leader is promoted to a supervisory job, all other crew members move up a notch. Shaded areas indicate unscheduled time set aside for unforeseen problems. Rest and delay time, bottom, is actually spread throughout the whole day.

a shell in one day

5. It saves \$13 in equipment because the farm trailers, which need almost no maintenance, have replaced a five-ton, flat-bed truck which in 1962 cost \$1,870 to operate and maintain.

6. It saves \$7 in callbacks because houses are closed in before the framing can get wet, so nail popping is less of a problem.

7. It saves \$6 in power tools because they are now concentrated in the factory. "Before the factory started," says Downie, "it seemed as though we never had enough power saws to take care of all our site jobs. We bought seven saws a year, which cost about \$560. Now most of the cutting is done in the factory, and we have saws to spare. We also have fewer breakdowns. In 1962 we paid \$384 for saw repairs. In the five months since the factory started, we've had just one repair bill, and it came to only \$12." —MaxWELL C. HUNTOON JR.



The man behind the system: ex-TAMAPer James Downie

Jim Downie is a work-study engineer whose recent career is dramatic proof of homebuilding's need for the industrial and management expert. Until 1961 he had never watched a house being built ("I didn't even know what a stud was"); today he heads up one of the most efficient house construction operations in the country.

Downie has no doubts about his profession's potential value to homebuilding.

"Building, like any other industry, should be run according to proven management techniques," he says. "I don't think there's any question but that the average builder could cut his costs 15% to 20% with good industrial engineering. Most builders say that they can't afford an industrial engineer; I say they can't afford not to have one."

Born in Scotland 31 years ago, Downie learned his profession at the Royal College of Science and Technology in Glasgow and the British Transport Commission College of Work Study. He came to this country in 1960 and joined The Stanley Works of New Britain, Conn.-a move which eventually led to his becoming senior work study engineer on Project TAMAP (Time and Materials Analysis Program), the Stanley-NAHB study of Ohio Builder Robert Schmitt's operation (H&H, Sept. '62 et seq.). After TAMAP was finished, Downie became one of Stanley's builder-consultant team (H&H, Jan.). One of the team's clients was Lifetime Homes, which in 1963 hired Downie as its fulltime industrial engineer.

Who's to blame for the building code mess?

Should control of building codes be left in the impartial hands of the men who administer them?

Yes, say the proprietary regional code groups, whose four good building codes serve as models—more or less—for local codes in some 70% of U.S. cities of 50,000 population or more.

No, says President James Pease of the Home Manufacturers Assn. "Laws should not be made by policemen" (see NEWS, p. 15). And code men have proved unequal to the task.

If building officials—often among the lowest paid employees in cities—are to control the technical provisions affecting a \$60 billion construction industry, how well they do the job becomes a matter of major public concern. For the costly waste of conflicting code provisions (as well as the waste of code-compelled overdesign) is a major item in the soaring cost of building. Runaway costs, now housing's No. 1 long range problem, are leading to more and more political proposals for housing subsidies—some of which could in time threaten the private status of the industry itself.

This is the second in the series on building codes written for HOUSE & HOME by one of the nation's top code experts, the former managing director of the International Conference of Building Officials. The first article (H&H, Jan.) spelled out how three of the proprietary codes, spurred by ICBO, have tried for 20 years but failed to achieve national uniformity. This article details the almost insurmountable troubles well intentioned code officials face trying to keep their model codes abreast of changing construction technology—troubles compounded, alas, by lobbyists for producers of some materials who shortsightedly try to block changes to gain coveted code favoritism.

Why the men who keep proprietary codes up to date failto do a responsible job of itby Hal Colling

"The motion to disapprove the recommendation of the Code Committee on change No. 342 is before you. All in favor say 'Aye,' opposed 'No.' The ayes have it. So ordered."

Down comes the moderator's gavel and the meeting to decide upon new provisions in the building code is adjourned in a rush to the industry hospitality rooms.

"These actions to update codes are in the best tradition of American democratic principles," says Cassatt D. Griffin, past president of the largest of the model code groups. But how democratic are they actually? Is this brand of democracy the best way to determine the highly technical ingredients of building codes? There were 140 building officials from 17 states present at the meeting noted above. Yet a small, organized group of a dozen building officials and representatives of two industries controlled the floor.

Much improvement in building codes has been achieved by the International Conference of Building Officials, the Building Officials Conference of America, the Southern Building Code Congress and the National Board of Fire Underwriters. But these groups have yet to prove that they can keep their codes up to date efficiently and non-politically. Updating model codes, which building officials call code maintenance, has become for ICBO, BOCA and SBCC a long and windy process carried out on a convention floor. The results are usually compromises born in the heat of debate—and a poor substitute for the ideal.

On convention floors, by far the most vocal contenders are representatives of materials' makers. In ICBO's five annual meetings from 1957 through 1961, 35% to 52% of the floor time on code changes was seized by lumber and steel-industry representatives battling each other, competing materials and code officials for a coveted edge in ICBO's model code.

A second big influence in debate is a well organized group of building officials whose contributions to the arguments at hand sometimes seem prompted largely by ambition to control the organization and rise in its hierarchy. Finally, there is a hard core of dedicated and forceful building officials interested in making their code the best available and enforceable. These men speak up effectively in debate, but they often lose in the voting that follows.

Code conventions can be not only illogical but very undemocratic in the handling of code changes.

A handful of local officials can control changes in the building officials proprietary codes

Until 1963, ICBO required a quorum of only 35 active members to vote on most code changes. This, in turn, meant that 17 men could control the outcome of decisions that might involve millions of dollars of sales for a product, might boost or lower the price of thousands of new homes costing billions of dollars. In the few cases where the rules called for a twothirds majority, only 23 votes were needed but even these could be controlled by coalition voting. ICBO's 1963 annual meeting upped the quorum to 75. It was a forward step, but it doesn't solve the problem. There are usually 150 voting members at annual meetings and a third of them are invariably from southern California. Organized and disciplined, this group controls the floor.

It is even easier to control the floor at a BOCA meeting. BOCA's quorum is 25 active members, so 13 of them can in theory control decisions. BOCA recently put through a revision that gives more than one vote to a member-jurisdiction (a town or city using the BOCA code), and two officials from the same city will usually vote the same way.

In updating the NBFU code, there is no pretense at democracy. A committee of 15 to 18 men, all representatives of fire insurance companies, approve or reject changes proposed by their own members, the industry or the National Fire Protection Assn. The NBFU committee has industry advisors (with no voting power), and its members have broad engineering experience. But their viewpoint is expectably that of the fire insurance underwriter whose primary interest is not in human safety, or in reasonable provisions, but in cutting fire-insurance losses.

SBCC is the one code body with little appearance of organized control of voting: members not present at a meeting mail their ballots. CBO and BOCA have no such provision.

Attempts to settle industry arguments in committee and to limit floor debates have not succeeded

There are three basic reasons why:

1. Seldom are the best qualified men appointed to a code committee which studies and revises recommended changes and reports to the convention. Instead of being picked for ability and integrity, committeemen may be chosen for geographic location, as a reward for past voting support or because they

are aggressive in seeking prominence and power.

2. None of the technical committees of the three building officials organizations have an outside code analyst review all proposed revisions. If good code analysts were used they would probably have to be anonymous to avoid pressure that industry otherwise might bring to bear on them.

3. Efforts to complete industry arguments before committee reports are published and sent to conventions have failed because of a) industry's strong inclination toward floor debates and b) insufficient lead time.

An attempt was made to settle all industry arguments in subcommittee before the 1952 edition of ICBO'S Uniform Building Code was published. Arguments between the wood and steel industries centered around occupancies, heights and areas. An occupancy subcommittee was set up to iron differences. Towards the end of 1950, it was ready to report to ICBO'S code changes committee. Then William B. Kirkland of the American Iron & Steel Institute, who was also mayor of Huntington Park, Calif., instigated a report from two buildingofficial members to upset the occupancy report, which he considered unfavorable to the steel industry. The occupancy chairman and the ICBO staff attemped to kill the minority report with gentle ridicule. The chairman wrote a pseudo-formal report in which he suggested facetiously that the Uniform Building Code be rewritten in limerick form. Samples:

> There was contractor named Peele Who said, as he left out the steel, "The inspector is dumb, If the shack's outa plumb Nobody will know it but Peele." All wood shall be marked in accord With rules lumbermen can afford. There's one rule to meet— In a thousand board feet No knot greater in width than the board. There shall be plenty of exits about Which shall lead from within to without If you cannot get in, It's considered no sin,

But you have to get out without doubt.

The minority report was withdrawn but even so, the occupancy report did little to clear the air.

Industry's stake lies in preserving the status quo so new systems fight big odds for code acceptance

Representatives of building industry associations use a gamut of techniques to keep competitive materials from winning code acceptance: filibustering, dust-throwing, irrelevancy, misleading statements. Their representatives wine and dine building officials —and such hospitality is as beguiling to low-paid building officials as it can be to public officials at higher levels.

Such tactics became standard operating procedures after a classic code fight in 1942. The fight, celebrated in code circles as the Battle of Reno, impressed on the competitively contentious representatives of materials' industries—lumber, gyp-sum, steel and others—that building officials if organized and ably led could upset the profitable status quo in codes despite their efforts to preserve it.

As a result, industry groups after Reno shifted to a strategy of keeping the nation's building officials divided, urging distinct and competitive model codes. By 1949 there were three of them—plus the NBFU code.

The Battle of Reno was fought out at PCBOC's convention over proposals for code changes to be incorporated in the 1943 edition of its Uniform Building Code. The lumber industry battled—and lost—in an effort to block adoption of more steel provisions, new glass-block provisions and a whole new chapter on masonry.

Lumber's first tactic was an attempt to derail PCBOC's procedures for orderly code change. The 1940 edition of the UBC, in which light steel had won a toehold, had been a humiliating retreat from the pro-lumber code of 1937. Light steel had battled for three years just to get a toehold, and now in 1942 steel had proposals for 55 more changes before the code men. Lumbermen tried to submit their own report on code changes directly to the convention floor, bypassing the technical committees. Outspoken Conference President L. Harold Anderson (retired vice president of Pacific Gas & Electric Co.) rebuked the lumber industry. He wrote out a statement, read it to lumbermen and threatened to read it on the convention floor. It said:

"We tried to co-ordinate the interests of each industry. We endeavored not to favor any one industry. We requested members of industry to submit their comments on the report of the code changes committee so they might be relayed to active voting members prior to the convention for study . . . Just as we are going into convention, we have received a report from an industry which they have compiled *since* they have received comments from other industry—an obvious advantage which the other industries . . . did not have . . . They present a report which tries to confuse the issue and, in my opinion, tries to forestall adoption of what I believe, and what the code changes committee believes, to be a very forward step." The upshot: voting delegates refused to consider the lumber-backed code revisions.

Lumber's second tactic was an attack (via a second report) on the officers and staff of the conference. President Anderson successfully counter-attacked, describing the document as "an obvious attempt to discredit our managing secretary and . . . me . . . and to delay consideration and adoption of the reports we have before us."

Lumber's third tactic was an attempt to postone action on new provisions. Lumbermen sought to have the revisions labeled tentative, which would have kept the changes out of the 1943 code. Steelmen countered by noting that such a move might lead them to stop recommending the PCBOC code for adoption by cities in the East and Midwest, where PCBOC was just starting to gain ground.

In the end, delegates adopted most of the revisions, including 27 of steel's proposed 55 changes.

"Where," one awed steel lobbyist asked President Pete Anderson, "did you get the power?"

Anderson got his power from dedication and the courage to speak out. The import of this was not lost on materials' men.

How lumber, steel, gypsum and glass ganged up to try to keep plastics out of model codes

As early as 1943 the attention of building code officials had been focused on the coming role of plastics in construction by articles published in PCBOC's magazine, *Building Standards*. In July 1952, PCBOC issued its first research approval of a plastic material, acrylic skylights. (This approves a material, product or system as a general recommendation, but not as part of the code.) By July 1953, research approvals had been issued for acrylic and polyester (reinforced with glass fiber) windows and sunshades.

In 1954, the Society of the Plastics Industry, with a good

many research approvals in their dossier, began working toward code acceptance in all four model codes. Its proposals for revisions to UBC's chapter 42 on flame spread and its proposed new chapter 52 on plastics began a three-year period of review and periodic shelving by PCBOC—at the prodding of other industries involved in the conference's code work. Plastics representatives were the underdogs in the code committee work—supported by neither the combustibles (wood) nor the incombustibles (steel, gypsum and glass). On most committees, plastics men were outnumbered at least four to one.

More ammunition was added to plastics' fight for acceptance by the building of Monsanto's research laboratory at Creve Coeur, Mo. in 1956. Plastic plumbing lines and fixtures, plastic ceilings, walls and floor finishes, and plastic-foam-core partitions were all used. Aldermen gave the building a special permit, bypassing the city's code—BOCA's Basic Building Code, which at that time had no provisions covering plastics and in which procedures for research approvals could take up to two years. The road to a special permit was well paved; the architect of the building, Kenneth E. Wischmeyer, was also building commissioner. But the job did prove that there were many sound uses of plastic which are acceptable alternates for traditional materials or systems.

Dozens of revisions and changes went before code committees from 1954 to 1957. At last the documentation of plastics' worth was so voluminous that it could no longer be swept under the rug. By the fall of 1957, revisions to the UBC's chapter 42 on flame-spread and a new chapter 52 on plastics were ready to go to the convention floor of the International Conference of Building Officials (PCBOC changed its name to ICBO in 1956).

After five years of debate, plastics won code acceptance in mixed-up form

When plastics proposals reached ICBO's convention floor, they come under immediate attacks from steel and lumber groups plus representatives of the California Fire Chief's Assn. and other fire services. Many of the voting members had been prejudiced against the proposals by personal visits, before the convention, by members of the opposing groups. Arguments against the proposals covered a familiar gamut: inadequate tests, no standards of toxicity and smoke emission; inexperience of the voting members of the subcommittee (they should take another year to re-analyze the proposals); proposals would promote non-uniformity in codes instead of uniformity; there was sufficient provision in the present code for plastics without adding provisions; the proposals are premature and should be tabled for further study.

All these arguments were, after years of industrious work by the plastics people, spurious and simply designed to hold things up. On the floor, the plastics people so stoutly defended themselves, and the blocking tactics of other groups became so apparent, that the voting membership after two days of listening clearly was fed up and ready to vote in the new proposals. The meeting ended with revisions to chapter 42 adopted and chapter 52, with some revisions drawn up at the conventions, written into the Uniform Building Code. Chapter 52 was later rewritten by fire service representatives to ICBO and adopted in 1960, but even the new chapter fails to keep pace with the new uses being developed by the mushrooming plastics industry.

Since 1957, requirements covering plastics have gradually been incorporated in all four of the model codes, but the

N.B.F.U. BUILDING CODE	UNIFORM BUILDING CODE	SOUTHERN STANDARD BUILDING CODE	BASIC BUILDING CODE
NATIONAL BOARD OF FIRE UNDERWRITERS. 85 John: Street, New York, N. Y. 1955 Edition, 1957 Amendments Date of First Publication 1905	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS 50 South Los Robles, Pasadena, California 1961: Edition, Date of First Publication 1927	SOUTHERN BUILDING CODE CONGRESS Brown Marx Building, Birmingham, Alabama 1960-1961 Edition: Date of First Publication 1945	BUILDING OFFICIALS CONFERENCE OF AMERICA 1313 East 60th Street, Chicago 37, Illinois 1960 Edition, Date of First Publication 1950
ESIDENTIAL OCCUPANCY	GROUP I - DWELLINGS	GROUP A - RESIDENTIAL	RESIDENTIAL - GROUP L-3
			1 AND 2 FAMILY UNITS
	and the second	NITIONS	
UILDING OCCUPIED EXCLUSIVELY FOR RESI- ENCE PURPOSES AND HAVING NOT MORE THAN DWELLING UNITS OR AS A BOARDING OR DOOMING HOUSE SERVING NOT MORE THAN 15 PERSONS WITH MEALS OR SLEEPING ACCOM- MODATIONS OR BOTH.	ANY BUILDING OR PORTION OF BUILDING WHICH IS NOT AN "APARTMENT HOUSE" OR "HOTEL" AS DEFINED IN CODE WHICH CONTAINS 1 OR MORE "APARTMENTS" OR "GUEST ROOMS," USED, INTENDED OR DESIGNED TO BE BUILT, USED, RENTED, LEASED, HIRED OUT TO BE OOC CUPIED OR OCCUPIED FOR LIVING PURPOSES.	FICATIONS, MEANS A STRUCTURE OCCUPIED EXCLUSIVELY FOR RESIDENTIAL PURPOSES BY NOT MORE THAN 2 FAMILIES.	BUILDING CONTAINING 1 DWELLING UNIT W NOT MORE THAN 5 LODGERS OR BOARDERS
	PLAN CHEC	KREQUIRED	
ES	YES	YES	YES
	LOCATIO	N ON LOT	
IO REQUIREMENTS EXCEPT 2500 SQ. FT. EQUIRES 30' SETBACK 2	3' OR LESS, NO OPENING PERMITTED AND 1-HR, PROTECTION REQUIRED, OVER 3', OPENINGS PERMITTED ²	LESS THAN 3', 1-HR, FIRE PROTECTION 2	LESS THAN 3' NOT PERMITTED ²
	AREA AND HEIGHT ALL	OWABLE (WOOD FRAME)	
STORY - 6000 SQ. FT.	1 STORY - UNLIMITED	1 STORY - 7000 SQ. FT.	1 STORY - 7100 SQ. FT.
STORY - 4000 SQ. FT. PER STORY	3 STORY - MAXIMUM	2 STORY - 7000 SQ, FT,	2-1/2 STORY - MAXIMUM
5' HEIGHT MAXIMUM	Provi star Auto	2-V2 STORY - MAXIMUM CEILING HEIGHT ¹	
Y WIDE MIN, AND 70 SQ.FT, MIN, SIZE. 1617 MIN, CEILING HEIGHT ITCHEN 60 SQ.FT, MIN.	80 SG.FT. MIN. SIZE 7'6'' MIN, CEILING HEIGHT KITCHEN 50 SQ.FT.	NO REQUIREMENTS	7'7'' MIN. CEILING HEIGHT 7' WIDE MIN. AND 70 SQ.FT. MIN. SIZE
	WINDOWS, VENTILATIO	N OF HABITABLE ROOMS	A second distance of the second s
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ATHROOMS 3 SQ.FT. MIN.	BATHROOMS 3 SQ.FT.	BATHROOMS 3 SQ.FT. MIN.	BATHROOMS 3 SQ.FT. MIN.
		WINDOW AREA	
OREQUIREMENTS	1/50 OF FLOOR AREA3	1/50 OF FLOOR AREA	1/50 OF FLOOR AREA
ELOW FROST LINE 4	12" 1-STORY 18" 2-STORY BELOW FROST LINE		BELOW FROST LINE ⁴
ELOW PROST LINE	And a second	TFOUNDATION WALLS	BELOW PROST LINE
IN. NO. 4 BARS AT 16" VERTICAL	MIN, NO, 4 BARS AT 16" VERTICAL	BY REFERENCE TO A.C.I. REQUIREMENTS	BY REFERENCE TO A.C.I. REQUIREMENTS
NO. 4 BARS AT 10" HORIZONTAL	NO. 4 BARS AT 10" HORIZONTAL		
	MINIMUM T	HICKNESS	
	8''	8''	8"
A CONTRACTOR OF	A CONTRACTOR OF	REQUIREMENTS	
OREQUIREMENTS	18" MIN. BELOW JOISTS VENTS 2 SQ.FT. OPENING FOR EACH 25 LIN.FT. EXCEPT ON FRONT	18" MIN. BELOW, JOISTS VENTS 1-1/2 SQ.FT. OPENING FOR EACH 15 LIN.FT. OF WALL EXCEPT ON FRONT	18" MIN, BELOW JOISTS VENTS 1/3 OF 1% OF THE ENCLOSED BUILDING AREA
	SILL	PLATE 5	
2" BOLTS AT 6	1 2" BOLTS AT 6'	1/2" BOLTS AT 6'	1/2 BOLTS AT 8'
TRENGTH AND RIGIDITY EQUIVALENT TO 2 X 4 TUDS AT 16" ON CENTERS EXCEPT 1-STORY ESIDENCES WITH STUD LENGTH NOT OVER 0" MAY BE 24" O.C. ⁶	2 X 4 STUDS AT 16" CENTERS UNLESS VERTI- CAL SUPPORTS DESIGNED AS COLUMNS ⁶	ALL FRAMING ¹ 2 X 4 STUDS AT 16" CENTERS ⁶	POSTS AND STUDS TO BE DESIGNED AS CO UMNS WITH DUE ALLOWANCE FOR LATERA SUPPORT FURNISHED BY SHEATHING, INTE MEDIATE BRACING, HORIZONTAL BRIDGING FLOOR AND ROOF FRAMING. ⁶
	FIRESTOPPING REQUIRED	AT FLOOR AND CEILING	
ES	YES	YES	YES
	BRIDGING (1 >	(3 SPECIFIED) 7	
T INTERVALS NOT EXCEEDING 8'	BETWEEN SUPPORTS EVERY 8' FOR JOISTS	BRIDGING ON SPANS OVER 8'	1 LINE PER 8' OF SPAN IN FLOOR, ATTIC A
	AND EVERY 10' IF FOR RAFTERS	S (1/2" FIBER BOARD SPECIFIED IN 4' X 8' SIZE)	ROOF
EFERS TO NATIONALLY RECOGNIZED GOOD	1" WOOD - 5/6" PLYWOOD	58" WOOD - 516" PLYWOOD	1" WOOD - 516" PLYWOOD
RACTICE WHICH BY CODE REFERS TO STAN- ARDS OF LUMBER AND PLYWOOD INDUSTRIES.	1/2" GYPSUM - 1/2" FIBER BOARD	646" FIBER BOARD - V2" GYPSUM	1/2" GYPSUM - 1/2" FIBER BOARD
		30 LB. LOAD-1/2" PLYWOOD, 4' X 8' SIZE)8	
EFERS TO NATIONALLY RECOGNIZED GOOD RACTICE WHICH BY CODE REFERS TO STAN- ARDS OF LUMBER AND PLYWOOD INDUSTRIES.	3/8" PLYWOOD USING DOUGLAS FIR U2" PLYWOOD USING GROUP I AND II	38" PLYWOOD USING DOUGLAS FIR 1/2" PLYWOOD USING WESTERN SOFTWOODS	1" WOOD 38" PLYWOOD USING GROUP I 1/2" PLYWOOD USING GROUP II
	and the second se	NTERS-1/2" PLYWOOD SPECIFIED, 4' X 8') 9	a the second
EFERS TO NATIONALLY RECOGNIZED GOOD RACTICE WHICH BY CODE REFERS TO STAN- ARDS OF LUMBER AND PLYWOOD INDUSTRIES,	1/2" PLYWOOD USING DOUGLAS FIR 5/4" PLYWOOD USING SOFTWOOD GROUP 1 AND II BLOCKING REQUIRED AT UNSUPPORTED EDGES	1/2" PLYWOOD USING DOUGLAS FIR 5%" PLYWOOD USING WESTERN SOFTWOODS BLOCKING REQUIRED AT UNSUPPORTED EDGES	1/2" PLYWOOD USING GROUP I 5.8" PLYWOOD USING GROUP II BLOCKING REQUIRED AT UNSUPPORTED ED
	I manufacture and the second	DRAGE (PLANS NOT SPECIFIED) 7	
TIE EVERY 3 SQ.FT. OF WALL SURFACE AND "'MAX. SPACING HORIZONTALLY AND ERTICALLY	EACH TIE TO SUPPORT NOT MORE THAN 2 SQ. FT. OF WALL AREA AND TO BE 24" MAX. SPACING HORIZONTALLY	16" VERTICALLY 32" HORIZONTALLY	16" VERTICALLY 20" HORIZONTALLY
		ASPHALT SHINGLES WEIGHING 235 LBS. PER SC	UARE)
LASS "C" ROOF COVERING IS EFFECTIVE	ASPHALT SHINGLES LAID IN 2 OR MORE	ASPHALT SHINGLES WEIGHING AT LEAST 180 LBS. PER 100 SQ.FT. DESIGNATED CLASS 3	CLASS 4 ROOF COVERINGS FOR FRAME LIMITED TO USE OUTSIDE OF FIRE LIMITS

 $^{2}\ \mathrm{Requirements}$ usually governed by more restrictive limitations of a zoning ordinance.

³ Plans checked comply with Uniform Building Code.

 4 Soil test or bearing capacity knowledge is required generally and each code has a list of presumptive bearing capacities of various types of soils. In areas with prolonged frost local codes

Kan, the minimm depth permitted is 36" below finished grade.

 5 Plans checked comply with N.B.F.U., Southern and Uniform codes, at variance with Basic code.

⁶ All four proprietary ccdes permit diaphragm construction or special construction when designed to support the superimposed live and dead loads or when tested. 8 Laminated truss design tested for strength and spaced 24" o.c. The Uniform and Southern codes are the only two using tables for most common and live and dead loads with various spans on roof rafters, ceiling joists and floor joists.

⁹ Spacing for floor joists, all codes, 2" x 10", 16" o.c. Codes approach the design of structural members by referring to technical references from various lumber associations.

How four model codes differ in basic requirements for a house

Architect Louis J. Krueger of Topeka checked the plan of a 1,982 sq. ft. split level house, with basement, against the provisions (*in red*) of the four model codes and tabulated how their specifications compare. Much of the variation involves terminology—not basic concepts. But

some involve shades of difference big enough to balk standardization (e.g.: room sizes and ceiling heights). Note that only two of the 20 provisions—"plan check required" and "firestopping required"—are actually uniform through all four codes.

scope and extent of provisions for plastics varies widely from code to code.

Every permissive use of plastics in model codes has won its place only after long and usually bitter fights. One such fight produced a curious result. In the Southern Building Code, after the plastics industry had succeeded in getting a chapter on plastics adopted, opposing forces persuaded the code editors to make the chapter more conservative by reducing all allowable areas by 50%. The editors indiscriminately cut all the significant figures in half, and, in the process, also cut the amount of glass fiber required in reinforced plastics from 20% minimum to 10% minimum, thereby weakening the plastic considerably.

Even today, only a small fraction of the many uses of plastics in building is covered in the four regional model codes. Commonly, when a builder or architect wants to use a new plastics (material, system or product), it is not covered in his code and he must seek a research approval from his own code or one of the four model codes.

The local building official may accept the plastic use, reject it, or ask a model code group to approve it for him. If the

Here's how the four model codes differ on how plastic skylights should be used

NBFU Buiding Code

Sec 805.4 (d). Skylights of combustible plastic must have a curb not less than 4" high above adjoining roof surface; area within curbs of each skylight is limited to 100 sq. ft.; aggregate area may not exceed 20% of the floor area sheltered by the roof in which the skylights are installed; there must be at least 20' be-tween a skylight and any wall in which the openings must have fire protection. Skylights must be protected by a substantial wire screen placed above the glazing except when installed so that flying brands are not likely to lodge on the plastic. There must be at least 5' between units.

Uniform Building Code

Sec. 5205 (b). A skylight with plastic glazing must not be installed within 10' of a property line. Edges of dome-type skylights must be flashed. Plastic skylights must be separated from each other at least 8' laterally and 10' along the roof slope.

and 10' along the roof slope. Sec. 5205 (c). Area of an individual skylight is limited to 100 sq. ft. The aggregate area of skylights is limited to 20% of the area sheltered.

Sec. 5205 (d). Curbs, 4" high, are required for skylights in roofs which slope less than 4" in 12". Curbs may be omitted when a skylight is provided with a wire screen (1" mesh maximum) substantially mounted immediately below the skylight.

Southern Standard Building Code

Sec. 2604.1 (b). Plastic must be mounted at least 4" above the

roof on a noncombustible or metal-clad curb of at least 12" for industrial and commercial structures and 6" for residential structures.

Sec. 2605.1 (c). Plastic units must be at least 5' apart and not less than 5' from any exterior wall. Units must not be installed within the distance from an exposure within which openings in walls must have fire protection.

Sec. 2605.1 (d). Flat or corrugated panels are to slope at least 3" in 12" from the horizontal! the panel is to be 10' or less in length along the inclined plane. Sec. 2605.1 (e). Dome-shaped

or curved units must rise above the mounting flange a minimum distance of 10% of its maximum span or 5", whichever is more.

Basic Building Code

Plastic skylights may be used if: Sec. 2003.41. Roof opening is limited to 50 sq. ft. in area and the aggregate area is limited to 20% of the roof area.

Sec. 2003.42. Pitch of skylight is not less than 30° to the horizontal or is dome-shaped with a minimum rise of 10% of the maximum dimension but not less than 5''

Sec. 2003.43. There is at least 3' between skylight units and no unit is within 20' of any wall in which openings must be fireprotected. Skylights have curbs not less than 4" high above roof level.

Sec. 2003.44. Total area within the curb of a single unit is not more than 50 sq. ft. and no dimension is more than 10'.

Sec. 2003.45. The plastic material is mounted in a steel or other approved metal frame. official seeks approval from a model code, the builder must supply him with 1) technical data substantiated by tests and experiments and furnished by the plastics industry; 2) technical data submitted to support the particular application for approval; 3) manufacturer's certificates and guarantees; 4) data covering structural strength, fire resistance and flame spread characteristics. The official sends this in to the model code body which at BOCA may take two years to grant research approval. Even then, if the building official doesn't like the test data, he can call for more. And the model code experts, of course, can only *recommend* to the local official that he let a builder use a plastic that has a research approval.

How far behind today's plastic technology the four model codes lag can be glimpsed from the chart (*below*) which compares their provisions for one specific area in building. Moreover, all are incomplete (in different ways) and they are at considerable variance with each other. Often, no provision is noted, which means that a builder would have to seek research approval or satisfy a building official he was on sound ground without one. Plastics used in one-family houses must comply with the structural and fire requirements for that class of dwelling. There are no special fire requirements for many parts of a one-family house in all these model codes. The problem in using plastics becomes critical in multifamily dwellings where fire requirements can be stiff.

Who should devise model building codes? Can building officials' groups meet the challenge?

Building officials' groups have accomplished much to improve codes. But their ability to perform efficiently, nonpolitically and to measure up to their power and responsibility has not been demonstrated.

This study has focused on two decades of struggle by ICBO to create a modern, technically clean building code. The other two major organizations of building officials have faced similar problems.

Two viewpoints emerge from the battle. Some say: "Let the federal government take over. The building officials' organizations are under too much pressure, are too vulnerable to do a good job. Let them concentrate on enforcement, department procedures, upgrading their craft and leave code-writing to other technical groups."

On the other hand, defenders of the status quo argue: "The building officials' organizations are the logical agencies to write codes since building officials must deal with the enforcement problems daily."

I would agree with the later view *if* building officials would maintain their codes free of internal politics and free of bigindustry control. The rough and tumble of politics are in the American tradition. But they only muddy the water when they dominate decisions on such a technical matter as a building code. Model code groups, to set their houses in order, must choose the members of technical committees for ability, and ability alone. The commitees need the professional help of an independent code analyst who is not a staff member and so not under pressure from any selfish interest. And they must give themselves more time—and stick to a schedule to cut down on windy convention debates. Some organizations have adopted policies against convention hospitality rooms, which is a forward step.

The shortcoming of today's system of code control leave a deplorable gap in the regulation of the nation's biggest industry —a gap which will ultimately be filled.



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Two years of continuous testing under the most rigorous conditions as concrete form material now creates a new residential siding called Fiber-Ply—a $\frac{3}{8}$ " overlaid plywood siding that's tough, good looking and profitable. This new Fiber-Ply is manufactured by a patented G-P process. The rugged overlay has been specially formulated for a paint base. It costs less, takes paint better and holds it as well as other medium density overlays—yet costs only pennies more than common A-C plywood.

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What's behind the H.V. I. Emblem on range hoods and exhaust fans?

Air delivery ratings you can trust. Performance that is certified. Products designed to meet FHA requirements. Independent tests by Texas A & M. These are the dependability factors that stand behind the HVI emblem ... and the reasons why more and more builders are looking for it on range hoods and exhaust fans (and. finding it currently on two out of every three manufactured).

Send for free 12-page "Home Ventilating Guide" that keys air delivery ratings of fans to room sizes, includes HVI recommendations on number of air changes per hour, types of exhaust fans and range hoods available, location of fans and hoods, selection of accessories, and installation of ducts.



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Pre-seasoning "locks" dimension lumber into shape. The wood cells are thoroughly dried from within, giving added strength and the lasting stability so important in framing construction. Pre-seasoning provides a solid, better-holding nailing base, adds resistance to decay and lightens the lumber for easier handling.

Insist upon pre-seasoned Western Pine Region lumber for every basic construction use. Look for the assurance of WPA grade and species marks...your buyers do! They are seeing a version of this ad in American Home, Sunset and Better Homes & Garden.

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Bakes, broils and sells right before your eyes! Why she'll go for Chateau: This magnificent gas eye-level oven range has two...yes, two complete ovens! Upper oven with its picture-window view not only bakes, but radiant broils. Both ovens have AutoMagic Cook and Keep Warm. Cooking platform stays put in use, swings up for cleaning. Soft fluorescent light floods burners. ■ Why you'll go for Chateau: Sleek Chateau slips into 30 inches of counter-space... no carpentry... no major installation. It's the pride and joy of a big family of Magic Chef Color-Mates... sinks, dishwashers, ventilating hoods, garbage disposers... profitable to sell as a package! ■ Why you'll both go for Chateau: Magic Chef, maker of fine ranges for over 50 years, is known nationwide for quality. More women cook on Magic Chef than any other range!









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Are you using other flooring materials because you think they cost less? Time to recheck the price of Oak. It's less expensive installed than everything except the very cheapest asphalt tile and carpeting. You'll pay far more for vinyl floorings which try hard to imitate Oak's beauty.

Are you passing up Oak Floors because you're building houses on concrete slabs? New methods of installing Oak Floors over slabs are being used successfully by large and smallvolume builders (write for details). Oak Floors are best for slab homes because their resilience and insulating qualities add much to comfort.

Do you think other flooring materials or floor coverings will make your homes more salable? Exposed wood floors with area rugs are today's style favorites. This combination offers buyers complete decorating freedom and thus adds to the salability of any home. With Oak Floors you appeal to at least four out of five prospective buyers, a comfortable margin of acceptance for your market-built homes.

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New! High-output, low-cost cast iron boilers for large homes!

New Lightweight APH—completely packaged in three sizes with net I=B=R ratings of 86,300, 112,500 and 138,800 Btuh. Efficient model DH-5 Arcoflame oil burner. Primary control features light-sensing detector for instant response to ignition. Insulated steel jacket in attractive two-tone brown and beige. Takes only $29\frac{1}{2} \times 31\frac{1}{2}$ inches of floor space. **New Lightweight GPH**—completely packaged in three sizes for use with all gases. Net I=B=Rratings of 75,000, 101,300, and 127,500 Btuh; slightly less for LP. New-type combination mixer tube and burner with punched slots gives high efficiency. Insulated steel jacket in attractive twotone brown and beige. Takes only $24\frac{1}{2} \times 28\frac{7}{8}$ inches of floor space.

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You have so much more to sell with hydronic heating — now it can work for you in all your new homes!

Home seekers prefer clean, quiet hydronic heating. They know it means rooms of uniform warmth, no sudden blasts of heat or drafts, no openings in the interior walls. Then why not give your new homes this big selling advantage?

Your plumbing and heating contractor can now deliver American-Standard baseboard heating to any home you build—from small ranches to large colonials—at truly competitive prices.

With the introduction of the new GPH and APH cast iron boilers your contractor now has a complete line of packaged, lightweight boilers designed for continuous forced hot water circulation. Net I = B = R ratings range from 45,000 to 127,500 Btuh for gas-fired models, and from

54,000 to 138,800 in oil-fired. All deliver high output with minimum weight and size.

The new packaged GPH and APH are engineered for your larger homes. They feature attractive two-tone styling, with brown top and side panels, light beige front panel. They're attractive for game room as well as basement installation; gas-fired models are also approved for closet installation.

For complete information on hydronic heat at warm air prices, talk with your local American-Standard plumbing and heating contractor today. Or write direct to American-Standard, Plumbing and Heating Division, 40 West 40th Street, New York 18, N. Y.



For medium and smaller-size homes, the packaged GPR and APR boilers are your best buy. Since introduction last year, their efficiency has been proved in thousands of installations. Available in two sizes, they take only 2 x 3 feet of floor space. Gas-fired models (GPR) have I=B=R net ratings of 45,000 and 60,000 Btuh. Approved net I=B=R ratings for oil-fired models (APR) are 54,000 and 67,500 Btuh.



Your prospects will admire the trim styling of American-Standard Heatrim baseboard panels. Made of nonferrous metal, they can be painted to blend with walls. Three sizes of heating elements give great flexibility in installation. For further savings, a new Economy Design Method has been developed. Each circuit is automatically engineered to provide the best balanced design for each area and also the most economical.





Steel studs go up first.

GENERAL CONTRACTOR: Paul B. Emerick Co., Portland, Ore. PLASTERING CONTRACTOR: Ivan Sietta, Portland, Ore.

This new construction method utilizes a simple system of metal studs, Keymesh[®] Paperbacked Lath and spray-on exterior wall.

It is the most meaningful breakthrough in curtain wall construction since glass and metal.

Keystone Spraywall is low cost, of course. (This hospital addition was done for \$2.00 a square foot, from the plastering on the inside to the Botticini Marblecrete finish on the outside.)

Its hourly fire ratings are excellent. (The rating on this building is 2 hours.)

But more than that, Spraywall's design possibilities are endless, because of its plasticity. Using Keystone Spraywall, you can *sculpt* the walls; curve them, create hyperbolic paraboloids, shape them in any way you can imagine. Then finish them to meet your design requirement in any color, any texture, with or without embedding stones.

Keystone's new Keymesh Paperbacked Lath is the product that makes Spraywall possible.

For complete information about applying this simple system to your next job, call your Keystone Representative, or write us.

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Portland Cement is sprayed on.



Cement trowelled prior to application of finish coat.





Columbia Park State Home, The Dalles, Oregon ARCHITECTS: Mockford & Rudd, Oregon City, Ore.

PER SQUARE FOOT Cost of hospital wall system of new Keystone Spraywall

\$**2**00



Price Pfister's **all new** CONTEMPERA line of plumbing brass achieves new high levels of beauty and performance. CONTEMPERA styling is in perfect harmony with today's advanced trends in new housing and the replacement market. It has unusual appeal to women — so important in the ultimate sales picture. And CONTEMPERA's **quality** adds many functional improvements to Price Pfister's established reputation for the best performance in the industry.

And — it's ANOTHER PRICE PFISTER FIRST! For the first time in Price Pfister's long history, its entire line of finished chrome items for new housing installations has been re-designed at one time. CONTEMPERA's forward-looking design captures today's flair for fashion in bathroom and kitchen fittings. The new line is the result of combining the best ideas from leading design consultants working in collaboration with Price Pfister's own engineering department. Widespread praise from the National Home Builder Exposition where it was shown, proclaims CONTEMPERA an instant success.

CONTEMPERA IS COMING SOON — at the same economical level so consistent with Price Pfister — the world's largest independent producer of plumbing brass. You'll find that profits are in style — with Price Pfister's CONTEMPERA!



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PRICE PFISTER products install easier – work better – last longer.



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Typhoon introduces 5 closet-sized heat pumps and air conditioners for individual apartment climate control. 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$ and 3 ton units, engineered to meet maximum standards. Cooperative apartment developers prefer them because each owner has his own central station system, complete with independent control and separate meter. Owners of tenant-occupied apartments like them because tenants pay operating costs, simplifying initial construction financing. Resulting lower rental rates make tenants happy, and Typhoon's carefree performance keeps them happy! Each unit is made with oversize parts that thrive on heavy usage. Installs easily be-



cause it's completely pre-assembled and shipped ready-to-work. Can be furnished as cooling units with electric heat, or with conventional heating systems. Equally effective in many commercial applications. Typical Typhoon versatility! Whatever you need, you'll find in the big Typhoon line of 218 air conditioners/liquid chillers/furnaces/heat pumps. Write today for full product information.

TYPHOON AIR CONDITIONING DIVISION, 505 CARROLL STREET, BROOKLYN 15, NEW YORK





CONVENTIONAL-LOOKING HOUSE has woodshingle siding and an asphalt-shingle roof.



PLAN puts both front and kitchen entries under 8' roof overhang. Laundry is in second bath.

Steel-and-gypsum custom house comes in at \$13.33 a sq. ft.



OPEN-TRUSS JOISTS make the whole floor system a warm-air plenum supplying baseboards through continuous opening between floor and walls.

And that's a competitive figure in Hamden, Conn. where this house was built. The house has 1,650 sq. ft. of living area plus two important features: a full-basement playroom with a fire-place and a highly efficient heat-distribution system (*see details, left*). Its cost: 22,000 without land. And Owner-Builder William F. Roden thinks that figure might be cut to 19,000 if ten or more houses were built. Here's how the job was done:

1. When the foundation was poured, steel plates were set into the wet concrete to anchor columns and floor joists.

2. Four men, using a crane, erected the steel framing in one day. Floor joists, 4' o.c., and 3" pipe-columns were spot-welded to the anchors, header beams spot-welded to the columns and 27' trusses on 5' centers spot-welded to the beams.

3. Subflooring of gypsum planks was laid on the joists. The planks (*see details*) are 10'x15''x2'', have steel t&g edges, weigh 13 lbs. per sq. ft. and span up to 7' under a 75 psf. load.

4. The first course of gypsum roof plank was set against an angle welded to truss tails; other planks were offset to stagger all joints. Asphalt shingles finished the roof.

3. Walls—all nonbearing—were framed with steel studs, 16" o.c., and finished inside with plaster on clipped-on lath.



FOUNDATION could be backfilled before house was erected because it was held rigid by floor joists spot-welded to steel anchors in concrete wall.

Technology continues on p. 171

The new **Teigh** finishing system is giving you



In Coopersville, Michigan a new finishing plant inside a plant-with pushbuttons-first cleans and phosphatizes hoods before sending them to the "white room."

range hoods with the industry's highest quality finish



"White room" kept dust-free by filtered air where hot paint, forced through atomizing nozzles in an airless spray, produces better finishes-hardened in dust-free ovens.

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Employing the lastest techniques and the most modern equipment, the new Leigh finishing system is giving you products with the finest finish ever developed in the appliance industry. This revolutionary system, operating within a totally controlled environment, puts products through four ultra-modern processes:

- 1. Metal cleaning with high pressure jets of alkali spray.
- 2. Phosphatizing raw metal surfaces to inhibit rust (just as is done for fine automobile finishes).
- 3. Painting with hot plastic-base paint under 600 lbs. pressure inside a pressurized, dust-free room.
- 4. Baking a hard, lustrous finish in a dust-free electronically controlled oven.

Result? The best finish money can buy—smoother—harder—more attractive more durable. Actually, a higher quality product! You get this new finish at no extra cost on Leigh range hoods and on a host of other Leigh products. And the finish is only one of many ways Leigh gives you extra quality as a bonus on more than 150 building products.

LEIGH MAKES MORE THAN 150 PRODUCTS FOR THE BUILDING INDUSTRY

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BUILDINC

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Service in depth is the key to builders' acceptance of the GM-Delco Key Builder Plan. First stage: factory help customizes GM-Delco 365 Home Conditioning into your original architectural drawings. The proper unit is then chosen to fit the requirements of the homes you build.

2. During construction

Your GM-Delco Dealer follows through into the second and critical construction stage: local warehousing gives you immediate job-site delivery. Factory-trained experts provide swift, capable installation. A wide range of over 200 models assures you of the *correct* equipment.

3. After completion

Your GM-Delco Dealer, and his Key Builder Plan, *help you sell* your *completed* product: national and local advertising, effective merchandising attract customer interest. Parts and service are at your disposal *after* the job, as well, to keep your customers satisfied.

WRITE FOR YOUR FREE COPY OF THE GM-DELCO 365 KEY BUILDER MERCHANDISING PROGRAM, Delco Appliance Division, Dept. XB-4, General Motors Corp., Rochester, New York 14601



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

REPEL MAD FIREBUGS save money

NEW STANDARD REPUBLIC DOORS CERTIFIED FOR 90 MINUTES

Whether you're concerned with careless smoking, children with matches, spontaneous combustion, or our fiend here—

Whatever sort of building you're building, we've got news. Republic now offers a series of 1½-hour-certified steel fire doors at a clear saving of dollars per door.

You save because these doors are stock in every respect, immediately available from 19 warehouses. You save because they're hung from only two standard hinges. You save because you pay no premium for the certification tests, performed by a nationally recognized laboratory under ASTM specifications.

These rugged, certified fire doors are written up thoroughly in a new fact sheet, which we'd be happy to mail or deliver in person.

Youngstown, Ohio 44505

Unless, of course, the chap in our photo happens to be you ...





Light-sensitive glass darkens when sun is bright, clears when sun fades

Used in houses, this new photochromic glass could offer the best of two worlds: shade on sunny days and light on cloudy days.

On the clock face above, the glass reacts quickly to ultraviolet light like that given off by the sun. Clear at first (left), it darkens after 30-sec. exposure to simulated sunlight $(left \ center)$, reaches maximum dark-

ness allowing only 28% visible light transmission after 52 sec. (*right center*) and clears to 70% transmission 48 sec. after the light is removed (*right*).

Key elements in photochromic glass are submicroscopic crystals of silver halide that react indefinitely to light change—instead of just once, like a photo emulsion—because they are sealed off from air. The glass is not yet on the market. But in lab tests by Corning Glass (whose demonstration is shown here) and Pittsburgh Plate Glass, it weathered thousands of darkening-clearing cycles without losing clarity or ability to darken fast. It is as inert, durable, hard and impermeable as ordinary glass.



A fresh way to keep floor tile from bulging, sagging or breaking



The drawing above shows how Pittsburgh's big Ryan Homes (1,500 to 2,000 houses a year) says it gets "a tight floor every time and saves hundreds of dollars a year in potential callbacks."

Ryan's crews glue the underlayment to the subfloor, thus prevent the two chief causes of floor-tile failure:

1. Nail popping due to lumber shrinkage and the resultant separation of the underlayment and subfloor. The glued bond prevents this separation because if the lumber shrinks, the underlayment moves with it. 2. Horizontal shrinkage—and lateral movement—of the underlayment, leaving cracks into which resilient tile sags. The glued bond is tight enough to stop this lateral movement.

Temperatures must be above 60F. for best results with most commonly used floor and underlayment adhesives. Ryan's crews broomclean the subfloor, apply adhesive (National Starch & Chemical's Floor-Lok 93) with a notched trowel, press the underlayment in place (*photo, left*) and nail it in a few spots to insure a good bond. Tile can be installed almost as soon as underlayment is down.

Technology continues on p. 173

if*it's* Dierksit works

(14

DIERKS PINESIDE 100 helps them make up their minds! This extraordinary new exterior primed siding offers the warm effect of real wood . . . yet improves on nature when it comes to durability, strength, dimensional stability. PineSide 100 is a hard-working salesman, because Dierks works to pioneer products that work . . . for you.

TECHNOLOGY

(starts on p. 167)



Shell house in plastic is designed to sell for \$3 a sq. ft.



A screwdriver, a wrench and a hand drill are the only tools needed to erect the 400 sq. ft. house above. Rigid vinyl panels, light aluminum channels for framing, and sliding aluminum windows (along with nuts, bolts and screws) make up the whole shell package. The erected shell should sell for \$1,200, say its developers—Navaco Division of Howe Sound Co., Dallas, and Roger Dunn & Co., Chicago. That price does not include slab, utilities, appliances or fixtures. Conceived as shelter for underdeveloped countries, the house seems likely instead to find a place in the U.S. vacation market.



City code calls for anti-corrosion guards on steel water-supply lines

In Tulsa, where chemicals in the soil shorten the life of buried steel pipe, the protective method shown above is now required on steel water and gas lines from mains to houses.

The problem: steel pipe and underground chemicals interact to generate small electric currents that eventually eat through the pipe. Solution: destructive currents are diverted from the pipe to a bar of magnesium suspended in a bag of chemicals.

Tulsa city engineers adapted the method called cathodic protection—from one long used on oil pipelines. Expected result: most Tulsa homeowners will avoid at least one big repair job in the life of a house.



Water-repellent undercoating extends paint life on siding

A chemical seal, applied to siding before it is painted, cuts down peeling and blistering because it keeps rain water from penetrating the wood at joints between boards.

So reports the U.S. Forest Products Laboratory of Madison, Wis., which tested the seal and produced examples (*above*) of untreated (*left*) and treated (*right*) siding. In FPL's tests, panels of primed and painted siding were put in a humidity cell for a week and a dry cell for a week, sprayed heavily for four hours and finally exposed to the weather for three years. Unsealed panels absorbed up to a pint of water in 8 sq. ft. Sealed panels absorbed almost no water. ... for samples and complete information, call your local Dierks representative or write



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KILN-DRIED SOUTHERN PINE FINISH "WET-GUARD" DENSE DIMENSION PANELING

MILLWORK DIVISION

JAMBS AND PRE-HUNG DOOR UNIT PARTS, K.D. PACKAGE MITERED INTERIOR TRIM WINDOW AND DOOR FRAMES WINDOW UNITS AND SASH

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WOODFIBER INSULATING SHEATHING ROOF INSULATION SOUND DEADENING BOARD PINESIDE 100 EXTERIOR PRIMED SIDING

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Why it pays to include MODERN GAS INCINERATORS

in your homes



In the highly competitive business of selling homes, the smart builder is ever alert to new features—to *plusses* that will impress potential buyers. A modern Gas incinerator is just such a plus.

• Homes in a cleaner, quieter, more modern setting . . . this important selling point can be yours with a modern Gas incinerator that eliminates noisy, unsightly garbage cans.

• An obviously attractive point to housewife prospects and to their husbands, too — is eliminating the mess and nuisance of daily garbage and trash carrying, by installing modern Gas incinerators.

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House hunters know they can



LIVE MODERN FOR LESS WITH...



Will integration make housing a public utility?

OPEN OCCUPANCY VS. FORCED HOUS-ING UNDER THE FOURTEENTH AMEND-MENT. Edited by Alfred Avis. Bookmailer, New York. 316 pp. \$6.

Open occupancy laws inevitably restrict the rights of property owners. The question arises: is integration more important than the property rights it curtails? This books adds up to a big no.

Behind much of its argument lies concern for traditional property rights, rights that began with the Magna Carta and which historically distinguish economic freedom from feudalism. As recently as 1952, the book shows, a New York State appeals court was insisting that "landlords have the absolute right, under the law, to choose their tenants." This right is invaded, argues former Arizona Supreme Court Chief Justice M. T. Phelps, by ordinances that provide in substance "that because a man is a Negro he is not ipso facto an undesirable tenant."

For Editor Alfred Avins, the movement toward "forced housing" is slowly converting the housing industry into a public utility. "The main characteristic of a public utility," he asserts, "is that the public may demand its service as a right."

The book's approach is an attempt by more than 35 contributors to undermine arguments for integration. For example:

• Integration is supported by the Fourteenth Amendment. Not so, says Charles Tansill, former professor of history at American, Fordham and Georgetown Universities. In a chapter with three other contributors, he argues that the framers of the Fourteenth Amendment aimed at restricting state laws that discriminated against the property rights of minorities. They intended no infringement of the property rights of individuals.

• Integration is morally right. How can anyone determine what is morally right, challenges Cornelius Greenway, minister of All Souls Universalist Church, Brooklyn, N. Y. Greenway and others cite Supreme Court Justice Jack-

Who's responsible for ugly America?

GOD'S OWN JUNKYARD. By Peter Blake. Holt, Rinehart & Winston, New York. 144 pp. \$4.50 cloth, \$2.95 paper.

"This is perhaps a rather naive book," writes Architect-Editor Blake in the preface.

Alas, his judgment on this point is keen. Blake's Junkyard

son who raised this point: "How should we ascertain the moral sentiments of masses of persons on any better basis than a guess?"

• Integration is consistent with our Judeo-Christian traditions. Not true. "Jewish law discouraged intercourse with Gentiles on terms of equality and in many instances categorically forbade it," insists Nathaniel Weyl, author of "The Negro in American Civilization." As for Christianity, says Weyl, St. Paul's analysis of the church (I Corinthians XII:4-31) stresses "a basic inequality of man which was accepted by such authorities as St. Augustine and St. Thomas Aquinas.

• Integration reduces crime and growth of slums. A study of two Chicago districts, Fillmore and Woodlawn, indicates no favorable relationship between crime and integration. Moreover, in seven out of eight Chicago communities which changed racially between 1950 and 1960, substandard and dilapidated units declined more slowly than for the city as a whole.

• Segregation does irreparable damage to the Negro personality. Sociological research delivers no unequivocal conclusion on this score, contends Clairette P. Armstrong, former chief psychologist of the children's court and domestic relations court of New York City. In fact, "Evidence indicates that Negroes develop . . . psychological impairments as a consequence of systematic contact with whites, particularly during critical phases of personality formation," says Pyschologist Armstrong.

• Elimination of discrimination is necessary for the sake of America's relations with the rest of the world. Attorney John D. Graves and Herbert C. Sanbord, former professor of philosophy and psychology, Vanderbilt University, argue that the United States need not adjust its internal policy to satisfy non-white countries—especially when many of these countries openly practice discrimination themselves without regard to world opinion.

is what the British trade journal *Architectural Review* calls "the mess that is man-made America." He has assembled 157 photographs, ironically contrasted with uplift quotes by philosophers, architects and authors, which make the pressing and depressing point that much too

Books continued on p. 176




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Roper Charms - gas or electric. Exclusive slide-out cook top. Eye-level bake/broil oven. 30" and 39" widths.

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A Roper in the kitchen influences smart home buyers. (For four generations, Roper's quality name has moved prospects.) And now, Roper offers the widest choice of quality gas and electric ranges . . . with the newest, most complete line of models, completely interchangeable in either fuel—size for size, shape for shape, exciting feature for exciting feature. It makes pleasing prospects easier! Roper Counter Built-Ins – gas or electric. Economical slide-in installation. Top or front mounted controls.

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GAS AND ELECTRIC RANGES BY



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PVC pipe eliminates waste in more ways than one

This could be the greatest single improvement in drain/waste/vent systems since plumbing came indoors. It's PVC pipe—light in weight, strong, easy to install with no wasted effort. This man is slipping a section of it into position in the outstanding community of homes at the New York World's Fair.
Selected by The House of Good Taste, pipe made of Geon vinyl will be seen by millions who visit the Fair. Here, as in any home, pipe and fittings made of PVC offer excellent strength plus impact and corrosion resistance. It is completely inert, will not scale or rust. Resists acids, alkalies, oils and solvents. \Box Also significant to men in the building business is this: Geon PVC pipe is approved by the National Sanitation Foundation for carrying potable water and has been rated self-extinguishing by the American Society for Testing Materials. Learn more about pipe made of Geon rigid vinyl; write B.F.Goodrich Chemical Co., Dept. EN-4, 3135 Euclid Ave.,

Cleveland, O. 44115. In Canada: Kitchener, Ont.



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READING ON ELECTRONIC MOISTURE METER GIVES GO-AHEAD FOR PAINTERS.

DRY AS A BONE—HARD AS STONE! This Dens-Cote wall is only one day old, yet the surface is so dry it can be painted. Bestwall's new Dens-Cote, a one-day, one-material system, saves time and money: 1. Apply Dens-Cote Base, a gypsum base reinforced with glass fibers. 2. Apply Dens-Cote Tape and corner beads. 3. Apply Dens-Cote to a thickness of 1/16''. This great new "one-bag" system produces a true, even, extremely hard surface. "Apply Dens-Cote today—paint tomorrow."



Accent on remodeling

This month's New Product department points up an important opportunity in today's housing market: the same materials and equipment that make a new house really new can be used to make an old house practically new. The products shown here and on the following pages have been selected because they are just as applicable to home modernization as to new-home construction. They make it possible for the remodeler to market many of the same key features that are selling today's best new houses: more attractive interior and exterior finishes, lowmaintenance materials, better sound conditioning, design accents and, above all, more efficient kitchens and better equipped, more dramatic baths.



Low-maintenance siding in board-and-batten style is made of plastic-covered plywood. PF-15 comes in white, grey, green, beige and yellow with a Tedlar surface that is guaranteed to need no painting for at least 15 years. It is fastened with concealed nails. U.S. Plywood, New York City. (*For details, check coupon No. 1 on p. 209*)



Solid vinyl siding is colored all the way through and is backed with an insulating fiberboard. It will not rot, dent, conduct electricity or absorb dirt—it washes with a garden hose. Standard 12'6" lengths are easily cut, can be applied over old siding. Bird, East Walpole, Mass. (*For details, check coupon No. 2 on p. 209*)



Prefab chimney eliminates masonry work and footings, saves space in the house. Vitroliner housing can be installed right over B gas vents in less than 30 minutes. Chimneys come in buff, white or red brick. Condensation Engineering Corp., Chicago. For details, check No. 3 on p. 209



Nail-free soffit snaps in place, needs no special framing. Wall angles and cross tees support weatherproof Soffit-sote panels, Panels come 12", 16" and 24" wide, 8' and 12' long, are factoryfitted with screened vents and primed. Homasote, Trenton. For details, check No. 4 on p. 209



Wire gutter guard can be installed in either a new or existing gutter. It snaps in a 4" or 5" gutter without cutting or fitting. Gutter-Skreen is a plastic-coated wire mesh, comes in 4'-long sections. Stockton Wire Products, Palmyra, N.J.

For details, check No. 5 on p. 209



Dual-purpose cupola serves as both decorative element and attic vent. Weather-resistant construction includes prefinished redwood housing, aluminum top and stainless steel staples to fasten the unit to roof. George M. Stephenson Co., Cleveland. For details, check No. 6 on p. 209

New products continued on p. 189



DRESS UP YOUR BRASS WITH BEAUTY

Crystalite handles are smartly styled with full-length fluting that reflects sparkling highlights and produces a unique decorative effect. They will never slip, because a chromium-plated metal insert with broach provides lifetime, metal-to-metal contact with the valve stem of the faucet. Crystalite handles are available for the entire line of Gerber bath, shower, and lavatory brass. Illustrated: 143A Centerset faucet.

SPRODUCT OR PERFORMANCE DEFECTION GOOD HOUSE RECEIPTING GUARANTEES GUARANTEES GUARANTEES GUARANTEES Handsome Gerber brass fixtures with new Crystalite handles add a fashionable look of elegance to bathrooms and powder rooms alike. This striking new luxury combination increases the visual appeal of new homes, and reflects the discriminating tastes of the builders and plumbers who select it. Add a luxurious touch to your remodeling projects, too, by including handsome Gerber brass fixtures with new Crystalite handles.

Gerber brass is sculpted to bold, crisp designs that will blend handsomely with the plumbing fixtures of your choice. The heavily plated deep chrome finish will keep its brilliance for a lifetime. Beneath this beauty lies practicality: all Gerber lavatory and bath and shower fixtures are cast from a Gerberformulated ingot of high-copper-content brass. Onepiece construction means there are no joints to loosen or crack — prime insurance against leaks and costly repairs. All threads of working parts are in the bonnet, permitting easy removal for replacement.

These are some of the ways Gerber adds extra value without adding extra cost. For more information, send for the Gerber catalog of brass, lavatories, bathtubs, closets, and shower cabinets.



GERBER PLUMBING FIXTURES CORP., 232 N. CLARK ST., CHICAGO, ILLINOIS 60601 Factories: Kokomo, Ind., Woodbridge, N. J., Delphi, Ind., Gadsden, Ala., West Delphi, Ind. Export Division: Gerber International Corp., 500 Green St., Woodbridge, N. J.



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NEW PRODUCTS

start on p. 185

Baths and closets



Mirrored closet doors blend with decor, make bedrooms look larger and lighter. Bifold doors can be folded back to give side and back views. Mirrors and hardware are factory mounted. Panels come 4', 5' and 6' wide. Kennatrack, Chicago.





Marble-like countertop can be cut with a masonry wheel to fit any size basin or cabinets. Formed of crushed marble and resins. Bellamar is claimed to be chip resistant and stainproof, costs about as much as plastic laminates. Bertol, Chicago. For details, check No. 10 on p. 209



Built-in clothes hamper saves floor space in small baths or laundries. It fits standard stud spacing so needs no special framing. Top and bottom doors make Hamper Maid easy to fill and empty. Modern-Aire Ventilating, North Hollywood, Calif. For details, check No. 13 on p. 209



old houses as well as new. Stainless-steel unit uses minimum space because it mounts through the wall. Available in 6-kw. capacity for home use and 9-kw. for motels and clubs. General Electric, Shelbyville, Ind. For details, check No. 8 on p. 209



Heater-ventilator-light is allin-one unit that simplifies inside bath wiring. Heat, vent and light work separately or in combination. Quick Combo 93 is $11\frac{1}{2}$ "x11 $\frac{1}{2}$ "x8"; aluminum grille extends 1 $\frac{1}{2}$ " from ceiling. Home Metal Products, Dallas. For details, check No. 11 on p. 209



Vinyl stall-shower pan liner is flexible and easy to install, can be cut to fit odd-sized shower spaces in remodeling jobs as well as used in new construction. Vinyl moisture barrier eliminates hot mopping, is approved for single-ply installation. Seal-Zit, Long Beach, Calif. (For details, check coupon No. 9 on p. 209)



Enameled-steel shelves telescope and expand to fit any size closet. Installation involves no trimming and fitting. Rod and shelves in five models adjust from 23" to 85" for clothes closets. Linen closet shelves come in two models that adjust from 17" to 43". Louver Mfg. & Supply, Minneapolis. (*For details, check coupon No. 12 on p. 209*)



Bathtub with above-the-floor drain eliminates under-slab roughing in slab houses, lets a bath be added to a house without falsework in the ceiling underneath. Dynametric is a 5' recessed tub with bottom raised high enough to put drain 2^{34} " off the floor. Kohler Co., Kohler, Wis. (For details, check coupon No. 15 on p. 209)

New products continued on p. 190



Electric wall heater is sized to fit between wall studs. Features include thermostatic control, fan delay switch to keep cold air from circulating, vibration-free motor mounting. Capacities from 1,500 to 4,000 watts. Electromode, Rochester. *For details, check No. 14 on p. 209*

NEW PRODUCTS

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Kitchens



Split-level sink is standard double-sink size (21"x32"), fits same cabinet space. Designed for use with a dishwasher and disposer, the sink has a deep section for washing large pots, a shallower section for scraping and rinsing. Graning, El Monte, Cailf. For details, check No. 16 on p. 209



Roil-paper dispenser for aluminum foil and toweling fits standard stud spacing so it can be installed in either a new or modernized kitchen without extra framing. Kitchen Kaddy has a brushed-chrome finish. Swanson Mfg., Owosso, Mich. For details, check No. 17 on p. 209



Top-control disposer is designed for the replacement market. New model 6600 has all the features of the maker's extraquiet Custom Hush models, plus a switch in the top for owners who prefer that type of control. Waste King, Los Angeles. For details, check No. 19 on p. 209



Faucet-blender unit fits standard-size sinks, also comes with stainless-steel bar sink that includes two storage wells, an ice bucket and a cutting board. Push buttons control faucets, blender and dishwasher brush. Zeigler-Harris, San Fernando. Calif. For details, check No. 20 on p. 209



Drop-in range and oven looks built in and takes only 27" of counter space. Mark 27 comes with a remote-control wall panel (*upper right corner of photo*) or a choice of two hoods that include oven and range controls. General Electric, Louisville. For details, check No. 22 on p. 209



24'' undercounter range has lever controls at one side of the burners. Counter-hung range needs no bottom support. Chrome trim and optional backsplash fit any counter. Model 1720 comes in lusterloy and five colors. O'Keefe & Merritt, Los Angeles. For details, check No. 23 on p. 209



Three-level refrigerator has 4 sq. ft. counter that slides out to provide an extra working area. Top cabinets and right half of lower cabinet provide 10.6 cu. ft. refrigerator storage. Lower left cabinet is the freezer. Vegetable crisper and meat tray are in the center. Whirlpool, Benton Harbor, Mich. (For details, check coupon No. 18 on p. 209)



Ductless hood traps odors and grease in kitchens where venting outside is a problem. Air is drawn through an aluminum filter, then through a chemically-treated filter which comes out for washing and recharging. Front panel is charcoal black. Widths: 24", 30", 36" 42". Broan, Hartford, Wis. (For details, check coupon No. 21 on p. 209)



110-volt cooking appliances are designed for installations where 220-volt power is not available. Two-burner range is $17\frac{1}{2}$ "x19"x15^{1/2}"; oven-broiler with electric rotisserie is $17\frac{3}{6}$ "x20^{1/8}"x22^{1/4}". Compact size can solve space problem in a small kitchen. Princess Mfg., Los Angeles. (For details, check coupon No. 24 on p. 209)

New products continued on p. 192



New 3' and 5' convection baseboards combine with 4', 6', 8' and 10' units for any length needed









A. Forced Air Baseboard can be recessed, using new 3-piece accessory trim kit to frame opening. **B.** New Ceiling Cable is completely clean, absolutely safe and, of course, silent. Requires no maintenance. **C.** Bathroom Trio Ceiling Unit heats, lights, ventilates. Similar Duo unit heats and ventilates. **D.** New Wall Heaters combine safety grill, economy price. Available in radiant and fanforced models. Both install easily between standard 16" studs.

Now Hunter Heatliners fit almost anywhere. Two new lengths give complete versatility. Patented heating element uses *less* power to produce *more* heat at *lower* operating temperature. Easy installation. Fast warm-up. Quiet operation. Deluxe Heatmaster baseboards available in 32" and 48" lengths.

Hunter also makes portable convection, Vycor® infrared and unit blower heaters.



NEW PRODUCTS

start on p. 185



... MORE THAN JUST FOR KICKS!!



Mercer flexible Cove Base protects walls ... closes gaps while adding a distinctive effect to floors ... yet is popular priced. Choose from Mercer's selection of colors and designs. Sizes from 11/2" to 6", with or without toe.

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CHROMALOX electric heat Edwin L. Wiegand Company, 7770 Thomas Blvd., Pittsburgh, Pa. 15208



Interiors



Ceiling panel grid can be set within 3" of joists for maximum headroom, holds 2'x2' and 2'x4' solid or luminous panels. Clips (left) are nailed to joists 2' o.c., then runners are snapped to them and cross-members and panels dropped into place (right). National Gypsum. Buffalo, N.Y. (For details, check coupon No. 25 on p. 209)



Through-wall humidifier can be installed in closets, cabinet soffits or stairwells. Unit is piped to water supply with quick-disconnect fittings, can vaporize up to six gallons of water per day. Walton Laboratories Inc., Irvington, NI

For details, check No. 26 on p. 209



Ceiling decoration resembles sculptured plaster, is attached to ceiling with adhesive or small nails. Melanie ornaments can be used to cover unused fixture holes. are finished with conventional paint or gilding. Fradol Enterprises, Cleveland. For details, check No. 27 on p. 209

Metal trim for thin-coat plaster comes in two sizes: 1/16" for single coat or 1/8" for double coat. Trim is galvanized steel,, includes corner bead (top) and casing bead (bottom) for use around doors and windows. Casings Inc., Milwaukee.

For details, check No. 28 on p. 209



Crack-repair system glass-fiber fabric to bridge cracks and a weatherproof compound to stick and cover tape. Tuff-Kote can be used on plaster, masonry, wood or metal, works indoors or outdoors. Tuff-Kote, Woodstock, III

For details, check No. 29 on p. 209



Double-action stapler lets ceiling tile be mechanically fastened directly to gypsum board (*left*). Gyplock Tacker drives two staples (*right*): second staple hits the first and spreads out, locking the ceiling tile into the board. Bostich Inc. East Greenwich, R.I. (*For details, check coupon No. 30 on p. 209*)



Traditional chandelier of wrought iron is part of a new line called Heritage. Other fixtures in the line include two chandeliers, matching wall pieces and two outdoor lanterns. Prices range from \$8 to \$37. Emerson Electric, St. Louis.

For details, check No. 31 on p. 209



Wood-pattern paneling is gypsum wallboard covered with wood-grained film. Random plank grooves conceal Ultrawall's joints. Board is available in five wood patterns: cherry, teak, walnut and two surf-woods. U.S. Gypsum, Chicago.

For details, check No. 33 on p. 209



Compact switches are half the width of standard units, permit vertical mounting of two switches in a single gang box or four in a double gang box. Space Saver Twins are available as either toggle or tilt switches. Rodale, Emmaus, Pa.

For details, check No. 32 on p. 209



Embossed ceiling tile has a white-on-white pattern resembling woven fabric. The surface of Panama is washable, flame resistant to Class F requirements. Center-grooved tiles are available in 12"x12" or 12"x24" sizes. Celotex, Chicago. For details, check No. 34 on p. 209

New products continued on p. 194



Square Tubes — Greatest Yet for Rolled Drawings

Rolled drawings go in and out of Plan Hold square tubes easier. No binding against the sides as in round tubes. Each Plan Hold*cabinet has 36, 16, or 9 square tube sections. Tube lengths up to 44". Use one cabinet alone or stack together, as needed. The most engineering file for your money. Write for catalog of 18 filing systems to Dept. H44, P.O. Box 90913, Airport Station, Los Angeles, Calif.



Takes little space on desk or table





. . . or alongside, LL. in vertical position. *Reg. U.S. Pat. Off.







 Biral steel stairway is supported by a center column Presteel

start on p. 185

NEW PRODUCTS

Spiral steel stairway is supported by a center column. Presteel stairs have open or closed risers, a choice of three treads, four platforms and ten level rails. Sizes: 3'6" to 6' in diameter. Woodbridge Ornamental Iron, Chicago. (For details, check coupon No. 35 on p. 209)

Decorative masonry coating looks like marble aggregate and provides a seamless surface. Aggretex allows normal vapor transmission, limits penetration of exterior water and resists weather deterioration. Desco International, Buffalo.



For details, check No. 36 on p. 209



Polyurethane liquid dries to a hard coating for wood or metal. Liquid finish is applied from the can, dries to touch in 30 min., can be recoated in 6 to 8 hours. High gloss is used for exteriors, smooth satin for interiors. Valspar, Rockford, Ill. For details, check No. 37 on p. 209



Wall fixture throws indirect light on walls and ceilings, includes an aluminum reflector for good light diffusion. Designed for hallways, baths, etc., Prismacket uses two 100-watt (max.) lamps, mounts on conventional outlet box. Guth, St. Louis. For details, check No. 38 on p. 209

Publications start on p. 197

"Great house, great service" mean sales success for USS Homes Dealer

Midland has completed over 400 USS Homes houses in the Kansas City area in two developments. They like U. S. Steel Homes exclusive steel framing system because it gives buyers a solid, stable, more maintenance-free home. They like the speed of erection and the small inventories required, because their money turns over faster. And they like the complete cooperation they have received from every department of U. S. Steel Homes, from market surveys, financing, model home selection, merchandising, engineering and erection. "Every detail is handled in an excellent, businesslike manner by qualified representatives," they say. "Those are the reasons why we have been successful with U. S. Steel Homes."

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say George Lieberman, President, and Leonard Kay, Salos Manager, Midland Development Company, Kansas City, Missouri.



Kansas City builders, George Lieberman (left) and Leonard Kay





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Management magazine of the housing industry published by Time Inc.

PUBLICATIONS



Low-maintenance landscaping: how to plan it

Thirty-three well-illustrated pages show how to plan lawns for easy mowing (*example above*), how to build walls, terraces, planters and fences that will need minimum upkeep, and how to select low-maintenance plants and grasses. It is helpful for builders who want to cut maintenance costs in model house areas and at the same time provide a traffic-pulling feature. It is also an attractive give-away item for hot prospects and buyers. Price: 25ϕ . Jacobsen Mfg., 1721 Packard Ave., Racine, Wis.



Planning ideas for apartment laundries

A series of five bulletins lists the basic requirements of apartment laundries and shows photos and layouts (*sample above*) of typical installations. The bulletins cover these subjects: 1) basic laundry requirements, 2) smalispace design, 3) sales advantages and ideas for apartment owners, 4) luxury design and 5) specifications for coin- or ticket-operated appliances. Maytag Co., Newton, Iowa. For copy, check No. P1 on p. 209

Publications continued on p. 199



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It's hard to find time, we know, to read everything you'd like. Maybe there's an article listed here that you missed in HOUSE & HOME. If so, we might be able to help.

USE OF PAINT IN TOMORROW'S HOUSE. Results of an industry Round Table that examined the costly communications breakdown between the paint and housing industries.

FEDERAL HOUSING AID: AN EDITORIAL. A thoughtful and provocative examination of why Federal housing aid fails to get at housing's real problem—high cost—and instead makes it worse.

HOW TO PLOT A STRONG GROWTH PATTERN. Case history of a successful builder who went from 35 houses to 875 houses in 10 years—and who tells how he planned it.

BASEMENTS: WHEN DO THEY MAKE REAL SENSE? Basements can be an abomination; but they can also make some houses more livable and more salable.

If you're interested in one of these articles, limited quantities of reprints are available. Just drop a note to HOUSE & HOME Reader Service, Rockefeller Center, New York, N.Y., 10020.

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Duraflake COMPANY BOX 428 · ALBANY, OREGON Phone 503-926-2666



PUBLICATIONS

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For copies of free literature, check the indicated number on the coupon on page 209.

Catalogs

BUILDING PRODUCTS. 32 pages. Illustrations, descriptions, specs and prices on range hoods, venti-lators, metal bifold doors and hardware, bath and closet accessories, mail boxes, door knockers, shutters and awnings. Leigh Products, Coopers-ville, Mich. (Check No. P3)

VINYL FLOORING. 16-page booklet shows patterns and describes the qualities of each. Technical data and installation specs. Sandura Co., Jenkintown, Pa. (Check No. P4)

METAL DOORS. 20 pages. Description and specs for standard door and frames. Typical elevations, sections and construction details. Hardware options. Amweld, Niles, Ohio. (Check No. P5)

POWER TOOLS. 68 pages. Saws, hammers, sanders, planes, routers, drills, screwdrivers, etc. are described to help users select the proper model for the job. Skil Corp., Chicago. (Check No. P6)

QUARRY TILE. 20 pages. Patterns, trim unit data, specs and installation details. Summitville Tiles, Summitville, Ohio. (Check No. P7)

AND FITTINGS FOR WALL-MOUNTED CARRIERS TOILETS. 48 pages. Photos, descriptive data, installation details and suggested layouts, Josam Mfg., Michigan City, Ind. (Check No. P8)

VENTILATORS for kitchens and baths. 8 pages. Range hoods, oven hoods, bathroom heaters and ventilators. Photos, descriptions, installation de-tails and specs. Robbins & Myers, Pico Rivera, Calif. (Check No. P9)

REFRIGERATORS. 6 pages. Photos of 13 models, features described, specs. Sub-Zero Freezer Co., Madison, Wis. (Check No. P10)

PERFORATED METAL. 8-page folder describes and illustrates in actual size more than 80 industrial and decorative patterns. Harrington & King, Chicago. (*Check No. P11*)

BUILDING PRODUCTS REGISTER. Technical products data for material selection as an introduction to more detailed research. Also included: abstracts of technical standards, testing methods, manufacturer association standards, product index, manufacturer index, trade names index, organization index. \$20. For copy, write Building Pro-ducts Register, AIA, 1735 New York Ave., Washington 20006.

STONE. Complete information on stone with sectionalized files on argillite, granite, limestone, quartzite, marble, bluestone, brownstone, slate. \$20. For copy, write Building Stone Institute, 420 Lexington Av., New York City 10017.

PLAN FILING SYSTEMS, 12 pages. Photos show how to use hanging and tube files. Plan Hold Corp., Los Angeles. (Check No. P12)

SLIDING CORNERS, 8-page price list. Simplicity Tool Co., Portland, Ore. (Check No. P13)

WIRING GUIDE, 160 pages. Illustrations, sizes, capacities and descriptions of surface metal raceways, fittings, multi-outlet assemblies, tools, and lighting equipment. Wiremold, Hartford, Conn. (Check No. P14)

Technical literature

PLASTIC GLASS IN BUILDING APPLICATIONS, 4-page folder discusses thermal expansion and contraction, rigidity, design stresses, temperature-humidity bowing and impact resistance. Rohm & Haas, Philadelphia. (Check No. P15)

CONCRETE AND PLASTER AGGREGATES. 8 pages. Physical property data, detail drawings and specs for lightweight insulating concrete. Plaster data covers thermal and sound conductivity, fire ratings, weight savings, application techniques. Perlite Institute, New York City. (Check No. P16)

Publications continued on p. 202

YOU WILL When buying a home, one of the two rooms with the greatest attraction for sell more homes Mrs. Housewife-and usually for the man of the house, too -is the bathroom! And in many transactions, it is WITH the unusual touches to the bathrooms-the things that others don't have that help sell homes. HALL-MACK® Below are a few of Hall-Mack's finest quality bathroom accessories-every one a real home-seller! By making bathrooms more attractive and OUALITY convenient, Hall-Mack specialties help to clinch many a sale for smart builders and **IN EVERY BATHROOM!** contractors everywhere.



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199



NOW IS THE TIME TO ENTER THE 4TH ANNUAL





ALREADY MORE THAN 200 BUILDERS HAVE PARTICIPATED IN THIS NATIONAL PROGRAM DESIGNED TO BOOST SALES OF NEW HOMES.

Everywhere builders report tremendous buyer interest in their model Horizon Homes. The Program offers effective advertising and publicity support—both national and local. It has generated enthusiastic response, helped sell homes in record numbers.

Identify yourself in 1964 with this aggressive program, tailored to your promotional needs. All Horizon Homes shown for ten consecutive days prior to October 17, 1964,



Matt Jetton, President Sunstate Builders, Inc. Developers of Carrollwood Tampa, Florida

"The Horizon Homes Program offers tremendous benefits to the builder and the community. In our Carrollwood Horizon Home promotion we took advantage of professional talent in all facets of development, construction and merchandising. This professional teamwork in building and promoting resulted in the highest sales period our Carrollwood development has ever experienced." will be eligible for the big awards. For details, contact your nearest PCA office.

EFFECTIVE MERCHANDISING SUPPORT

You will receive a complete kit of sales and promotional materials. The kit covers every phase of local Horizon Homes merchandising from the initial planning stage through your model home showing.

Strong national and local advertising and publicity support provided by the sponsor will back up your efforts.

WIN A TRIP TO ANYWHERE IN THE WORLD!

Every builder entering the program can qualify for entry in the Horizon Homes National Awards Program. Top national award: a trip for two to any place in the world. In addition, seven regional awards will be presented. All winners will be individually honored and widely publicized.

EASY TO ENTER

The builder must be an NAHB member and agree to construct and show a model Horizon Home with selling features appropriate to his area. Emphasis is to be placed on good design, total living area and imaginative uses of concrete within the \$25,000 sales price ceiling for the home. There are also reasonable requirements on the total use of concrete and other cement products. Entries may be individual houses or multi-family dwellings not over three stories above grade.

GET FULL DETAILS NOW. CONTACT YOUR NEAREST PCA OFFICE

Albuquerque, N.M., 5301 Central, NE Atlanta 3, Ga., 161 Peachtree St. Austin 1, Texas, 110 East Eighth St. Baltimore 2, Md., 512 Keyser Bldg. Birmingham 5, Ala., 1214 South 20th St. Boston 16. Mass., 20 Providence St. Chicago 2, III., 111 West Washington St. Columbus 15, Ohio, 50 West Broad St. Denver 2, Colo., 721 Boston Bldg. Des Moines 9, Iowa, 408 Hubbell Bldg, Helena, Mont., Mezzanine-Placer Hotel Indianapolis 4, Ind., 612 Merchants Bank Bldg. Lansing 23, Mich., 900 Stoddard Building Los Angeles 17, Calif., 816 West Fifth St. Louisville 2, Ky., 805 Commonwealth Bldg. Memphis 3, Tenn., 815 Falls Bldg. Milwaukee 2, Wis., 735 North Water St. Minneapolis 2, Minn., 1490 Northwestern Bank Bldg. New Orleans 12, La., 611 Gravier St. New York 17. N.Y., 250 Park Ave. Oklahoma City 2, Okla., 1607 First National Bldg. Omaha 2, Neb., 720 City National Bank Bldg. Orlando, Fla., 1612 East Colonial Drive Philadelphia 2, Pa., 1500 Walnut St. Phoenix 12, Arizona, 3800 North Central Ave. Richmond 19, Va., 1401 State Planters Bank Bldg. St. Louis 1, Mo., 913 Syndicate Trust Bldg. Salt Lake City 11, Utah, 304 Executive Building San Francisco 4, Calif., 235 Montgomery St. Seattle 1, Wash., 903 Seaboard Bldg. Topeka, Kan., 700 Kansas Ave. Trenton 8, N.J., 652 Whitehead Rd. Washington 4, D.C., 837 National Press Bldg.

PORTLAND CEMENT ASSOCIATION An organization to improve and extend the uses of concrete

Arnold H. Wilkins, H. W. Wilkins & Son Marion, Indiana

'Our Horizon Homes received phenomenal acceptance. Total adult open house attendance was 16,120-by far a record for any such showing in our community. The favorable ratings given by local financing and insurance organizations are un-precedented. And the design concepts and concrete construction techniques we employed will be of real value in future residential and commercial projects."



Vice President for Marketing Robilt, Incorporated Lakewood, New Jersey

"The Horizon Homes Program puts its emphasis and support in areas of vital interest to the builder-strong encouragement of home ownership-effective merchandising assistance and professional guidance in the improvement of home design. Our model Horizon Home gave us new appreciation of the sales potential of concrete features. This program answers a definite need in our industry."



Clyde Marsh, Harry C. Marsh & Company Riverside, California

"The Horizon Homes Program is a most effective promotion, particularly for builders willing to take advantage of the merchandising opportunities offered. As a result of our success we have started several new projects and expect many longterm benefits. The program has enabled us to plan, specify and bid much more intelligently in terms of concrete and concrete products."

PUBLICATIONS

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Merchandising aids

PROMOTION IDEAS. 12 pages. Collection of 57 ideas that builders have used successfully. Edwards Engineering, Pompton Plains, N.J. (*Check No. P17*)

SELL ELECTRIC LIVING. 8 pages. Plan for selling electric-living package in existing homes. National Wiring Bureau, New York City. (*Check No. P18*)

How TO ADVERTISE. 8 pages. Describes basic advertising media and what each accomplishes. Mueller Climatrol, Milwaukee. (*Check No. P19*)

Design aids

BRICK WALL AND CONCRETE BLOCK CONSTRUCTION in a prototype motel, school and other buildings. Two 12-page booklets. Design commentary by the architect and data on the buildings operating and maintenance costs. Zonolite, Chicago. (Check No. P20)

How to BUILD FIREPLACES. 100 pages. \$1. For copy, write Donley Brothers, 13900 Miles Av., Cleveland 5.

STAIN SPECIFICATION KIT. A folder showing Olympic stain colors, spec slips and sets of color samples on wood. Olympic Stain Products, Seattle. (*Check No. P21*)

PLYWOOD PAINT PROCEDURES. 24 pages. Paint types and application methods including latex paints and new stains. Recommendations on which paint or finish works best for a desired effect on different types of plywood. Douglas Fir Plywood Assn., Tacoma. (*Check No. P22*)

LAMINATED ARCHES, BEAMS, TRUSSES. 20 pages. Photos of use in church, school, motel and other roofs and ceilings. Detail drawings, design data, specs. Weyerhaeuser, Tacoma. (*Check No. P23*)

Management aid

REPRODUCTION SERVICE CENTERS. 10-page booklet illustrates and explains document-copying services offered by Xerox centers in major U.S. cities. Xerox Rochester, N.Y. (*Check No. P24*)

Installation brochures

CERAMIC TILE. Four 4-page folders cover standard specs, FHA minimum property standards and instructions and drawings for shower installations. Ceramic Tile Institute, Los Angeles. (*Check No. P25*)

CEILING TILE. 32 pages. Sections on metal and wood furring strip application, adhesives, nailing and stapling. Also use of sculptured tile. National Gypsum, Buffalo. (*Check No. P26*)

INSULATION: application as a vapor barrier and as a plaster base. 8 pages. Drawings and charts of physical properties and comparative values. United Cork, Kearney, N.J. (*Check No. P27*)

Product bulletins

INTERIOR HARDBOARD PANELS. 16 pages. Photos of nine factory-finished woodgrains, a marbletone, two filigree patterns and pegboard. Hardboard characteristics, instructions for installation and finishing. Sizes, accessories. Masonite, Chicago. (*Check No. 28*)

HARDBOARD SIDING. 20 page booklet illustrates and describes ColorLap and X-ninety sidings. Cutting, nailing and finishing data. Masonite, Chicago. (*Check No. P29*)

THREE-DIMENSIONAL PLASTIC WALL TILE. 4 pages. Six designs are illustrated and specified. Contura Inc., South Bend, Ind. (*Check No. P30*)

PLASTIC ROOF VENTILATORS. 8 pages. Four models are illustrated and described. Leslie Welding, Franklin Park, Ill. (*Check No. P31*)

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THESE UPSON PRODUCTS HELP BUILD TODAY'S FINE HOMES FASTER, EASIER



Upson Dubl-Bilt—sheathing and siding combined in a single panel for exterior walls or for decorative facades.



Upson Trim-Bilt—attractive, economical exterior trim board for cornices, fascia and rakes.



Upson Soffits-pre-cut, primed, vented, screened and ready to apply.



Upson Primed All Weather Panels—a superior, high-quality board for board and batten exterior walls and gable-ends.



Upson Pre-Building System—allows complete pre-wiring and plumbing of whole sections off-site for accelerated building.



Upson Super-Bilt Interior Panels—onepiece seamless—ideal for in-shop production, unit assembly.



THERE'S A THING CALLED MONEY...

It's one man's medium of exchange, another man's poison—or, if you don't like it straight, root of all evil. To us, it's also an indicator of the presence (or absence) of a very important asset for businesspaper advertisers: wantedness.

When a man wants a publication enough to pay for it, the chances that he'll read it are bright. When he doesn't, it's anybody's guess. And in our book, *anybody*'s guess as to whether or not your advertising is likely to be seen isn't much to put your money on.

If you, too, believe that money talks, a good place for your advertising to cash in on what it says is in the pages of publications that readers *pay for*... publications bearing this familiar symbol:



The plus value of paid circulation is "wantedness"



UPSON MATERIALS FIT FINE HOMES BUILD IN PERMANENT BEAUTY WITH UPSON EXTERIOR PANELS

The builder of this gracious home has used Upson Siding and Soffits for two important reasons: (1) They're durable, economical to install and inexpensive to maintain. (2) Each offers a simple, good looking installation virtually trouble-free over endless years of service.

Take Upson Primed Siding, a practical and proven horizontal lap siding. Completely uniform, $9\frac{1}{2}$ " or 12" wide and 12' long—it permits exact layout with minimum waste. It's waterproofed throughout. And Upson siding is easy to install directly to studs or over sheathing on hidden fasteners that eliminate the blemishes of face nailing and provide automatic venting to prevent moisture traps behind the siding. SOFFITS? Same story: fast, easy installation, good looks that last. Pre-cut widths, screened vents, prime coating and neat H and J Moulding joints.



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(IF YOU'RE A "COMFORT-CONDITIONED HOME" BUILDER)



HOUSE OF GOOD TASTE EXHIBIT - NEW YORK WORLD'S FAIR 1964-65

70,000,000 people will have the chance to learn the "Comfort-Conditioned Home" story at the New York World's Fair. How? By visiting the House of Good Taste Exhibit. All three homes in the exhibit will be Comfort-Conditioned Homes insulated to CCH standards. Pretty important when you consider that the exhibit will be sending Fair visitors from your town back as prospects for CCH homes. Don't miss out on this profitable opportunity. Be a Comfort-Conditioned Home builder. Thousands of builders have already sold over half a million CCH homes. And this year, Owens-Corning is out to give builders who insulate to CCH standards the biggest support yet with sales training, sales aids and local newspaper advertising. So what are you waiting for? Send us the coupon today.

in the Fair





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every building in this community

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Pages



The complete line of heating and air conditioning equipment for residential, commercial and industrial applications.

"WHERE TO BUY IT"

ABC HEATING AND COOLING CORP.

That's right. Any Janitrol heating and cooling contractor can help you handle any job. The new Janitrol heating and air conditioning line includes models in a wide variety of heating and cooling capacities to meet all your needs—from small homes and individual apartment units to roof top combinations for your commercial buildings. Factory trained crews assure expert installation. Janitrol quality means more customer satisfaction, fewer call-backs too. Contact a Janitrol heating and cooling contractor for prices and specifications. He's in the Yellow Pages.

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ONS

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More products bulletins

PLASTIC TOILET SEATS. 28 pages. Regular and elongated solid plastic models are illustrated and described. Specs. Beneke Corp., Columbus, Miss. (Check No. P32)

MASONRY WALL SURFACING in brick designs and textures. 4 pages. Photos. Long-form specifications. Century Brick, Erie, Pa. (Check No. P33)

ROOM AIR CONDITIONERS. 6 pages. Describes heat-ing, cooling, filtering and dehumidifying operation. Performance ratings and specs. Modine Mfg., Racine, Wis. (Check No. P34)

ALUMINUM PIPE FITTINGS. 8 pages list available styles and sizes. Latrobe Foundry, Latrobe, Pa. (Check No. P35)

FOAM PLASTIC BOARD. 4 pages describe construction uses of foam plastic insulation board. Koppers Co., Pittsburgh. (Check No. P36)

AIR COMPRESSORS AND PAINT SPRAYERS. 6 pages. Photos and performance data. Campbell-Hausfeld, Harrison, Ohio. (Check No. P37)

SLIDING DOOR HARDWARE, 6 pages show illustrations and an exploded view to clarify assembly. Ever-Roll Mfg., Dayton. (Check No. P38)

For more information circle the numbers below (they are keyed to the items described on the New Products and Publications pages) and send the coupon to: HOUSE & HOME, Rm. 1960, Time & Life Building, Rockefeller Center, New York 20.

Note: House & Home's servicing of this coupon expires June 30, 1964. If you contact manufacturers directly, it is important that you mention the issue of HOUSE & HOME in which you saw the item.

Publications

New products

 U.S. Plywood siding Bird vinyl siding Gondensation Engineering prefab chimney Homasote nail-free soffit Stockton Wire gutter guard George M. Stephenson cupola Kennatrack mirrored closet door G.E. sauna heater Seal-Zit vinyl shower pan liner Bertol marblelike countertop Home Metal heat-vent-light Louver Mfg. & Supply shelves Modern-Aire clothes hamper Electromode wall heater Swanson roll paper-dispenser Whirlpool three-level refrigerator Broan ductless hood G.E. drop-in range O'Keefe & Merritt undercounter range Princess 110-volt cooking appliances National Gypsum ceiling panel grid Walton through-wall humidifier Fradel ceiling decoration Casings metal trim for plaster Sutich stapler Cosings metal trim for plaster Casings metal trim for plaster Vodele compact switches U.S. Gypsum paneling Celotex ceiling tile Woodbridge spiral stairs Desco masonry coating Valspar liquid plastic Bentoria dural plastic 	 P1. ☐ Maytag laundry planning ideas P3. ☐ Leigh building products P4. ☐ Sandura vinyl flooring catalog P5. ☐ Amweld metal door catalog P6. ☐ Skil power tool catalog P7. ☐ Summitville quarry tiles P8. ☐ Josam toilet carriers and fittings P9. ☐ Robbins & Myers vent catalog P10. ☐ Sub-Zero refrigerators P11. ☐ Harrington & King perforated metal P12. ☐ Plan Hold file catalog P13. ☐ Simplicity Tool siding corners P14. ☐ Wiremold wiring guide P15. ☐ Rohm & Haas plastic glass data P16. ☐ Perlite concrete & plaster aggregates P17. ☐ Edwards Engineering promotion ideas P18. ☐ National Wiring Bureau selling ideas P20. ☐ Zonolite brick & concrete construction P21. ☐ Olympic Stain spec kit P22. ☐ DFPA painting procedures P23. ☐ Weyerhaeuser laminated arches P24. ☐ Xerox reproduction service P25. ☐ Ceramic Tile Institute folders P26. ☐ National Gypsum ceiling tile P27. ☐ United Cork insulation P28. ☐ Masonite interior hardboard panels P29. ☐ Masonite interior hardboard panels P30. ☐ Contura plastic wall tile P31. ☐ Leslie Welding roof vents P33. ☐ Century Brick wall surfacing P34. ☐ Modine room air conditioners P35. ☐ Latrobe aluminum pipe fittings P36. ☐ Koppers foam plastic board P37. ☐ Campbell-Hausfeld air compressors P38. ☐ Ever-Roll sliding door hardware
	April
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City	
I wish to enter a subscription to House & Hoм	E for □ 1 year, \$6; □ 3 years, \$12; □ new; □ renewal (U.S. and possessions and Canada only)
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APRIL 1964	



This 221/2 H.P. unit produced over 300 million gallons of water from a 931-foot depth, before replacement . . . with another Reda Pump, of course! Many such installations are in operation at apartment houses, sub-divisions, shopping centers, community water systems, large estates . . .

SELECTION CHART

Pump Type	Min. Unit O.D.	Design Capacity GPM	Design Lift Head in Feet	
			Max.	Min
D55E	6"	55	2000	140
G70E	6″	72	5400	180
G120A	6″	110	3500	105
G160	6″	150	2750	82
1250	8″	230	1860	47
1300	8″	280	1520	61
J400	8″	480	780	60
M520	10″	540*	840	93
M675	10"	680*	580	115
KG725	10"	800	490	69
N525	10″	525*	1200	240
N750	11″	660*	1000	210
P1000	12"	1200*	900	120
R1500	14"	1900*	740	80
T2000	16"	2150*	630	52



Tracino Corlon – a luxury, sheet vinyl floor with a textured surface, at only 45¢ sq. ft. installed

and the best known name in building materials, too!

About forty-five cents a sq. ft. installed—that's all it costs to give your home today's most popular kind of resilient floor, a textured sheet vinyl. With Armstrong Tracino Corlon, you get the striking decorator effect shown on the facing page, at about the same cost as embossed linoleum.



Tracino Marble

Tracino Vinyl Corlon gives you a choice of these two patterns, each available in several decorator colorings. And because Tracino comes in long rolls, 6' wide, you get a floor with the minimum of seams—the kind of resilient floor that new home prospects know is the easiest to keep clean.

Tracino's gently textured surface is strikingly attractive and offers practical advantages, too; it helps hide scuff and indentation marks and subfloor irregularities. Because it has Armstrong's exclusive Hydrocord Back, Tracino can be installed at any grade level, even in a basement directly on concrete (except where excessive alkaline moisture makes the use of any resilient floor impractical).

Whenever you use Tracino Corlon, you're putting the best known, most advertised name in building materials



to work for you. So it pays to show prospects that your model has Armstrong products—with this emblem.

Home buyers have real faith in Armstrong products. Many have used Armstrong materials for years. Throughout 1964, they'll see fullcolor ads for Armstrong floors in twenty-five leading consumer magazines and commercials every week on the Danny Kaye Show, CBS-TV, reaching 23 million viewers.

Your Armstrong Architect-Builder Consultant or flooring contractor can help you get the most out of



Armstrong floors—and the Armstrong name. Call him, or write Armstrong, 304 Sixth Street, Lancaster, Pennsylvania.

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TO THE 50 IMPATIENT BUILDERS WHO WILL ANSWER THIS AD TODAY:

You build 20 to 40 homes per year. With a sound per-home profit. And an image of integrity in your community.

But you have a problem.

You built fewer homes last year than the year before. Or the year before that.

And you are a man who needs growth to be happy.

Can it come under your present system? Could you build three times as many homes this year?



Are there enough hours in your day? Enough specialists available to provide the skills it would take? Quickly enough? Affordably?

Is the capital available?



There is a way for builders like you to grow three years in one.



And you can build in your proven price range. \$10,000 to \$40,000.

And it doesn't take a major capital expansion.

Or an untenable increase in overhead.

Do you want dramatic growth?

Assign us your overhead items on a fixed, per-house basis.



On a pay-as-you-use basis we become your architect, advertising department, land planning counsel, promotion man.

Deorge Trice

George Price, President, National Homes Corporation, Lafayette, Ind., Horseheads, N. Y., Tyler, Texas

And financial counsel, auditor, cost analyst, estimator, publicity agent.

And decorating counsel, public relations man.



All this we do with experience gained in the marketing of 250,000 homes. And the development of an amazing number of financially successful dealers.

Do you want to begin building three years' houses in one?

Bring us your intelligence, your energy, your impatience, your integrity.

We will multiply you by three.

Today, write and tell me where you want to go and how fast you want to get there.