

House & Home

MANAGEMENT PUBLICATION OF THE HOUSING INDUSTRY

APRIL 1965



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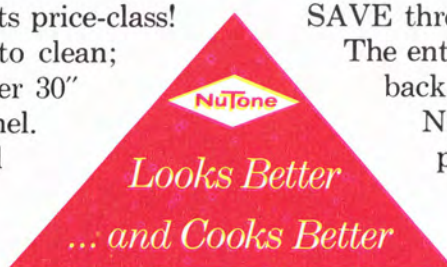
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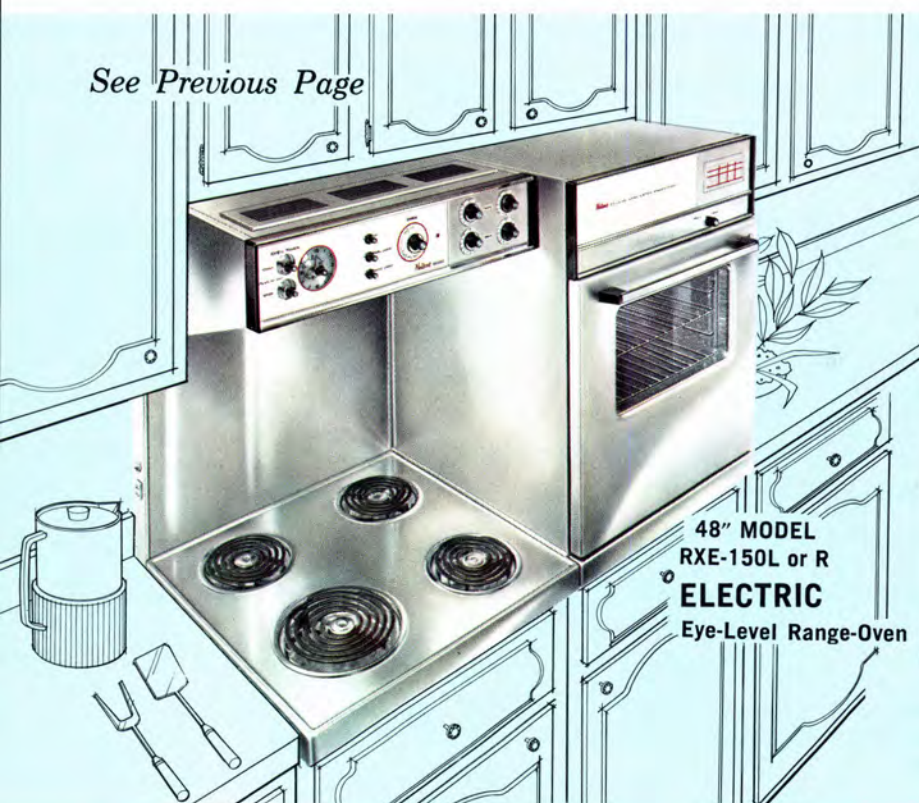
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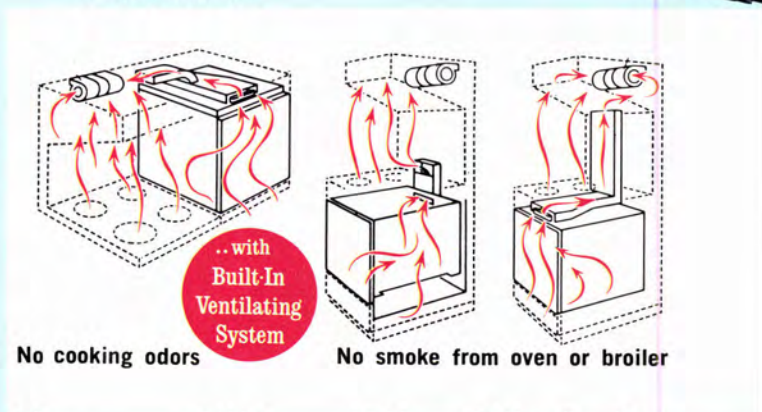
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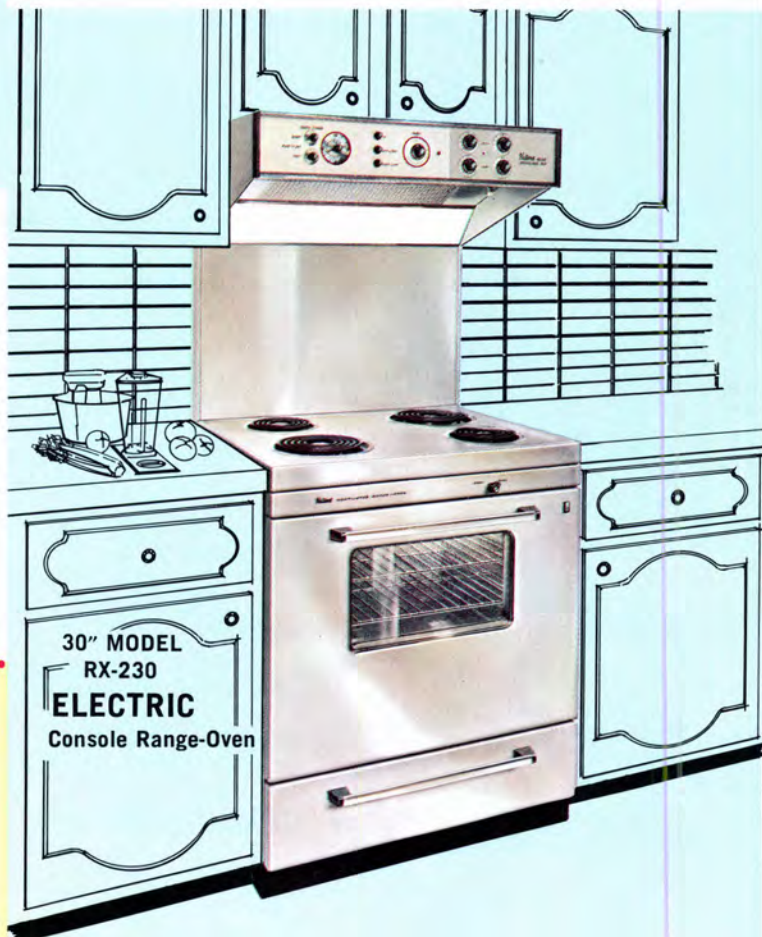
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VOL. XXVII NO. 4

APRIL 1965

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NEXT MONTH

Thirteenth annual merchandising issue: a 40-page sales managers' handbook on how to sell the prospect who doesn't have to buy, plus a HOUSE & HOME Round Table report on how homebuilders can increase their share of the consumer dollar . . . Who's making money in housing: another H&H annual report on earnings of the industry's leading publicly held companies



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WASHINGTON INSIDE

Look for more on-site picketing

The industrial and building craft union wings of the AFL-CIO have ended four years of internecine war and agreed on a bill to let unions picket—and thereby close—construction sites, even if they have a dispute with only one contractor. Congress previously refused to consider the issue until labor agreed.

\$100,000-an-acre park land

FHA's open-space buying program will put up nearly \$500,000 of the \$1,663,209 Milwaukee County plans to spend to buy 16 acres of parkland. The land is choice Lake Michigan shoreline inside the Milwaukee city limits.

National building code boosted

A Commerce Dept. advisory committee is urging study of a national model building code as part of increasing federal emphasis on national commodity standards. A model code "is technically feasible at this time," says the committee headed by International Nickel's Francis LaQue. The study group notes that the lack of an official U. S. standard has long hindered international negotiations, and it urges the establishment of a new Standards Institute to correlate and approve privately developed standards.

THE STATE CAPITOLS**Texas mulls housing bias vote**

Lone Star legislators may put to a state-wide vote a constitutional amendment letting property owners sell to whomever they please, and barring the state from banning race bias in housing. The measure is modeled after a law California voters approved last fall.

Indiana, meanwhile, has become the 12th state to ban race bias in private housing. And legislators in 17 other states are wrestling with housing antibias bills, says the National Committee Against Discrimination in Housing. Ohio's Supreme Court upheld an antibias ordinance in Oberlin but killed Toledo's "indefinite" law.

Texas homebuilders are fighting a bill to ban green lumber with over 19% moisture in dimensions less than 2". Georgia legislators have killed a plan to license and inspect homebuilders.

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Battle before Congress: LBJ housing package hinges on rent supplements

Congress is beginning the prodigious task of digesting President Johnson's 1965 plans for housing and cities. The job may take months, because the \$6.4 billion bill sprawls all over the legislative landscape. Congress is being asked to:

- Approve the country's first nationwide use of rent supplements to aid middle-income families living in 500,000 new units. Initial cost: \$50 million.
- Let FHA insure land development loans and let states develop suburban land.
- Use cash to prod cities to "begin to think and act across boundaries."
- Concentrate renewal "more and more" on housing, less on downtown fixup.
- Elevate HHFA to a Housing and Urban Development Dept. (see p. 8).

Unifying the scores of aid programs for cities and private builders is a Johnson ideal: "creative federalism." He clearly wants the federal government to end its diffidence toward the metropolitan problems of zoning and building codes. Although Washington cash and expertise will be available, he expects cities to begin coping themselves by thinking and working as regional partners (p. 8).

"We must redirect, modernize and streamline our housing programs" in this effort, he says. Heart of this revamping is his novel plan for rent supplements. As this plan fares in Congress so—probably—will fare the LBJ package.

Rent subsidies to a half-million middle-income families living in new apartments are the newest and biggest spur to homebuilding in President Johnson's package.

However, they are also the proposal in the deepest trouble with Congress. The biggest reason is novelty: Congress has never studied the idea of rent supplements, and historically the lawmakers are unresponsive to innovations the first time around. "Once you understand it [the rent-supplement proposal] you favor it," opined one Administration man, "but we could take a year explaining it."

Congress' natural reluctance could be overcome if President Johnson puts all the power of his office behind the plan. And his message served notice he wants the aids.

They are "the most crucial new instrument in our effort to improve the American city," he said. "This approach has immense potential advantages over low-interest loan programs.... In the long run this may prove the most effective instrument."

Automatic aid. Under the Johnson plan, families receiving aid would live in apartments or co-ops built with FHA Sec. 221d3 market-rate loans. Units would be built by limited 6% dividend companies set up

by private builders, or by nonprofit groups sponsored by churches and labor unions.

Supplements would be paid directly to mortgage holders. The aid would equal the difference between 20% of the family's income and full economic rent. Families buying co-ops or one-family houses would pay 25% of income on lease purchase.

Families who were displaced by federal actions, were living in substandard housing, or were elderly or handicapped would be eligible. Aided families could earn up to current d3 limits (\$9,000 in Chicago), but Dr. Robert Weaver, administrator, expects the vast bulk to earn between \$3,000 and \$5,000.

Sub-market substitute. Johnson and Weaver expect the rent supplements will eventually replace the Sec. 221d3 and Sec. 202 direct loans for housing for elderly. Both will continue for the present.

Enacted in 1961, the d3 program has lost appeal for Administration planners because 1) the interest rate, tied to overall federal borrowing costs, already has risen from 3½% to 3¾% and may hit 4¼% by July; 2) "there's the problem of what to do with people living in d3 units whose income rises over the income limits."

Land loans: states may turn developers

President Johnson has added a new dimension to the three-year battle over FHA-insured land loans by inviting states to become suburban developers.

He asks Congress to let states set up special land development agencies to buy open land "and improve it before the imminent approach of the city has sent costs skyrocketing." Finished lots would then be resold to builders.

HHFA would lend the state agencies the money they need for 15 years at 4% if they 1) showed private financing was not available at reasonable rates, 2) followed a comprehensive plan for the metropolitan area and 3) provided housing types to serve a broad range of family incomes.

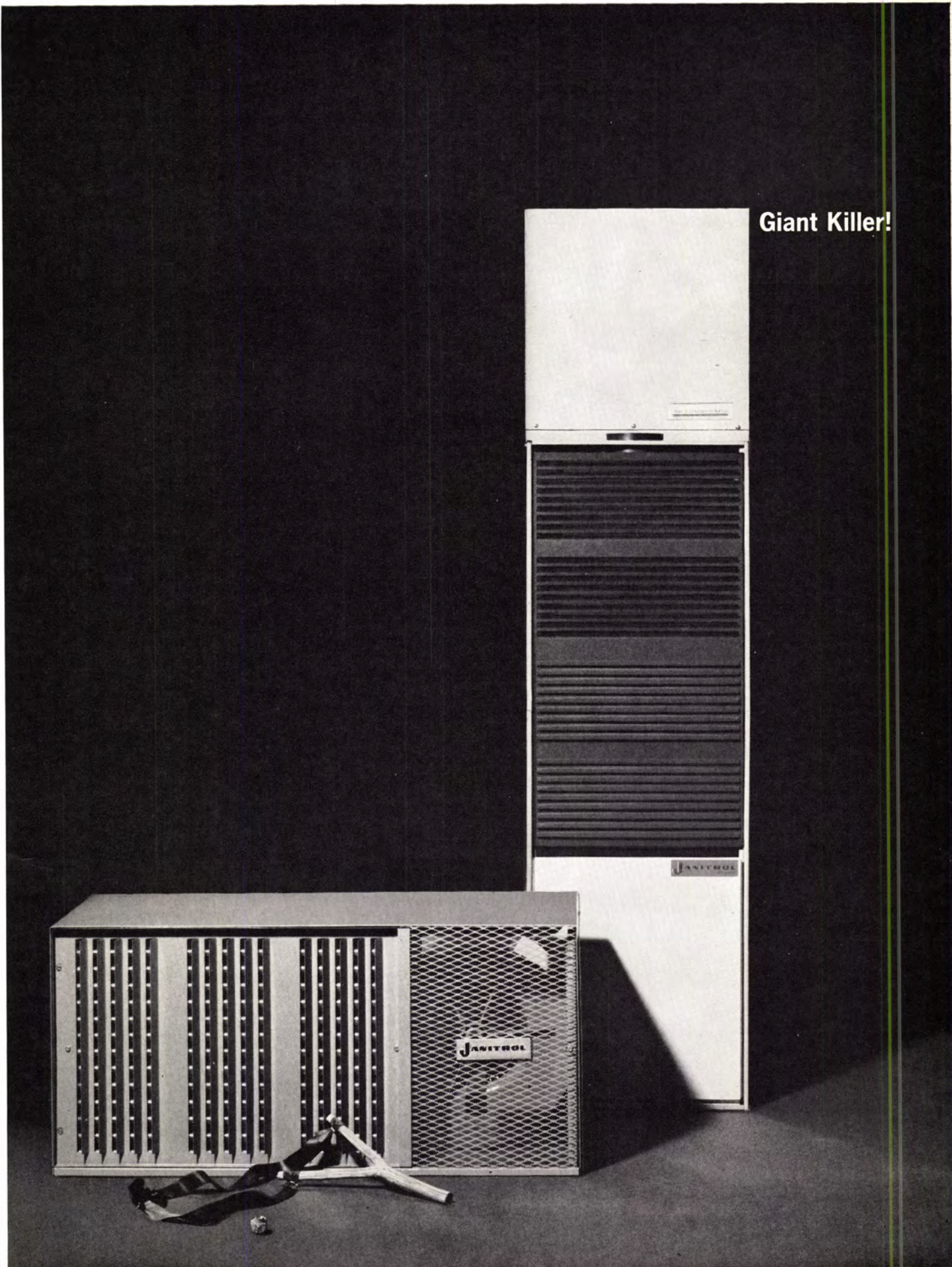
The plan took housing men by surprise. NAHB remains uncommitted, but NAREB has opposed "broad control over land."

This approach is not new. The Urban Renewal Administration already lends money to cities to buy open land and to correct such ills as poor platting.

The Administration has slimmed its land loan insurance plan from the 1964 version—loans are held to \$25 million, half of last year's limit—but other features remain. FHA could insure both subdivisions adjoining cities and new towns remote from urban areas. Maximum loans: either 1) 75% of developed-land value or 2) 50% of raw land costs plus 90% of improvements.

NEWS continued on p. 8

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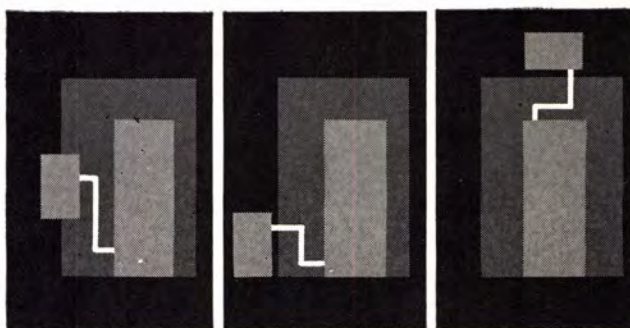
The condensing unit is only 39" x 18 $\frac{1}{4}$ " x 18 $\frac{1}{4}$ ". Installs easily through the wall—or on the roof or on an outside slab.

Yet this compact package delivers 2 tons of cooling and 80,000 Btu heating. It was designed for apartments. But it's also the perfect

answer to small house year round comfort or large house zoned heating-cooling. Installation is literally a snap. Charged refrigerant lines have quick-connect couplers at both ends.

Janitrol's 570 Comfort Package may well be the best unit for your next job. Available in 1 $\frac{1}{2}$, 2, 3 ton cooling and 50,000, 80,000, 100,000 and 150,000 Btu Heating Packages.

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Uncle Sam, the metro man, to tackle zoning, building codes and land tax

Early this year HHFA Administrator Robert Weaver suggested that "federal representatives" man "metro desks" to help local communities "avail themselves of federally aided urban programs."

Last month President Johnson accepted this idea—and much more. He proposed thrusting the federal government deeper than ever before into the zoning and building-code chaos which has hobbled homebuilding and contributed to urban sprawl.

Uncle Sam will remain a spectator rather than a referee, says the President—but his cheering will be loud indeed.

Chief cheerleader will be a Temporary National Commission on Codes, Zoning, Taxation and Development Standards, whose members will soon be appointed by the President (Congress' consent is not needed). "I predict that the body masked by such an unwieldy name may emerge with ideas and instruments for a revolutionary improvement in the quality of the American City," said the President.

LBJ wants his temporary study group to open a can of peas housing men have long called mouldy, at best. LBJ's orders:

"We need to study the structure of building codes across the country: their impact on housing costs, how building codes can be made more uniform. . .

"We must better learn how zoning can be made consistent with sound urban development. . .

"Few factors have greater impact on cost, on land speculation and on the ability of private enterprise to respond to the local interest than local and federal tax policies. These too must be examined.

"Finally, we must begin to develop bet-

ter and more realistic standards for suburban development. Even where local authorities wish to prevent sprawl and blight, to preserve natural beauty and insure decent, durable housing, they find it difficult to know what standards should be expected of private builders."

Setting standards for new development in zoning and building codes has been a traditional stronghold of local government. But the proliferation of suburbs in metropolitan areas has meant that builders often had to deal with the conflicting and often contradictory rules of dozens or even hundreds of neighboring towns. Pittsburgh builders, for example, run a gantlet of 128 building and zoning codes.

The net result has been such chaos that planners have raised loud protest in recent years. Last year's American Society of Planning Officials' convention heard "obsoleter and ineffective zoning" indicted repeatedly (NEWS, June).

President Johnson doesn't believe his Temporary National Commission can end this nightmare for builders quickly. Nor does he intend that Uncle Sam tell local communities how to decide land use.

"We can offer incentives to metropolitan area planning and cooperation," he says.

To backstop the Commission's search for means to better housing, Johnson asks:

- An Institute of Urban Development inside the proposed housing department "to support research aimed especially at reducing the costs of building and home construction through new technology."

- Regional representatives — Weaver's metro men—in metropolitan areas to aid communities in drawing areawide plans.

Details of cabinet post for housing shrouded as LBJ leaves himself maximum maneuvering room

President Johnson is not divulging the exact format of the proposed Housing and Urban Development Dept. he has thrice promised to send Congress.

Johnson's cautious approach stems from his desire to avoid the political defeat suffered by President Kennedy when he first proposed the cabinet post in 1962. That defeat was caused partially by Southern Congressmen's opposition to making Dr. Robert Weaver the first Negro cabinet member.

Dr. Weaver remains heir apparent to the spot—"Who else could fill the job?" ask Washington insiders—and indeed his administration of HHFA's sprawling bureaucracy has won private admiration from some of his Southern foes of 1962. But the President has refrained from endorsing Weaver in advance, as did Kennedy. This time the President's strategists are urging delicate but firm vote counting before unveiling the exact cabinet form.

Once this soft-sell yields a solid vote base—the President probably will seek quick action. Other parts of Johnson's package:

Water and sewers. The U.S. would pay up to 40% of the cost of water and sewer lines for areas expected to face population growth. Lines must follow areawide plans.

Rehabilitation. HHFA would give homeowners in renewal areas up to \$1,000 to renovate their homes when they cannot make repairs in any other way. Elderly persons who earn less than \$2,000 are the most likely recipients.

HHFA previously asked for \$50 million to begin a program of 3% fixup loans.

Rural housing loans. For the second year, Congress is asked to let the Farmers' Home Administration insure loans for rural housing. Interest would be the same as FHA loans (5¼%) except low and moderate income borrowers could get 5% loans.



THE LANDSCAPE PAINTER

LBJ message stirs surprising comment—pro and con

On the pro side was Congress's chief Republican housing spokesman, Rep. William Widnall (N.J.), who said, "With several exceptions, it reads like the Republican housing proposals of 1964 and 1965."

Widnall last year pushed through 3% rehabilitation loans; this year he seeks an independent FHA, merger of urban renewal and public housing and leasing 60,000 existing houses for public housing in two years (vs. LBJ's 60,000 in four years).

On the con side was *The New York Times*, which called President Johnson's housing proposals "a penny-whistle program" and said, "The vision is hedged in by careful avoidance of anything that would offend the real estate industry or local interests."

Other newspaper editorial writers cartoonists (see above and below) followed predictable patterns.

Said the *Wall Street Journal*: "A 'temporary' national commission . . . certainly sounds like incipient Federalization."

President Perry Willits of NAHB was "particularly pleased with the emphasis on a continuing reliance upon private industry. New approaches to the housing of low-income families are long overdue."

President Maurice Read of NAREB viewed the President's program as "the Administration's bid to dominate the nation's urban communities and housing."

© Los Angeles Times—Conrad



JOHNSON CITY, U.S.A.

New York City takes guesswork out of renewal-land buying

The city's Housing and Redevelopment Board has sold its first land under a revolutionary formula that bases the price on the number of rental rooms to be built.

The formula's significance: it lets redevelopers know their land costs from the very beginning—and thus plan their financing and rent schedules accordingly.

The Urban Renewal Administration agreed to let New York's HRB test the formula for two years whenever land is sold for middle- or low-income public housing, which accounts for virtually all of the city's renewal projects. The plan—brainchild of Daniel Bayer, HRB's deputy chief of project development—works like this:

HRB fixes a price tag of \$225 per rental room—versus an average \$269 per room in past sales—on land for middle-income housing. The number of rooms is the maximum permitted under zoning—not the number a redeveloper actually plans to build. Almost all New York housing will be financed with 3.95% mortgages under the state's Mitchell-Lama program, so the zoning room count is adjusted for 1) a different room-count method used by Mitchell-Lama officials and 2) any commercial space included. The city also deducts the

excess costs of abnormal foundation work.

The first buyer under the new plan was RNA House Inc., a co-op sponsored by the Riverside Neighborhood Assembly.

RNA plans a 13-story, 208-unit apartment in the city's West Side renewal project. Rents will average \$28.50 a room.

HRB officials are cautious about predicting nationwide acceptance of any plan linking renewal land prices and the number of new housing units to be built. But they say the plan aids redevelopers—and, in effect, strengthens a project by ending guesswork. For renewal officials, it ends mountains of paperwork and time taken to appraise vacant sites. Even these appraisals produce complications, says Bayer: "Of necessity, this is not a free market situation and cannot be treated as such."

West Coast fadeout. While New York experiments, a promising land-disposition test in San Francisco is falling apart amid a spate of name calling.

Architects James Levorsen and B. Clyde Cohen have demanded a grand jury investigation of attempts by Redeveloper Irwin J. Kahn to change their prize-winning plan (NEWS, Sept. '61) for Red

Rock Hill. Levorsen and Cohen said Kahn wants to add 100 units to the 990 called for in the plan without paying a \$45,000-a-unit penalty set in the contract when he bought the site at auction.

Kahn's reply: he fired his architects when their final cost estimates nearly doubled the \$10.24 a sq. ft. that they first mentioned. Kahn says he actually wants to add 222 units. But he says the units will be smaller, so there will be no more rooms than originally planned.

Renewal revolt? Kansas City bond voters say it isn't so

More than 71% of the 56,223 voters who braved a snow storm and subfreezing weather approved a \$3.5-million bond issue for urban renewal last month. The proposal had failed in two previous ballot tests under a Missouri law requiring a two-thirds voter approval.

Practically every community group—including the real estate board and Democratic and Republican leaders—endorsed the bonds. Backers pointed out that many cities were getting more federal renewal aid than Kansas City and asked, "Why send our tax dollars to other cities?"

First private real estate group asks President to extend antibias to conventional loans

The Real Estate Board of Greater Baltimore, oldest of the nation's 1,500 boards, is the first to ask the President to widen the 1962 executive order against racial bias in federally aided housing.

The order covers loans insured by the FHA and VA but not conventional lending by commercial banks or savings and loan associations (NEWS, Jan. '63).

Unless the President applies the order to private lenders, the Baltimore group warns, the flight of whites to the suburbs will continue. Says Board President Russell T. Baker:

"Some practical action must be taken to insure that Baltimore and other large cities will not become all black while surrounding suburbs remain all white." Baltimore has the nation's fifth highest percentage of Negro residents, 35% of 950,000.

Property values. Baker, whose Russell T. Baker & Co. is Maryland's largest real estate brokerage, concedes that the board's action is based on simple economics.

"It can save property values and tax rates," he says. "Values on most of the property in our inner core are down."

Some sketchy evidence: the average sq.-ft. value of used homes insured by FHA rose 1% from \$11.52 in 1958 to \$11.64 in 1962 versus a national rise of 8%.

Realty men say extending the executive order would open the suburbs to Negroes, relieving pressure on the city. Adds Baker:

"We are confident that the extension

would have a salutary effect on the entire housing market."

Support in Washington. Chairman David Lawrence of the President's Committee on Equal Opportunity in Housing was present when the Baltimore board announced its action in Washington. Baker said it was the Lawrence committee's recent fair-housing conference in Baltimore that persuaded his board to act now.

The Baltimore board's membership of 1,600 ranks it among the nation's top ten. Only nine of the metropolitan area's 44 Negro realty dealers are on its rolls.

Despite its stand on the executive order, it has joined the parent National Association of Real Estate Boards in opposing state and local laws prohibiting racial bias by homeowners selling their homes. Warned Baker at the Washington meeting: "Open housing laws . . . would withdraw from citizens generally their right to voluntary contract."

A tithe urged as investment in nonsegregated housing

"If you believe in equal opportunity in housing, speak up!" said the ad covering most of a page in *The New York Times*.

It announced the birth in Washington of a National Committee on Tithing in Investment, which will ask individuals and nonprofit organizations to put 10% of their investments into nonsegregated housing. The goal: overcome a shortage of



capital for housing open to all races.

Rep. Donald M. Fraser (D., Minn.) is chairman of the committee, which claims 3,000 sponsors and includes homebuilders Robert C. Davenport of Washington, Harvey Furgatch of San Diego, Philip M. Klutznick of Park Forest, Ill., and Charles F. Vatterott Jr. of St. Louis.

Negro realty, mortgage men call for boycott of Met Life

The National Association of Real Estate Brokers and the United Mortgage Bankers have proposed a policy-purchase boycott against Metropolitan Life starting in August. The purpose: to protest alleged refusals to finance Negro housing.

The two groups—which are predominantly Negro—have invited national Negro organizations, notably the National Association for the Advancement of Colored People, to join the boycott. To date, no decision has been announced.

President Dempsey J. Travis of the United Mortgage Bankers protests that the Met and other companies refused to appoint Negro mortgage correspondents. Metropolitan says it already lends on a nonbias basis.

NEWS continued on p. 15



Thinking of going to Europe?
This vacation home costs less than two weeks there.

Build it and it's yours to keep for a lifetime of enjoyment.

Tuck it away on a mountainside or at water's edge. Plan it for year-around use. It's a ski chalet, a private resort, a family hide-away—any or all of these.

Why not? Sites are available. And never before has it been so easy to finance second homes, especially those based upon sound plans and solid materials such as this compact, inviting A-Frame.

This one is really put together. It uses

Western Wood framing, strong and straight to shoulder loads of snow or high wind. Western Wood is used for the slanting walls, too—practical for installing and weathering. And inside it sports a sleeping loft over a roomy living area warmed with abundant wood.

Like another style? We have 10 more vacation home designs, all in one color ful booklet that's yours for the asking with one dime and the coupon shown. Mail it soon. Before you get busy.



**This ad
found 6,835 vacation home prospects!**

Here's how to turn "our" prospects into your customers!

Send for Western Woods' Vacation Home Promotion Kit!

It contains ad mats, "repro" proofs, full-color booklets, envelope stuffers and complete materials lists. We'll even provide detailed construction plans for eleven different Western Wood vacation homes at low cost.

There will be 100,000 vacation homes built in the U.S. this year. Our first ad

in SUNSET Magazine pulled 6,835 requests for our "Vacation-Land Homes" booklet in one month.

We've got three more ads scheduled for SUNSET. Plus ads in NEW HOMES GUIDE, HOUSE BEAUTIFUL'S BUILDING MANUAL, and HOUSE & GARDEN'S BUILDING GUIDE. All are full-page size—in beautiful color.

You can run tie-in ads in your own community, featuring identical vacation homes. Prospects will clip your coupons instead of ours. Then you can use our booklet as your own vacation homes catalog.



Send me the Western Wood Vacation Home Builder Promotion Kit.

Name _____

Firm _____

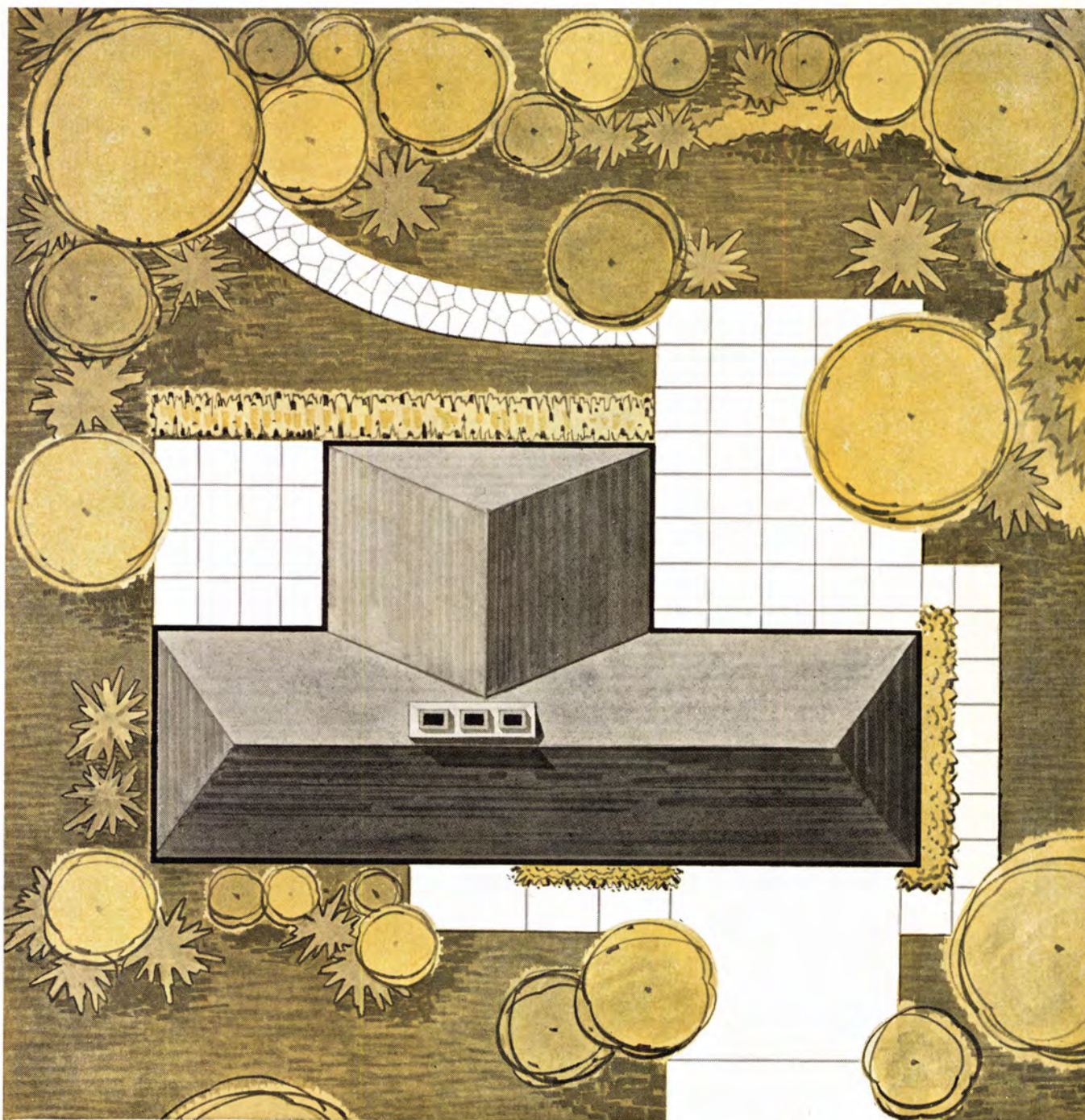
Address _____

City _____

State _____ Zip _____



WESTERN WOOD PRODUCTS ASSOCIATION
 Dept. HH-465, Yeon Building, Portland, Oregon 97204



EXTERIOR DECORATING WITH CONCRETE

How a new concept in decorative concrete paving, designed to complement home styles, is helping builders create exciting new sales appeal—Today, a home is more than just a house. Home buyers expect livability that extends all the way to the fences. A little imagination—and modern concrete paving with distinctive surface treatments—is the low-cost answer for outdoor “extras” that help builders lure customers, sell more homes. These attractive improvements—offered as an option to the buyer—add only a fraction to the total cost of the typical \$20,000 home. □ Dramatically patterned, textured, colored—concrete paving readily becomes a landscaping material that matches the mood of any style of home—traditional, contemporary, ultra-modern. □ Custom styling is simplicity itself. Your own crews can do the whole job. Versatile concrete is so easy to work with. See for yourself on the following pages.



EXTERIOR DECORATING



WITH CONCRETE

A colonial driveway creates added charm for traditional homes—A driveway can be so much more than a runway for the car. The cobblestone effect of this concrete pavement goes beautifully with colonial or other “period” homes. An hour’s work with a grooving tool provides an authentic touch that lifts the whole home design out of the ordinary. There are dozens of other tooled designs to suit any imaginable landscaping plan.



EXTERIOR DECORATING



WITH CONCRETE

A patterned patio that's casually continental—The livability you design *into* your homes can be followed right out the window to provide exciting new outdoor living enjoyment. A concrete-paved patio can take any shape, any form. Here, the mellow tones of a Spanish courtyard are matched in colors and textures quickly and easily achieved in long-lasting concrete for a lifetime of pleasure.

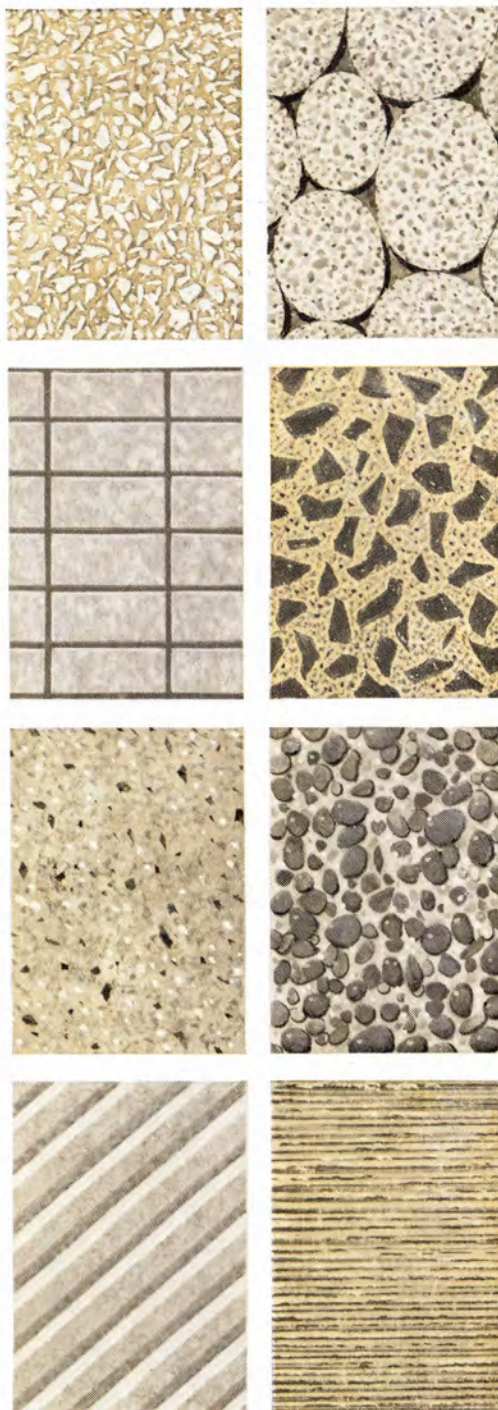


EXTERIOR DECORATING



WITH CONCRETE

Pebbled, woodland beauty for a quiet garden—It's easy to build a reputation for originality when you work with modern concrete. The granulated textures achieved with exposed aggregates enhance the most creative planting arrangements. Color and texture is limited only by the pebbles and rocks available. And with concrete walks, no up-keep is ever needed.



CONCRETE the material of a thousand uses—These are just a few of the new ways concrete surfaces are being textured and patterned today. The range of intriguing designs you can create is almost unlimited. For landscaping, no other basic material offers such freedom for innovation.



Your ready-mixed concrete producer—or your local PCA office—will be glad to provide technical information and assistance in developing distinctive design ideas for concrete paving. For free booklet on concrete finishing, write to the address shown below.

PORTLAND CEMENT ASSOCIATION
Dept. 11-94, 33 W. Grand Ave., Chicago, Ill. 60610
An organization to improve and extend the uses of concrete

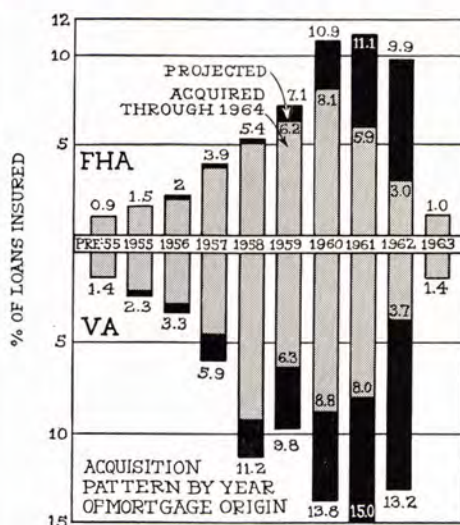
Foreclosures now threaten 184,600 FHA-VA loans

One of every ten home mortgages insured by FHA or VA in the last five years will eventually go into foreclosure. About one-third of these—100,950—have already been foreclosed, and the remaining 184,600 will be spread over the next five to ten years.

So predicts Advance Mortgage Corp. of Detroit after making a nationwide study of foreclosures. Advance blames the high foreclosure rate on 1) overly liberal lending and 2) over-reliance on used-house inflation, which leveled off six years ago.

The new warning to builders and mortgage men comes amid continuing concern over foreclosure rates and soft credit. In 1964, peak year of the nation's longest peacetime economic boom, the foreclosure rate of 4.59 per 1,000 mortgages nearly doubled that of 2.34 in 1959. Foreclosures surged past 100,000 for the first time since 1939 although the U.S. Savings & Loan League was quick to point out that 100,000 people did not lose homes. One-fifth of these were homes under construction and never occupied (*see p. 17*); and in 15% of the other cases, the occupying owners found means to satisfy obligations before eviction or final repossession.

Advance found that more than 8% of VA and 7% of FHA loans guaranteed in 1960 and 1961 have already been foreclosed. At this rate, 14% of the VAs and 11% of the FHAs originated in those years will eventually be foreclosed. The foreclosure rate peaked on 1961 loans; those insured in 1962 and later have a slightly more favorable outlook (*see chart*). The Advance report makes no predictions for 1963 or 1964 loans, but a company spokesman estimates foreclosures will eventually hit 7% to 8%.



FORECLOSURES by year of loan origin show heavy concentration for 1960 and 1961. Advance makes no specific projections for 1963 and 1964.

Hard sell, hard collect. Foreclosures are influenced not by prosperity or depression, the study shows, but by the credit conditions under which the loan is made. Six times as many foreclosures occurred in prosperous 1964 as in the recession year of 1958. The sharpest increases in VA foreclosures came on loans made in 1958 and 1961, but the foreclosures took place in later and more prosperous years. The reason, says Advance President Irving Rose:

"When business slows down, builders and brokers react by selling harder. Mortgage and insuring agencies ease scrutiny."

Negative equity. The study points up figures showing an end of the postwar inflation in used-house prices. The square-

foot appraised value of existing homes insured by FHA rose only 7.3% from 1959 through 1964—an average of 1.2% a year and only half the 1950 to 1958 rate. And value actually fell 0.5% in 1963.

Values declined from 1959 through 1963 in eight of the ten cities surveyed in detail (Chicago, Cleveland, Columbus, Detroit, Indianapolis, Louisville, Milwaukee and Pittsburgh) and rose in two (Cincinnati and Dayton).

"A level market, in which homes depreciate with war, has succeeded a market in which houses appreciated automatically some 5% a year," Rose says. "In that era, even no-no-no [no down payment, no closing costs, no moving costs] VA buyers, who were virtually paid to move in, rapidly acquired equities."

But Rose's study found that more than a million families now have negative equity—or owe more on their homes than the homes are worth. He emphasizes that 80% of these families pay off their loans despite all hazards, but he warns:

"The price of a low-down payment financing system is extraordinary vigilance in keeping risks within tolerable limits."

Failure yardstick. To reach its conclusions, Advance persuaded FHA to re-analyze its 1963 and 1964 foreclosure data. From this re-analysis, the mortgage company devised a mortgage survival table similar to those used by insurance companies.

The Advance study found that 50% of all VA and 90% of all FHA foreclosures take place within five years of loan origination. By computing for five years the foreclosures of loans originated in any one year, experts could project the ultimate foreclosure rate for that year's loans.

Could housing survive on a 30-day inventory? S&L regulator urges month's supply for builders

John de Laittre has stirred new market controversy by suggesting that S&L lenders limit builders to cash for a 30-day sales supply of new homes.

The Home Loan Bank Board's only Republican cautions that new homes under construction or unsold by merchant builders at year's end equalled 5.2 months' sales based on a monthly average of 47,000 sales in 1964. The 244,000-house total is less inventory than builders have been averaging since 1962.

"There is really no meaningful base for judging what a proper supply in the pipeline should be," de Laittre admits "but the existing amount seems high."

Builder foreclosures. De Laittre is worried about foreclosures (*see story above*), and particularly those against builders. A just-completed HLBB survey of federally insured savings and loan associations in 1963 shows 20% of 42,688 single-family foreclosures came on construction loans.

"In some areas the foreclosures against builders approach half of the total," says de Laittre. "This suggests inadequate examination of the probability of the success of a project by the lender." He will not pin down specific areas. HOUSE & HOME checks show speculative building ahead of sales is limited outside the West Coast.

Rebuttals. De Laittre's speech, made in Los Angeles in the latest attempt by a HLBB member to talk West Coast lenders into more cautious lending practices, aroused immediate dissent. Says the California S&L League's Executive Vice President Frank Hardinge:

"An oversimplification of the problem, and unrealistic. Thirty days is too short, and there is no way to measure what a good vacancy ratio is in relation to total supply. Ideally there should be a short inventory, but there are other considerations—population increase, economics."

Agrees southern California housing re-



Vincent Finnigan

HLBB's DE LAITTRE
He gets an answer: "No."

searcher Louis Goodkin emphatically:

"It isn't right. Inventory quotas handicap leading builders who need big inventories. There are builders here who have 150 homes ahead all the time and need them. Others have too many with ten."

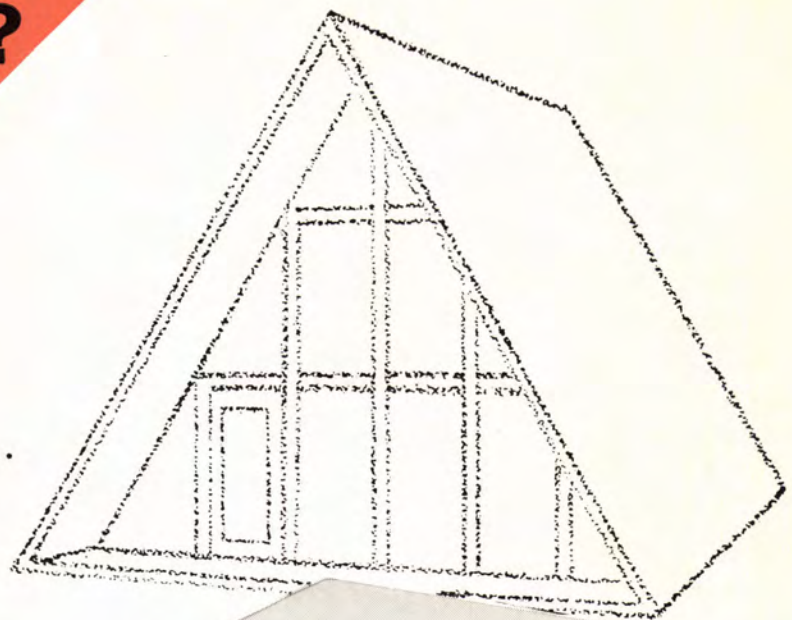
And to questions on the practicability of a 30-day supply, NAHB Economist Nathaniel Rogg simply shakes his head: "No."

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 (15/16", 1 3/8",
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T & G panels, 2' x 8', serve as decking and side-wall for this A-frame with 48" o.c. spans. Interior surface can be factory-coated in white, beige or special color to order—with vapor barrier and vinyl film or white kraft surface.

On A-frame construction (as well as on all other types of roofs) Homasote Roof Deckings provide a better job at a lower over-all cost. Tough, all wood-fibre panels are fastened directly to framing—no additional insulation or ceiling finish is needed. Weatherproof Homasote assures constant resistance to temperature and humidity attack—interior side is available with a variety of attractive finishes (an especial advantage at high A-frame peaks).

If you have still to discover the all-round advantages of Homasote Roof Deckings for your bonded built-up roofs, metal-frame structures and conventional roofs, write for technical bulletin, Dept. D-3.

homasote *Company*

TRENTON, N.J. 08603



BLITZ SELL starts with roving ad truck to alert customers, jumbo road signs to guide them to foreclosed houses being sold by Builder George Holstein.



HYSTERIA is promoted by signs and pennons to convince customer he has bargain. It works so well that fist fights develop over homes like these.



FRENZIED SALESMAN pushes take-or-leave-it offer. One site turned away 120 prospects.



HARRIED BUYER must decide in hurry. Others are waiting with "sugar bowl money" or checks.



FAST MOVE-IN permits family to protect home from neighbors raiding houses for appliances.

Operation Hysteria—or how to sell foreclosed houses nobody wanted

When Builder George M. Holstein took over part of a no-sale subdivision in Orange County, Calif., he told his staff to break windows and tear up the yards. In one weekend he sold all 78 homes at \$30,000 to buyers who were convinced they had a bargain.

Another company trying to market 35 homes in the same tract lowered prices to compete with Holstein. But it broke no windows, and nobody got the idea of a bargain. One house was sold.

Such success is routine to Holstein, new

master of the blitz sell in southern California. Builders call him in when projects bog. His George M. Holstein & Sons retailed 250 desolate two-year-old houses in Huntington Beach in a few hours, and it regularly sells 250 a year out of foreclosed subdivisions of homes nobody wants.

Holstein goes in with flags flying, horns blowing and salesmen talking hard, but there is more to it. He explains:

"You have to have a site that can be found. . . The lender must be realistic.

. . . You must offer reasonable value."

Price is important but not critical; Holstein moves \$32,000 models by the same razzle-dazzle he uses on cheaper models.

"In a word, hysteria," he says. "Our sign company, our ad men, our sales force are all in a hurry. That fine edge must be there when the doors open. A line of 20 or 30 folks are waiting with that sugar-bowl money, all set to buy. We say bring cash or certified check—and they do exactly that."

Operation Bulldoze—tear down foreclosed models and build new ones

That's what Wadsworth Homes of St. Petersburg has done after taking over as builder at Flor-a-Mar, a 2,000-acre foreclosed development at New Port Richey on Florida's Gulf Coast.

Reason: the tiny \$8,250 houses on 48-ft. highway frontages "weren't designed for the present market," says Lawrence Wadsworth. Now he and his brother Bruce are replatting into larger lots, dredging canals and building models to sell from \$15,000

to \$22,000. The two- and three-bedroom houses will be completely landscaped and will all face the water.

The brothers have contracted to buy lots from a development corporation run by associates of Chicago Financier Henry Crown and to sell the lots and new houses for Wadsworth Homes' exclusive profit. Crown's Empire Properties got the Flor-a-Mar tract for \$1.5 million in a foreclosure sale (News, Mar.). Empire had lent \$3.2

million to the original developers, Howard Burkland and Sumner Sollit, and had won a \$4.6-million foreclosure suit.

Wadsworth Homes has been selling an estimated 250 homes a year, ranging up to \$50,000 in price, in the sluggish Tampa Bay sales area. The company moved to Florida in 1956 from Kansas City, where it had sold 10,000 prefabricated units throughout nine midwestern states in the previous ten years.

Operation Dress-up—inside and outside facelifting helps sell rejects



Les Walsh

POP GOES THE TRIM in new paint job on home spruced up for resale in California foreclosure. Market expert Chuck Parr uses color to sell.

Chuck Parr's Coleman-Parr ad and market agency in Beverly Hills is selling its 29th foreclosed subdivision for a southern California savings and loan. Here's how:

"We pop the trim," says Parr. "We spruce up with ornate lighting fixtures.

"We use bright colors and bold, good looking wallpaper in bathrooms. We go to light greens, blues in gray kitchens."

Parr reshapes roofs and re-landscapes. He redressed one tract so completely that visitors who had at first refused to buy returned without being sure they were seeing the same subdivision.

"We had a new showcase," says Parr.



Don Bush

STYLISH LIGHTING fixture and large mirrors interiors new note of elegance. "A good decorator is worth his weight in gold," says Parr.

Huge crop of 18-year-olds promises housing demand boost

"We are at the beginning of a new period of growth in housing demand," says NAHB Economist Nathaniel Rogg.

This demand may not be felt for several years, Rogg says, but it's bound to come. Reason: this year 3.7 million children reach their 18th birthday—one million more than 1964 and "a bulge we will not see again."

Rogg suggests some of these teenagers may already be contributing to housing demand: one-fourth of last year's brides were 18 or under.

Will these teenagers be able to find jobs? The Labor Dept. reports that last year private businessmen added 1.2 million jobs to their payrolls—nearly five times the 250,000 new jobs they created annually from 1957 to 1962. But, Labor also notes, 15.7% of teenagers in the nation's labor force are unemployed, and the 500,000 teenagers who are their families' chief wage earners average only \$2,200 a year.

Immediate upturn. More and more housing economists now predict rising starts later this year. Rogg sees an end to the downtrend that began early in 1964. And McGraw-Hill Economist Gordon W. McKinley cites five reasons why housing demand will rebound in the months ahead:

1. "We do not have a large excess in-

ventory and vacancies are below 1960."

2. "Home sales are still running substantially over a year ago (*see table*)."

3. "Employment and incomes generally will be high." Personal income hit a record \$509.5-billion rate in January.

4. "The mortgage money market will remain easy."

5. "The age structure of the population will be unusually favorable. . . . We are already seeing a rise in the marriage rate, which has been stable for years."

Commerce Secretary John Connor agrees: "Residential activity may soon stabilize and may actually improve somewhat later in the year."

Consumer intentions to buy houses within 12 months are down 0.1% from year-ago levels, Commerce reports, but the Treasury Dept. says the April 15 deadline for paying income taxes will not take nearly as much money from consumers' pockets as feared. Estimates over \$1 billion are cut.

NEWS continued on p. 27

KEY HOUSING INDICATORS

		1965	1964	% Change
		DOLLARS (millions)		
Dodge residential contracts	Jan.	\$1,273	\$1,372	— 7
ENR advance mass housing plans	Feb. 2 months	1,081	720	+ 50
		1,630	1,675	— 3
ENR advance apartment plans	Feb. 2 months	646	349	+ 85
		909	793	+ 15
ENR advance house plans	Feb. 2 months	206	216	— 5
		320	373	— 14
		UNITS (000)		
Starts, private nonfarm	Jan.	81.2	98.3	— 17
Starts, seasonal rate	Jan.	1,457	1,688	— 14
New houses sold	Dec. '64 12 months	34	31	+ 10
		562	560	UC

Sources: F. W. Dodge Co., division of McGraw-Hill; Engineering News-Record; Census Bureau; HHFA; UC—Change less than 1%.

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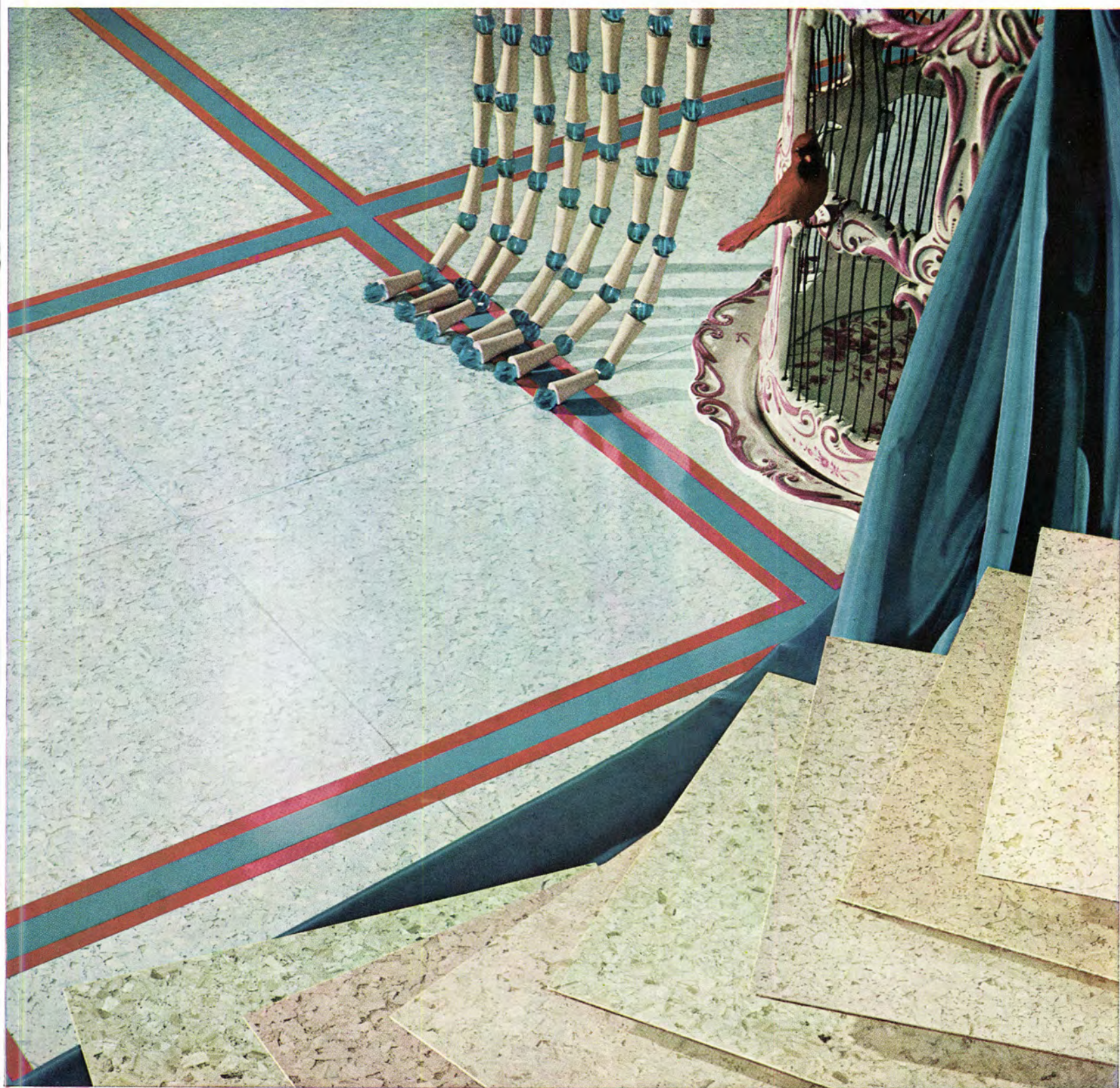
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Don't be satisfied with less than

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AIR CONDITIONING • HEATING

Mortgage-rate stability expected for another six months

Homebuilders can count on plenty of cash for most of the construction season.

Reason: mortgage prices are riding into the second quarter of a second year with virtually no significant change; and most leading economists now agree that the secondary market will retain stability well into September.

President John K. Langum of Business Economics Inc., a Chicago research house, capsules their thinking with his prediction that interest rates will drop until fall.

Ample savings. Meanwhile, money continues to be abundant. Savings and loan associations reported a startling 99% drop in savings inflow for January—only \$5 million as against \$463 million in the first month of

the growth year of 1964. But loan paybacks of S&L portfolios provide enough money to keep S&Ls lending briskly.

"The savings flow will continue nationally at 7% of disposable income," says President Robert Morgan of Boston's 5¢ Savings Bank and head of the Massachusetts Purchasing Group of savings banks. "The drop in S&Ls merely means the money is changing pockets. It used to be that some institutions were not in mortgages and such a change mattered; now everyone is in mortgages, and it doesn't matter. The money is there."

Despite the money overhang and a shortage of good residential loans, the secondary market has achieved a kind of working balance, and neither the rates the

builder pays for mortgages nor the yields his mortgages furnish to investors are expected to rise. He pays an average discount of 1½% on the FHA 203b market leader, and it yields from 5% to 5.12% (see table).

Code drafted to correct loan and appraisal abuses

Eight appraisal and mortgage lending groups have outlined a code to combat forgeries and other abuses creeping into the real estate appraiser's profession (NEWS, Feb.). The guide urges lenders to verify dates and values with appraisers and report discrepancies to law officers.

The Chicago meeting that drafted the guidelines heard criticism of financial institutions that lend solely on appraisals.

Mortgage quotes revised to keep housing men abreast of changing market

To make mortgage facts more useful to readers, HOUSE & HOME has revised its mortgage table to make two tables.

• One section of the new format this month quotes discounts paid by the builder instead of the prices paid to the mortgage banker by permanent investors.

• A second section reports the yield received by investors in the secondary resale market regardless of what combination of price and servicing fee produces it.

The changes are being made because

the two categories—builder discounts and investor yields—have now become the most accurate gauges of the price of mortgage money for housing men.

Changes in the mortgage price—the amount an investor pays a mortgage banker who sells him a loan—have virtually disappeared in today's balanced market. Instead service fees, the percentage paid by the investor to the mortgage banker for servicing the loan, are the crucial bargaining point. From a ½% fee, the industry has gone to various "broken serv-

icing" combinations of ¾% and ¼%.*

The table's conventional lending section expands to recognize a nationwide trend to loans with higher loan-to-value ratios. The table continues to report rates charged to the builder for 75% and 80% loans but adds the newly popular category of loans above 80% of value.

* For example: A 203b at 5¼%, 30-year term prepaid in 12 years, delivers the same yield of 4.94 on at least four servicing and price combinations—a price of 98½ at ½% servicing, 99 at ¼% for 2 years and ½% thereafter, 99½ at ¾% or 100½ at ¼%.

HOME BUILDER'S MORTGAGE MARKET QUOTATIONS

Reported to HOUSE & HOME in week ending March 5.

City	FHA 5½s (Sec. 203b)				FHA 207	Conventional Loan Rates			Construction Loan Rates
	FNMA Sdtry. Mkt. ¹	Discount paid by builder	Min. Down ²	30-year Immed. ³	Trend	Apts. Firm Commitment	Comm. banks, Ins. Cos. 75%	Savings banks, S&Ls 80%	Interest+fees All lenders
Atlanta	2¼	1-2	Steady	a			5¼-5¾	5¼-6	6-6¼
Boston	1¾	par+1-par	Steady	par+1-par			5¼-5½	5¼-5½	5½ ^b
Chicago	2¼	1-2	Steady	par-½ ^b			5¼-5½	5½	5¾-6
Cleveland	2¼	1-1½	Steady	a			5½-5¾	5½-6	5¾-6½
Dallas	2¼	1-1½	Steady	par			5½	5¾	6
Denver	2¼	1-2	Steady	1-2			5½-5¾	5¾-6	6-6½
Detroit	2¼	par-1	Steady	1-1½			5½-5½	5½-6	5¾-6
Honolulu	2¼	1½-2½	Steady	a			5¾-6½	6¼-7	6¾-7¼
Houston	2¼	1½	Steady	a			5¾-6¼	6	6-6¼
Los Angeles	2¼	1½	Steady	par+1-par+½			5½-6	5¾-6,6	6¼
Miami	2¼	1¾-2	Steady	½-1			5½-6	5¾	6
Newark	1¾	1	Steady	½-1			5½	5¾	5¾-6
New York	1¾	par	Steady	par+1-par			5½	5¾	6
Okla. City	2¼	1½	Steady	a			5½-5¾	5¾-6	6-6¼
Philadelphia	1¾	par	Steady	par-1			5½-5¾	5¾-6	6
San Fran.	2¼	1½	Steady	par-1			5½-5¾	5¾-6	6-6¼
St. Louis	2¼	1-2½	Steady	par-1			5½-5¾	5¾-6	5¾-6½
Wash., D.C.	2¼	1	Steady	par			5½	5¾	6 ^b

SECONDARY MARKET FHA & VA 5¼%

Money center	Sec. 203b & VA houses		Trend	Sec. 207 Apts.		Trend
	Yield to Investor	Yield to Investor		Yield to Investor	Yield to Investor	
Boston	5.00-5.12	Steady		4.94-5.00	Steady	
Chicago	5.00-5.06	Steady		5.12-5.15	Steady	
New York	5.00-5.12	Firmer		5.13-5.20	Steady	
San Fran.	5.00-5.12	Steady		5.14	Steady	

* Immediate covers loans for delivery up to three months, future covers loans for delivery in three to twelve 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.

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

Footnotes: a—no activity. b—limited activity. w—for comparable VA loans also. x—FNMA pays ½ point more for loans with 10%. y—discounts quoted are net after seller

pays ½% marketing fee and ¼% adjustment for stock purchase. Seller must pay 1% of mortgage for stock calculated in \$120 units, of which \$20 is contribution to FNMA capital and \$100 is for a share trading at about \$84.

Sources: Atlanta, Robert Tharpe, pres., Tharpe & Brooks Inc.; Boston, Robert Morgan, pres., Boston 5¢ Savings Bank; Chicago, Harry N. Gottlieb, vice pres., Draper & Kramer Inc.; Cleveland, Richard Quint, asst. vice pres., Jay F. Zook Inc.; Dallas, M.J. Greene, pres., Southern Trust & Mortgage Co.; Denver, Allen C. Bradley, vice pres., Mortgage Investments Co.; Detroit, Sherwin Vine, vice pres., Citizens Mortgage Co.; Honolulu, H. Howard Stephenson, vice pres., Bank of Hawaii; Houston, Everett Mattson, vice pres., T. J. Bettes Co.; Los Angeles, Christian M. Gebhardt, vice pres., Colwell Co.; Miami, Lon Worth Crow Jr., pres., Lon Worth Crow Co.; Newark, William B. Curran, vice pres., Franklin Capital Corp.; New York, John Halperin, 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., Hector Hollister, exec. vice pres., Frederick W. Berens Inc.

CONVENTIONAL LOANS (combined averages)

	Jan.	Dec.	Year ago
New homes	5.79	5.76	5.83
Existing homes	5.95	5.92	5.98
Interest charged by various lenders, new homes			
S&Ls	5.90	5.85	5.92
Life ins. cos.	5.49	5.53	5.53
Mortgage companies	5.69	5.72	5.78
Commercial banks	5.67	5.67	5.67
Mut. sav. banks	5.56	5.52	5.61

	Length of loans (Years)		Loan to price %	
	Jan.	Year ago	Jan.	Year ago
S&Ls	24.7	24.4	76.9	76.4
Life ins. cos.	26.4	26.1	70.0	68.7
Mortgage companies	27.2	28.2	72.8	78.3
Commercial banks	19.4	17.9	65.1	61.5
Mut. sav. banks	25.2	24.7	70.8	71.4

Source: Federal Home Loan Bank Board

NET SAVINGS DEPOSIT CHANGES

(in millions of dollars)

	% change from Jan. '65	% change from Jan. '64	Year to date	% change from 1964
Mut. sav. banks	350	-8	350	-8
S&Ls	5	-99	5	-99
Commercial banks	3,100	41	3,100	41

Sources: National Association of Mutual Savings Banks, U.S. Savings & Loan League projections, Federal Reserve Board

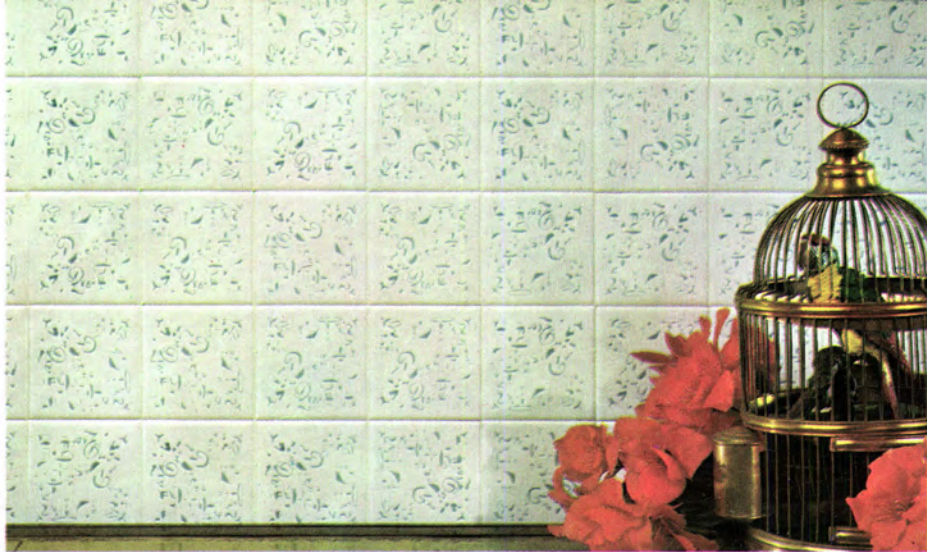
NEW YORK WHOLESALE MARKET

FHA, VA 5¼s
Immediates: 97-98 Futures: 97-98
FHA, VA 5¼ spot loans (On homes of varying age and condition)

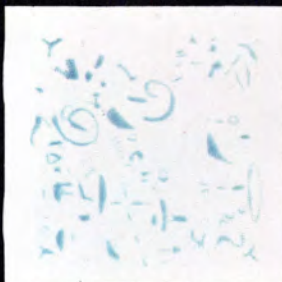
Immediates: 97-97½
Note: prices are net to originating mortgage broker (not necessarily net to builder) and usually include concessions made by servicing agencies. Majority of loans being sold today are spots.

Prices cover out-of-state loans, reported the week ending Mar. 12 by Thomas P. Coogan, president, Housing Securities Inc.

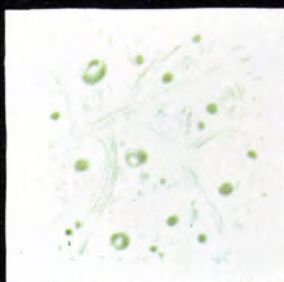
NEWS continued on p. 35



ROMAN COINS, No. 41-801



PERSIAN CARPET, No. 44-805



OLIVE TREE, No. 42-811



SUNBURST, No. 43-804

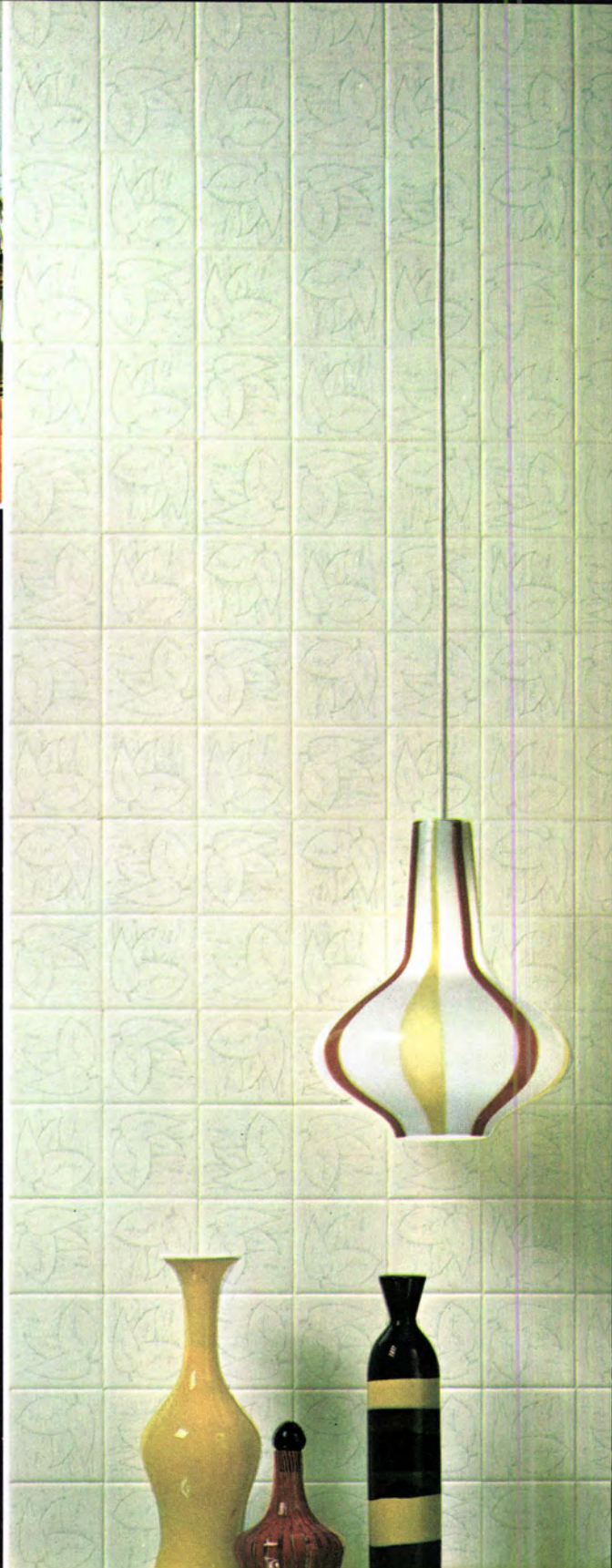


METEOR, No. 45-807



SPRING LEAVES, No. 40-800

Spivak Ceratile Designs, Copyright 1964



Spivak Ceratile Designs are for the architect, decorator or builder who wants something new... something really exciting in wall tile... *and on a modest budget.* ■ The attractive designs, interesting recessed texture and soft muted colors of these new Spivak Ceratile Designs combine to give an overall effect of elegance that will please the most discriminating client. ■ In creating each of these six new designs, Max Spivak designed them primarily for their "en masse" effect in a wall. By using them in a random pattern as rec-

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EVANS cedar-sawn **HORIZONTAL**

Just looking at Evans new Knotty Cedar-Sawn Horizontal Lap Siding you'd expect it to be expensive. Its saw-textured surface is distinctive and beautiful. It comes natural (un-primed), or with a factory prime, scientifically compounded for compatibility with any desired type of finish material. Natural Cedar-Sawn requires no finishing of any kind for the

life of the structure. It may be left as-is, to "weather" gracefully over the years. Special factory sealer protects each piece, front and back, against mildew, rot, fungus and insect attack.

Cedar-Sawn Horizontal Lap Siding comes in ideal sizes for fast installation and wide flexibility of design*. Widths are 8, 10 or 12

inches. Lengths are 8 and 16 feet. Thickness is $\frac{3}{8}$ inch.

Physically it combines the strength of plywood with the durability of Western Red Cedar—one of the highest rated softwood species for thermal insulation, stability, paint holding and weather resistance.

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EVANS

LAP SIDING

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_____ Literature

FIRM NAME _____

_____ Samples

_____ Have Salesman
call

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CITY _____ STATE _____

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PPG makes the glass that makes the difference



California professor takes first look at low-rise apartment builders

Ed Addeo

His not-so-surprising finding: apartment builders are venture-some individuals long on construction know-how but short on actual apartment experience.

After studying 39 builders of 406 units in and near Oakland, Calif., between 1957 and 1961, Prof. Wallace F. Smith of the University of California reports*:

1. Developers took a minimum short-term risk and averaged \$1,875 in profit per unit—only slightly below their estimated \$2,000.

2. Although 17% of the developers lost money, 13% posted profit of \$5,000 a unit.

3. Most investors sought a tax shelter, an equity buildup or net cash income from their units.

Three-fourths of 211 apartment sponsors described themselves as contractors, a label that included general contractors plus an uncounted number of plumbers, plasterers and carpenters. Others were licensed real estate brokers. Only nine of 129 giving their business listed "developer" as their primary occupation.

The builder-sponsors sold three of every five projects they erected. Business executives made up half of the investors. Real estate brokers helped locate two-thirds of these buyers, none of whom had taken part in the original decision to build.

The average development contained 10 to 12 units, mostly one-bedroom with less than 700 sq. ft. and renting below \$110 a

* *The Low-Rise Speculative Apartment*, Research Report 25, Center for Real Estate and Urban Economics, University of California at Berkeley.



BERKELEY'S SMITH
For speculators, a defender

month unfurnished. Building costs, as given on permits, ran from \$5,500 to \$6,000 a unit. The typical site had previously been developed with a single-family house, which later deteriorated, and cost the developer \$1,400 a unit. Assembly of parcels was seldom considered simply because developers had upper limits on their financing.

Smith emphasizes that this activity was almost wholly speculative but argues:

"Speculative low-rise rental construction has a useful, long-range role to play in transforming our inventory of housing and the form of our urban areas.

"Equity investment is not an either-or proposition. We are not confronted with a choice between markets functioning on the basis of long-term yield forecasts and those responding solely to opportunities for quick profits. Both incentives are necessary, because [both] functions are being performed when income property is created."

Mortgage man on Home Loan Board

United Press International

The naming of Vice President **Michael Greenebaum** of Chicago's Lake Michigan Mortgage Co. brings to full strength the three-member Home Loan Bank Board, federal regulator for the nation's \$120-billion savings and loan business.

The 58-year-old Democrat joins Republican **John de Laittre** and another Democrat, **John E. Horne**, who became chairman in January after **Joseph P. McMurray** resigned (NEWS, Oct. 27 seq.).

Said Greenebaum: "Investing institutions all have the same problems, and I have spent my entire life in investing funds."

In realty and mortgaging since 1938, Greenebaum joined Lake Michigan in 1951 and became vice president in 1958. The company, working primarily in commercial and industrial mortgages,



BANK BOARD'S GREENEBAUM
An investor's investor

sold out to Arthur Rubloff & Co., Chicago's largest diversified real estate organization, in December.

An S&L industry spokesman called the appointment "heartening." Greenebaum said he feels the industry may have a few problems "but on the whole is a highly successful operation."

Home Manufacturers elect Dibble, plan to recruit components makers

For the first time in its 23-year history, the Home Manufacturers Assn. will open its membership to companies that prefabricate parts or systems but not complete houses.

HMA now has 45 active members and has long felt its representation of prefabricators was too limited.

The membership-expansion drive will fall to **Allan Dibble**, elected HMA president for 1965. Dibble, director of staff administration and public relations for National Homes of Lafayette, Ind., succeeds **A. R. (Bill) Tandy**, president of Southern Mill and Manufacturing Co., Tulsa.

Aiding Dibble will be Vice President **Graham Schadt**, president of Holiday House Manufacturing Corp. in Fort Worth, and Secretary-Treasurer **Ralph Lester**, president of Continental Homes, Boones Mill, Va.

HMA board of directors also:

- Suspended their quarterly magazine, *Manufactured Homes*, for one year. If the association expands its membership sufficiently the magazine may be reinstated.

- Set up staff machinery to



HMA's DIBBLE
For prefabbers, a bigger tent

create a clearing house for code problems. Any member with a code problem will submit documentation to HMA's headquarters in Washington. Headquarters will coordinate code assistance by four major lumber associations that have a total of some 130 field men devoting all their time to code work. HMA believes it can build a file of code acceptances that will in time prove invaluable to member companies.

- Deferred approving plans for a 1966 HMA promotion house (the 1965 house is shown on p. 132).

New housing lobby picks Al Rains

But the retired chairman of the House housing subcommittee will not shoulder any lobbying activities, according to organizers of the new Joint Council on Housing and Urban Development.

Rains will act only as legal counsel. His tie to the council had aroused speculation that he would lobby for the proposed Housing and Urban Development cabinet post—a spot for which he has been mentioned.

But actual lobbying duties will fall to Executive Director **Laurance Henderson**, former staff director for the National Housing Conference, 2 chief lobbyist for public housing and co-ops.

Henderson says the council will coordinate legislative aims of NHC and two other council sponsors—the U.S. Conference of Mayors and the National League of Cities (formerly the American Municipal Assn.).

Community builders eye group purchasing

The nation's largest developers—newly organized as the Community Developers Council of America—are studying ways to use their combined purchasing power to make better buying arrangements with producers. Council directors sold new homes valued at a total of more than \$1 billion in the last ten years.

Lawrence Weinberg, president of Larwin Group Companies of Los Angeles, is the council's new president. **Herman Sarkowsky**, president of United Homes Corp. of Seattle, heads the purchasing committee.

BUILDERS: **Harvey M. Meyerhoff** of Baltimore is 1965

president of the Research Foundation of NAHB. The new foundation, a wholly owned subsidiary of NAHB, was set up to conduct technological research. Other officers are Architect **Herman York** of Jamaica, N.Y., vice president; Builder **Leon Weiner** of Wilmington, Del., treasurer, and Builder **Peter W. Braun** of Buffalo, secretary.

DIED: **Robert James Painter**, 60, executive secretary emeritus of the American Society of Testing & Materials, Feb. 23 in Norristown, Pa.; **John R. Simms**, secretary-treasurer of the National Electrical Contractors' Assn., March 4, in Kansas City in a dynamite blast when he turned on the ignition of his auto.

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...WITH FIXTURES

NEW FROM GERBER-- DECORATOR FIXTURES FOR MODEST BUDGETS

Fixtures illustrated include oval bowl with raised Wedgewood pattern, No. 316W; wide spread faucet in brushed chrome finish, with lead crystal trim, No. 107ASCC.

Gerber's new decorator fixtures lower the cost of bathroom luxury to a reasonable level. These fixtures—lead crystal trim, decorated bowls, faucets with gold or brushed chrome finish, and Marblelite lavanity and counter tops — are well within the budget of your customers. They are available as individual accessories or as a complete decorator unit with Gerber's beautiful Princess Anne cabinets. They open up an exciting new dimension in bathroom beauty for new construction or remodeling projects.

The brilliant lead crystal trim for lavatory and shower/tub is cast, cut, and polished by hand. Oval bowls have one of eight charming patterns, or an all-gold finish, fired directly onto the china for lasting beauty. Three of the patterns are raised, and are fired to colored bowls.

Handsome Gerber fittings—for all bathroom fixtures—are finished in smooth brushed chrome, or rich gold protected by a tough epoxy coating. Classic Marblelite tops, incorporating actual marble, have an optional integral splashback. They come in white with gold, gray, or brown; or black-and-gold to blend with any bath decor.

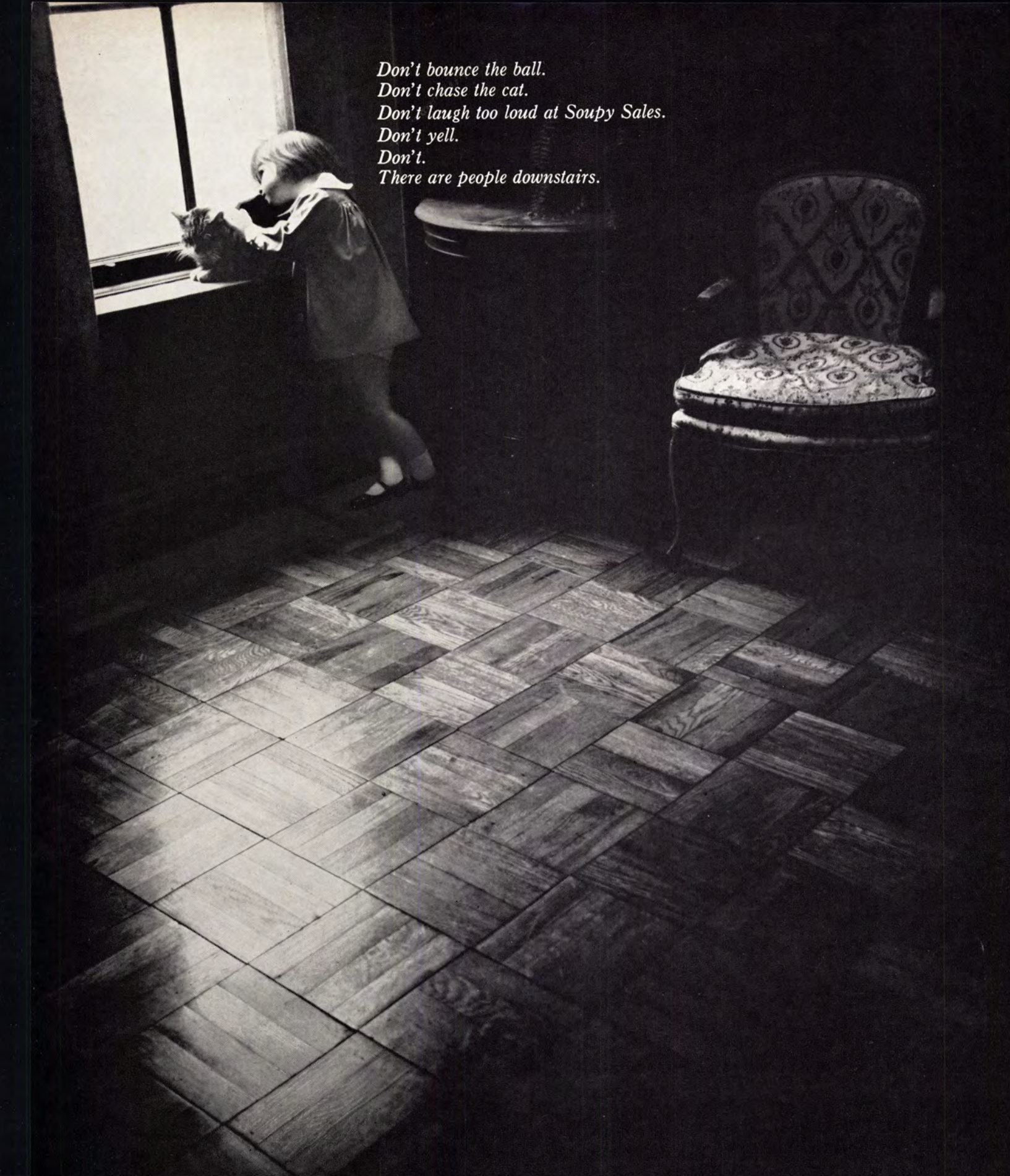
The decorative possibilities with these fixtures are virtually unlimited. The quality is excellent; the cost is modest. To find out more about Gerber's exquisite decorator fixtures, write for full-color literature with complete information.



plumbing fixtures

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CAST IRON ENAMELWARE STEEL ENAMELWARE**

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Don't chase the cat.
Don't laugh too loud at Soupy Sales.
Don't yell.
Don't.
There are people downstairs.*

Is this any way to bring up children?
No wonder many young families don't want
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Intelligent builders, however, know how
to build apartments that are as private as
houses. By making carpeting an integral
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All quality carpeting muffles airborne
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carpeting with Acrilan® acrylic fiber in

the pile works best for a builder.

It looks like wool. But man-made Acrilan
has virtues that wool can never attain.
It's longer wearing than wool. More
resilient. Its colors last longer. Acrilan is
easy to maintain. Mothproof. Mildew-
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These are among the mills now licensed by Chemstrand for Acrilan: Barwick, Bigelow, Cabin Crafts, Callaway, Coronet, Crestline, Downs, Forrest, Hardwick and Magee, Hightstown, Millbrook, Monmouth, Philadelphia Carpet, Rensselaer, Wyndham, Wyndham-Wynn, Inc. Canada: Barrowmore Carpets, Connelley/Karastan, Harding Carpets.



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Send for free 12-page "Home Ventilating Guide" that keys air delivery ratings of fans to room sizes

and includes HVI recommendations on number of air changes per hour, types of exhaust fans and range hoods, location of fans and hoods, selection of accessories, installation of ducts.



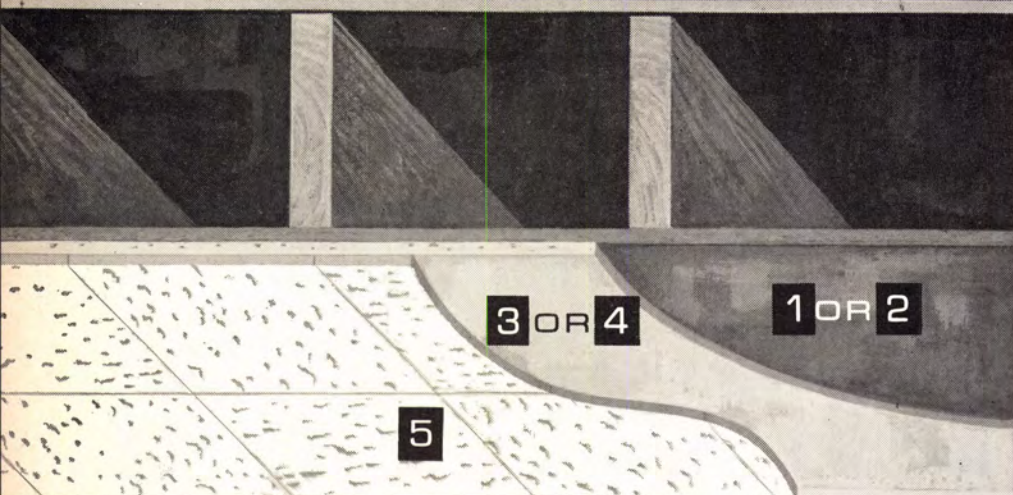
Full information also available from HVI members: Aubrey Mfg., Inc. • Berns Air King Corp. • Broan Mfg. Co., Inc. • Emerson-Pryne Co. • Fasco Industries, Inc. • Kich-N-Vent Division, Home Metal Products Co. • Miami-Carey Division, The Philip Carey Mfg. Co. • Nautilus Industries, Inc. • Nutone, Inc. • Roberts Mfg. Div., Rangaire Corp. • Swanson, Mfg. Co. • Trade Wind by Thermador Div. of Norris-Thermador • Ventrola Mfg. Co.

HOME VENTILATING INSTITUTE

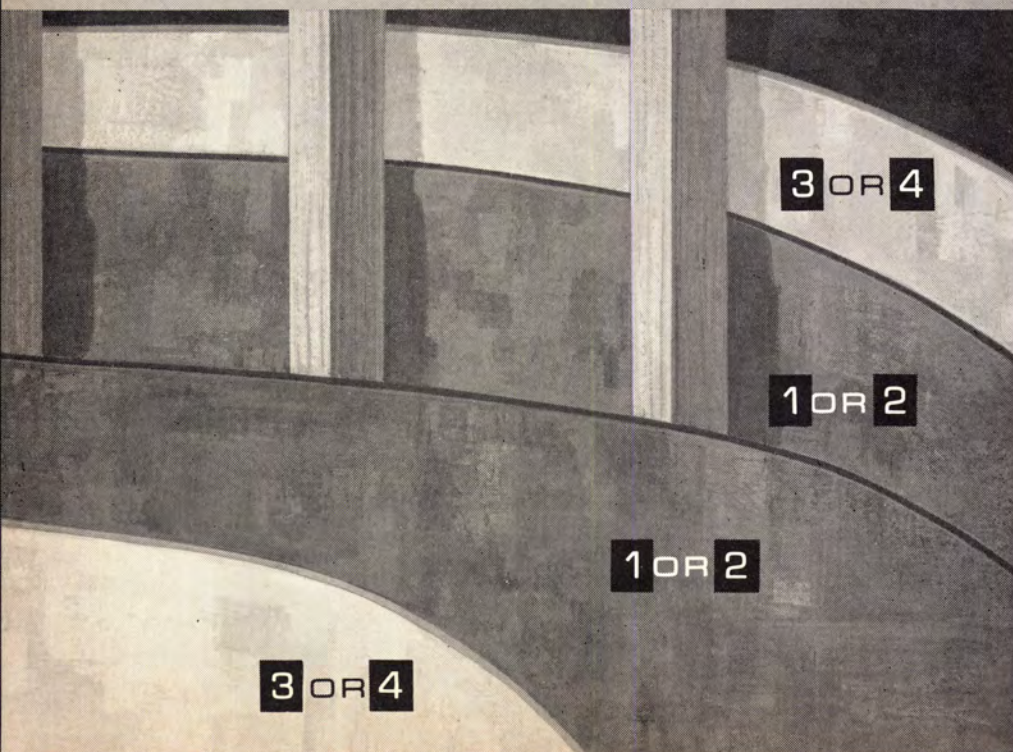
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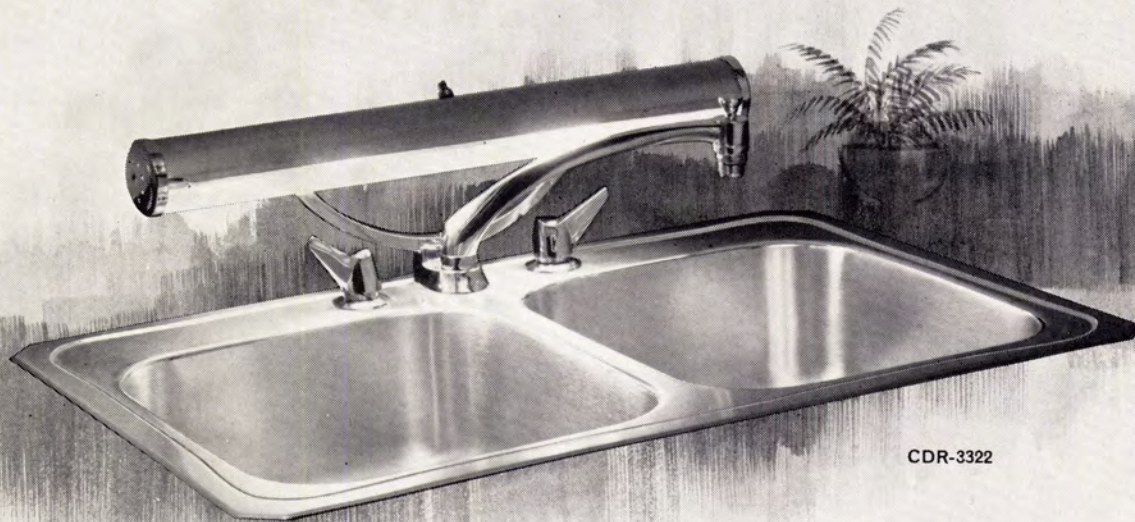
Building single family? The Comfort of Quiet begins with acoustical ceilings by Celotex—in family room, kitchen, wherever noise should be hushed. And for a "quality difference" that means extra sales, merchandising-minded builders are offering Celotex quiet-rated partitions around bathrooms, master bedrooms, family rooms.

For assured sound control, as recommended by Research Institute of NAHB, quiet condition with Celotex products and Celotex tested-rated constructions. Write us today for your free copies of (1) technical book showing systems, STC values, relative costs and (2) Management Guide with merchandising suggestions.



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HOUSE & HOME presents locations, sponsors, architects and estimated costs of representative new projects costing over \$500,000 as gathered by ENGINEERING NEWS-RECORD and F. W. Dodge Co., division of McGraw-Hill Inc. to alert builders, lenders and contractors to new business.

ALABAMA—HUNTSVILLE: Apartment, \$600,000. Sponsor: Commercial Contractors, Montgomery; 500 houses, \$10 million. Builder: Hunter & Mitchell.

CALIFORNIA—STOCKTON: 176-unit subdivision, \$1.5 million. c/o James F. Yost. TRACY: Retirement settlement, \$16 million. Sponsor: Tranquility Gardens. Architect: Marvin S. Knox, Los Gatos.

CONNECTICUT—GROTON: 87 houses, \$1.7 million. Builder: Colonial Manor, New Haven. SOUTH NORWALK: Garden Apartments, \$600,000. Sponsor: Carlton Court Apartments, Norwalk. Plans: Samuel Resnick, Norwalk. STONINGTON: Apartment, \$1 million. Sponsor: Howard B. Falk Inc., West Hartford.

FLORIDA—FT. LAUDERDALE: Condominium apartments, \$2 million. Sponsor: General Builders. Plans: Phillip Pearlman, North Miami; Apartment, \$1.5 million. Architect: Gilbert M. Fein & Assocs., Miami. HOLLYWOOD: 18 apartments, \$5 million. Sponsor: Beverly Hills Inc. Architect: James M. Hartley. POMPANO BEACH: Apartment and swimming pool, \$2 million. Sponsor: Robert Hill. Plans: George Davis, Boynton Beach.

GEORGIA—CHAMBLEE: 28 apartments and swimming pool, \$3.4 million. Sponsor: Jamestown of Atlanta, Columbus, Ohio. Plans: Schooley & Cornelius, Columbus, Ohio.

HAWAII—HONOLULU: Apartment and swimming pool, \$2.5 million. Architect: Jo Paul Rognstad. WAIPAHU: 500 houses, \$11 million. Builder: Blackfield Enterprises, Honolulu.

ILLINOIS—CHICAGO: Garden apartments, \$3 million. Sponsor: Metropolitan Structures. Plans: Stanley Tigerman. NORTHBROOK: 50 houses, \$1.5 million. Builder: Miller Builders, Chicago. Plans: William Ballard, Chicago. ORLAND PARK: 500 houses, \$10 million. Builder: Braun & Aldridge. SCHAUMBURG: 200 houses, \$4 million. Builder: Timber Crest Homes. Plans: Weiner & Balaban, Chicago.

INDIANA—CROWN POINT: Apartments, \$500,000. Sponsor: Lake County Trust Co. Architect: Tobocman & Lawrence, Detroit, Mich. Associate architect: Premil & Barich, Gary. INDIANAPOLIS: Apartments, \$2.5 million. Architect: Warren Hall, Dallas, Tex.

IOWA—CEDAR RAPIDS: Apartments and townhouses, \$2 million. Sponsor: W. H. Wenkster. Plans: Crites & McConnell.

KANSAS—JUNCTION CITY: 82 houses, \$860,000. Builder: Frank Novascone, Wichita. OVERLAND PARK: 35 garden apartments, 21 houses, \$5 million. Sponsor: Alex Bascom Co.

LOUISIANA—BATON ROUGE: Apartments, \$500,000. Sponsor: John & Harold Garrett. Architect: C. E. Newman. EUNICE: Apartment and swimming pool, \$1.3 million. Architect: Ashtown Smith.

MAINE—WESTBROOK: 78 houses, \$1 million. Builder: C. Sam Dibiase, Portland.

MARYLAND—ANNAPOLIS: 134 houses, \$2.1 million. Builder: Jerome Alperstein, Baltimore. Plans: Michael Asimenios, Baltimore. LANHAM: 131 houses, \$3.2 million. Builder: Timora Construction Co., Washington, D.C. Plans: Werner-Dyer Assocs. Washington, D.C. SILVER SPRING: Garden apartments, \$800,000. Sponsor: Thomas Ryan, Washington, D.C. Plans: Robert S. Yale, Bethesda. TOWSON: Garden apartments, swimming pool and bathhouse, \$2 million. Sponsor: Perring Park Land Co., Baltimore. Plans: Donald B. Ratcliffe, Baltimore. UPPER MARLBORO: Garden apartments, \$2.5 million. Sponsor: Cherry Hill Assocs., Washington, D.C. Plans: W. L. Mayne, Alexandria, Va. WHEATON: 35 houses, \$700,000. Builder: American Housing Guild. Architect: Loewer-Sargent & Assoc., Kensington.

MASSACHUSETTS—MANCHESTER: Apartments, \$500,000. Sponsor: Cobb Trust, Wellesley. Plans: John G. Danielson, Lexington. WEST ROXBURY: Garden apartments, \$2.8 million. Sponsor: Roxbury-Nardelli Construction, Weston.

MICHIGAN—DETROIT: Apartments, 130 row houses, \$3.8 million. Sponsor: American Redevelopment, Huntington Woods. Plans: Sanford Rosen. LIVONIA: 200 houses, \$2.7 million. Sponsor: Gordon-Begin Co., Detroit. Plans: Michael Downes, Detroit. SOUTHFIELD: 64 houses, \$1.6 million. Builder: Pan Development, Oak Park. YPSILANTI: Townhouses and apartments, \$1 million. Sponsor: Richard Ahern, Ann Arbor. Plans: Ann Arbor Collaborative.

MINNESOTA—BLOOMINGTON: Townhouse apartments, \$900,000. Sponsor: Hipps Construction, Minneapolis. Plans: Harry E. Gerrish, Minneapolis. MENDOTA HEIGHTS: Apartments, houses and townhouse and garden apartments, \$2.5 million. Sponsor: Harvey Bream & Carmen Tuminelly, St. Paul. ST. PAUL: 250-unit low rent housing, \$3 million. Architect-Progressive Design Assoc.

MISSOURI—HIGH RIDGE: 61 houses, \$650,000. Builder: Donald Tuggle. MANCHESTER: 203 houses, \$3 million. Builder: Foster Development, Clayton. Plans: Bert Luer, Webster Groves. ST. LOUIS: 300 houses, \$4 million. Builder L. J. McNeary Realty, Afton.

NEW JERSEY—BURLINGTON: 81 houses, \$1.3 million. Builder: Louis Blumberg, Philadelphia, Pa. CLIFTON: Garden apartments, \$700,000. Sponsor: Cliff-Wood Terrace. Plans: Leonard G. Feinen, Hasbrouck Heights; 21 garden apartments, \$3 million. Sponsor: George Poydinecz. Plans: H. B. Southern, Rahway. EATONTOWN: Garden apartments, \$4 million. Architect: Benjamin Nienart, Elizabeth. HILLSBOROUGH: 87 houses, \$950,000. Builder: Millstone River Corp. INDEPENDENCE: Garden apartment, \$700,000. Builder: Arthur Gibbs. Architect: Richard M. Newman, Short Hills. LITTLE FALLS: 12 garden apartments, \$3 million. Sponsor: G. Poydinecz & Co., Clifton. Plans: H. B. Southern, Rahway. RARITAN: 49 houses, \$1 million. Builder: Howard Siegel, Matawan. WALL TOWNSHIP: Eight garden apartments and swimming pool, \$1.5 million. Sponsor: Dr. Benjamin Rubin, Deal. Plans: Jerome M. Larson, Spring Lake Heights.

NEW MEXICO—ALBUQUERQUE: Two apartments, \$500,000. Sponsor: Blas Barcia. Plans: Walter Gathman.

NEW YORK—DEWITT: 100 houses, \$4 million. Builder: Anodaga Subdivision Co., Syracuse. Plans: Claude Miquelle Assocs., Stoneham, Mass. GREENLAWN: 42 houses, \$750,000. Builder: Newbrook Woods, Brooklyn. HAUPPAUGE: 70 houses,

from
Chromalox®
52
good reasons
for installing
season::aire®
electric
comfort
condition-
ing



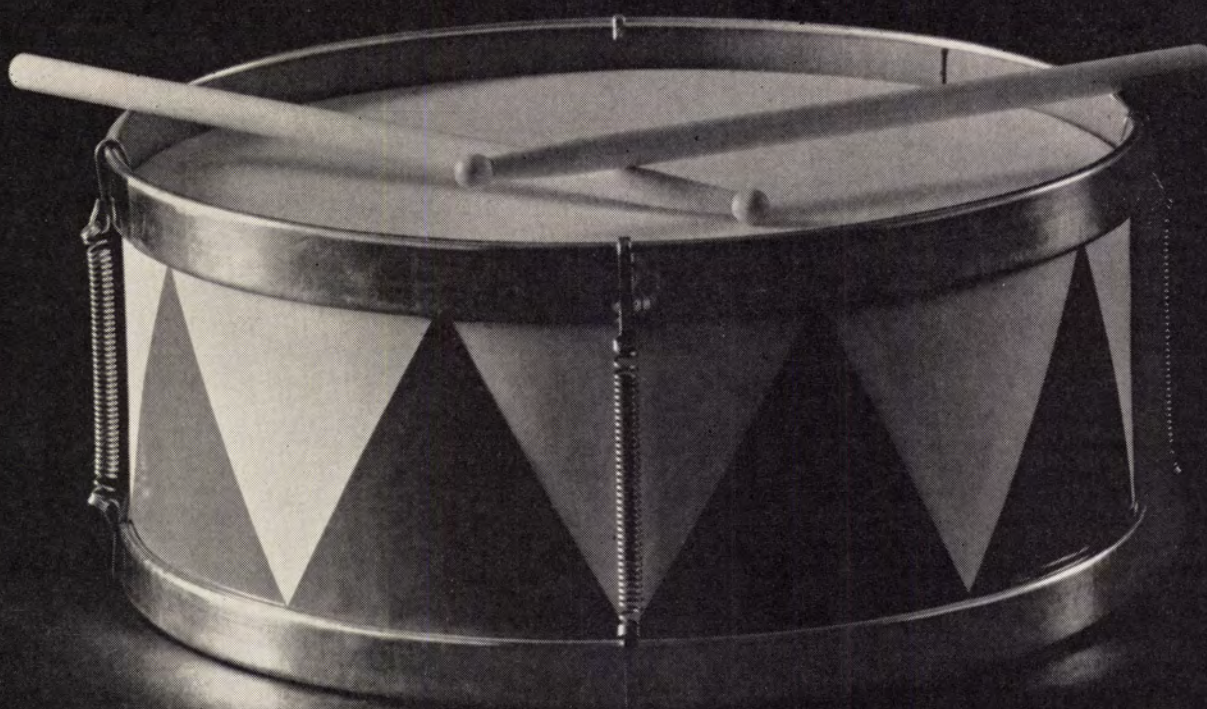
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Business continued on p. 49



SOME FOLKS DON'T APPRECIATE MUSIC

Add "live music" to the din produced by washing machines, air conditioners, garbage disposal units and TV, and it's bedlam. Who wants to live in bedlam? Not today's home-owner, apartment-dweller, office worker. They clamor for walls and ceilings which effectively reduce transmission of noises from next door or rooms or offices

nearby. With all your customers in mind, Bestwall Gypsum offers specially-manufactured Sound Deadening Board for use in economical, easily-installed laminated construction. Up to 50 STC can be achieved in various assemblies. Full details available from Bestwall—pioneer in modern fire-resistant and sound-control wallboard systems.

BESTWALL GYPSUM COMPANY • PAOLI, PA.



BUSINESS

starts on p. 47

\$1.25 million. Builder: Zoller Building Corp., Oceanside. HIGHLAND: 85 houses, townhouse and garden apartments, \$3 million. Sponsor: Hi-Toc Realty. Architect: Miguel A. Franco, Poughkeepsie. NEW YORK CITY: Apartments, 370 units and shopping center, \$8 million. Sponsor: Tompkins Square Neighbors. Plans: John A. Pruyin. SMITH-TOWN: 57 houses, \$975,000. Builder: Legend Woods, Freeport. SOUTHOLD: 71 houses, \$900,000. Builder: Deep Hole Creek Estates, Mattituck. WHITE PLAINS: 35 houses, \$1 million. Builder: Carriage House East. Plans: Matthew J. Warshauer, Scarsdale; 70 houses, \$2.5 million. Builder: Wedo Construction, New York City.

NORTH CAROLINA—CHAPEL HILL: Apartments, \$1 million. Sponsor: Jack J. Carlisle. Plans: Arthur R. Cogswell.

OHIO—COLUMBUS: 1,000 houses, \$10 million. Builder: John J. Ranft. Plans: Harold S. Schofield, Gahanna. MIDDLEBURG HEIGHTS: 40 houses, \$1.2 million. Builder: Pivato Construction, Medina. OREGON: 60 apartments, \$1 million. Sponsor: E. F. Lowry & Co., Dayton. SEVEN HILLS: 50 houses, \$1.5 million. Builder: Jo Lan Construction Inc., Chagrin Falls. WILLARD: 2,000 houses, \$20 million. Builder: United States Land Corp. Plans: Robert Woods Kennedy, Cambridge, Mass.

PENNSYLVANIA—ALLENTOWN: Apartment and swimming pool, \$800,000. Sponsor: Emmanuel Pelekanos. Plans: Wassell & Pyros, Wilkes Barre. ASTON: Nine apartments, \$1 million. Sponsor: Anthony Haday, Chester. Plans: Martin M. Laibow, Cornwell Heights. FEASTERVILLE: Five garden apartments, \$800,000. Sponsor: George Nole, Holland. Plans: Ralph Caldwell, Richboro. UPPER ST. CLAIR: 32 houses, \$960,000. Builder: Joseph T. Smalhoover, Bridgeville.

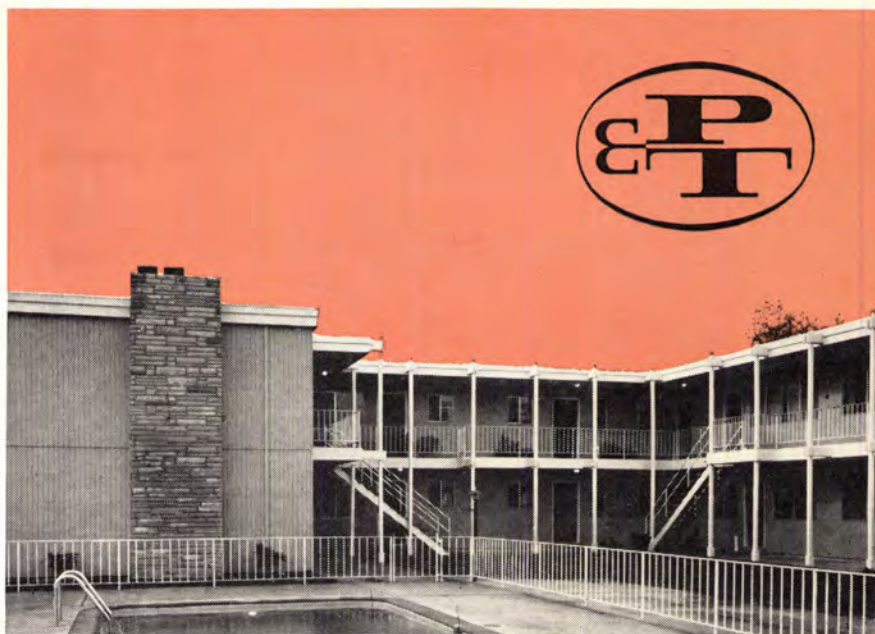
TENNESSEE—DYERSBURG: Three apartments, \$600,000. Sponsor: Thurman Lawson, Murray Flatt & Walter Hastings. MEMPHIS: Apartment, \$1 million. Sponsor: Alperin Enterprises. Plans: Thorne, Howe, Stratton & Strong.

TEXAS—AMARILLO: 100 houses, \$1.75 million. Builder: Nash Phillips Co. CHANNELVIEW: 50 houses, \$1 million. Builder: Cranbrook-Pontikes Corp., Houston. HELOTES: 28 houses, \$840,000. Builder: The Forty Acres, San Antonio. HOUSTON: 69 houses, \$1.4 million. Builder: W. Freeman; 93 houses, \$1.3 million. Builder: Logtex Construction. TEXAS CITY: 92 houses, \$1.4 million. Builder: Colonial Building, Houston.

VIRGINIA—ALEXANDRIA: Apartments, \$2.5 million. Sponsor: William Cafritz Development, Rockville, Md. Plans: Berry & Rio, Annandale. CHARLOTTESVILLE: Garden apartments, \$600,000. Sponsor: E. H. Goss & Assocs. Plans: Joseph T. Norris. FAIRFAX: 256 houses, \$5.1 million. Builder: Richmart Construction, Washington, D.C.

WISCONSIN—ELM GROVE: 28 houses, apartment, \$2 million. Sponsor: Land Inventory, Milwaukee. Plans: Award Engineering, Milwaukee. MADISON: Seven apartments, \$1.3 million. Sponsor: Suburban Homes, Milwaukee. Plans: Richard Blake, Milwaukee; apartment, \$800,000. Sponsor: Henry Hamilton Apartments. Architect: Carl Gausewitz & Assocs. WAUWATOSA: Apartments, \$4 million. Sponsor: Maple Home Inc., Milwaukee. Plans: Harold Bayerlian, Milwaukee. WHITEWATER: Apartments, \$800,000. c/o Midway Construction and Engineering, Rolling Meadows, Ill. Plans: Eugene A. Mayer & Assoc., Chicago, Ill.

Leaders start on p. 57



Gladstone Court Apartments, near Portland, Oregon / Architects: Williams and Ehmann

8,000 square feet of P&T NO-CHECK siding...at an in-place cost of only 26.4¢ per foot!

This handsome apartment house shows how you can reduce siding costs while building walls that will remain free of normal weather checking.

More than 8,000 square feet of 5/8-inch NO-CHECK siding was used. Wall sections were assembled on the ground, windows installed and siding applied. Completed sections were then lifted into place.

THE TOTAL IN-PLACE COST OF THE NO-CHECK SIDING: 26.4¢ PER SQ. FT.!
Compare that total with your own siding costs for an idea of No-Check advantages.

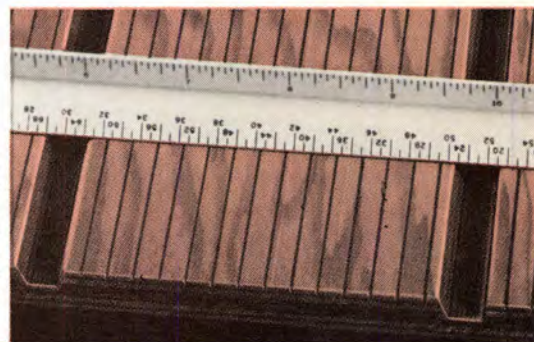
Fine vertical striations on the face veneer of No-Check prevent grain rise and weather checking by relieving surface stresses. They thus put an end to unnecessary imperfections of finish, and minimize future maintenance problems.

No-Check has proved its merits in the construction of homes, business and institutional buildings. It is also suitable for gable ends, soffits, garage doors, exposed roof sheathing and interior paneling.

When properly applied, No-Check of 3/8-inch or greater thickness provides the bracing strength required by FHA without bracing or sheathing.

Other Specialty Plywoods from POPE & TALBOT

Available also from building materials dealers are primed, unprimed or stained Ruff-Cut, Texture 1-11, and Channel Groove plywoods. If your dealer doesn't stock them, write us for information and the name of your nearest P&T outlet.

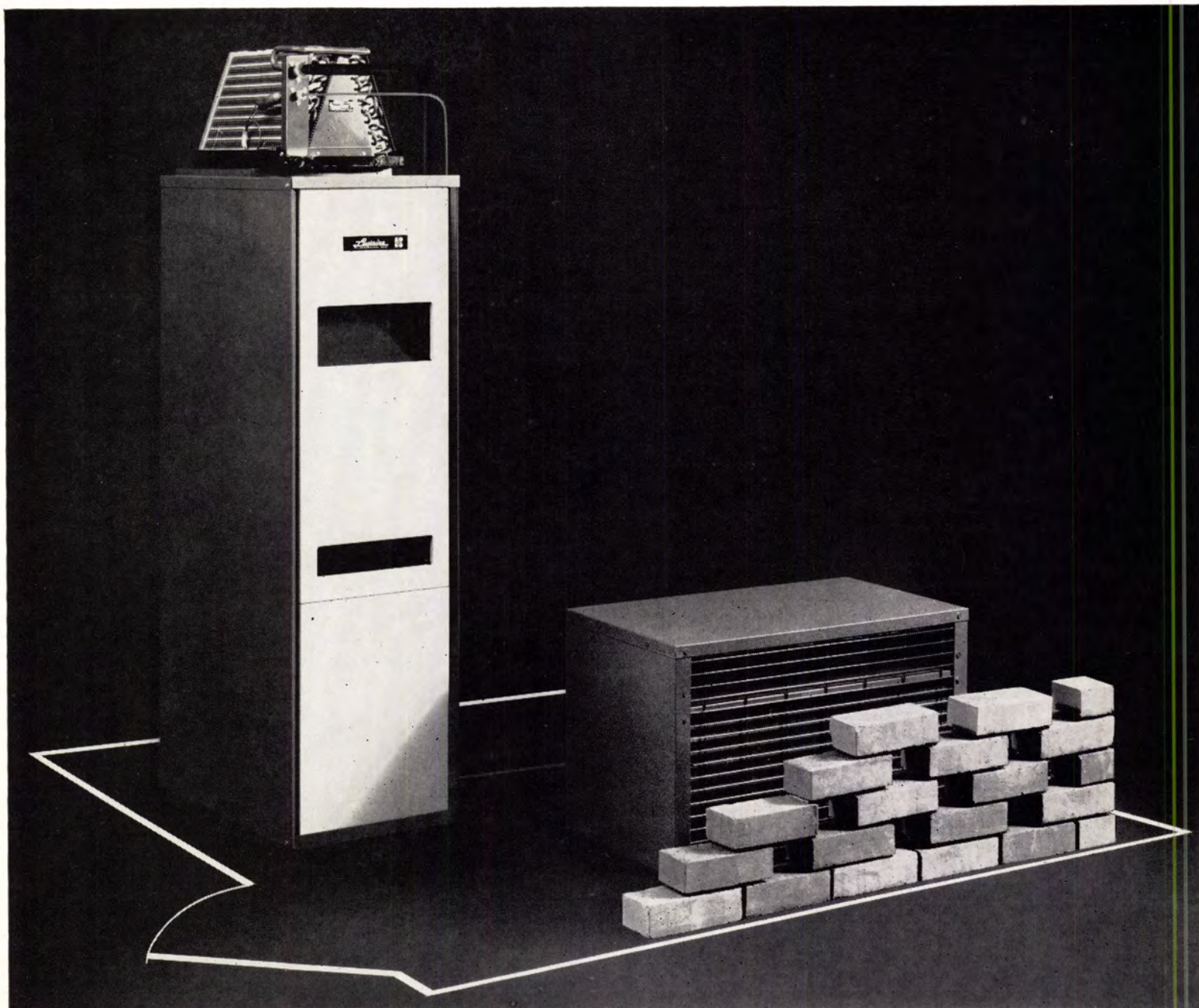


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**Of all the brands you'd trust,
Luxaire makes the lowest-cost
heating/cooling package in the industry!**

Yet gives you top Luxaire quality,
full warranties, and has the most
useful installation ideas you've seen.

Today, take TWO steps to increase the saleability of your homes without increasing the cost.

FIRST. Call your Luxaire man and get the price of this year-round package, consisting of GS-Series Furnace and CAC-Series Cooling. You'll be surprised at the low Luxaire price-tag on a 10-year warranted heat exchanger, 5-year warranted com-

pressor, lint-free burners, versatile through-the-wall condensing unit, pre-charged lines and components, built-in filter rack, quiet operation, furniture-style cabinet and the nationally-advertised Luxaire brand-name.

SECOND. Write us for installation ideas using the GS/CAC package to save floor space and construction cost. Detail drawings ready to adapt

to your plans; practical ideas that even show you how to tuck the water-heater into what used to be waste space. Just a post card that says "GS/CAC Idea File" will bring them to you.

Luxaire

The C. A. Olsen Manufacturing Company, Elyria, Ohio



Beautiful ideas come in Color Packages from Mosaic

Trust Mosaic to do the color harmonizing for you. And beautifully.

Take the scene above. You can, you know. Mosaic offers these floor, wall and countertop tiles in coordinated browns as a complete color package. (Here, for instance, a new Interlude floor, #3023-VDGA and a new Faintex, #1891 Moonstone on the vanity, combined with light tan, #1611, Bright-Glaze wall tile).

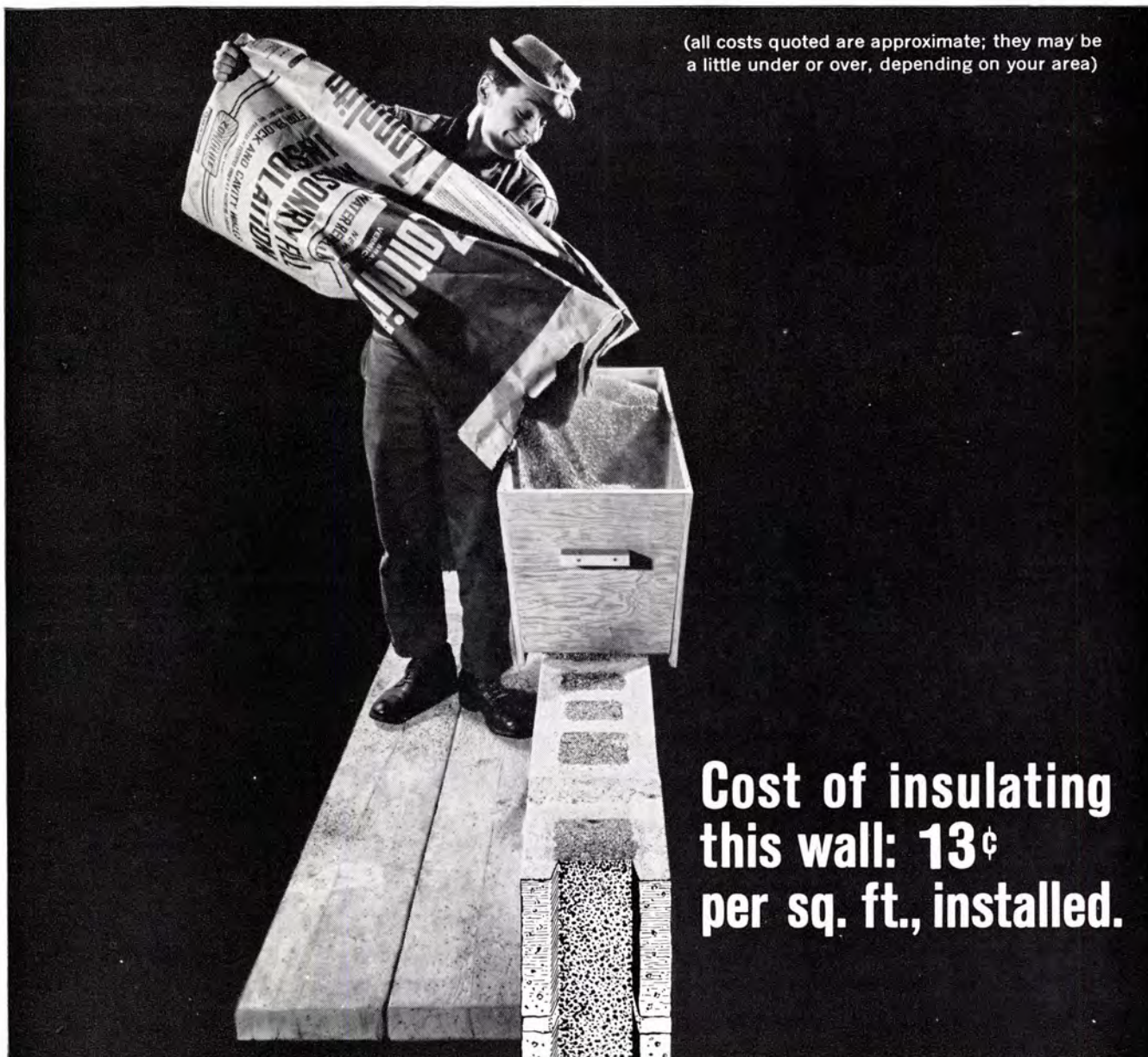
It's a scheme to save you time without sacrificing a thing to the future. Because the creation of every Mosaic tile color

is dictated by the latest Mosaic Color Forecast information, which means tile colors will stay fresh and compatible even with tomorrow's accessories and materials.

Check your Mosaic Representative, Service Center or Tile Contractor for price ranges of tiles shown in this ad, alternate colors, samples, availability and more color-package ideas. See Yellow Pages, "Tile Contractors-Ceramic". Or write: The Mosaic Tile Company, 55 Public Sq., Cleveland, Ohio 44113. On the Pacific Coast for comparable colors: 909 Railroad St., Corona, Calif.

MOSAIC®

"Mosaic" is the trademark of The Mosaic Tile Company.



(all costs quoted are approximate; they may be a little under or over, depending on your area)

**Cost of insulating
this wall: 13¢
per sq. ft., installed.**

**Simply pour water repellent
Zonolite* Masonry Fill Insulation
into the cores of this 8" block.**

That's all the wall needs to stay warm and dry on the inside. If you don't want to finish the interior, you don't have to.

One man can easily insulate 29 square feet of wall a minute with Zonolite Masonry Fill Insulation. To install it, he just opens the bag and pours. (Either directly into the wall or into a hopper that can easily be knocked together on the job.)

He doesn't need to know any new techniques. If he's smart enough to pour coffee into a cup, he's smart enough to install Zonolite Masonry Fill Insulation.

This insulation cuts heat transmission through the walls up to 50% or more. Cuts the cost of your heating and cooling equipment, too, by allowing you to use smaller units.

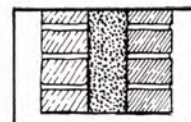
The material is water repellent. In tests at the Structural Clay Products Research Foundation,

Geneva, Ill., it was installed in a cavity wall purposely built to leak. The wall was subjected to 144 hours of rain—5" to 8½" per hour—at winds up to 75 m.p.h. No water came through the wall, or penetrated the insulation.

Another nice thing about Zonolite Masonry Fill Insulation; when you pour it in, it doesn't get hung up on mortar or reinforcement. Just fills the wall right up and stays there without settling, saving on heating and air conditioning bills for the life of the building. For complete information, read our Bulletin MF83. Write to Zonolite, 135 S. La Salle Street, Chicago 3, Illinois.

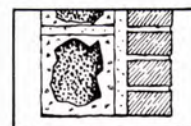
ZONOLITE
W. R. GRACE & CO.
135 SO. LA SALLE ST., CHICAGO, ILL.

* Reg. trade mark of Zonolite Division, W. R. Grace Co.



10¢

per sq. ft. installed, to insulate this 10" brick cavity wall with 2½" cavity.



10¢

per sq. ft. installed, to insulate this brick wall with 6" block backup. Just pour material into the block. If the size of the block changes, the cost naturally changes.



Kohler lavatories in accent colors! the first really *new* idea in years

And what a bright idea this is! Use a neutral shade for tub and closet—then let the lavatories stand forth in bold and brilliant contrast. Play red against white; let blue flatter gray; contrast a soft tan with a deep, rich coffee tone. That's Accent Color! To help you make the most of it, Kohler is now fashioning lavatories in five sprightly new shades (that's Antique Red above), each chosen to compliment Kohler white or one of the six regular Kohler colors. Select from three styles in enameled cast iron: Radiant, Farmington, Tahoe. The accent is on color—our new brochure spells out the whole, exciting story. For the brochure and more information see your Kohler distributor or write Accent c/o Kohler Co., Kohler, Wis.



JADE WITH CERULEAN BLUE. Remember when no one even thought of using blue and green together? Now recommend it as an easy to live with combination that fits right into all decorating ideas.



EXPRESSO WITH SUEZ TAN FOR A WARM RICH LOOK. This combination can be either masculine or softly feminine. Suggest colorful towels and accessories in orange, green or earth colors.



CITRON WITH SUNRISE YELLOW. These light, bright colors live together in absolute harmony. There's a whole spectrum of colors to go with Citron and Sunrise Yellow—a new world of decoration.



BLUEBERRY WITH ARGENT GRAY FOR ELEGANCE. This is a quieter kind of drama. The bathtub and other fixtures in a soft silver gray, the lavatories in wonderful blueberry. The results will be beautiful.

KOHLER OF KOHLER

Kohler Co., Established 1873, Kohler, Wisconsin

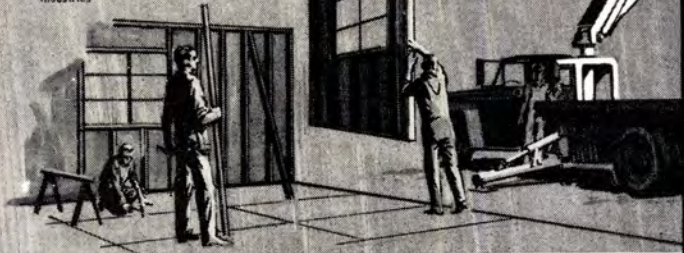
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"Meadowood" homes at Old Saybrook, Conn., demonstrate the strong curb appeal of homes built with Weldwood® PF-15® Siding. Builders: Town & Country Homes, Inc., Westbrook, Conn.

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United States Plywood Corporation guarantees WELDWOOD PF-15 SIDING against the need for painting for a minimum of 15 years. If, within 15 years of the date of installation, said Siding should require painting and United States Plywood Corporation is given reasonable written notice thereof prior to the commencement of the work, it will pay the cost of painting. This obligation is restricted to painting required by reason of deterioration of the finish of the Siding resulting from normal exposure. (It does not include such elements as destruction by physical defacing.)

The Siding is further guaranteed against manufacturing defects and delamination for the "LIFE OF THE BUILDING" on which it is installed. Siding covered by this guarantee must be installed in accordance with established building standards. Should WELDWOOD PF-15 SIDING delaminate or prove to be defective, it will be replaced, or, at United States Plywood Corporation's option, it will reimburse the purchase price of the material.

Salesman.

We admit even a remarkable siding like Weldwood PF-15® won't work miracles. But as an effective home seller, it's in a class by itself. Especially when your buyers learn they won't have to paint it for 15 years—at least. That's guaranteed by United States Plywood.

PF-15 is Weldwood siding with a colorful new DuPont film called Tedlar* permanently fused to the wood. This puts the color on to stay. An occasional hosing keeps PF-15 Siding looking like new.

You install PF-15 directly to studs—in any weather. No waiting for

Send for free sample of PF-15.

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777 Third Avenue, New York, N.Y. 10017

- ☐ Please send me a "salesman" and samples of Weldwood PF-15 Siding and Tedlar film showing colors available—and detailed information about accessories and installation.
- ☐ Please send me information about other Weldwood guaranteed sidings: textured, for stain finishes; Duraply®, for painting.

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City.....State.....Zip Code.....

dry days to paint. Like all Weldwood sidings, it adds strength to your homes, won't conduct electricity, provides wood's natural insulation, resists denting and splitting. Another beautiful example is on the other side of this page. Take a look.

*DuPont registered trademark

WELDWOOD® PF-15® Siding

United States Plywood

Come take a walk through our woods. See our new showroom in the United States Plywood Building.

Sample?



Hold page this side up
to see how vertical groove panels look.

Hold page this side up
to see how lap siding looks.

Weldwood® Planktex® siding comes either way to help you give handsome variety to your homes. For vertical applications, in 4' x 8', 9', and 10' panels with deep "square" grooves 8" apart, to look like individual planks.

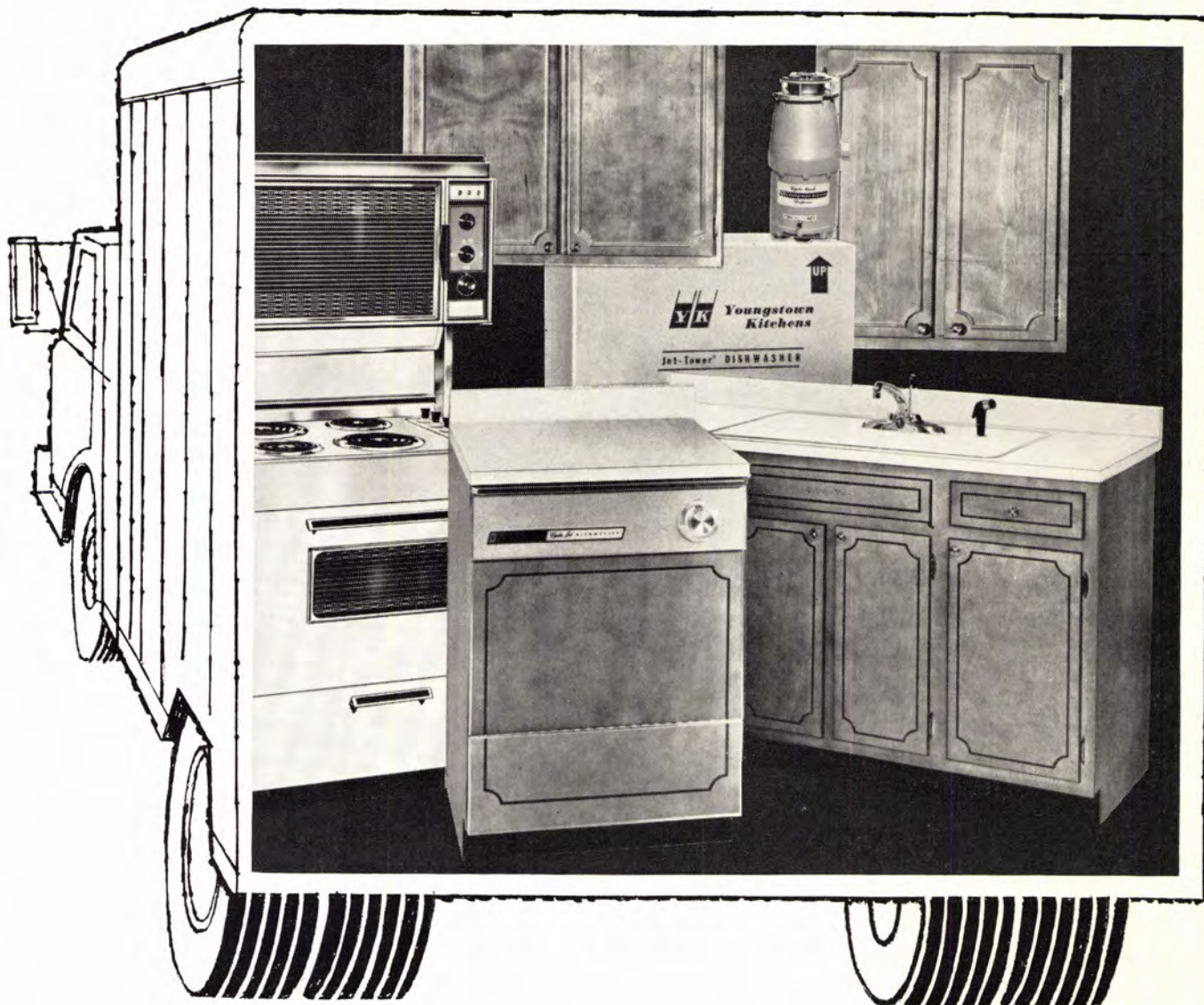
And for horizontal applications, in lap siding in 8', 12', and 16' lengths. You can install both Planktex sidings direct to studs. In redwood and fir, with swirled saw-cut faces, for economical stain finishing.

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Sidings

United States Plywood



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Every day, more dealers and builders are installing the *new* Youngstown Kitchens. Many never before realized the convenience of Youngstown's complete kitchen line. Provincial or contemporary cabinets, in deep toned cinnamon or honey maple hardwoods. Ovens and ranges. Dishwashers, with matching wood fronts,

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**HIP & RIDGE UNITS
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CLASSIC COLUMNS* of lifetime aluminum combine beauty with ease of installation making them ideal for many construction projects. These distinctive units are suitable for use with any architectural style — colonial, classical or contemporary. On most projects, the installation is a one-man job because aluminum is lighter and easier to manage. These rugged units are designed for interior or exterior use, will not rot or split and are load bearing (8-inch column tested to 34,200 pounds).

CLASSIC COLUMNS are available in diameters of 6-, 8-, 10-, 12-, and 15-inches and in lengths up to 24 feet. Constructed of extruded aluminum staves, the units are furnished knocked-down for convenience of storage. After cutting to length with hacksaw, columns are quickly assembled, ready to install. Decorative flange-type caps and bases of heavy cast aluminum slip over the column ends. Columns and caps are prime-coated, ready for painting. **CLASSIC COLUMNS** are distributed by leading wholesale Sash and Door distributors throughout the country.

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Approximate number of homes involved _____

We would like information on applicator help _____



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It represents the forest fire prevention campaign serving every American business that depends on wood or wood products — *your* business, very likely. It's been pretty successful, too. Since this campaign began in 1942, there have been over 272 thousand acres that did *not* burn, more than 1 million fires that did *not* happen, and 10.1 billion dollars worth of damage that did *not* occur. But Smokey's job will never end, and he needs your help. *You* can wear that hat, too, by urging your employes and the people in the communities in which you do business to be extra careful with fire — *every* fire.

remember—only you can prevent forest fires

Material for posting on your bulletin board available from your State Conservation Department or the nearest office of the U. S. Forest Service.

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Quality adds profit to any home

□ Why does Pacesetter ceramic tile add extra quality to any home and extra profit to the builder? The reason is simple. With Pacesetter ceramic tile you can offer the home buyer the highest quality ceramic tile on the market . . . at a price competitive with other brands. You can choose from a full range of colors in both bright and crystalline glazed wall tile, plus a full line of glazed and unglazed ceramic mosaics. And that's not all. Pacesetter is easy to handle, easy to cut, easy to install. There are other reasons, too. □ Home owners are pleased with the tile's clean, opaque colors — colors that never fade. They like the easy-to-clean surface and the lifetime durability. But best of all, they like the extra quality ceramic tile adds. □ Let's see now . . . competitively priced, easy to install, extremely attractive with any decor, a full range of patterns and colors, fast service on all orders, a job you'll be proud of at a profit you'll be pleased with. THAT'S why more and more builders are building profits with Pacesetter ceramic tile. Why don't you? There is a Gulf States Ceramic Tile distributor near you, talk to him soon.

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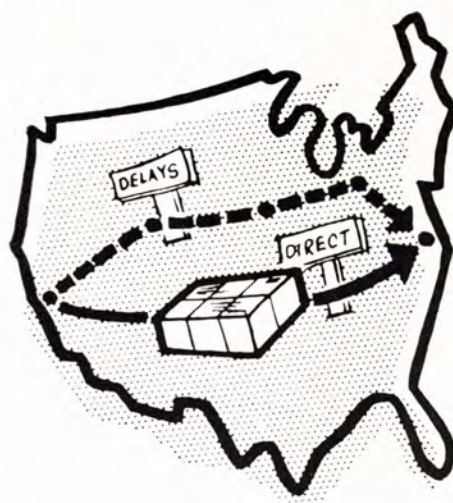
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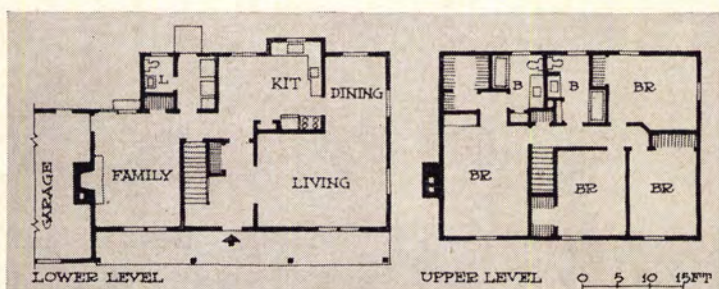
1. Packages are shipped by more direct route.
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ZIP Codes
keep postal costs
down but only if
you use them.





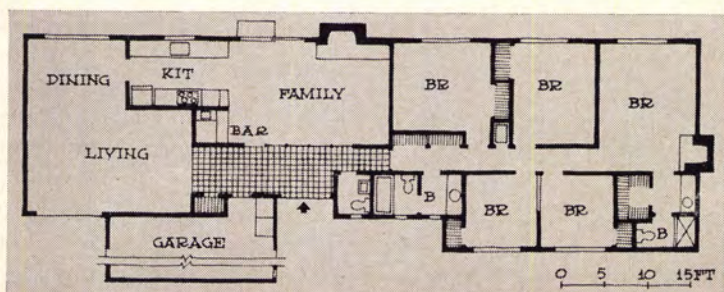
A modified colonial planned for family privacy on two levels



Upstairs the private master bedroom suite is separated and buffered from the three children's bedrooms by the stairwell, bathrooms and closets. Downstairs the family room is isolated, but still a part of the traffic pattern within the family living areas. The formal entertaining areas can be completely closed off from the rest of the house. Ray Dehmer designed this 2,160-sq.-ft. house in Brookfield, Wis., for Tomsinger Construction Co. Priced at \$29,200 on $\frac{1}{3}$ acre, it outsold each of two other lower-priced models in the project (82 out of 200 sales). Features include carpeting throughout the formal areas, stairway and upstairs hall as well as a marble-tiled entrance foyer.



A rustic California ranch designed to fit on a wide, shallow lot



The living area of this 80-ft. house is only 22 ft. deep because the rooms are placed parallel to the street. And because the front bedrooms and baths are less than 9 ft. deep, the over-all depth of the bedroom wing is only 25 ft. Result: even with a front two-car garage, more than 40 ft. of the 90-ft.-deep lot remain for rear outdoor living. At \$24,250 on a \$6,000 lot, this 1,900-sq.-ft. model outsells (92 sales of 360) four less expensive models in a Fremont, Calif., project by Brad-Rick Homes. Popular features: five bedrooms, 4-ft. overhangs, a family-room bar and a master-bedroom fireplace (\$400 extra), plus wood siding on all four elevations. Architects: Reitdorf & Wright.

Letters start on p. 68

Forget you're a builder.
Pretend you're a young
mother looking at
garden apartments
in July.



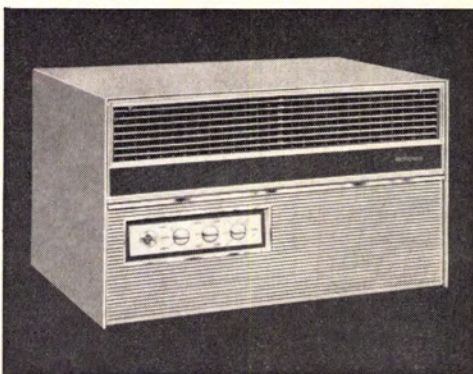
Young mothers
feel strongly about
a reliable cooling
system for their
family when it's hot.
And they like units
that blend with
room decor.

O.K.?

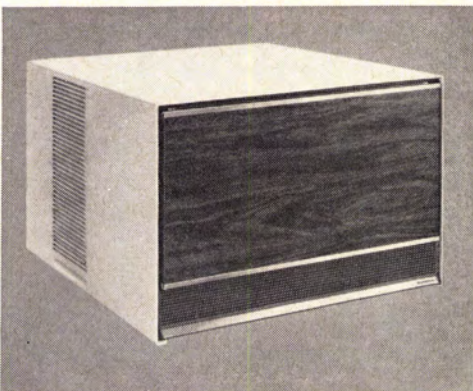
Now . . . who makes the kind of room air conditioner that garden apartment tenants want—with the versatile styling they like? Westinghouse—that's who. The brand name that means quality and reliability.

Not that the name alone is actually going to clinch a lease for you . . . but Westinghouse room air conditioners in your garden apartments go a long way in saying how much quality you put into your buildings.

Westinghouse Mobilair® line. Cooling capacities from 6,000 to 17,000 BTU/HR. Many models wired for universal 208/230-volt operation. Models for heating and cooling also available. Fit standard telescoping and building sleeves. Optional furniture fronts in Provincial, Early American, Traditional or Contemporary styling.



Westinghouse Super High Capacity units. Cooling capacities from 15,200 to 26,000 BTU/HR. Most models wired for universal 208/230-volt operation. Slide-out chassis. No separate sleeve needed. Furniture styling in reversible front panel that's cherry on one side, walnut on the other.



Leading builders like to do business with Westinghouse. To quote Charles Cheezem, prominent Florida home builder: "Since I build homes in different price ranges and in different communities, I find that Westinghouse equipment meets my every need."



Charles Cheezem,
Florida home builder,
St. Petersburg, Fla.

As Mr. Cheezem knows . . . and we hope you do soon . . . one call puts you in touch with a complete line of residential products. Appliances, heating and cooling equipment, lighting, wiring, elevators, laundry equipment, even Mica[®] decorative surfacing.

One call can also get you valuable help in merchandising and promoting your project. And specially tailored to your needs. (As we've said: One Man, One Plan, One Brand.)

Call your Residential Sales Manager at your Westinghouse Major Appliance Distributor. Get the new 1965 Residential catalogue. Or look it up in Sweet's Light Construction or Architectural Files.



You can be sure if it's Westinghouse

Even in July a young mother looks ahead to year-round air conditioning.

Give her the comfort she wants with Westinghouse conventional Split System cooling and heating. Westinghouse Split System cooling combined with a Westinghouse forced air furnace provides maximum flexibility. Condenser may be located outside the building or installed through the wall. Either way saves installation cost and gives easy accessibility for maintenance.

Westinghouse offers you forced air furnaces in gas, oil or electric. All provide quiet, convenient heating comfort with minimum maintenance.

So right now she wants cooling. But come cooler weather, she'll need clean, dependable heating, too.



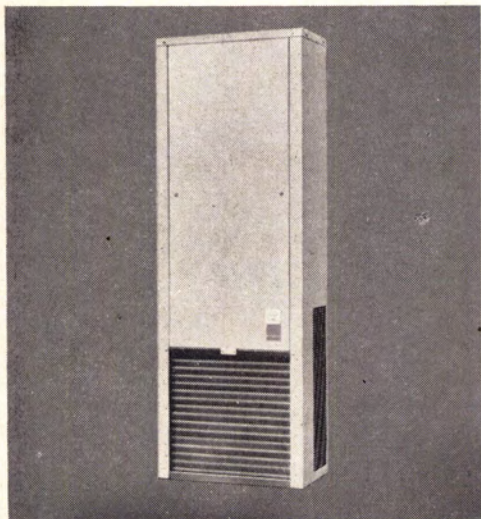
Model SLA Air Cooled Condensing Unit. Factory charged. Compact. Air inlet and outlet on same face. Matching Quick-Connect components . . . complete line of cooling coils plus fan coil units. 1½, 2, 2½ & 3 ton sizes.

Gas upflow furnace. Also available in counterflow, basement and horizontal models. BTUH ratings to suit every requirement.

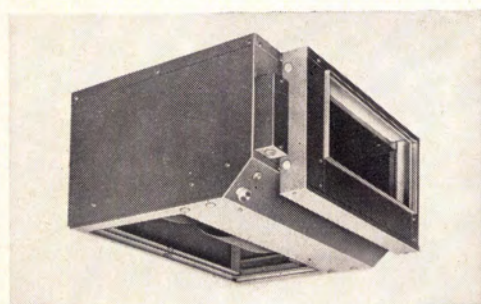
Give her the comfort she wants with Westinghouse Total Electric cooling and heating. Full range of systems. WhispAir® heat pumps offer lowest installed cost for packaged heating and cooling. Today's Westinghouse packaged and Split System heat pumps will meet any installation requirement.

Westinghouse electric forced air furnaces come in ratings from 34,000 to 119,000 BTUH. Pair them with conventional cooling components for Total Electric central air conditioning.

Westinghouse Fan/Coil units also are available with supplementary heating to give you Total Electric heating and cooling. And every Westinghouse Total Electric system offers maximum reliability, economy and ease of installation, with minimum maintenance.



Model HB WhispAir heat pump. Mounts outside on the wall for easy installation. Requires no floor space, only minimum duct work. Complete package prewired, ready to go. Other models for indoor or thru-the-wall installation.



Model AF Fan/Coil. Compact, easily installed in 26" closet. Accessory electric heater or hot water coils optional. Used with SL condenser.

Give her Total Comfort by adding a Precipitron® and humidifier. Precipitron air cleaner removes dirt, pollen and other irritants from the air electronically. Housewives love it for the house-cleaning benefits alone. Humidifier maintains relative humidity at comfort level even in dry winter weather.



Model VB Precipitron installs easily in any position in return-air duct.



Model HR 2B power humidifier available for application on horizontal or vertical ducts.

Whichever Westinghouse air conditioning system you choose, you'll be adding to the rental attraction and investment value of your garden apartments. Get full details from your nearest Westinghouse Air Conditioning Distributor. Or write "Residential Air Conditioning," Westinghouse Air Conditioning Division, Staunton, Va.



You can be sure if it's Westinghouse



**What do you do with
Ceramic Tile
bearing this mark...**

Announcing A "Certified For Ceramic

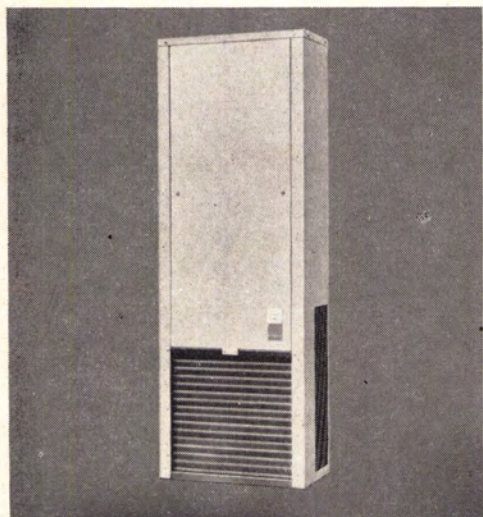
Quality construction requires quality materials. And the Tile Council of America knows it. That's why we've developed the "Certified Quality" program. It means this: you can now select ceramic tile with *complete* assurance of quality. Tile to tile. Carton to carton.

Here's how it works. Tile produced by participating companies now undergoes inspections by an independent laboratory. The quality standards such tile must meet are the highest ever set for the industry. These standards are published by the government in SPR R61-61 and in Federal Speci-

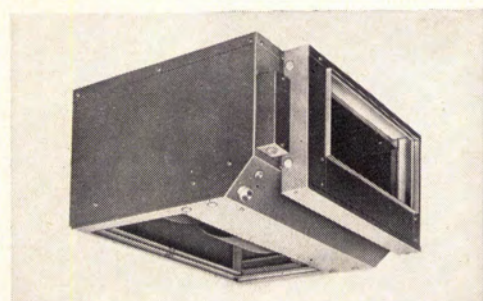
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You can be sure if it's Westinghouse



Wood ceiling covers this home with charm. Beams, siding and stairs of wood work wonderfully and willingly with glass. Wood has a way of handling its many assignments beautifully. Residence by Ragnar C. Qvale, A.I.A.

Build well to sell well... with **WOOD**

You can cut building time and cost without cutting quality, when you build with wood . . . to offer homebuyers the many features they look for most.



Here's privacy without rudeness. Siding and roof blend perfectly with the walkway's railing and posts. It's a breezeway with a breeze. Carport is on the right of the walk. Roger Lee Associates are the architects.

One of your strongest selling points is your reputation. Every quality house you build helps build a better name for you. That's one of the many reasons why you can depend on wood to keep your reputation good.

With wood, you can build good and fast. Wood is readily available and easily workable. Wood has a versatility about it that lets you use it attractively all through your houses . . . putting in the quality features that help you sell faster. *Looked-for* features . . . like wood siding, paneling, flooring, beams, and built-ins.

Quality wood homes, as seen in NLMA's color, national magazine advertising, can now be built in less time and at less cost than ever . . . with UNICOM, the new system of modular construction by which components are precut and preassembled to save labor at the site . . . for any style home.

For more information on UNICOM and how you can build well to sell well . . . with **WOOD**, write:

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

nlma

It's built to sell when it's built of **wood**



Note the important part played by louvered doors in enhancing the beauty of this home's beamed ceiling and wood floors . . . a striking combination. The wood cabinets and shelves work together as a charming room-divider.



Stairs no longer have to be a plain or dull place in today's lively living. A little imagination and a little wood have made this staircase a show place. Its wide-open spaces combine with proper lighting for style and for safety.



**What do you do with
Ceramic Tile
bearing this mark...**

Announcing A "Certified For Ceramic

Quality construction requires quality materials. And the Tile Council of America knows it. That's why we've developed the "Certified Quality" program. It means this: you can now select ceramic tile with *complete* assurance of quality. Tile to tile. Carton to carton.

Here's how it works. Tile produced by participating companies now undergoes inspections by an independent laboratory. The quality standards such tile must meet are the highest ever set for the industry. These standards are published by the government in SPR R61-61 and in Federal Speci-



Select it!

Quality" Program Tile

fications SS-T-308b. You can be confident that, without exception, Certified Tile will now meet these standards.

So why take chances? Be sure to select "...tile that is Quality Certified by the Tile Council of America." We put our reputation on it. You can too.



Lone Star Ceramics Co. • Ludowici-Celadon Company • Mid-State Tile Company • Monarch Manufacturing, Inc. • Mosaic Tile Company • Oxford Tile Company • Pacific Tile Company • Pomona Tile Manufacturing Co. • Redondo Tile Company • Ridgeway Tile Company • Sparta Ceramic Company • Stylon Corporation • Summitville Tiles, Inc. • Texeramics Inc. • United States Ceramic Tile Co. • Wenzel Tile Company • Winburn Tile Manufacturing Co.

APRIL 1965

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CHEVROLET **workpower**



Chevrolet 3/4-ton Fleetside pickup



Chevrolet 1/2-ton panel delivery

GIVES COIL-SPRING SMOOTHNESS AT ALL FOUR WHEELS



Here's the smoothest of truck rides . . . work-proved in more than 1½ million Chevrolet trucks.

THESE CHEVIES ARE THE ONLY 1/2- AND 3/4-TON TRUCKS ON THE MARKET WITH COIL SPRINGS FRONT AND REAR, PLUS INDEPENDENT FRONT SUSPENSION

Independent coil-spring suspension up front . . . coil springs in the rear . . . that's the combination that has earned Chevrolet its reputation as the best riding truck in the business. Carefully balanced front and rear suspension designs reduce pitch and sway, soak up the jolts from the roughest roads.

Front suspension, with upper and lower control arms at each wheel, allows individual wheel action . . . lets each wheel "walk" over bumps independently. Just as important, wheel geometry minimizes tire scuffing, gives steering a nice feel of balanced control without fight or shake.

Rear suspension has two-stage coil springs which

give proper spring action whether the truck is empty or loaded. Twin control beams anchored to the frame keep rear axle aligned but don't interfere with easy spring action.

When you own a Chevy truck, you have the most advanced concepts in truck suspensions working for you. And Chevy suspensions are backed up by years of design and manufacturing experience . . . plus millions of miles of owner use in all types of tough truck jobs. See your Chevrolet dealer for an on-the-road demonstration of Chevy ride and handling . . . they're like none other! . . . Chevrolet Division of General Motors, Detroit, Michigan.

THE LONG STRONG LINE



**Which is the
best way to
heat and cool**

an Apartment

MOTEL

CLINIC

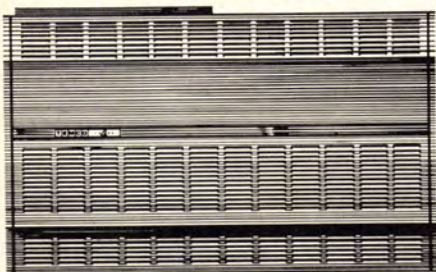
OFFICE

Restaurant

ANY ADD-ON ROOM

?

**THE MODERN
ANSWER:**



**TEMCO 4-SEASONS
ZONED
WEATHER CONDITIONER!**

Whatever your zoned heating and cooling problem . . . you'll solve it quickly, easily and economically with the new Temco 4-Seasons Weather Conditioner. The first major advance in heating and cooling in 25 years! 4-Seasons is a thru-the-wall gas furnace and an electric air conditioner in one fully automatic unit. Uses outside air only for combustion — exhausts outside. Instant comfort in any season! Just press the desired selector button to switch from heat to cool . . . cool to heat. You'll please any client with Temco 4-Seasons . . . the way it cuts investment, installation and operating costs. See Sweet's Light Construction Catalog File, section 10 B/TE for information on complete line of Temco Sealed Combustion Units, including the 4-Seasons . . . or mail this coupon today.

TEMCO[®], inc.

Dept. HH4, P. O. Box 1184, Nashville, Tennessee

Please send me the complete facts on 4-Seasons.

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LETTERS

Windows and thermal design . . . minority markets

Electric heating

H&H: The "house design" section of your electric heating issue [Feb.] is prefaced with the statement that while "new equipment design is important to electric heat's success, house design is even more important." We agree, but certainly not for the reasons cited.

In terms of window treatment, there is a surprising lack of information. Even more surprising is the failure to cover the "new" developments in this field.

For example: triple glazing, insulating glass plus storm sash, available today in stock wood units, is not discussed. This concept is especially applicable to electric heating—many utilities in low-temperature areas recommend it. Weatherstripping which is, of course, a must in the electrically heated house is not covered. And there are new developments in weatherstripping—factory application and new materials and techniques have reduced air infiltration to the desired minimum.

The article left the impression that limiting the size of window area was the only reasonable way to reduce heat loss in electrically heated homes. A great many of the utility companies throughout the country, including the Detroit-Edison, Niagara-Mohawk, and all five of the American Electric Power Corporations (together these five represent the second largest utility network in the country) specify that the sash and frame material shall not conduct more heat or cold than the glass itself. None of these suggest limiting the size of the window area, and I'm surprised to see H&H making such an inference.

ROBERT H. HERBST, general manager
Ponderosa Pine Woodwork
Chicago

H&H was not attempting to present a comprehensive report on thermal design and construction techniques in the February article on the all-electric house. The purpose was to show how the all-electric house is being merchandised and sold by utilities and other electric interests, and how the homebuilder is taking advantage of this effort. In the discussion of electric heat, the point about improved insulation techniques is that they are being used to bring down operating costs. The examples presented were chosen at random to illustrate the point and not to catalog all the possible techniques. There are indeed many advanced ways to achieve a high degree of insulation in houses today, and H&H does not include among these the elimination of windows.—ED.

No merger

H&H: In describing Project Viru, [NEWS, Feb.] a one-thousand unit housing project being built in Lima, Peru, by Development Corporation International you affiliated DCI with Development Corporation of Puerto Rico and said it would soon merge into Rexach Construction Co.

At no time was a merger between DCI and Rexach proposed. A joint venture was and still is contemplated by the two companies.

DEBORAH R. COTTON
Cotton & Bass Public Relations
New York City

Minority housing

H&H: Your analysis of the minority market [Feb.] was one of the most accurate "position papers" that could have possibly been assembled at this time.

As a reporting job without slant or bias, it is truly outstanding. You have not gone a bit deeper than one could go as to what is behind the growth of this market and what can be expected of it. On the other hand, you have brought to light facts and data, concisely assembled.

I say this not as an editorial encomium, but in appreciation of the very delicately handled reporting job and in admiration of your staff's ability to organize this particularly testy subject.

JOHN H. TOLAN JR.
Barrett Homes Inc.
Richmond, Calif.

Appraisals

H&H: I was particularly impressed with the article, "Appraisal abuses bring warnings from industry leaders," [NEWS, Feb.].

The Society of Governmental Appraisers would like to reprint the text of the article in our Society Newsletter.

ALBERTA A. SPANGLER, president
Society of Governmental Appraisers
Chico, Calif.

No violation

H&H: In your story "Bias attack on renewal" [NEWS, Feb.] you stated that a renewal program in Santa Fe Springs, Calif., had been temporarily stopped because 99% of the families forced to move were of Mexican descent, and that "the judges said this violated the 1964 Civil Rights Act." The statement is inaccurate.

At no time did the judge make any ruling in the case with respect to the Civil Rights Act. A temporary restraining order was issued so that the court could hear the matter, but the restraining order has since been dissolved.

While the plaintiffs did attempt to utilize the Civil Rights Act as the basis for their action, this point was never reached or ruled upon by the Court. The Judge, Edward J. Guirado, ruled that the action was premature because California state law prohibits any legal attack upon a proposed urban renewal plan until the adoption of the plan. In the Santa Fe Springs case, the plan has not yet been adopted.

MASSEY HERRERA JR., executive director
Redevelopment Agency of Santa Fe Springs
Santa Fe Springs, Calif.

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Floors: Bruce Laminated Oak Blocks with dark finish. Walls: BrucePly Paneling in Premium Colonial Cherry.

Distinctive designs in hardwoods...with *TUF-LUSTRE* prefinish

Bruce Blocks give any room warm, natural beauty and smart contemporary design. In laminated or solid oak, this parquetry flooring is laid in mastic over concrete, wood or sound-rated insulation board. Other prefinished Bruce Oak Floors are: Ranch Plank with pegs, Fireside Plank in dark finish, and always popular Strip. Tuf-Lustre prefinish used on millions of feet of Bruce Floors now beautifies and protects BrucePly walls, too. You have a choice of 41 paneling woods and finishes, color-styled by one of the nation's top designers. For complete data, write E. L. Bruce Co., P. O. Box 397-B, Memphis 1, Tenn.—world's largest in hardwood floors.

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Walls



Leader in prefinished hardwoods

BRUCE FLOOR CARE PRODUCTS • BRUCE-TERMINIX



Investment Opportunity

You have an investment in this boy. To protect this investment, you can join with other leading American businessmen in promoting the Treasury Department's Payroll Savings Plan for U. S. Savings Bonds. The Treasury's Plan works to build responsibility and diligence in citizens of all ages. It fosters the self-reliance and the concern for individual freedom, so necessary in the functioning of our democratic society.

Some day this self-reliance and freedom will take shape in the skills and knowledge needed for technological and industrial advances, for breakthroughs in science, for innovations along the production line

that will insure America's place in the world community and provide products for a competitive international market.

When you bring the Payroll Savings Plan into your plant—*when you encourage your employees to enroll*—you are lending a helping hand to every child striving to achieve his true potential. You are investing in the future power of America. In freedom itself.

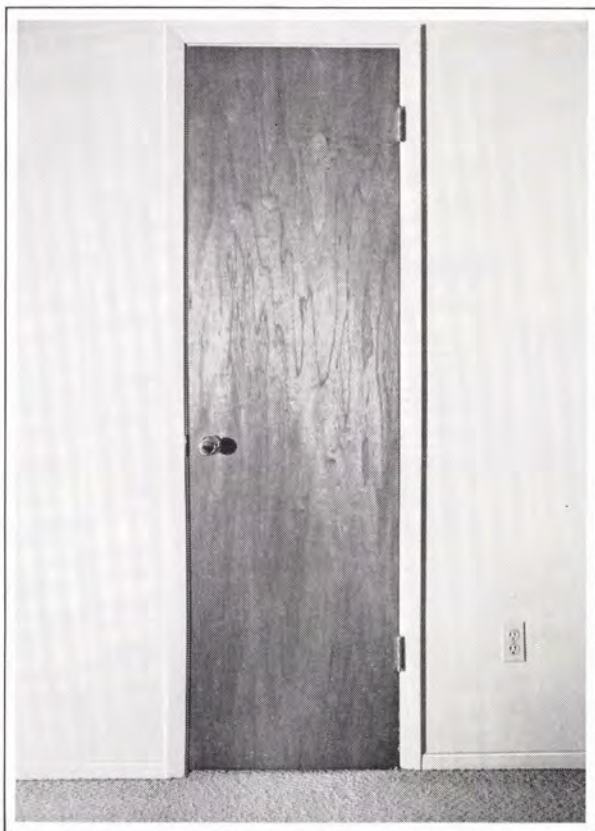
Don't pass this investment opportunity by. Call your State Savings Bonds Director. Or write today to the Treasury Department, United States Savings Bonds Division, Washington, D. C., 20226.



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**This is a closet door.
It opens and closes.
That's all.**



**This is a Float-Away
bifold door. It opens the eyes
of discriminating prospects
and helps close contracts.
And that isn't all.**

Don't neglect closets. Put in too few, make them small, let them look commonplace, and you cool a lot of hot prospects without realizing it. But include plenty of large closets emphasized by the beauty and convenience of Float-Away bifold doors and you'll turn more lookers into takers. There are models to match every decor.

Got some biting opinions about bifold doors? Check these five Float-Away benefits. If they change your ideas, get together with all the features of Float-Away doors soon.

- ☐ Rust-proof. Only Float-Away doors are made with zinc electroplated and bonderized steel.
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- ☐ Many find the off-white prime coat a pleasing finish coat.
- ☐ And every model has a 5-year guarantee.

Free! Special High Rise Kit to help you with the loading, labeling, distributing and odd-size opening problems of high rise apartments. Write for it.

NEW! A budget door that meets all specifications of competitive doors, available in most models with a 1-year guarantee.

Write or phone for full information:

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1173 Zonolite Road, N.E., Atlanta 6, Georgia
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Valuable builder information on **Kemper** kitchen cabinets and bathroom vanities

Now Kemper offers three completely different wood kitchen cabinet styles in a choice of walnut, fruitwood and cherry finishes. ∞ In addition, a new line of bathroom vanities and lavanettes are available from Kemper in Corinthian, Provincial and Traditional styling in walnut, fruitwood and white and gold finishes. ∞ This fine variety of popular styles and finishes makes it possible for you to benefit from one money and time saving source of supply. The growing number of builders who now use Kemper wood cabinets exclusively find they benefit from competitive prices, the finest cabinet finish available anywhere, strong, quality construction, dependable delivery and Kemper's exclusive furniture quality guarantee. ∞ Write for our free full color catalogs describing the complete line of Kemper Kitchen

cabinets and bathroom vanities. In the meantime visit your nearby Kemper Distributor . . . He's listed in the Yellow Pages under Kitchen Cabinets.



Kemper Kitchens are featured at the Better Living Center, New York World's Fair!

Kemper

KEMPER BROTHERS INCORPORATED • RICHMOND, INDIANA

*Pictured at left
Kemper's V grooved Colony Kitchen in authentic cherry*



IN EVERY DIMENSION...

designed for better living with *SPA Southern Pine



Architects: Hayes, Howell & Associates, A.I.A., Southern Pines, North Carolina

This home speaks a gracious welcome . . . with sweeping elegance of design and the natural warmth of wood.



Construction utilizes the great strength of pre-shrunk SPA Southern Pine for simplicity and spacious living. Board-and-batten siding is stained to allow the natural beauty of the grain to delight the eye.



The patio plan provides each room within a pleasant view of a private courtyard. The resilient wood floor assures walking comfort.

SEE YOUR LUMBER DEALER



For the raised sun deck, pressure-treated Southern Pine provides lasting protection against all conditions of constant exposure.



**Trade-Marked and officially Grade-Marked*

FROM MEMBER MILLS OF THE
Southern Pine Association
P. O. BOX 52468, NEW ORLEANS, LA. 70150



Buying decisions for F&S Construction Company are in the hands of seven men.

House & Home calls on all of them...every month.

These are the seven men who make the decisions on building materials used in F & S Construction Company's building projects. F & S has built over 18,000 houses since WW II. They've built shopping centers, utility systems, community buildings. Recently they completed a big new condominium apartment on Chicago's North Side.

Jack Hoffman, Chairman...Bob Rosner, Executive VP... Bob Haag, VP and Controller...Bill Griffin, VP and Chief Engineer...Lowell Siff, VP for Marketing...Mort Silfin, VP Sales...Len Birnbaum, VP Advertising and Promotion. They're in the housing business—and they buy building materials and equipment from manufacturers whose business

is selling people like them. Like most other people in the business of housing, the executive team of F & S Construction Company uses HOUSE & HOME to be informed about what's going on in housing—markets, money, management, and, naturally, manufactured products.

In the case of F & S Construction, having HOUSE & HOME on your schedule is the same as making seven sales calls on this Chicago firm every month. Serving the total housing market, HOUSE & HOME makes more of these calls than any other industry publication.



HOUSE & HOME—A McGraw-Hill/Dodge Publication.

Builders don't kill the goose that laid the

We've often felt that the building business was unnecessarily risky. Now we know why.

Although most builders don't realize it, about 75% of the profit they actually generate goes into other people's pockets.

Take the case of a typical successful builder, George Martin of Louisville. In the last 16 years Martin has sold 2,200 housing units valued at \$32 million. Their value to the community may be considered equivalent to an investment of \$100 million. (See box at right.) Yet if Martin stopped building now, he would have to disband his organization—perhaps even liquidate his company.

Why? Because he hasn't shared in the continuing business—and profits—generated by his housing. His 2,200 housing units provide an annual cash flow of about \$4½ million for these businesses in which Martin could—and should—have an interest:

	Cash flow from 2,200 occupied housing units	Annual profit	Present value for sale or borrowing
Mortgage servicing	\$ 75,000	\$ 7,500	\$ 150,000
Insurance	264,000	26,400	264,000
Maintenance	576,000	57,600	115,200
Services	1,795,000	89,750	448,750
Furnishings	681,120	68,112	68,112
Realty	1,100,000	13,750	55,000
TOTAL	\$4,491,120	\$263,112	\$1,101,062

If Martin had set up his company to handle just one-fifth of that \$4½ million-plus cash flow, he would net this year \$52,622 and have a business worth \$220,212—all without building a single house.

Put another way, if he had set about homebuilding in the way an automobile dealer sets about selling cars, he would have more than tripled his income. Like the auto dealer, he would have kept part of each buyer's financing costs, gotten repeat maintenance business, profited from resales of trade-ins and pocketed part of the insurance premiums.

Specifically, here is how Martin might have shared in the continuing profits generated by his houses:

- *Mortgage servicing.* He would not have for-

feited his rights to a share of the servicing profits from mortgages. And those profits would continue monthly for an average of 12 to 15 years and perhaps for 30 or 35 years.

Instead he would have insisted on, say, a ⅛% servicing participation. Or he would have started his own mortgage servicing company or joined with other builders to service loans jointly. So today he could count on from ⅛% to ½% of the income from an estimated \$15 million in outstanding mortgages on his houses—or from \$18,750 to \$75,000 a year.

Mortgage servicing is the one area of continuing profits that some builders, and former builders, have moved into since World War II.

- *Insurance.* Martin would have retained some of the fire and homeowners' insurance premiums, which probably average \$120 a year on his 2,200 housing units. That's an annual total of \$264,000. And net profit from such insurance is about 10%—or \$26,400 a year.

- *Maintenance.* Martin would have tapped at least part of the maintenance business on his houses. His homebuyers probably spend 1.8% of their house prices on annual maintenance—or a yearly total of \$576,000, which is more than most homebuilders gross. He figures this volume is netting 10%—or a \$57,600 annual profit for other businesses.

At present only co-op and condominium builders are sharing in the maintenance dollar.

- *Services.* Martin would have shared in the service income from his houses. His average buyer pays \$816 a year for these services: electric, gas or fuel-oil energy, \$540; water, sewage and waste collection, \$60 each; telephone, \$96.

So collectively the services used by Martin's 2,200 homes generate an annual income of \$1,795,000—all of which, with one exception, goes to private and public utilities. Even if these utilities net only 5%—and some net up to 7%—their yearly profit comes to \$89,750. The one exception: sewage disposal. To build more houses, Martin was forced into building a sewage plant. Now that it's finished, it gives him a yearly net profit of \$45,000 after maintenance and operating costs and debt service on \$680,000 in bonds.

golden eggs — they give her away

How could Martin share in other service income? In one way or another, many electric and gas utilities will provide a builder with allowances and participations equivalent to as much as \$300 to \$400 a house, if he offers all-electric or all-gas homes. Normally the builder pockets these allowances because he needs cash now. But he could ask the utility to put the money in a trust fund

for him. Such a fund, made up of payments on Martin's 2,200 homes, would have given him a nest egg of \$660,000 to \$880,000. At 4% interest—the prevailing rate—his annual yield would be \$26,400 to \$35,200.

• *Furnishings.* Martin figures his average buyer spends \$1,104 a year for drapes, carpets, furniture, appliances, television, sound systems and other amenities. He might set up a corporation to lease all or some of these items (a practice accepted in some apartments). On a \$3,000 furnish-package, homeowners would pay about 4.3% a month (allowing a two-year depreciation) for two years. That could bring a maximum annual cash flow of \$3,405,600 from the 2,200 homes for a two-year period. Assuming a ten-year life for the furniture package, average yearly cash flow would be \$681,120, with a profit of \$68,112. On the other hand, the same company might sell furniture outright from its vantage point in model houses for about the same profit.

• *Realty.* There has been a 100% turnover in Martin's housing in the last 16 years. If he had handled half of the re-sales, his average yearly realty volume could be \$1,100,000, his profit \$13,750.

Clearly, Martin cannot capitalize on all six of these profit opportunities. But if he tapped only a fifth of their potential, his \$52,622 annual earnings would support the overhead of a \$1 million business. Says Martin, "This can keep you in business during a downturn. As it is, if you have a bad year you may have to liquidate your business. This fact gives builders the name of opportunists, but most builders are opportunists because they are forced to be. For instance, a builder who sells 50 houses and makes \$50,000 quickly is liquid. But if he buys land, and spends time and money planning ahead, he is not liquid."

If Martin could capitalize on the income he actually generates, his \$1-million business, even during a housing downturn, would make him a major factor in his business community.

And he would have escaped the continuing cycle that makes homebuilding the only business that liquidates itself automatically.

—RICHARD W. O'NEILL

How much is an occupied house worth to the community?

The value of an occupied house to the business community at large may be considered to be equivalent to an investment of as much as 3½ times its sale price. As this table shows, a \$20,000 house is worth—in generated new business—an investment of almost \$70,000. Basis for the table: a single-family house with a market value of \$20,000; capitalized values selected at a 5% rate for 40 years.

	Annual Value	Capitalized Value of Income
Use of Shelter		
Interest	\$1,200	\$20,580
Taxes	480	8,232
Insurance	120	2,058
Maintenance	360	6,174
Sub-Total	2,160	37,044
Use of Services		
Energy	540	9,261
Water	60	1,029
Sewage	60	1,029
Telephone	96	1,646
Waste Collection	60	1,029
Sub-Total	816	13,994
Comfort and Aesthetic Benefits		
Home Furnishings	600	10,290
Appliances	240	4,116
Sound Systems and Color TV	264	4,527
Sub-Total	1,104	18,933
GRAND TOTAL ...	\$4,080	\$69,972



APARTMENTS TOWNHOUSES

Fresh ideas for today's demanding multi-family market

Make no mistake—it is a demanding market. Well-designed, well-planned projects like the one at left are doing fine; less-than-good projects are running into trouble in all but the most underbuilt areas.

No one questions the strength of the apartment and townhouse market. Last year 571,000 units were built—more than double 1960's output, and 38% of the total housing market. Many experts predict that this strong basic demand, buoyed by a record 3.7 million 18-year olds who will get married this year, will push that figure to 50% by 1968. The national rental vacancy rate is now about 7.7%, no higher than in 1960, even though more than two million new units have come on the market; and the bulk of these vacancies are in pre-war, below-standard units.

But new apartments and townhouses have entered a stage of intense competition. Last year, for the first time since 1960, the market dropped. It was a small decrease—about 2%—but, significantly, it occurred at the same time that builders and developers all over the country were reporting choosier tenants and buyers.

On the following 24 pages you will find examples of fresh ways in which townhouse and apartment developers are meeting this tougher market. These ways include:

Specialized marketing, whereby apartment builders identify—and build for—specific types of tenants.

Packaged projects, whereby an apartment builder taps the market of private investors who wish to build and own multi-family property for income purposes.

Finally—and most importantly—you'll see apartment and townhouse projects whose success is due to the essentials of the market: good design and good land and environmental planning.

To see the first of these projects, turn the page.

TOWNHOUSE APARTMENTS in Annandale, Va., were built by Carl Freeman Assoc. Details on p. 92.

continued



T-SHAPED COURT is heavily landscaped. Air conditioners are mounted under deep soffits.

Martin Linsey

Good landscaping and elegant interiors brought this project full occupancy

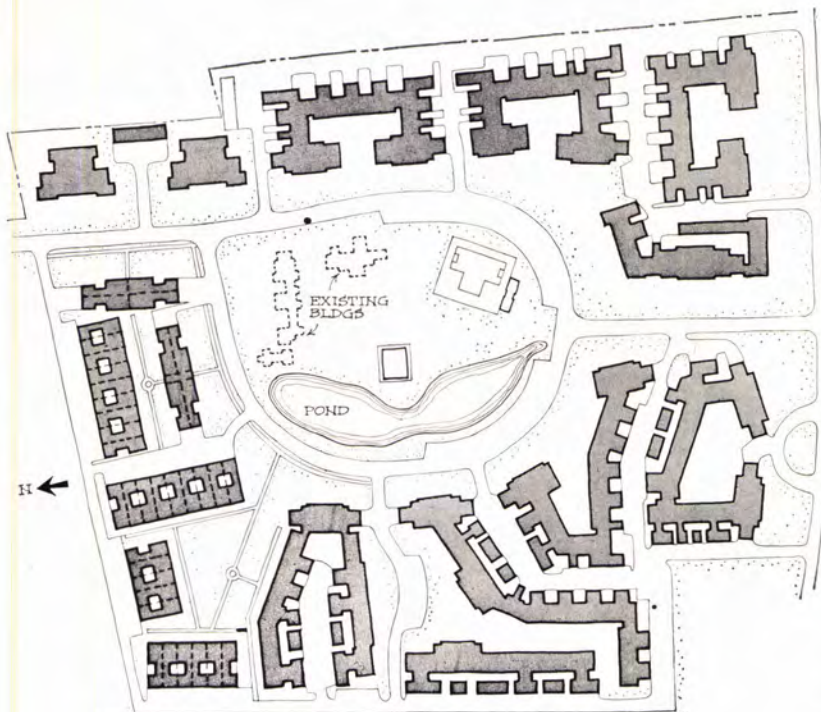
And the project was an immediate success despite two obstacles:

1. It is in an area—Mentor, Ohio—that has an 8% vacancy rate.
2. Nine out of ten tenants were drawn from nearby Cleveland, which is itself a competitive apartment area.

Furthermore, the only advertising was by word of mouth. It proved so effective that the last section of the 263-unit project, scheduled for occupancy by the end of this year, has been leased since February.

Land planning played a big part in this success story. All big trees were retained, and 21 more were transplanted to line the entrance drive. Large amounts of shrubs, flowers and ground cover were planted. And nine of the 50 acres were left as a park with a swimming pool (in which children are given free swimming lessons).

Inside, builder Blaine Lawson offers features like wall-to-wall carpeting, fireplaces, and built-in bookshelves. Air conditioning, by 16,000-Btu. window units, is



SITE PLAN groups buildings around a nine-acre center park with a community swimming pool.



CURVED STAIRCASE is used in two-story apartments. Floor of entry below is flagstone.

Photos: Martin Linsey



ENTRANCE SIDE of building at left has high columned porch. Careful siting saved big trees.

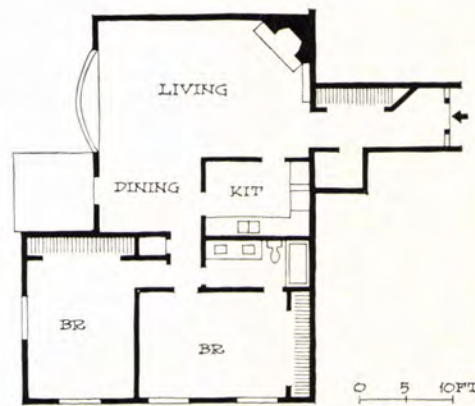


ONE-STORY UNITS on corner of building have patios or balconies hidden from each other.

—plus a waiting list

ducted to serve entire apartments. Some apartments have playrooms, and all have either one- or two-car heated garages.

The buildings—designed by Architect Nick Ramon—include one-story units with one or two bedrooms and two-story, townhouse-type units with two or three bedrooms. (The latter have proved so popular that the last section will be all two-story apartments.) Rents range from \$120 to \$194 and average about \$172. Average unit cost was \$15,500.



FLOOR PLANS show townhouse unit, left, and one-floor unit. Townhouses are most popular.

continued



TWO-LEVEL HOUSES are staggered to increase privacy and break up straight-line facades.

Photos: Julius Shulman

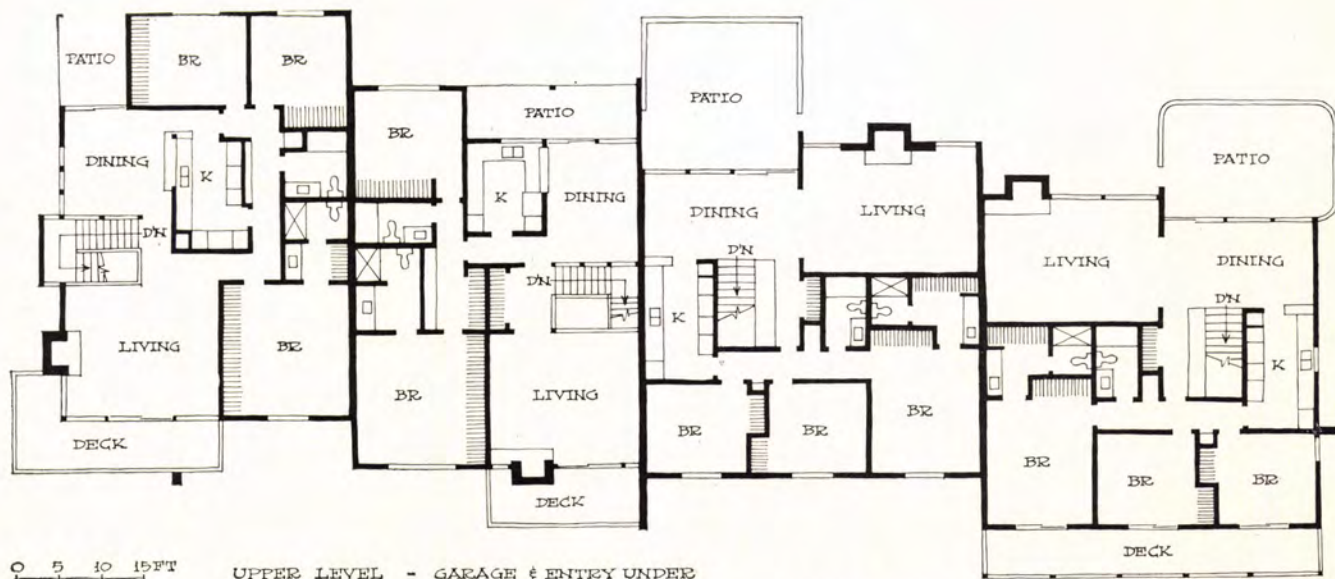
Greenbelt planning gives this waterfront condominium both

The belts are distributed throughout the project rather than grouped in a few large areas. Those in the inland area of the project are cut down as swales (*top drawing, right*), and those on gently sloping land near seaside bluffs are terraced down. Result: noise from the green areas is less disturbing to the houses, visual privacy is increased, and houses three or four rows away from the bluffs have a clear view of the ocean.

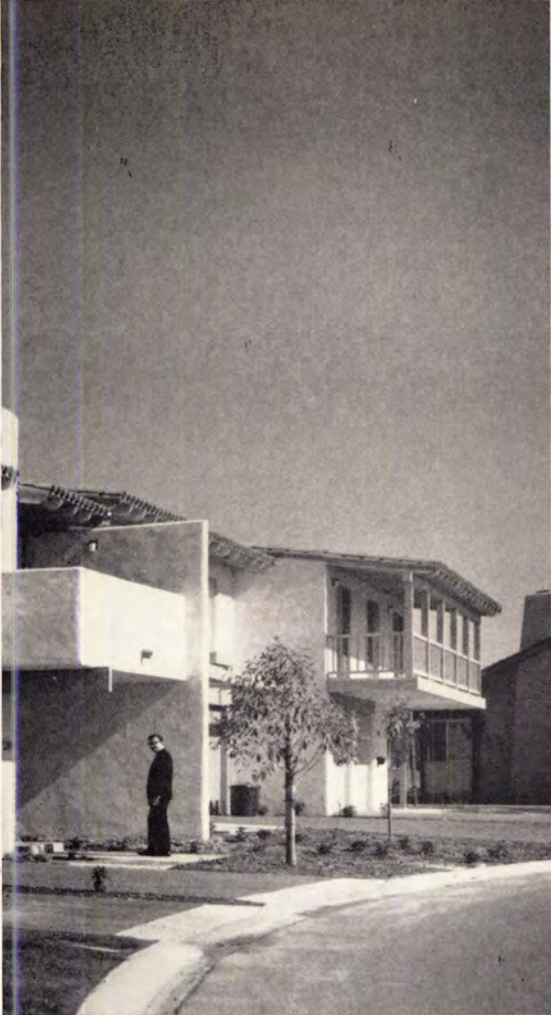
The project is being built on a 345-acre

portion of the Irvine Ranch of Newport Beach, Calif. The first half, now under construction, will include 1,220 units: 750 one-family homes, built in three- or four-house blocks, and the rest in five high-rise buildings. The land is not sold outright with the one-family houses, but is leased for 75 years.

The project opened in June, and within two months the first 198 single-family houses were sold out. They include one-story units and two-story hillside units,



FLOOR PLANS show upper levels of houses pictured above. Garages and rec rooms are below.



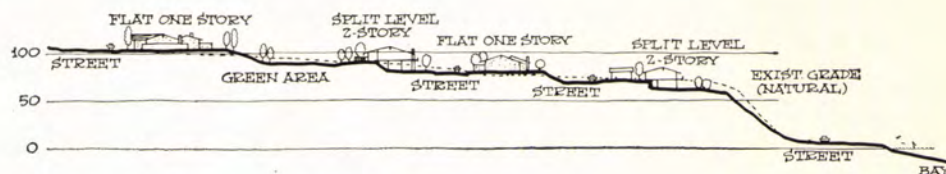
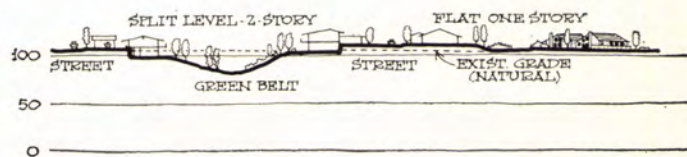
SCALE MODEL of first section shows relation of project to bluffs and bay, in foreground.

openness and privacy

each with two or three bedrooms and two-car garages.

Nine different plans are offered, including uphill models with lower-level garages facing the street (*photo, above*) and downhill models with lower-level terraces fronting on greenbelts (*photo, below*). Prices range from \$22,000 to \$40,000 and average about \$26,500.

Builder: George Holstein Jr. Architect: Richard Leigh. Landscape Architect: Horace E. Reynolds.



GRADING SCHEME drops greenbelts below house grades (*top*), provides view of bay (*bottom*).



FENCED PATIOS are built on uphill side of two-story houses. One-story units are in background.



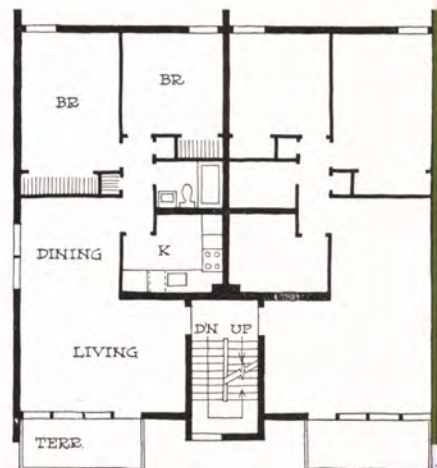
GREENBELT runs between rows of houses. This one includes a pitch-and-putt golf course.

continued

Shrader Studios



FRONT ELEVATION shows step-down design. Fin walls and setbacks add to balcony privacy.



2-BEDROOM UNIT

TWO-BEDROOM UNITS are planned so each pair shares one entry landing. Note plumbing layout.



3-BEDROOM UNIT

THREE-BEDROOM UNIT shares entry with apartments at left, has additional entry at right.

D. Datz

Hillside apartments that live like townhouses

The nine apartments in this Pittsburgh building are one-floor units, but they incorporate many characteristics of the single-family townhouse. Items:

1. The building has three main entrances instead of one. None of them serves more than four apartments, and the entrance to the three-level section (*bottom drawing, right*) serves only three.

2. Separate garages serve only the apartments immediately above them (*photo, right*). Three garages are shared by two

apartments, the other is shared by three.

3. Each apartment has an individual heating and cooling system. (And the systems include electrostatic air filters.)

Six of the apartments are two-bedroom, one-bath units; they rent for \$225 (or \$250 for corner units). The other three have three bedrooms and two baths and rent for \$350.

Builder: Paul Kossman Development Co. Architect: Paul Kossman. Cost (including land): \$245,000.



REAR ELEVATION shows separate garages. Three-story units are in projecting section at left.



Photos: James Paddock

TERRACES for ground-level apartments are next to entrances. Swales relieve the flat terrain.

A three-story project with second-floor patios

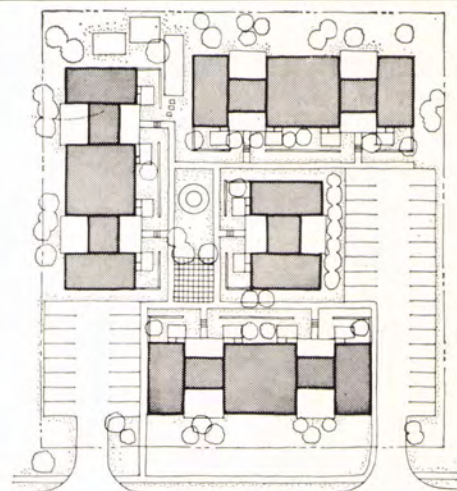
The patios are on decks that connect each pair of buildings (*photo, below*). There are two patios per deck, and they serve the two-story apartments on the second and third levels of the three-story buildings. Open beamed roofs form sunshields over the patios.

Below each deck are two areas. In the rear is an enclosed section housing the third bedrooms of the flanking first-floor apartments. In the front is an entry court which serves both the lower-level apart-

ments and, via a stairway to the patio deck, the upper-level apartments, which have second-floor entrances.

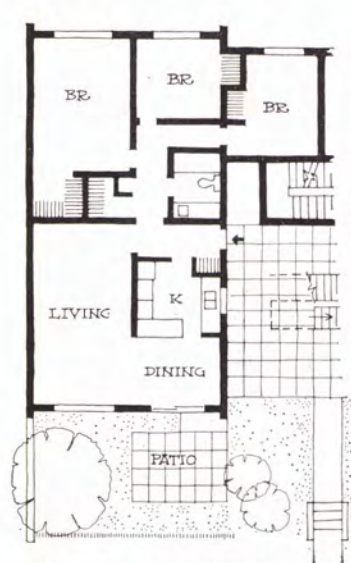
The project's 42 units are in four building groups (*plan, right*). Lower-level apartments have three bedrooms, rent for \$195. Two 2-story apartments are above each lower-level unit; they have two bedrooms and rent for \$162.

Builder: David E. Smith Ltd. Architect: John W. Long. Location: Calgary, Alberta, Canada.



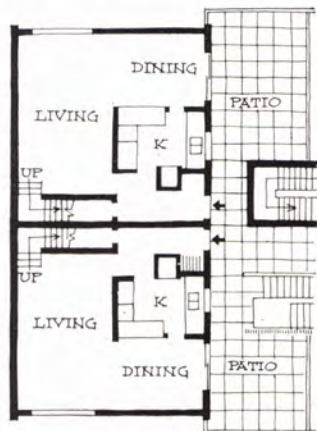
SITE PLAN

SITE PLAN shows patio bridges between pairs of buildings. Parking is kept at sides of site.

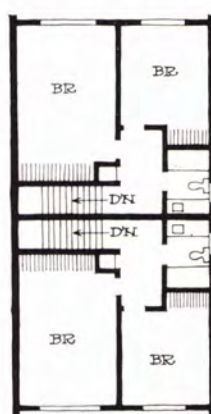


ONE STORY APARTMENT

GROUND-LEVEL UNIT (*left*) has three bedrooms; two-story units (*right*) have two bedrooms.



FIRST LEVEL



SECOND LEVEL

TWO-STORY APARTMENT

0 5 10 15 20 FT

SECOND-FLOOR PATIO has low wood front fence. Wall, right, separates adjacent patio.





HOUSE-LIKE APPEARANCE is evident in view from street. Porch in center leads to front doors.

This small apartment building looks like a split-level house. . .

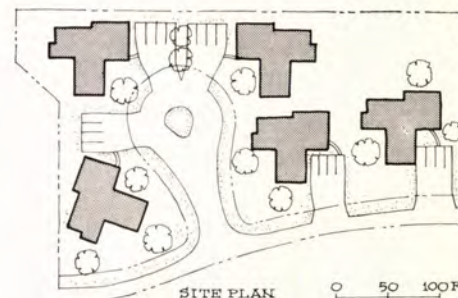
And although it appears little larger than a single-family house, it nevertheless contains 4 two-bedroom apartments—each with more than 950 sq. ft. of well-planned living area.

The building, in Columbus, Ohio, was planned as an offset T (drawing, below) with 2 one-story wings and one two-story wing. This layout provides unusual privacy for such a small building: there is a minimum amount of common wall between units, and no windows in any unit look

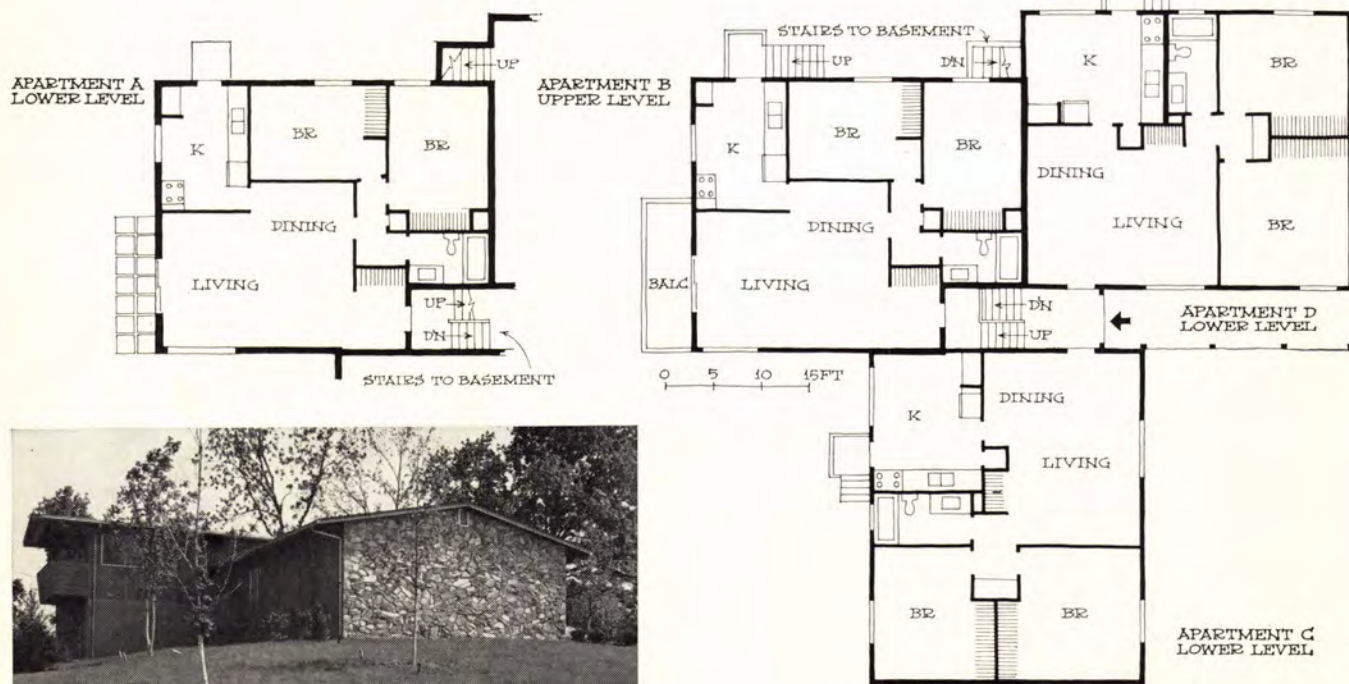
into an adjacent unit. A single front entry serves all four apartments, but each unit has its own back door. And the upper-level apartment has a balcony that opens off the living room (photo, below).

Five identical buildings—four of them grouped around a cul-de-sac—are on the two-acre site (plan, right). Each apartment rents for \$150.

Builder: Green Terrace Development Co. Architects: Donald J. Mussawir, Ed Walker and Dale Stewart.



SITE PLAN shows how 5 four-unit buildings and parking areas are grouped on two acres.



TWO-STORY WING is on downhill side of building. Balcony is off bedroom of upstairs unit.

FLOOR PLAN shows one-floor wings, bottom and right, and two-floor wing, left and far left.



FLOOR-TO-CEILING WINDOWS open one-bedroom apartment to view of surrounding woods.

Photos: Louis Reens

... and this smaller one looks like a custom contemporary

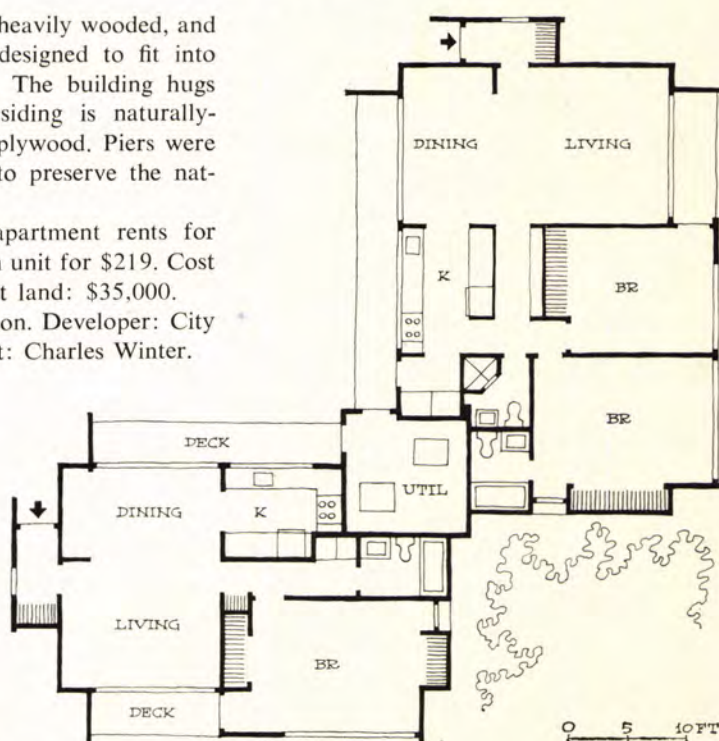
For all practical purposes, tenants living in this two-apartment building are living in houses. The only link between the two units is a common utility room that houses the individual furnaces and hot water heaters.

This two-unit building, together with another identical building close by, is the prototype of a 60-apartment project planned for Sterling Forest, a 20,000-acre industrial-research and residential community in Tuxedo, N.Y. As the pictures show,

the land is rolling and heavily wooded, and the apartments were designed to fit into this rural atmosphere. The building hugs the ground, and its siding is naturally-finished Texture 1-11 plywood. Piers were used for foundations to preserve the natural grade of the site.

The one-bedroom apartment rents for \$179, the two-bedroom unit for \$219. Cost of the building without land: \$35,000.

Builder: James Gibson. Developer: City Investing Co. Architect: Charles Winter.



L-SHAPED PLAN puts two apartments on opposite sides of utility room, gives privacy to both.

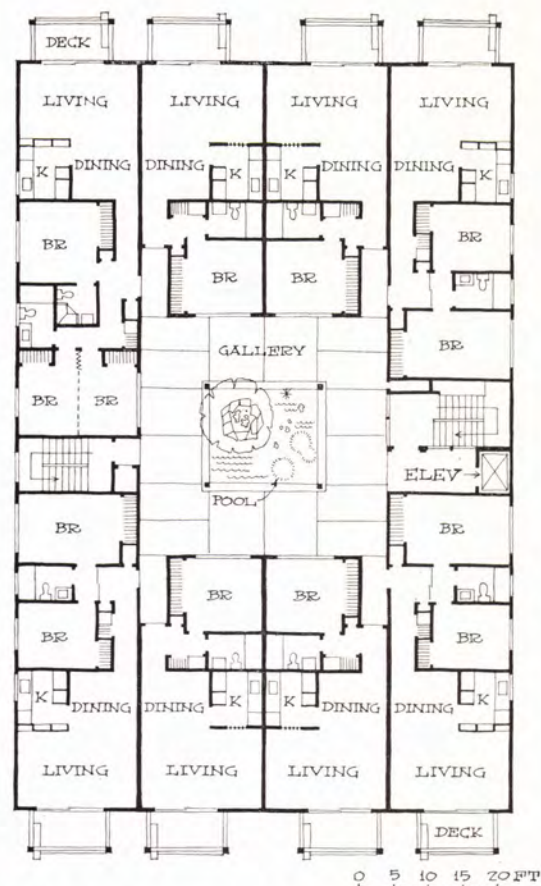
FRONT ENTRY of one-bedroom unit is in projection at left. Living room deck is at right.

continued



Photos: Roger Sturtevant

PRIVATE BALCONIES are supported by cantilevered slab which forms first floor of building.



FLOOR PLAN shows how eight apartments on each floor radiate from the central entry court.



ENTRY COURT with decorative pool is rimmed by covered balconies, has open roof above.

An urban apartment with an inside court entry . . .

The court (*left*) and the covered balconies overlooking it serve as inexpensive corridors in the 24-unit building. The open roof above the court brings light to rear rooms of the apartments. And a pool in the center of the court makes an attractive entry feature. Two stairways and an elevator give access to the upper levels.

Each floor of the building includes 4 one-bedroom units, 2 two-bedroom units and 2 three-bedroom units which rent for \$135 to \$185. The first floor, including the

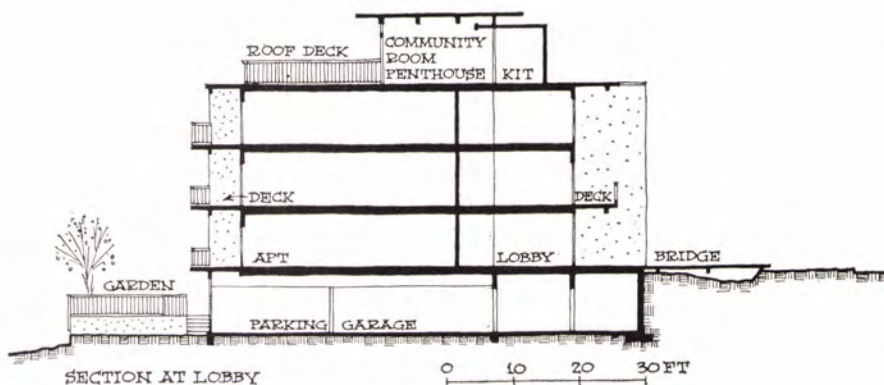
court, is raised above street grade to make room for basement garages. Wood balconies (*above*) at the front and rear of the building provide outdoor living space for every unit.

The apartments are in Berkeley, Calif., on a 12,000-sq.-ft. site that cost \$60,000. Construction costs were \$240,000. So the average per-unit cost, including land and improvements, was \$12,500.

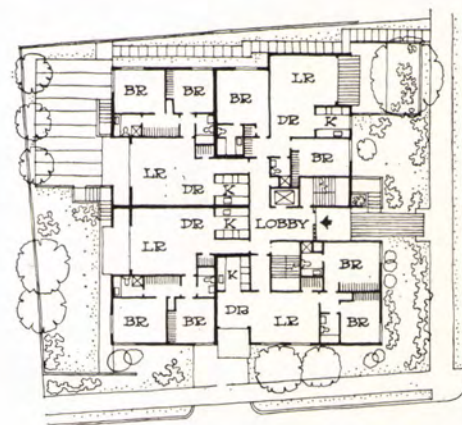
Builder: Conrad Ambrose. Architect: Roger Lee Assoc.



INSET BALCONIES provide extra outdoor privacy. Wood fence, foreground, is in front of garages.



SECTION DRAWING shows penthouse, three apartment levels and garage set into hillside.



TYPICAL FLOOR PLAN groups four apartments around small, efficient lobby. Other levels are identical.

... and one with a penthouse community area

The penthouse was designed to appeal to the apartments' particular type of tenants—upper-income couples with no children. It includes a large activities room, a kitchen and a sun deck; accommodates up to 75 people for private parties or community activities, and is available to tenants without charge.

Every apartment has two bedrooms, two baths and about 1,100 sq. ft. of living area. Rentals vary from \$200 to \$235, depending on a unit's location in the build-

ing. Cost, including land, was \$134,000—or \$19,500 per unit.

Planned for a sloping site, the building has five levels. The middle three hold the apartments; the top, as noted, includes the penthouse; and the lower level, which opens to grade on the downhill side, houses a 15-car garage, plus laundry and storage areas.

Like the building on the opposite page, this was built in Berkeley by Conrad Ambrose, designed by Roger Lee Assoc.



PENTHOUSE has a large community room, right, opening to sun deck through sliding glass doors.

continued



STYLE VARIATIONS include wood or brick siding, second-floor overhangs, varied window design.

Photos: Stan Begams Bel-Air Photographers

A condominium townhouse project built with traditional styling . . .

Because there are 25 different exterior designs for the 89-house project, entire blocks, like the one above, can be built with no design repetition. Plans include two or three bedrooms; they vary in size from 1,300 sq. ft. to 1,700 sq. ft. and in price from \$16,000 to \$24,000.

These are the first condominium town-

houses ever built in Houston, Tex., and sales—55 through January—are well ahead of construction. Interestingly, almost two thirds of the buyers are former apartment dwellers. And they apparently prefer the quiet life; one of the project's restrictions is no children under 16.

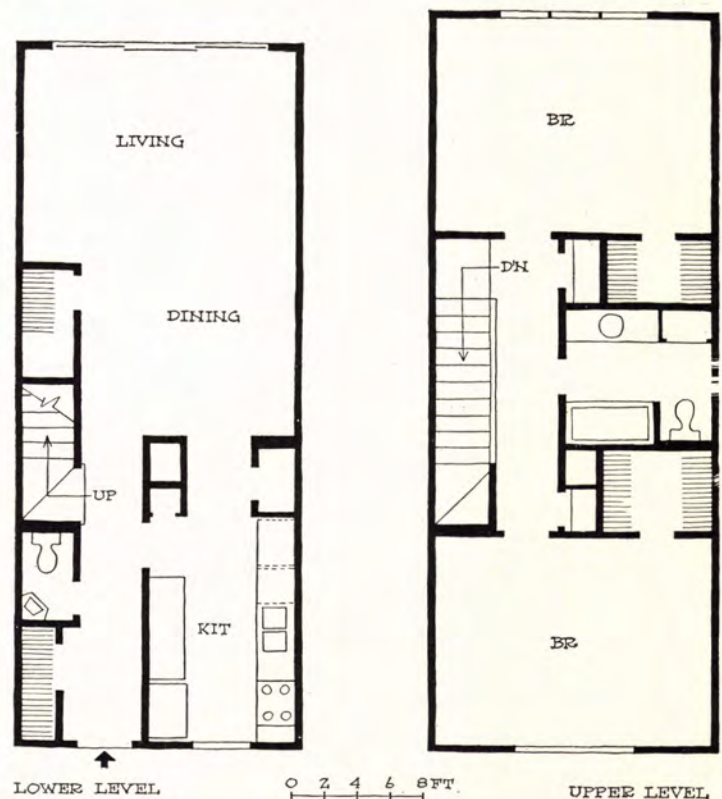
Features include a fully - equipped

kitchen, air conditioning and individual locked garages. Attic storage space is accessible via pull-down stairs. Community facilities include a garden area with a swimming pool.

Builder: J. L. Phillips. Architect: Langwith, Wilson & King. Total cost: \$1,820,000.



SIMPLE FACADE in colonial style contrasts with textured appearance of the two flanking houses.



TWO-BEDROOM PLAN has 1,350 sq. ft. of area. Well-equipped kitchen includes a washer-dryer.



FOUR-HOUSE BUILDING has a one-story unit, at far left behind tree, and four 2-story units.

Photos: Fred Farish

... and a planned-unit project of Spanish design

These townhouses represent an artful mixture of authentic materials and contemporary living. The red tile roof, with its deep overhang, forms sheltered second-floor balconies and also helps mask the modern sliding glass doors. Carved wood paneling makes the garage doors a strong feature of the design, so they can be in the most convenient location—right next to the street—without spoiling the facade. The buildings are finished in white stucco, and in the center of each four-house building is an arch,

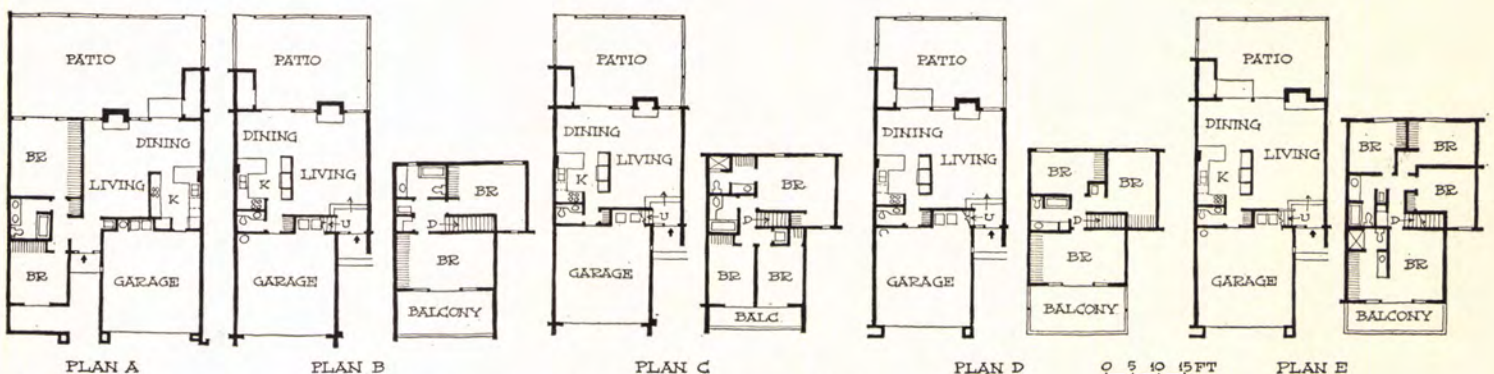
reminiscent of old Spanish missions, which leads into a two-house entry court.

The project will have 580 townhouses with two to four bedrooms that will range in price from \$19,000 to \$23,350. They are sited in clusters, with three 4-house buildings like the one above sited around square cul-de-sacs.

Builders: Transamerica Development Corp. and Town & Country Homes. Architect: Robert E. Jones. Location: Capistrano, Calif.



TYPICAL LIVING ROOM has arched brick fireplace that echoes outside entrance arch.



FIVE FLOOR PLANS in project include one single-story house, left, and five 2-story models.

Plan A sells for \$19,700; plan B, \$19,600; plan C, \$22,200; plan D, \$20,150; plan E, \$23,350.

Fred Farish



PUTTING GREEN is surrounded by lake. Houses fronting on golf course cost an extra \$5,000.

A recreation-oriented condominium project

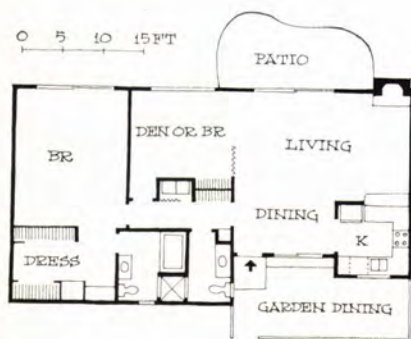
With 267 units occupied or under construction, this 80-acre, 600-unit project already had a 10,000-sq.-ft. clubhouse and community-building complex, a putting green and a nine-hole, par-three golf course that winds through the middle of the site (*plan, right, and cover photo*). And an olympic-sized swimming pool will soon be finished.

The project was designed specifically for adults. Single residents, or at least one spouse in a family, must be at least 35

years old, and no children under 18 may be permanent residents.

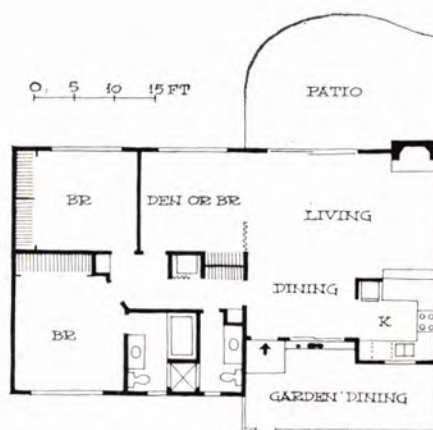
Eight floor plans, up to 1,215 sq. ft. in size, are offered. The smallest unit has one bedroom and a convertible den; the largest has two bedrooms, two baths and a convertible den. Prices range from \$19,495 to \$28,500, and a premium of \$5,000 is charged for golf-course sites.

Builders: Ray A. Watt and Richard H. Meine. Designer: Phil Blair. Location: Torrance, Calif.

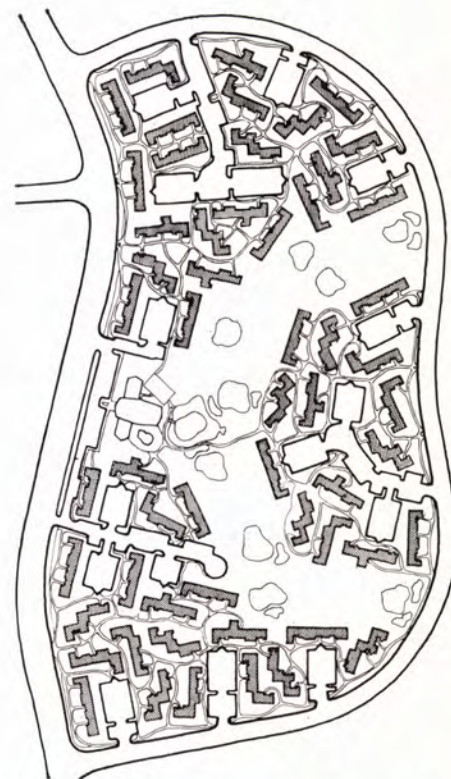


TWO-BEDROOM UNIT

FLOOR PLANS include two or three bedrooms, may be in either one- or two-story buildings.



THREE-BEDROOM UNIT



LAND PLAN is designed around golf course. Recreation center is T-shaped building at far left.



DAYLIGHT BASEMENTS on downhill side open to terraces. Balconies are off dining rooms.

J. Alexander Studio

Townhouse apartments designed for a rolling site

They look like three-story apartments but are actually two-story units, built on a slope, with their basements opening on grade. So in addition to living space on the first and second floors, there is an 11' x 16' basement room that can be used for recreation or as a fourth bedroom (*plan, below*). The basement holds a bath, utility room and also storage area.

The buildings are part of a project in Annandale, Va., which will eventually have 3,000 rental units—including 200

townhouse apartments. Just over 100 townhouse apartments have been built to date, and they have always been fully occupied. Rentals vary from \$195 for two-bedroom, 1½-bath units without basements (built on level ground) to \$270 for three- or four-bedroom, 2½-bath units like those shown above. Costs (not including land or land development) were from \$13,500 to \$15,000 per unit.

Builder: Carl Freeman Assoc. Architect: Robert J. Schwinn.

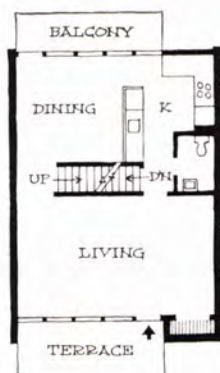


SITE PLAN groups townhouse apartments in straight rows for maximum use of sloping land.



GROUND LEVEL

FOUR-BEDROOM UNIT



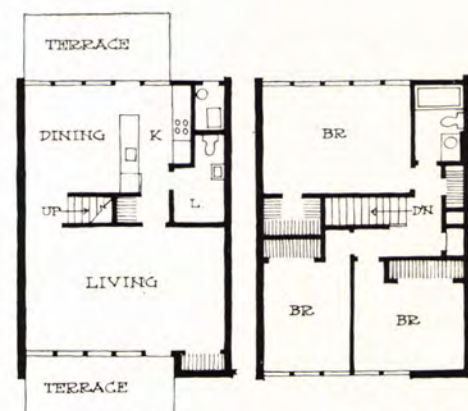
FIRST LEVEL



SECOND LEVEL

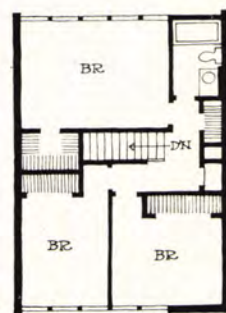
0 5 10 15 FT

FOUR-BEDROOM UNIT (above) has 1,450 sq. ft., three-bedroom unit (right) has 1,170 sq. ft.



LOWER LEVEL

THREE-BEDROOM UNIT



UPPER LEVEL

0 5 10 FT

APARTMENTS TOWNHOUSES



SWINGERS



SOPHISTICATES



NEWLY MARRIED

Segmented demand: Is today's apartment

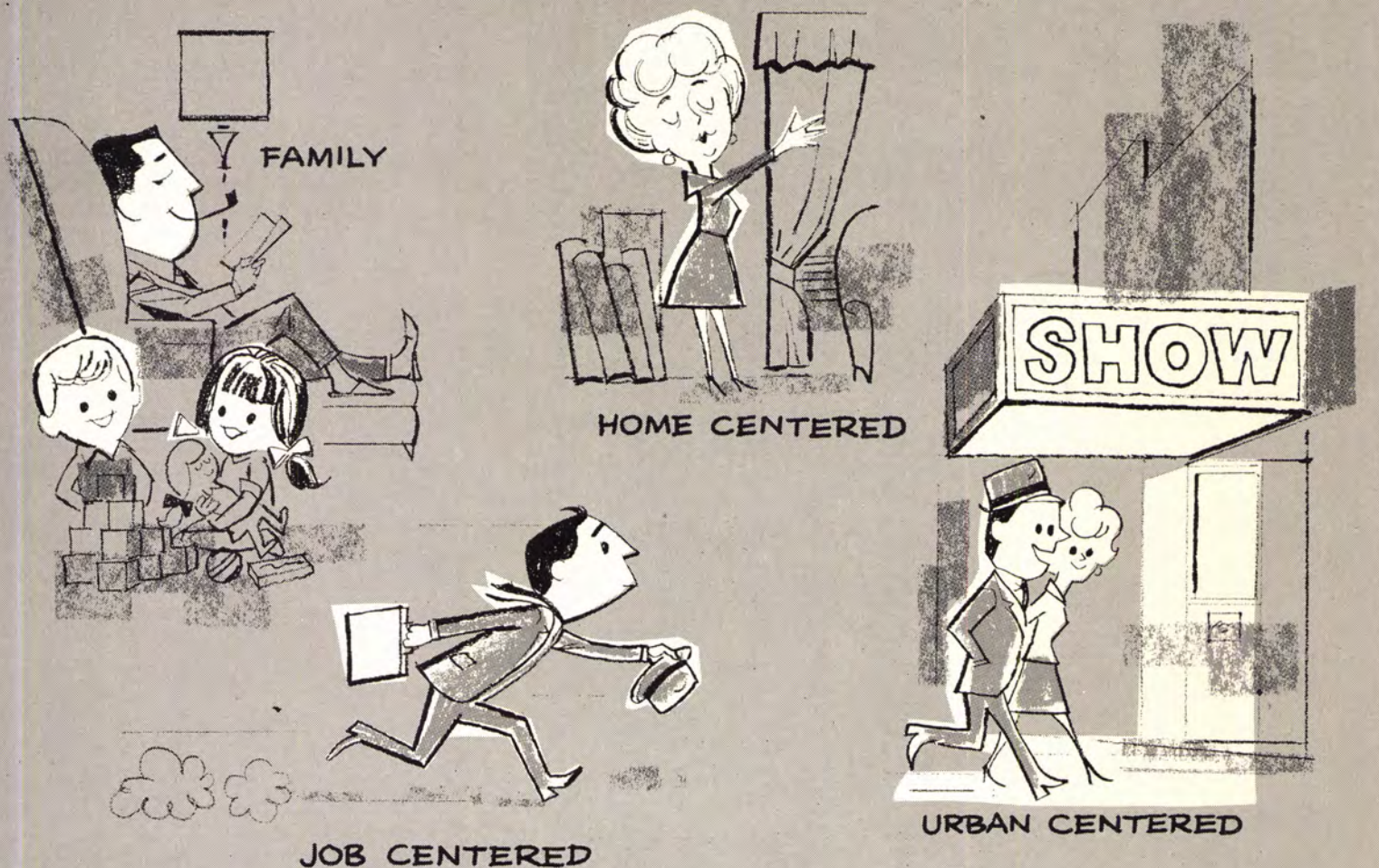
Smart Dallas builders think it is. They have found that in a market that is crowded with new apartments, there are still neglected pockets. Reason: the apartment market actually breaks down into distinct groups of rental prospects who, in turn, form their own specialized markets. And unless builders aim their projects at these specialized markets—instead of trying to appeal to everyone—they may well be courting failure.

Segmented demand exists in every apartment market although it still is latent in underbuilt markets. One of the best places to study segmentation is a pie-shaped 45-square-mile wedge known as North Dallas. Here, between 1960 and 1963, more than 10,000 apartments were built. And in 1964 builders opened more than 4,000 additional units and had another 800 under construction at year end. So, on the face of it, North Dallas looks like a harshly competitive market. But, in fact, North Dallas builders are not all competing for the same

apartment market. Instead they are avoiding over-all competition by building for seven different markets made up of these seven different renter types:

The young swingers. Born in the baby boom of the forties, these young people are making their first impact on the housing market. Dallas builders describe them as unmarried, active, fun-loving and party-going. They are a particularly strong market in Dallas because of the many airline stewardesses and nurses who are based there. And the market will probably get even stronger because the city's high-school enrollment is skyrocketing: Dallas schools will graduate twice as many pupils in 1967 as in 1962—12,000 versus 6,000.

The young sophisticates. Dallas builders characterize these rental prospects by comparing them to the swingers. Generally, they are older, more mature, less in need of boisterous companionship. Their higher level of income and education, combined



Curt Burgwall

market divided into these seven renter types?

with their greater desire for comfort and individuality, set them off sharply from the swingers.

Until recently, builders tended to lump sophisticates and swingers together. But in an oversupplied market, sophisticates will snub projects that retain a "swinging" atmosphere, regardless of how builders try to appeal to them.

The newly married. The growing market of young couples without children is part of the widespread increase in young renters in the North Dallas market. But the newly married tenants differ from swingers and sophisticates in one important respect: their focus is on their future home rather than their present apartment. They view their apartment as a transition to family life, not (as swingers do) a place to meet people.

Though newly married couples may have lived in "swinging" apartments before marriage, marriage has built a barrier between them and their old friends. As one former

swinger told her apartment manager: "It's never quite the same after you're married. You just can't go on living in the same apartment anymore."

The newly married live in apartments because they are not prepared financially for a single-family home. But economy is not a pressing concern to them, mainly because many young wives work.

The families. Very recently Dallas builders have discovered a strong demand for apartments among families with young children. As the suburban housing market pushes farther away from the city core, these families are staying longer and longer in apartments and, when a second or third child arrives, even moving to larger apartments instead of buying houses. Some builders who have built only limited numbers of three-bedroom apartments in their projects find with regret that they have tapped a market that is larger than they can handle. These units often fill up before smaller apartments.











The urban oriented. These are generally former homeowners who have willingly cut their ties with suburban life and look forward to a new life in apartments close to city attractions.

The home oriented. These tenants no longer need their single-family homes, but, in contrast, they turn to apartments hoping to retain some aspects of suburban life.

The job oriented. Such renters live in apartments to be nearer their jobs. This group may include single adults who do not have the interest of the sophisticates, or widows and divorcees who take jobs and move to apartments to save money.

These groups are the major demand segments in Dallas. By and large, they reflect social patterns that have emerged throughout the U.S., and as a result they exist—potentially—in every market. But identifying them is only the first step; the next step is to find the features that each group looks for in an apartment project. *To see what Dallas builders found, turn the page.*

continued

DISTINCTIVE DESIGN	ECONOMY	COMMON FACILITIES	PRIVACY
 SOPHISTICATES URBAN CENTERED 	 SWINGERS FAMILY   JOB CENTERED	 	  NEWLY MARRIED  HOME CENTERED

What the segmented market wants: here are the combinations

The table above lists the eight features important to the over-all Dallas rental market. If a feature is especially important to one of the seven market segments, the symbol of that segment appears in the appropriate column. Specifically:

Swingers want economically priced units, a package of community facilities, such as pools, meeting rooms and barbecue pits, that can be shared by active, gregarious tenants, and a downtown location convenient to jobs. There are other less marked trends too. One builder, for example, notes greater insistence on apartments with built-in bars and more colorful interiors. But the features in the table are the ones that will establish their project as "swinging apartments."

Sophisticates look for good architecture and privacy (apartments that open directly to large interior courts are shunned). They want variety in interior design—their apartment should not be identical with the one next door—and they want materials

that will blend with their own furnishings. (Swingers, on the other hand, are satisfied with furniture provided by the builder, as long as it is not dowdy or shabby.)

Finally, sophisticates judge an apartment by the kind of management it has. They are drawn to leasing agents and managers who share their own desire for privacy and good taste. Swingers, in contrast, look for permissive management.

Both the swingers and the sophisticates prefer not to mix with older groups. But they will accept some mixing—even with families—providing the builder takes certain precautions. First, the project must be large. Second, sections for single tenants and for families should be clearly defined and separate, and it is especially important that each segment have its own recreation area. Third, each section should have architectural individuality, perhaps even totally different styles.

Newly marrieds' wants can best be defined by comparing them to the wants of

CLOSE - IN LOCATION



ROOM SIZE



INTERIOR VARIETY



STRONG MANAGEMENT



Curt Burgwall

of features that rate highest with each of seven rental groups in Dallas

other segments. Unlike swingers, young married couples do not look for large pools and interior courtyards. Instead they want secluded patios opening off their own apartments. Like the sophisticates, they prefer management that emphasizes privacy and quiet, but unlike the sophisticates, they are not insistent on individual design and room variety in their apartments.

Families look at apartments chiefly in terms of children. Play areas are very important, which means that apartment builders who do not have parks, playgrounds and nurseries in their neighborhood may have to build them into their projects. The family segment is interested in economy too, because it is always comparing apartments to the alternative of a single-family home. This does not mean that apartment builders must keep rents very low for family tenants. Rather it means they must always make apparent the economies inherent in apartment living (no real estate taxes, no large commuta-

tion bills, no yard maintenance). Also, families are always comparing the living space in their apartments with the space offered in private homes. So room size is especially important to them.

Job-centered tenants are the most flexible of all the demand segments, and, as a result, the hardest to define. Job-centered tenants will vary from market to market, depending on the type of work—heavy industry, military, etc.—which dominates the market. If there is no one dominant industry, job-centered tenants will fit in with some of the other segments because, as a group, they have no clearly expressed tastes in design or facilities. They do, however, prefer a project with firm management. Most of them must live in relatively inexpensive apartments. And, of course, job-centered tenants prefer apartments that are convenient to their jobs.

Home-centered tenants, by definition, want an apartment that resembles a home. This means, primarily, roominess and a

clear separation between rooms. In open plans this can be achieved by differentiating areas in the apartment with varying wall and floor materials—mixing paint and paneling and hard and soft flooring.

Home-centered tenants want privacy, too. This often means separate entrances, private patios, master bedroom suites, and if possible, secluded gardens adjoining their apartments so they can retain some contact with the soil.

This segment often brings furniture from the old home to the new apartment, and, accordingly, looks for apartment plans that most nearly resemble houses.

Finally, the home-centered renter prefers an apartment in a residential neighborhood rather than one close to downtown.

Urban-centered tenants, in contrast to home-centered tenants, tend to be more interested in the design of their project, its management, its social and recreational features and its proximity to downtown attractions.

continued



POOL-SIDE PARTIES attract swingers to Tom England's Plantation House, 95% occupied.

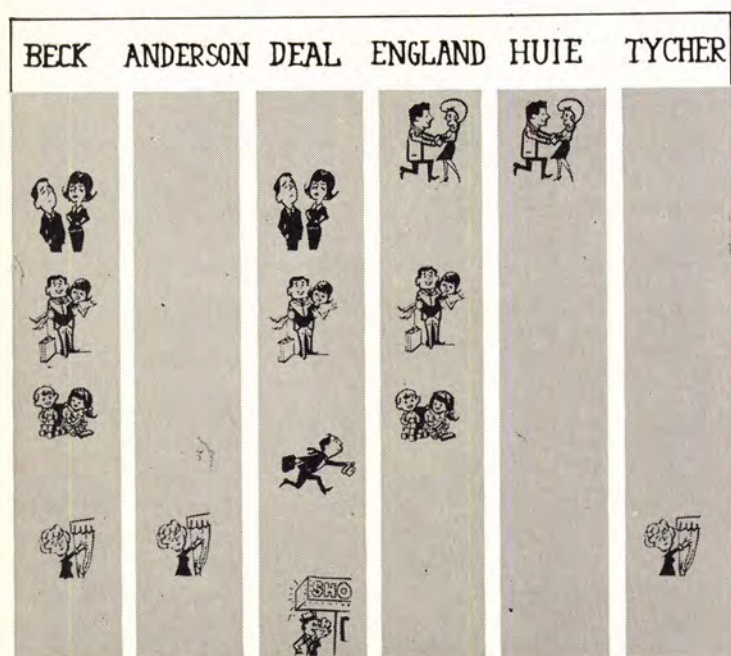


HOME-LIKE FACADE with balconies appeals to home-centered tenants at Ambassador apartments.



DAY NURSERY and playground draw families to Americana apartments (rentals; from \$199.50).

How to satisfy the segmented market:



SIX TOP BUILDERS aim at different segments of the segmented North Dallas apartment market.

As the chart at left shows, three of the six leading builders each specialize in apartments for a single segment of the North Dallas market, and three build for several segments.

The specialized approach has the advantage of consistency—especially in merchandising and management. The broad approach reduces the builder's vulnerability to market slumps—if demand is down in one segment, it may be up in another—and also gives him a chance to upgrade tenants within his own chain of projects.

But whether they build for one market segment or for several, the leaders tailor each of their projects for distinct tenant types. And this tailoring ranges from the designs of the apartments themselves to the facilities that go with them and the way they are promoted.

The specialists. Builder Harvey Huie has been exceptionally successful in appealing to the swinger market. His ten projects are so clearly geared for a young market that



DRAMATIC POOL helps attract urban-oriented tenants to Irving Deal's Tanglewood West.



CONTEMPORARY ARCHITECTURE and varied interiors draw sophisticates to Deal's The Moors.

here are the ways leading builders draw tenants to Dallas apartments

almost 45% of his tenants are under 26 and 80% are under 31. To promote his projects, Huie holds beauty contests among his tenants and runs a roommate finding service for young people who want to share their apartments.

Like Huie, Builder Martin Tycher is a specialist, but he concentrates on the home-centered market. Tycher beams consistent advertising (frequently by direct mail) at upper-income homeowners, who are tempted by apartments with formal dining rooms, private entrances, paneled dens and bedroom suites with big closets.

Hal Anderson, another specialist (and once Texas' biggest builder of \$100,000 homes), has played on the home-centered tenant's desire for privacy by building an entire community of apartments behind a pink brick wall. Demand has been so great that Anderson is now building three apartment towers there. They will be the first high-rise units in North Dallas.

Anderson is also diversifying into lower-

rental projects for other market segments—notably families with young children—but not in North Dallas.

The broad marketers. Apartment Builder Irving Deal likes to claim that he can offer tenants anything: "I've got apartments for the secretary downtown, for her junior executive boss and for the top man in the company. When someone grows out of one of my apartments, I can offer him something better." Despite this broad appeal, Deal does not want swingers, preferring to concentrate on the sophisticate segment of the younger market. His newest project, The Moors (*photo, above*) appeals to this segment with its contemporary architecture, winding staircases, built-in bars and split-level apartment plans.

Bill Beck, also a broad marketer, builds in the outer sectors of North Dallas—and thus attracts mature home-oriented tenants who balk at living close to downtown. Beck's three-bedroom units also attract younger families. But his major appeal,

like Deal's, is to the sophisticates. This stems from his emphasis on three of the features that sophisticates demand—distinctive architecture, tasteful interiors and strong management. Beck's 835 units were 96% occupied last winter during one of Dallas' worst rental slumps.

A third broad marketer, Tom England, builds for three groups—swingers, newly married couples and families with young children.

His most successful projects—the Quarters and the Plantation House—are popular with swingers because of their open plans, swimming pools, putting greens and private clubs (in Texas private clubs are an answer to the state's ban on taverns). England also throws pool-side parties (*photo, above*), runs a scheduled limousine service to Dallas Love Field (some of his tenants are airline stewardesses), greets new tenants with a reception committee and keeps the club at the Quarters lively with jazz musicians and entertainment.

APARTMENTS TOWNHOUSES

J. Allen Hawkins



TOP EXECUTIVES* of J. H. Hedrick Co. meet with client to discuss plans for apartment project.



\$435,000 PROJECT is 48-unit, semi-luxury co-op built by Hedrick for a group of businessmen.



\$218,000 PROJECT with 48 units commands high rentals even though it is in old, low-rent area.

This apartment team specializes in turn-key

The four men facing the camera are executives of a company that, since 1947, has built more than \$60 million worth of income property—for other people. In contrast to most apartment builders, who build for their own investment, the J. H. Hedrick Co. of Los Angeles builds for people who know nothing about apartments—beyond the fact that done right, they can be excellent investments.

For these people Hedrick provides a package of services that begins with feasibility studies and potential income analysis; includes design, a firm contract and a finished building, and ends with a course that teaches the investor how to manage his new apartment.

How sound is this approach?

- In 17 years no Hedrick-built apartment has been foreclosed.
- The vacancy rate in most Hedrick

projects is well below the area average.

- Many Hedrick clients have come back to the company for a second, third or even fourth project.

Most of Hedrick's clients are retired people who want the high income which rental property, with its special depreciation tax benefits, can provide. They have enough equity to buy land and to finance the operation up to the point where a permanent mortgage is issued. And they have enough time to manage their property.

What they lack is experience in developing and building apartments. So they present a ready market for the builder who can provide the services necessary to bring a project from vacant land to rented apartments.

Hedrick's service starts with a dry run of a project's potential

The company first analyzes the site from both a physical and an economic viewpoint. Then a design is drawn and

costed out, and a firm contract is offered. Finally an income analysis shows the potential return on investment plus probable tax benefits.

At this point the landowner can still decide against the project, with no obligation beyond payment of a fee for services rendered to date. If he decides for the project, he signs a construction contract. Hedrick then prepares finished drawings and specifications, gets the necessary permits and licenses, negotiates the most advantageous construction loan and mortgage, builds the apartment and turns it over to the owner.

Last, but by no means least, Hedrick offers the investor a property-management course on how to rent apartments and keep them rented.

To run all these services Hedrick has a staff of more than 150, ranging from top executives in real estate, financing and design down to carpenters and painters. No major responsibilities are turned over to outsiders.

* (l. to r., facing camera): Robert J. Wilson, executive vice president; Donald W. Richardson, Staff architect; Stanton T. Stavrum, vice president, sales; John H. Hedrick, president.

Duane C. Alan



\$160,000 PROJECT was built in prime location—near major freeway ramp. It has 24 units.



\$109,000 PROJECT with 14 luxury units is fourth apartment built by Hedrick for same owner.

packages

The company's main office is in San Gabriel, a Los Angeles suburb; and it has branches in San Francisco, San Diego and Santa Barbara.

Apartments for investors represent 70% of Hedrick's volume

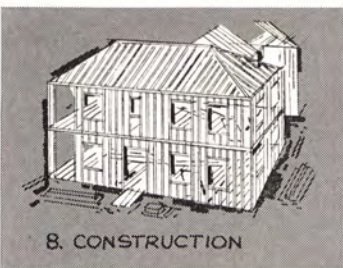
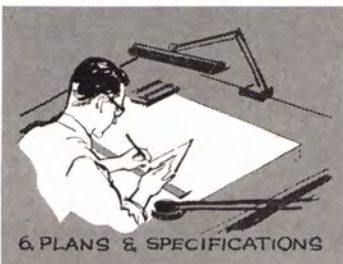
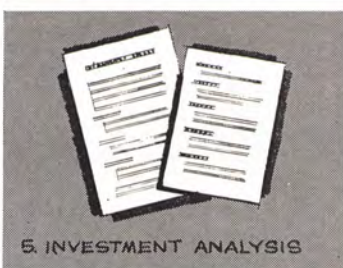
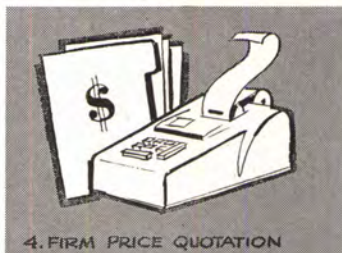
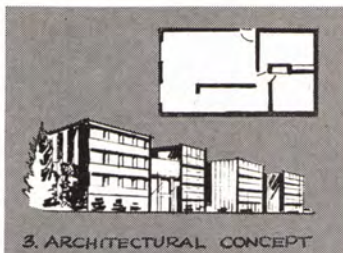
And the company is now building 22 such projects with a total of 287 units.

Hedrick projects—four examples are shown above—have been as small as four units and as large as 80; the median size is ten units. Costs range from \$4,000 to \$20,000 a unit, depending on the rental market the building is aimed at.

All apartments are designed and built to reduce noise transmission between units, most are air conditioned. And all include carpeting, drapes, a separate furnace for each unit, garbage disposers, garages, storage and laundries. In luxury buildings, patios, balconies, swimming pools, saunas, shuffle board courts, golf putting greens, recreation rooms and extra phone service may be included in the contract.

Here's how Hedrick takes a potential investor from the first inquiry to the ownership of his new apartment

The first five steps establish economic feasibility, quote firm costs and estimate the equity capital needed. From this point the investor can go on with the remaining steps or drop the idea and pay only for the paper work.



continued

Hedrick is just completing its first condominium project—the 34-unit, \$1-million Vista Colina apartments in suburban Arcadia. The clients are a group of investors who plan to sell off the units to individual owners at prices ranging from \$27,900 to \$31,950.

The balance of Hedrick's volume comes from two other sources

One source is nonresidential income property. The company has found a growing interest among physicians, dentists and lawyers in building office space—both for their own use and for rental to other professionals. So Hedrick offers the same turn-key package with office buildings as with apartments.

The other source of the company's volume—about 10% of the total—is apartments built for its own investment. Hedrick builds for itself when it finds a piece of land which has development possibilities and it knows the project will not conflict with any client's interests. But eventually the buildings are sold for profit—on the basis of their rent rolls—rather than held for income and capital appreciation.

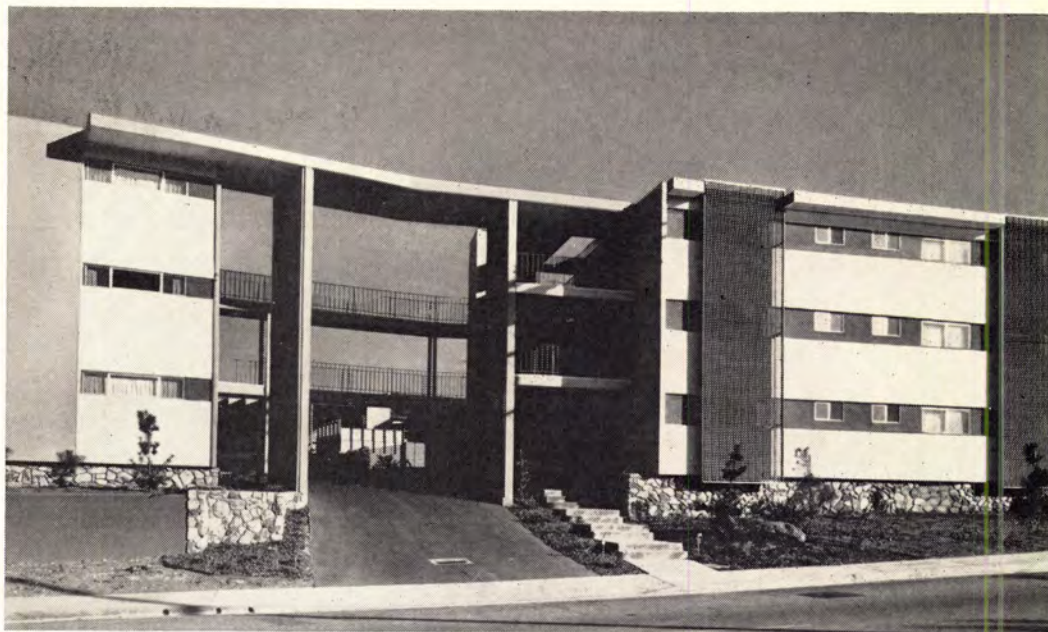
Despite its steady repeat business, Hedrick advertises for new clients

Its continual ad program (cost: \$62,000 annually) is aimed at owners of land in areas zoned for apartments and at investors or syndicates seeking ownership of income property.

All ads stress three appeals—design, quality and price—which were isolated by a company study of apartment owners. Owners of both large and small projects gave design top importance (“What will my apartment look like?”). Workmanship was second and price was a distant third.

Another source of leads is an open house—held when a new building has been completed but not yet occupied by its tenants. Newspaper ads and direct mailings to selected lists invite interested landowners and investors to inspect the building and get full details on how they can develop their own property. Hedrick has also begun a new program to develop leads. Late last year the company sponsored a lecture by a professor of land economics (subject: “The investment outlook for multiple housing in southern California”) which was attended by more than 400 people. Other lectures will cover such subjects as the new tax laws, joint ventures and apartments versus condominiums.

The company's profit margin? President John Hedrick isn't saying: “If we gave you too vague a guesstimate, it would be misleading, and if it were too accurate, it would be overly informative to our competition.”



FRONT ELEVATION (view A on plan, right) shows bridges connecting separate buildings.



SWIMMING POOL (view B) is convenient to all four buildings. Parking area is at right.

This \$535,000 luxury apartment

Its owners, an investment group of physicians, paid \$105,000 for a one-acre hillside lot close to a major hospital and medical center and convenient to all of Los Angeles via two major freeways. The group then asked Hedrick to study the feasibility of building luxury apartments primarily for renting to other physicians.

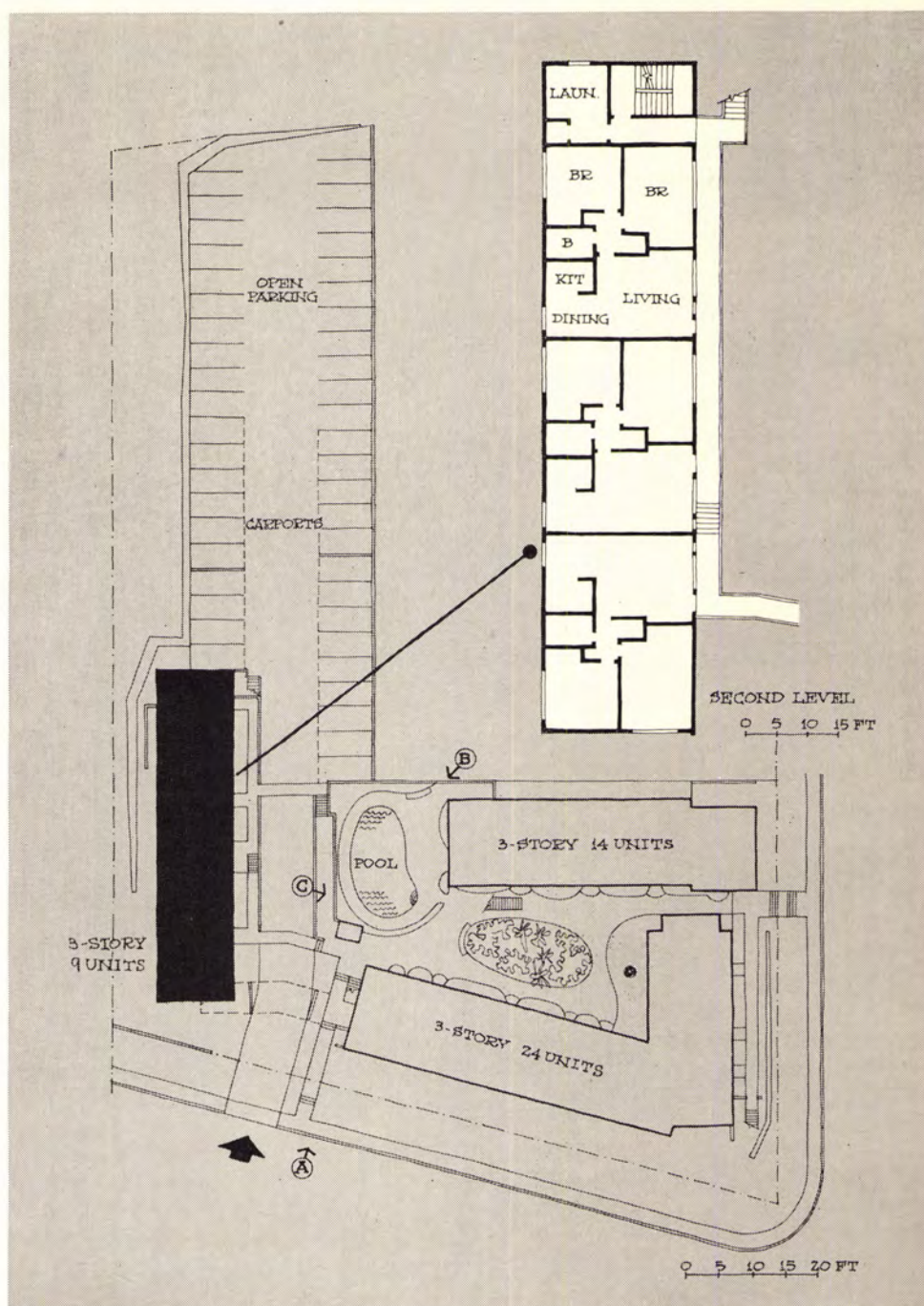
The first step was an analysis of the site. Zoning would have allowed 60 units, but this would have been economically unsound because of high earthmoving costs.



Photos: Duane C. Alan



INSIDE COURT (view C) is enclosed on three sides by the project's three buildings.



PLOT PLAN puts all buildings on the street-side leg of the L-shaped uphill site.

project is a typical product of Hedrick's package system

The final decision: build 47 units, a number which would combine maximum financing with a satisfactory rental yield and which could be built on the easiest-to-grade portion of the site.

Three buildings were arranged in a hollow rectangle on the low side of the land, and the high side was used for a parking area. The buildings were connected on two levels by bridges, so that a single elevator can serve all units. Balconies were used instead of interior hallways because they

are less expensive and easier to maintain. Design was kept clean and contemporary to match the adjacent hospital. And the pool and recreation area were put inside the rectangle formed by the buildings to create a self-contained environment.

Once basic floor plans were approved, the client and Hedrick's designers chose features that would make the project appeal to upper-income tenants without children. To the normal built-in appliances and air conditioning they added wall-to-

wall carpeting, wood kitchen cabinets, book shelves, luxury floor and wall coverings and custom-grade hardware and lighting fixtures. And they picked one extra sure to appeal to physicians: a poolside telephone service. The final cost was \$430,000, plus the \$105,000 land.

The building has attracted the professionals it was designed for: 41 of the 47 units were rented shortly after completion, and the owners expect full occupancy this month.



Laundry space: how to make it look like a sales extra instead of an afterthought

Any builder who wants an easy edge on his competitors need look no further than that 5' of wall with the pipe stubs and electrical outlet that his salesman calls the "laundry area." First, anything added to this long-neglected space will catch attention. Second, no matter how small the improvement, the buyer will accept it uncritically because she has nothing to compare it with—as she does when judging the design or convenience of a kitchen or bath. Even though she may be a second- or third-time buyer, chances are her previous laundries were so inadequate that even a minimum of good laundry planning will make her sit up and take notice.

But few builders are exploiting this wide-open opportunity. The great majority of laundries in today's new houses are still inadequate in either design or location, or both. HOUSE & HOME discovered this a few months ago by asking 100 leading builders how they were handling their laundry areas. Almost 60% were not providing storage facilities specifically for laundry or laundry accessories. More than 60% were not including a separate sink or laundry tub. And 18% were not even providing space or plumbing connections for a laundry.

Of those builders who were trying to upgrade the laundry area, fewer than 10% were offering a laundry that lived up to these minimum requirements:

1. A 2'6"x5' space to accommodate the average washer and dryer.
2. One or two overhead cabinets for storing the average assortment of soaps, stain removers and other accessories.
3. A shelf over the appliances to hold folded linens during the sorting of clean laundry. (The tops of the two appliances are sufficient counter space for sorting and folding.)
4. A 40"-deep space in front of the machines for ironing.
5. A closet for storing the ironing board and for hanging freshly ironed clothes.

6. A sink or tub, unless there is a bathroom or kitchen sink close at hand.

A minimum laundry center can be made to look like sheer luxury. The laundry shown at the top of the page combines all the requirements in 10' of space plus one extra—a stack of baskets for pre-sorting soiled linen. While there are six baskets in this model, three would be adequate: one each for white, colored and special items of clothing such as wash-and-wear and synthetics. Another useful and impressive extra in this laundry: the floor of the full-length closet is waterproofed for catching the drippings from wash-and-wear clothes.

A laundry's design, of course, depends entirely on its location. A laundry on the main living level may be placed close to an existing sink and closet and thereby fulfill the minimum requirements in just 5' of space. A laundry in the basement, on the other hand, requires a larger investment because it needs its own sink, counter and storage space. A good way to hold down the cost of a fully equipped laundry is to locate it in an area or room that has a second function—mudroom, sewing room or workshop, for example.

So laundry space location should be considered in the initial planning of a house—and not simply shoe-horned into an existing plan. The best location, certainly, is the one that requires fewest steps by the housewife. That ideal is well illustrated on the opposite page by a laundry that is not only located at the source of soiled laundry but is made integral with it by clean- and soiled-laundry passthroughs. And there are other possible good locations in almost any area of a house—kitchen, family room, bathroom, bedroom, breezeway, garage, hallway, utility room—and even the patio. The best location is largely a matter of the best compromise between cost and convenience.

For a look at some laundry locations and their comparative merits, see pages 106 and 107.



Two passthroughs save steps in this ideal laundry core

The core is located in the hallway of the sleeping area—source of most dirty laundry—and it is linked to one bathroom and one bedroom by a pair of unusual passthroughs:

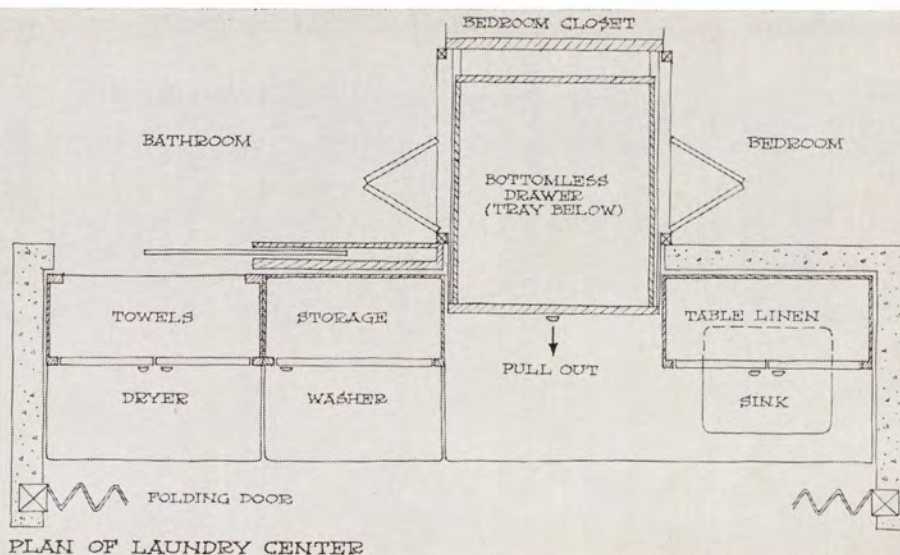
Through-the-wall shelves over the dryer are accessible through doors on both sides of the wall. Clean linen is stacked on the shelves from the laundry side and removed from the bathroom side (*drawing and photo, below*).

Three through-the-wall drawers are built over the laundry counter between the appliances and sink. They are side-loaded

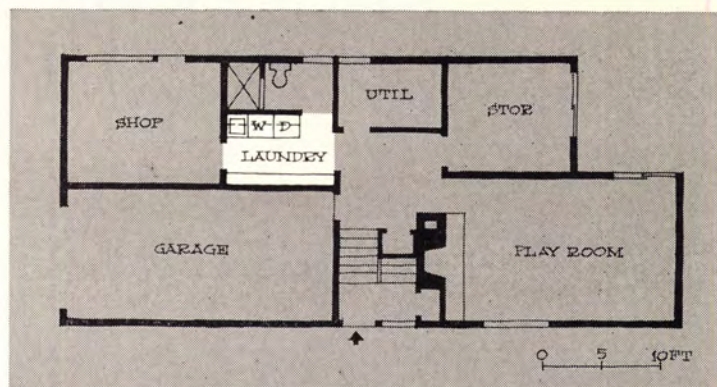
from either the bathroom or bedroom (*drawing, below, and photo, right*), and the housewife pulls open the drawers from the laundry side. The top two drawers are bottomless, so soiled clothes drop right onto the counter. Each drawer can contain a different category of laundry, thus eliminating the task of sorting.

Another idea: removable drawers below the counter for each family member's clean clothes (*photo, above*).

This laundry center was designed for the Maytag Home Laundry Idea Center by Architect Jack Swing of Chicago.

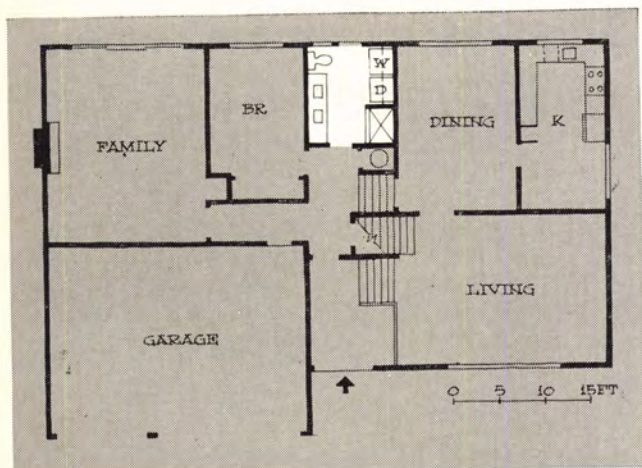


continued



Lower-level laundry is fed by built-in chute

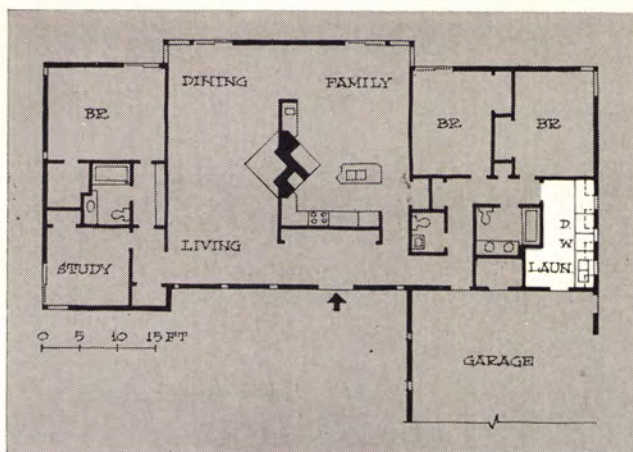
The chute runs from the upstairs linen closet into a cabinet over the sink. Without this convenient means of moving dirty linen from upper-level collecting points, the basement or utility level of a house makes a less-than-ideal laundry location. The well-equipped laundry shown here is in a 6'4" x 9'6" corridor on the lower level of a split-entry house designed by Architect-Builder Harry Wenning of Hartsdale, N.Y. Its other features: a counter for folding clothes, under-counter cabinets and an ironing-board closet with pull-out clothes rack.



Bathroom laundry is also a rear-entry mudroom

It takes up little space, but it nevertheless provides the basic laundry features. The vanity counter doubles as a laundry counter, and there is a special laundry sink in addition to the conventional lavatory. (If space had been even tighter, the lavatory could have been used for hand laundering). To get even more mileage out of the bathroom-laundry, the builder of this split-level, Olin Construction Co. of Pomona, Calif., has made it the rear-entry traffic area. (Note: the photo at right is from a house with its plan reversed from the plan above.)



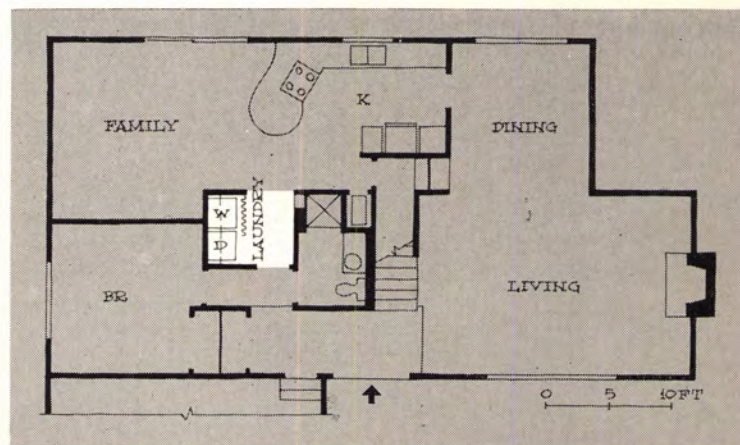
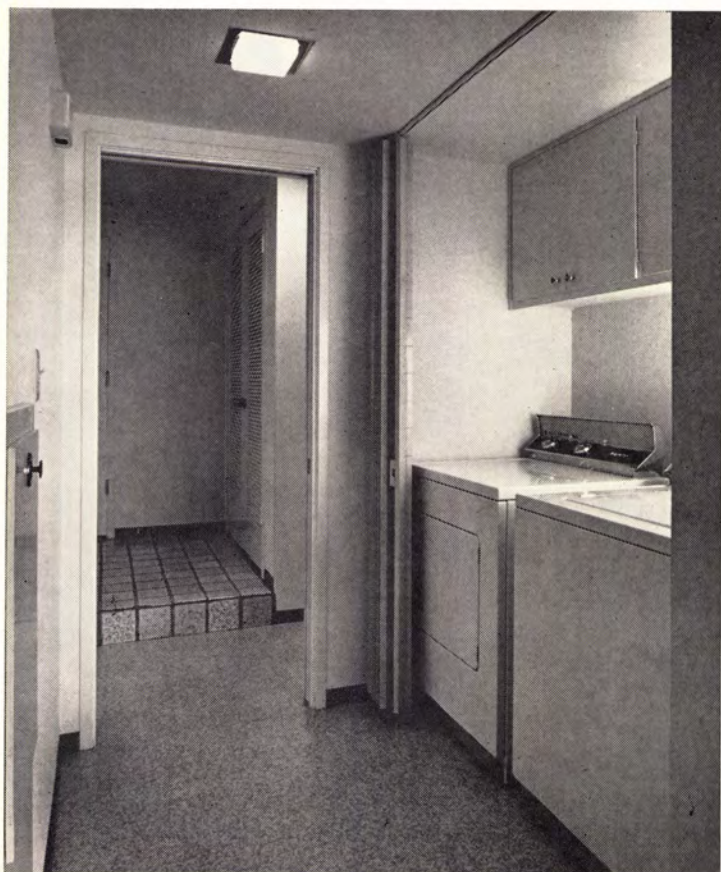


Bedroom-area laundry is child's clean-up center

This location is even more convenient than the bathroom center on the facing page. It is near the children's bedrooms and bathroom; it can be entered from the yard (through the garage); and it is large enough—6'4" x 14'4"—to meet every laundry requirement. Storage and counter space—more than adequate on the wall containing the washer, dryer and sink—is supplemented by a 5' closet on the opposite wall. Builder Elbert Arnold of Indianapolis includes this attractive work center in a 2,100-sq. ft. ranch with split sleeping areas.

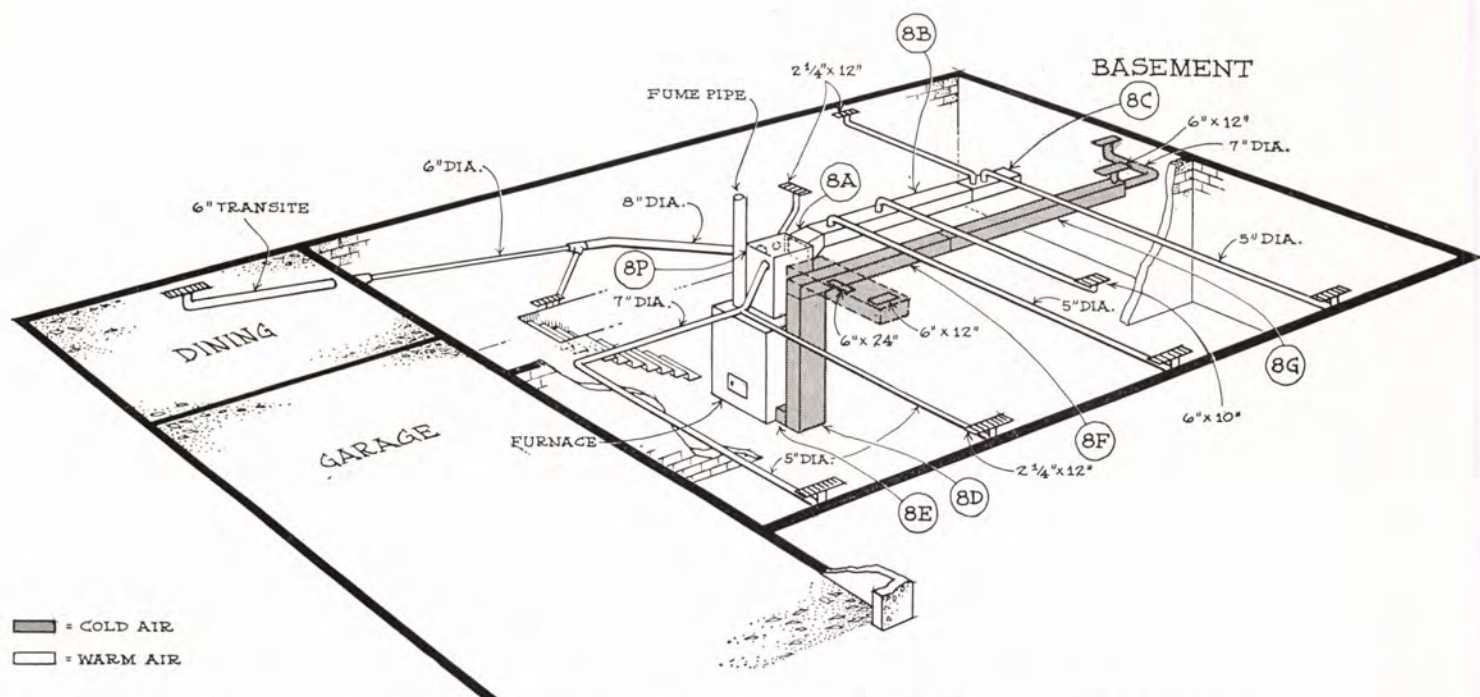


Larry George

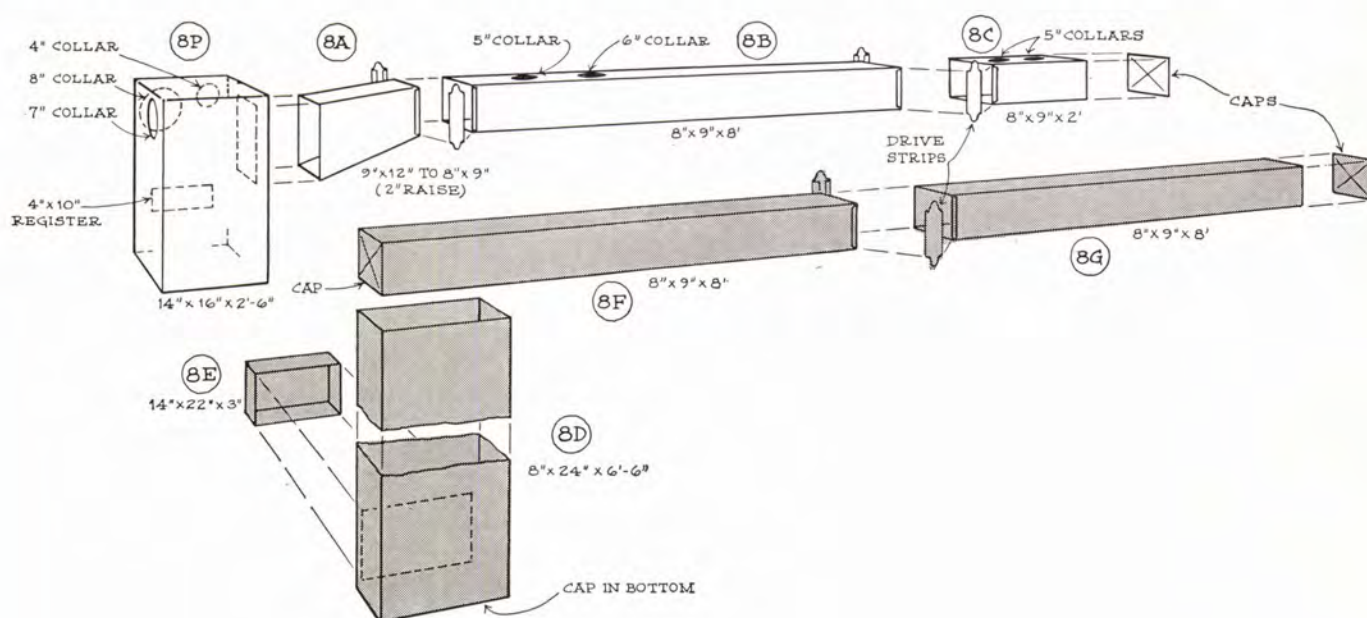


Corridor laundry can be closed off from foyer

It illustrates an important point: if a laundry shares a part of the living area, the housewife should be able to close it off when company arrives. In this two-story house by Perma-Bilt of San Leandro, Calif., the laundry is screened in two ways: folding doors are installed directly in front of the appliances, and a passage door closes off the front end of the corridor. Because this laundry is on the lower level of a two-story house, there is a chute (its door is at left in photo) which brings soiled laundry from the upstairs bathroom.



This heating system for a 1,100-sq.-ft. house costs the builder only \$335 . . .



. . . because the subcontractor built it in a shop out of these standardized components

How a heating contractor holds down costs

Like everyone else in homebuilding, the heating contractor has watched his labor and materials costs practically double in the past dozen years. But to make the heating man's position still tougher, a third problem has been added: in 12 years furnace prices have been cut in half. And the contractor—pressured by price-cutting at the retail level and by big-volume builders who can buy directly from manufacturers—has had to pass this saving along

to his customers and somehow make up the profit loss.

One of the veterans in solving this dilemma is Bogen Heating & Air Conditioning of Columbus, Ohio, a 43-year-old, family-owned company that sells more than \$1 million worth of heating and cooling annually. In Columbus' harshly competitive tract-house market, where \$8 can be the difference between winning or losing a bid, Bogen goes as low as \$335 for a

heating system (*diagram, above*)—yet continues to find ways to widen its profit margin without raising the builder's cost.

Bogen's formula for beating the cost squeeze:

1. Prefabricate as much ductwork as possible. Five years ago Bogen started a program to standardize heating layout so that more of it could be preassembled in a sheet-metal shop (nearly all of Bogen's new-house heating installations are warm-

Time-savers range from radio control to stockpiling

Photo: Bob File



MECHANICS' BINS in stockroom let them radio orders ahead, then pick up parts with no waiting.



RADIO DISPATCHER controls 26 trucks, assigns service calls and keeps job-progress record.



POWER BREAK is one of three 8' machines to permit prefabricating of standard 8'-long duct.



SHEET-METAL SCALE weighs entire duct system so shop can keep track of cost per pound.



MECHANIZED WAREHOUSING lets Bogen buy in large quantities as distributor and contractor.



DUCT STOCKPILE, covering 10,000 sq. ft., is replenished when heating business is slack.

for his builder customers

air systems). Since then, in its tract-house work, the company has chopped up to 25% off installation time and now rarely needs more than one installer to assemble a job.

Two men—a sales engineer and the installation supervisor—spend two days working over the plan of a builder's model to refine the heating system to the simplest terms possible. They look for ways to minimize bends and elbows and to keep duct

runs as short as possible. And they may suggest design changes to permit fewer registers.

They plan the system around standard duct lengths of 8' and use 5" pipe, adjusted to room needs by dampers, for most secondary runs (in a custom-house layout, pipe diameter would vary from room to room). The pipe is slightly oversize for most rooms, but it helps standardize the layout and eliminates callbacks. For

fast duct connections at the furnace, a flexible joint is used.

The final working drawings include a breakdown of the components, each with a code number. This is not only for the benefit of the installer and the prefabricating shop but also for the installation department, which keeps the component sketch on file and simply runs off new copies on a duplicating machine each time the builder orders that particular system.

'You won't find another sheet-metal shop better mechanized than ours'

2. Tailor the prefab shop to the most economical duct length. Bogen has determined that the longest duct one man can handle conveniently is 8', so its three major duct-fabricating machines—power shearer, power cutoff and notcher and power break (*photo, p. 109*)—are 8' long (most duct shops are geared to 3' and 4' lengths). Also, Bogen has set 8"x9" as the company's standard duct size because it can be formed from 36"-wide sheet metal with only 7/16" of waste.

The shop, which is air conditioned, makes every type of sheet-metal part for a heating system, including plenums, enclosures for air-conditioning equipment, and fasteners (drive strips, S-hooks) for joining ducts and caps on the job.

It gives Bogen a close check on costs. For example, all sheet-metal components for each job are weighed in the shop (*photo, p. 109*) to determine cost per pound. If one of the tract-house systems is modified because of a plan or design change, the shop crew knows whether there is a change in cost by simply comparing weights.

3. Watch costs daily by using accounting forms and systems that tell the whole story. When Bogen set up a new cost-accounting system recently to pinpoint hidden profit and loss areas, it made its forms not only more complete but also faster and easier to fill out. One reason for this was to get more accurate reports from workmen. Mechanics now are required to fill out a daily form that shows the number of hours spent working, traveling and waiting, as well as the type of work involved in each job. Installers—who rarely return to the plant because a field supervisor keeps them supplied with materials—help maintain records of how long it takes to put in the various tract-house systems.

Job progress is followed on a visual card holder with a vertical channel for each phase of work. A coded card for each job is moved from channel to channel by the radio dispatcher (*photo, p. 109*) as the job progresses.

The full bill of materials for every installation job is transferred from the working sketches to a two-page form by the installation department, and all equipment is ordered only from the form. A weekly inventory report keeps track of stock.

4. Stabilize dollar return by balancing the work load. Sharp pricing makes tract work the least profitable of Bogen's diversified business. Heating-equipment replacement and add-on air conditioning are two to three times more profitable, and the profit margin on new custom-house and commercial systems is at least 25% higher. But tract work helps Bogen build unit volume and thus get lower prices from its sup-

pliers. And, equally important, tract work—unlike the replacement business and most custom building—continues through almost the entire year around Columbus.

So Bogen's practice is to get the business of one large tract builder, doing about 150 houses a year, and then take on all the custom-house and replacement work it can get. Except for scheduling problems in the fall months, when the replacement business reaches its peak and the tract builder is rushing to get houses under roof, the tract work helps maintain a steady pace of business.

(Another income stabilizer and source of purchasing power is Bogen Inc., a heating and cooling equipment distributor in 26 Ohio counties. The Bogens set up this company in 1955, then made Bogen Heating & Air Conditioning a subsidiary of it. Arthur Bogen is president of Bogen Inc. His brother, Edward, heads Bogen Heating.)

5. Keep the crew productive all year with a slack-season program. To guarantee its mechanics a 40-hour week with a minimum of make-work, Bogen assigns them to a variety of jobs in its 50,000-sq.-ft., five-story plant from mid-December to March when the furnace business drops off. They help build up the inventory of sheet-metal parts (one 10,000-sq.-ft. floor is used to store stock-size ducts and plenums), rebuild used heating and cooling equipment for sale to rental properties, attend training classes on new equipment and methods (*see, below*) and work in the air-conditioning repair shop.

6. Put service on a paying basis. In addition to its \$1-million-plus sales volume, Bogen has 20,000 service customers representing an annual volume of more than \$300,000. The company has been servicing equipment at cost regardless of expired or nonexistent manufacturers' guarantees, and this nonexclusive policy has contributed

importantly to its reputation—as well as to the reputations of its builder-customers.

But the dollar volume of servicing is now so large that the company has decided to try making it profitable by lowering the cost. Radio control has been installed in the company's 26 trucks, 18 to 20 of which are used for service, so that a dispatcher can coordinate daily service operations and minimize the need for trucks to return to the shop. The basement of Bogen's plant has been converted to a garage, where a full-time mechanic maintains and repairs the trucks, and all refueling is done from the company's own tanks.

7. Upgrade the product, and sell a bigger package in higher-price markets. Bogen's average tract-house sale is \$425 for a ten-register system with three or four returns. Its average custom-house sale is \$1,000. But that is only one reason Bogen concentrates its sales efforts on custom work. A more important reason is this: a custom job can often be upgraded to include air conditioning or even total comfort, which means an air cleaner (from \$350 to \$800) and a dehumidifier (from \$140 to \$200).

Although Bogen sells three to four times as many furnaces as air conditioners, its dollar volume for residential and commercial air-conditioning jobs is more than 50% of the total. Air conditioning is clearly the way to beat the cost squeeze in heating, and two statistics show Bogen is taking advantage of it: last year 30% of its cooling installations were in new houses, and 30 of them were total-comfort systems—compared with none in 1960.

8. Operate a perpetual staff-training program. A large demonstration room in Bogen's plant contains a complete display of the company's equipment, much of it in installed condition. Here the contractor runs classes for its own mechanics and also invites in local builders, architects and engineers to tell them about advances in heating-cooling technology. Sometimes outside instructors are brought in to conduct lectures and working sessions for the mechanics, teaching them the wiring and construction of new equipment and how to check it out and test it. During the slack season, Bogen may send a mechanic or one of its three professional engineers to a manufacturer's school for specialized training in equipment or system design.

Top management also includes itself in the learning process. Whenever one of the Bogens hears of a company that is considered progressive (by their industry associations or business publications), they try to visit it. So far, they have visited plants in Pittsburgh, Cleveland and on the West Coast in their search for more ways to reduce costs and increase profits.



BOGEN BROTHERS, Arthur and Edward, are second-generation owners of 43-year-old company.

Technology starts on p. 132



TOP: Left—Colonial Plank; Right—BondWood; BOTTOM: Left—Straight Edge; Right—BondWood Domino

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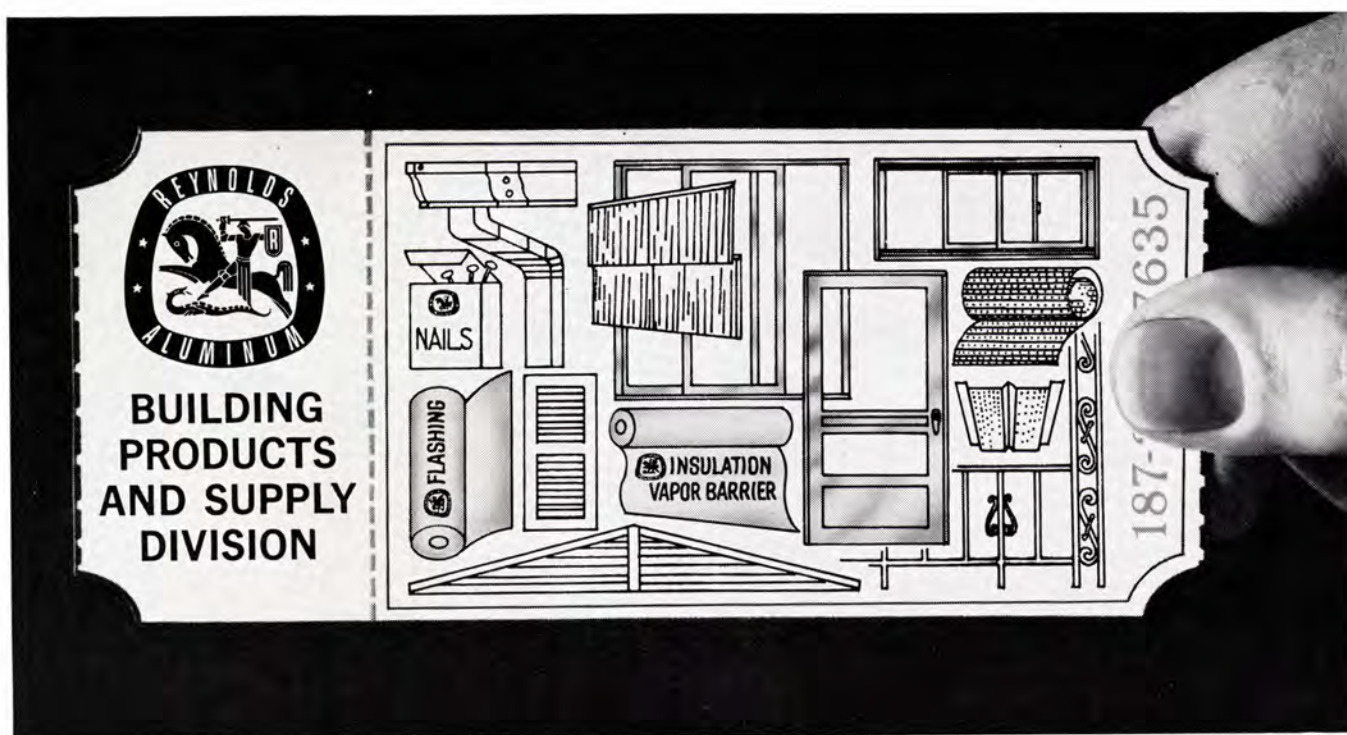
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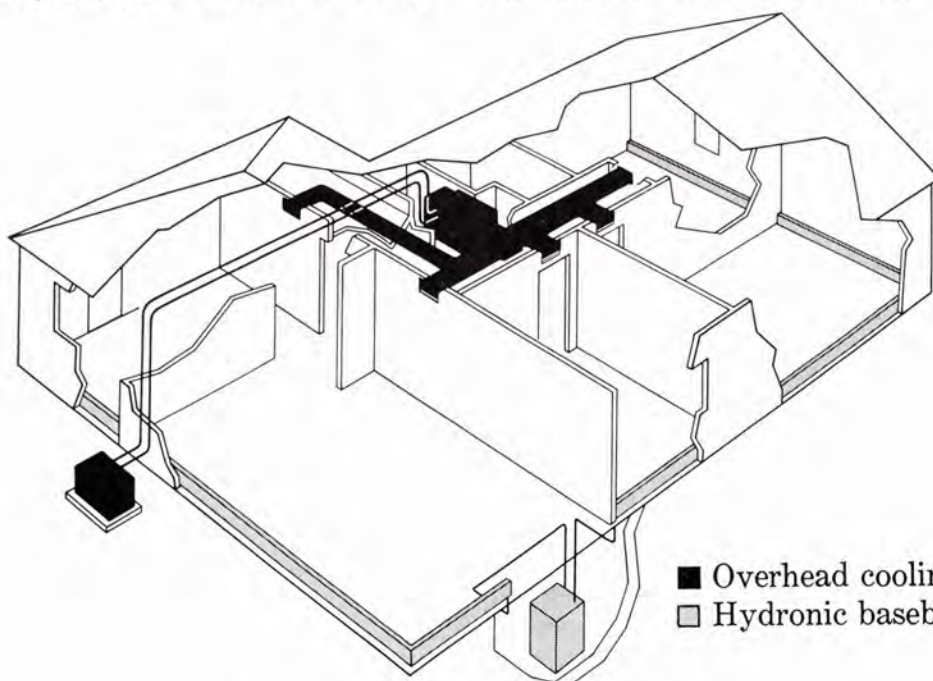
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*Countertop must take 3/4" wood screw.
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This is a vinyl floor. You don't believe it? Thank you.

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Your eyes tell you these are individual tiles hand set by a Spanish artisan. Don't believe them. This is sheet vinyl. A totally new kind of vinyl construction called Luran Airtred. Luran's Quiet-Cor of vinyl foam makes this floor far more resilient. Warmer, more comfortable to

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glazed Morocco Tile, Vermont Flagstone) at the quality floor covering retailer near you. For more information, write to Sandura Vinyl Floors, Jenkintown, Pa.

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1 Brighten a kitchen with the cheerful colors and fashionable lustrous texture of crystalline glazed tile walls made with a harmonizing ceramic mosaic floor. No smoke or grease can ever mar the beauty of this sunny-bright kitchen with walls of 392 Cr. Buckwheat—it wipes clean with a damp cloth. The attractive ceramic mosaic floor (P53-3191) will last forever and never needs waxing. Work-saving counter top is 98 Smoke Gray. Plate 125.

3 Add design interest around the range by using crystalline glazed scored tile with gay decorated tiles. Original treatments like this add so much sales appeal, yet can cost as little as \$5 extra. And this most practical wall is a housewife's delight for it will still look new after years of service. Wall is scored design SD-1, 362 Cr. Charcoal with inserts Rooster Q-4. Counter is tiled also, with SD-1, 45 Salt & Pepper. Plate 134.



2 Use popular earthtone colors, such as Murray's Canyon Red quarry tile, to create a floor that blends with the rich colors of the cabinets, as in this kitchen designed by the Frank Lloyd Wright Foundation. The tiled counter and backsplash provide a crisp, clean contrast to the darker tones. Counter: Scored design SD-5, 97 Gardenia. Backsplash: Contempora J-4. Plate 153.

3 Ideas for kitchens that will help sell homes

Color-bright, care-free kitchens that always look new and sparkling clean do more to sell a home than any other room. Build them with walls, floors and countertops of American Olean ceramic tile . . . the best there is! For a wealth of sales-building ideas, write for our new booklet 470, "New Decorating Ideas."

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**She's got all the symptoms
that might make her buy your house.**

**she's lost
in thought.**

(She thinks how she'll never be bothered with hand dishwashing again. Not even hand rinsing with a KitchenAid. About the time she'll save. Time for her family. Time for fun.)

**her eyes
are bright.**

(She sees the KitchenAid dishwasher. You've surprised her. Given her something special she can't find in a lot of homes.)

**there's a lump
in her throat.**

(She remembers Mama. How Mama told her if she gets a dishwasher it should be a KitchenAid. Because it works the best. And it keeps working for years and years.)

**her lips are
quivering.**

(She can't wait to tell Mary and Helen that she's getting a new KitchenAid. To show off how pretty it looks in her kitchen, especially with its matching front.)

**her heart
is pounding.**

(She's thrilled. With the idea of owning her own KitchenAid dishwasher. Maybe she doesn't know much about copper pipes or pre-seasoned wood, but she does know all about KitchenAid quality.)

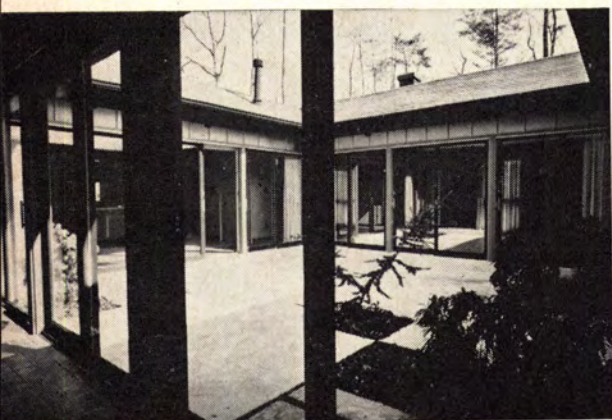
Now use your head. Probably no one is going to run out and buy your new house just because it's got a KitchenAid dishwasher. But when all things are equal, a KitchenAid is something special that could very well turn a prospect into a buyer. You don't need a doctor to tell you how to give her these symptoms. All you need is your KitchenAid man. Quick.

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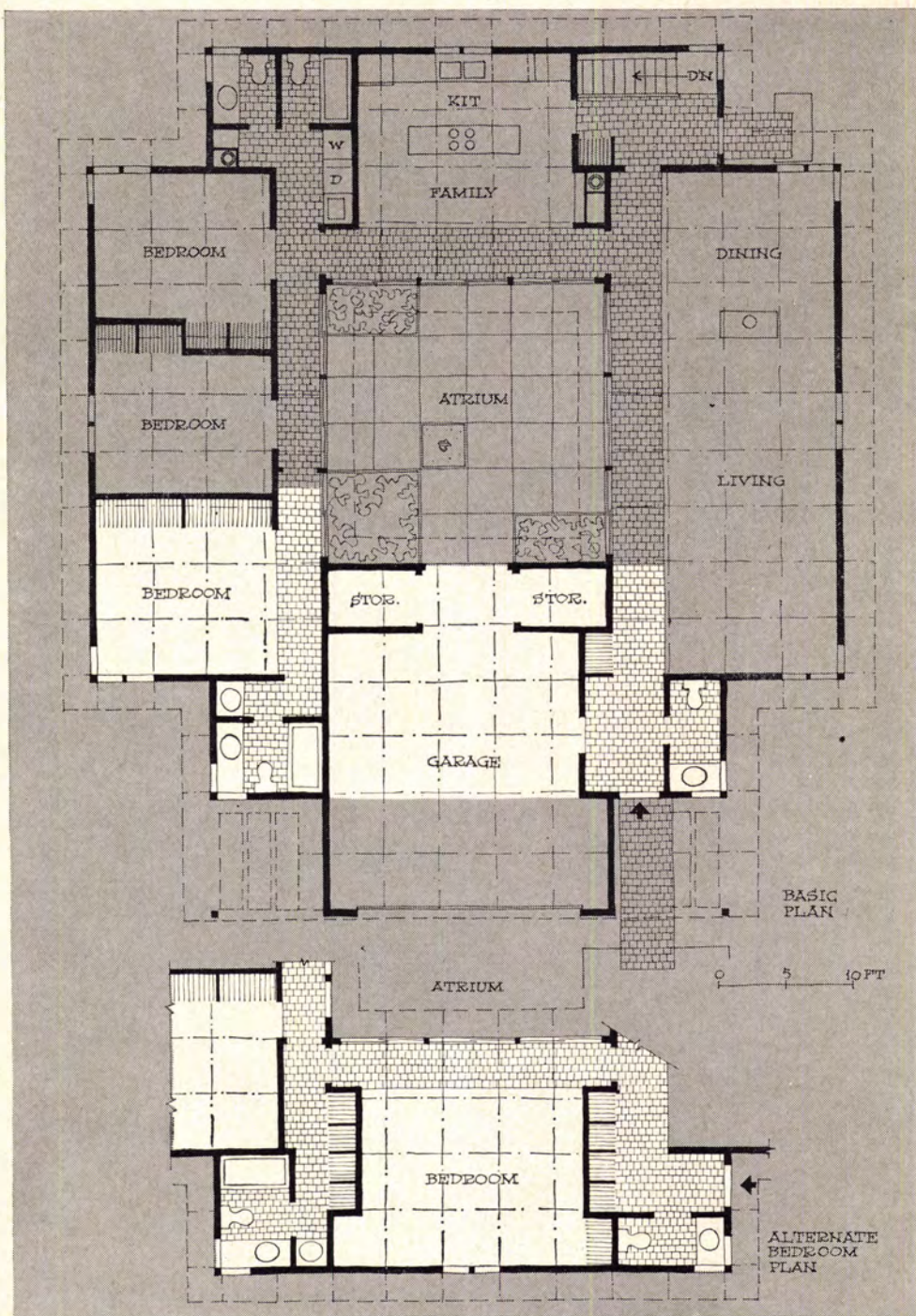
Dishwashers: Built-Ins • Portables • Convertibles—Call your dealer or write Dept. KHH-5, The Hobart Manufacturing Co., Troy, Ohio for free literature.



FRONT ELEVATION projects 8' to give garage adequate depth. Entry is set back at right.



SQUARE ATRIUM is bordered on three sides by quarry-tiled galleries behind glass doors.



FLOOR PLAN, based on four overlapping 16'x36' rectangles, can easily have fourth bedroom.

Home manufacturers' showcase: a prefabbed atrium house

This is a promotion house—built near Washington, D.C., by the Home Manufacturers Assn. to glamorize the prefab industry's image among homebuyers. It is also a technologically advanced house—designed by Architect Robert Martin Engelbrecht for efficient mass production.

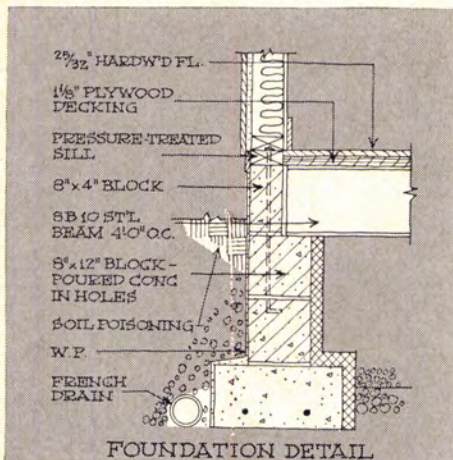
Most prefabbers have always used modular design to couple the economy of standardization with the flexibility demanded by diverse buyers in widely scattered markets. But not many have carried

modularity as far as it is carried in the HMA model.

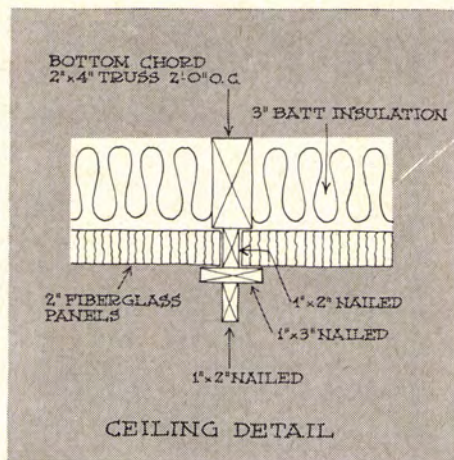
The house is modular both vertically and horizontally. The module is a universal one—8'—with a subrhythm of 2', which permits the repetition of same-size structural and finish components inside and out. For example, few of the plastic-coated 4'x8' siding panels have to be cut, and when they are cut, it is lengthwise and at precisely 2'. Reasons: wall height is 8' 1½", all windows are 2' wide, and all

window frames are wall-high (thus eliminating the cutting of siding for use as filler strips). The same benefits apply to the prefabricated 4'x8' panels which are used on all interior walls. And no filler strips are needed between doors and ceilings because all doors are 8' high.

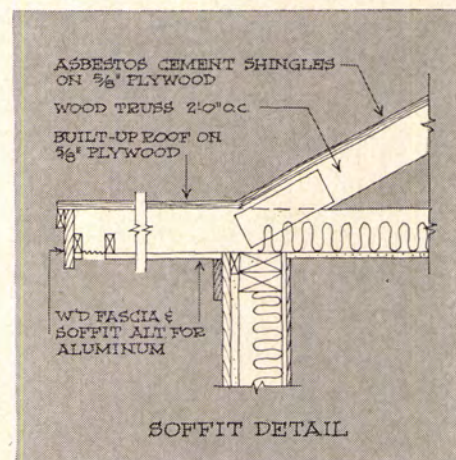
Modularity comes naturally because the plan is symmetrical—four 36'-long rectangles around a 20'x20' atrium. The foundation system for each rectangle is steel I beams on 4' centers (spanned by



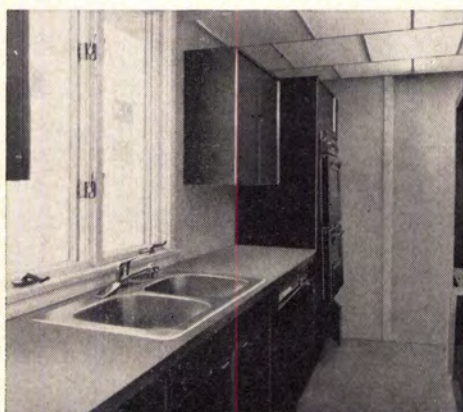
MODULAR FOUNDATION is steel I beams 4' o.c. bearing on second-from-top course of block.



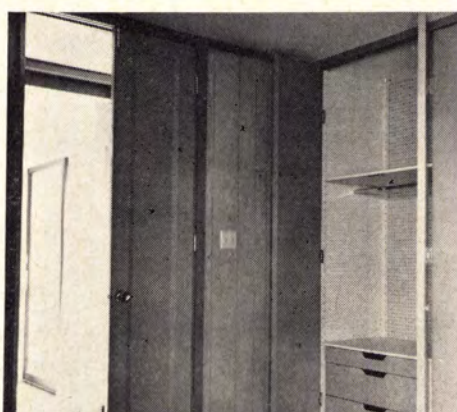
MODULAR CEILING consists of 4'x16' panels resting on battens nailed directly to trusses.



SOFFIT SYSTEM of pre-engineered aluminum includes fascia. Drawing shows wood alternate.



LUMINOUS CEILING of 2'x2' panels is suspended directly from trusses on 2' centers.



PACKAGED CLOSET, used in multiples in bedrooms, is 8' high like double-door at its left.



WASTE SYSTEM of sleeve-joined pipe is attempt to make plumbing layout more flexible.

makes the most of modular design

4'x8' panels of 1 1/8" tongue-and-groove plywood). And the 20' roof trusses, on 2' centers, are aligned with the foundation beams. A wood tee has been nailed to the bottom chord of every other truss in the living-dining area (*photo and drawing, above*) to carry a ceiling of 2"-thick plastic-coated glass fiber panels and give the effect of beams. (Unfortunately the panels were 47 3/8" wide—they are designed for thin metal tees on 4' centers—and thus had to be trimmed about 1" to fit between

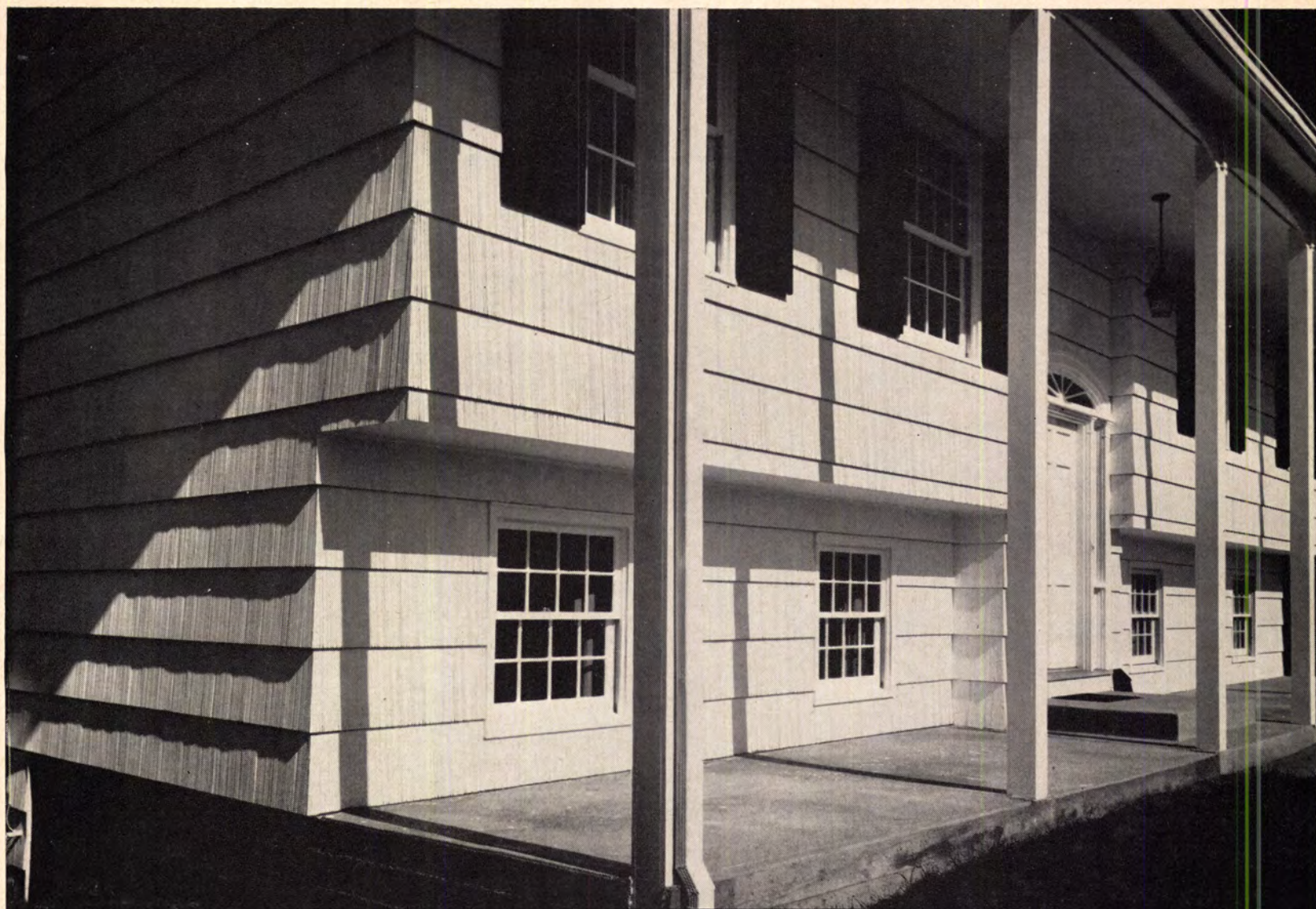
the 3/4"-thick wood tees.) Nearly every partition running parallel to the trusses has been located directly beneath a truss, so the top plate can be nailed directly to the bottom chord.

Plan changes are simplified by this repetition of standard spacing and component sizes (e.g., windows are interchangeable with siding panels). Among the plan alternatives the architect suggests are a fourth bedroom (*plan, opposite*) or a deep entry court in place of the garage.

Another purpose of the HMA house is to display advanced product systems. Included are: two-furnace heating and air conditioning, hubless waste and soil pipe (*photo, above*), two- and three-circuit luminous ceilings in all baths and kitchen, metal soffit-fascia system (*photo, above*).

The house has 1,728 sq. ft. of living area, plus the atrium and garage. It will be publicized nationally in a four-color article in the May issue of *Better Homes & Gardens* (circ., 6,500,000).

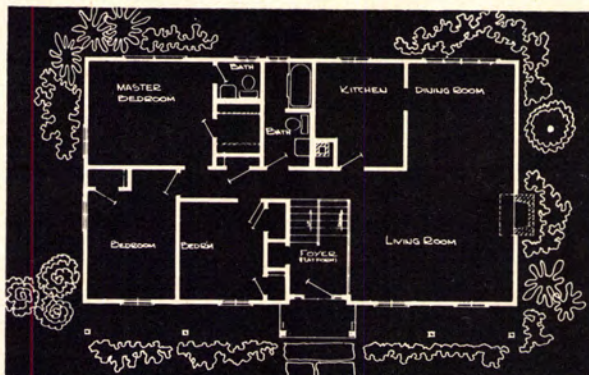
New products start on p. 137



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Red cedar grooved sidewall shakes have that "something extra" that clients can understand — and appreciate — for years after you've made the sale. These trim, dimensionally squared shakes give a home a broad, generous look. The vertical grooved texture picks up oblique light, which softens a broad expanse of wall. And the effect is just as good whether the house is tall or not. Occupants will soon notice the shakes' insulating effect, particularly on a hot day. Add to all this red cedar's well-established resistance to decay, strong winds and weather and you can see why homeowners everywhere like them...and tell their friends. Customers and builders appreciate the low applied cost of grooved shakes, too. The lowest, in fact, of any sidewall material of comparable quality. They're available natural or in a range of attractive *factory-applied* colors. Certigroove shakes are of premium quality — 100% clear, 100% heartwood, 100% edge-grained. For more information, write to Red Cedar Shingle and Handsplit Shake Bureau, 5510 White Bldg., Seattle, Wash. 98101. (In Canada: 1477 West Pender St., Vancouver 5, B.C.)



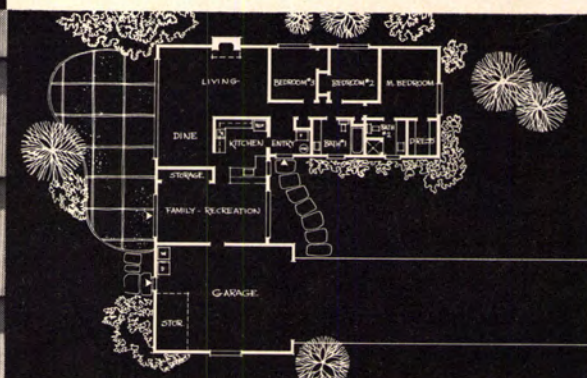
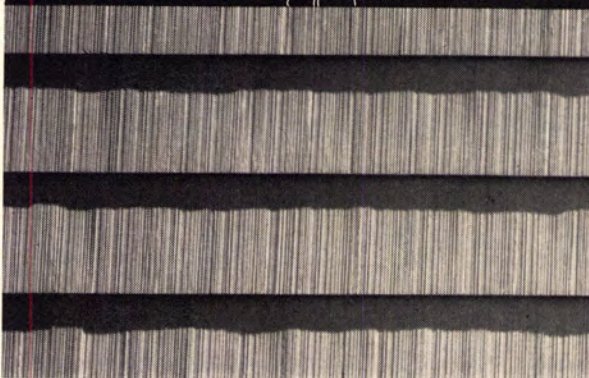
This house, designed in Colonial style (upper left), was built by Metcalf and Co. in Newington, Mass.

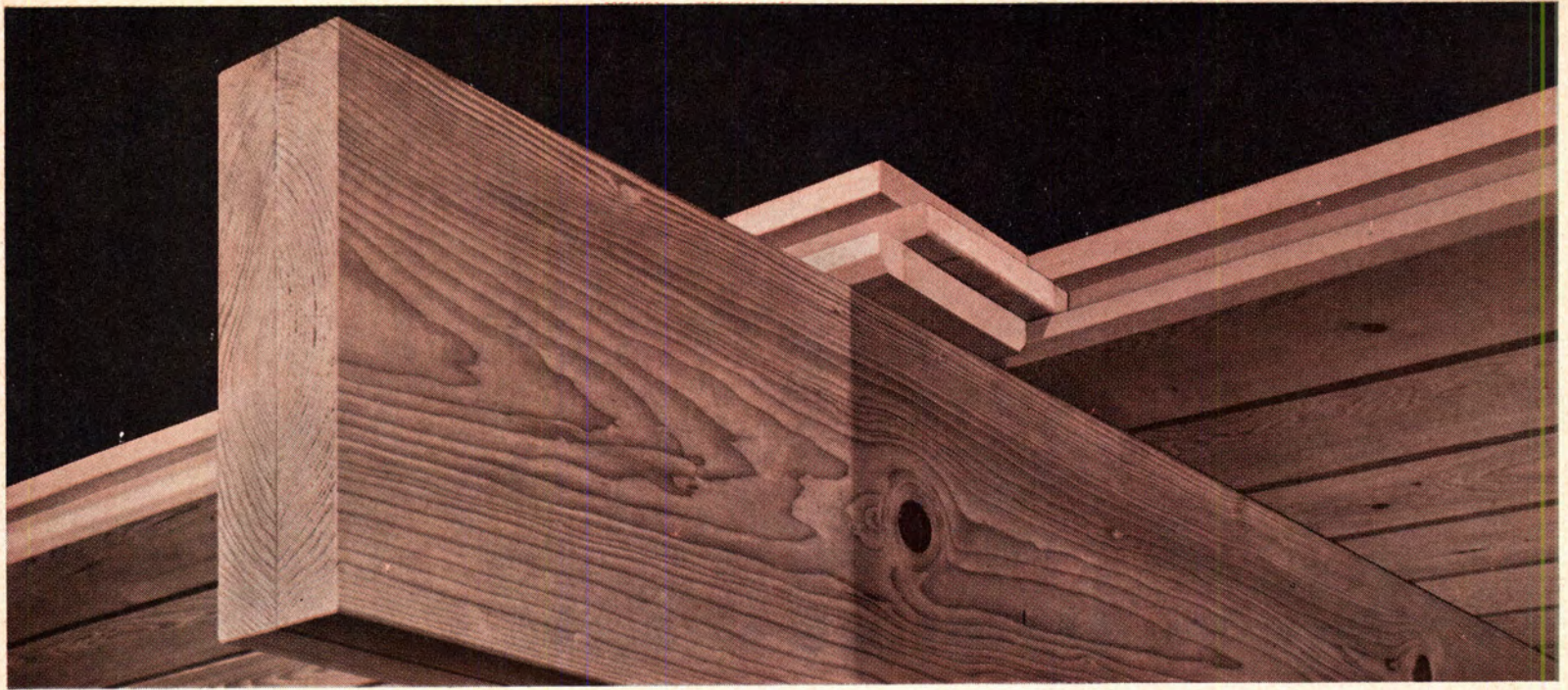
The home at the lower left, in Bellevue, Washington, was built by Bell & Valdez; John Anderson, Architect.

A relatively unbroken, deep horizontal shadow line is a feature of dimensionally squared red cedar grooved sidewall shakes.



The Certigroove label on the carton of red cedar grooved sidewall shakes is your guarantee of *strict-graded* quality. The manufacturing mills subscribe to our standards in order to use this label. And our inspectors constantly inspect at both mills and jobsites. This label is profit insurance for you. Don't pay for less.





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11. _____

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5. Is 400 lbs/M b.f. lighter than solid decking.
6. Costs about \$15.00/M b.f. less to install than ordinary decking.
7. Available with 75% of lengths 10' to 16', maximum of 10% in 8' lengths.
8. End-matched to speed construction and reduce waste. Covers up to 10% more with same amount of decking.
9. _____
10. _____
11. _____

Write us at Box B-99, Tacoma, Wash. for two new booklets on vertically laminated wood beams and laminated wood decking.

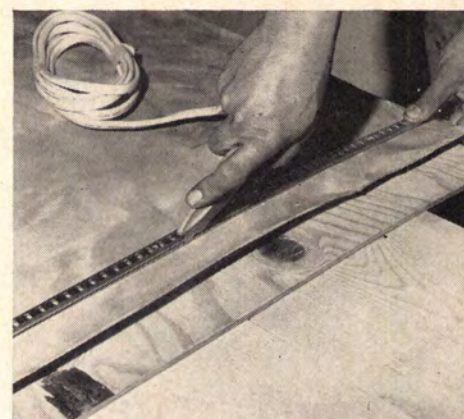


Weyerhaeuser
Laminated Wood Products

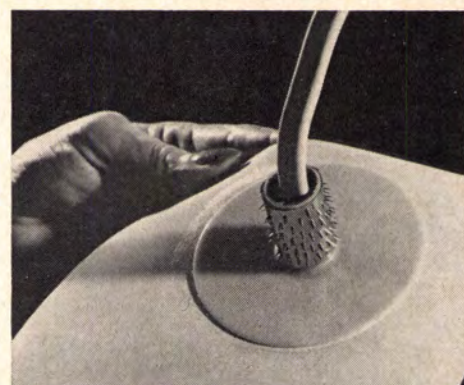
Heating and cooling



MASTIC COATING bonds radiant vinyl to ceiling. Bubbles are smoothed out with long-handled roller.



PANEL TRIMMING is done with a razor knife.



POWER CONNECTION has hole-gripping barbs.



HEATING ELEMENT is knitted thread-wire.

Ceiling electric heat system uses radiant vinyl panels

Installing the sheets (photo, above) is like laying linoleum on the ceiling. The vinyl, .060" thick, comes in standard 2'-wide panels 4' to 14' long, and in custom panels 26" to 50" wide and 3' to 12' long. Inside the sheet is a patented knitted wire element (photo, left) which has a heat output of about 17 watts per sq. ft. and operates on 240 volts. A lead-wire connection, bonded to each panel, fits into ceiling holes. The standard-size panels come in a choice of colors and finishes, but the custom panels are plain—

the manufacturer recommends painting or a thin sprayed-on acoustical finish.

On the basis of installations in 30 residences in Ohio, California, North Carolina and Florida, which have been studied for the past two winters, the manufacturer estimates the vinyl is competitive with a gypsum-board ceiling-heat system introduced four months ago. Installed cost for the latter ranges from 40¢ to 75¢ per sq. ft. (H&H, Feb.) depending on design and labor. Goodyear, Akron, Ohio. (Circle 201 on Reader Service card)



Wall-insert heater for bathrooms has a 4,302 Btu output to heat areas of more than 400 cu. ft. Model 1300, with a sliding on-off switch, lists for \$16.95. Deluxe Model 1305, at \$18.95, has an adjustable switch. Rangaire, Cleburne, Tex.

Circle 202 on Reader Service card



Circulating booster has quiet vibrationless operation plus positive air control. An air separation feature is included. Compression tank is directly connected to the air collection chamber. ITT Bell & Gossett, Morton Grove, Ill.

Circle 203 on Reader Service card



Duct heaters are available in 282 standard models rated from 2.5 kw to 160 kw for installation in any size duct, new or old. Heaters can be used as primary heating source or supplementary source. General Electric, La Grange, Ill.

Circle 204 on Reader Service card



Humidifier has evaporator pad horizontally installed. Also included is a visual gauge to show when pad needs attention. Herrmidifier 490 has an output of 1½ gals. an hour and is guaranteed 100% dust free. Herrmidifier, Lancaster, Pa.

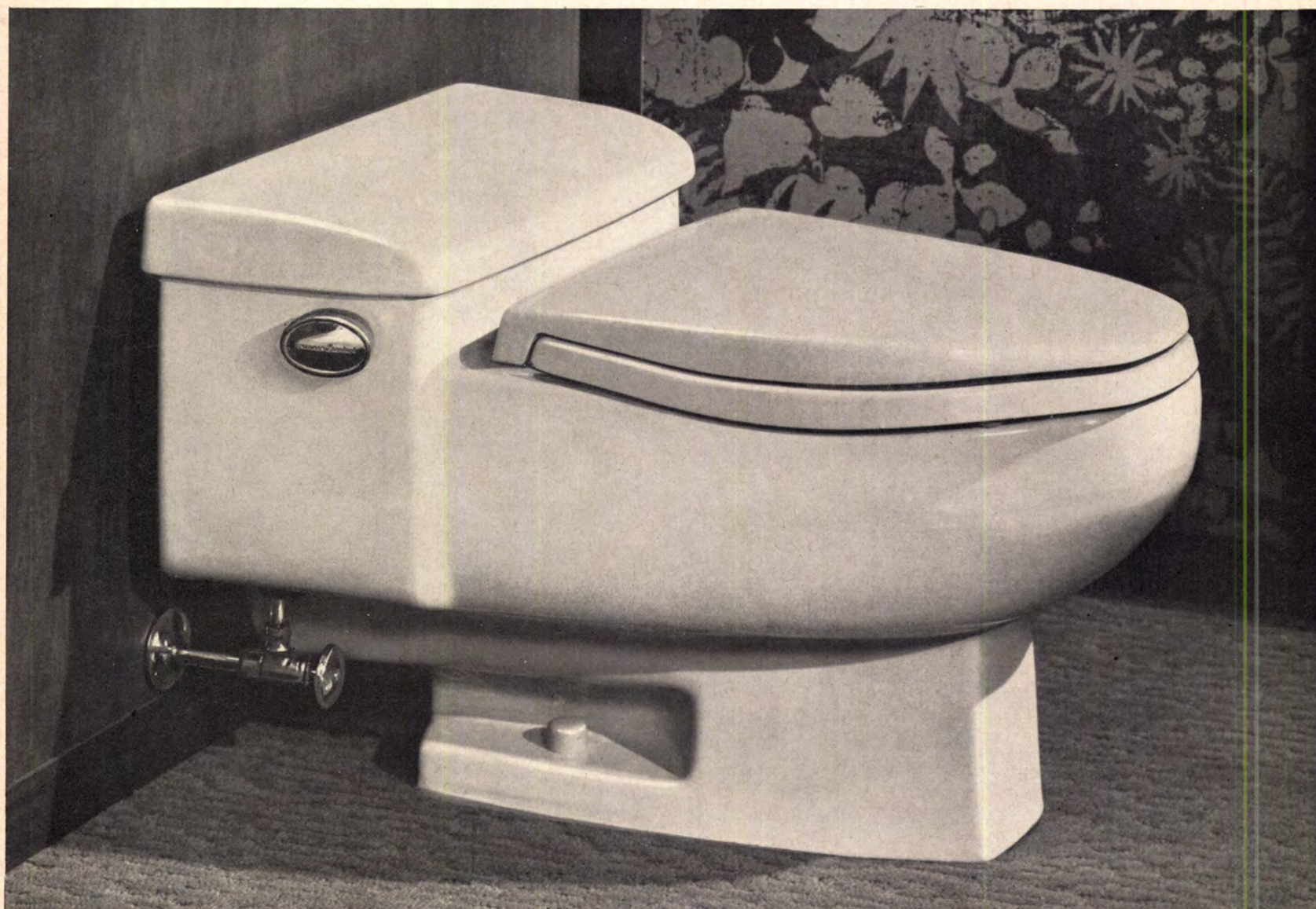
Circle 205 on Reader Service card

New products continued on p. 141

And now American-Standard brings you

The quietest toilet you never

**for the most sumptuous
bathrooms in the finest homes**



heard

**Wouldn't you like to demonstrate
a toilet that flushes in a whisper, never
needs handle jiggling, won't overflow
and ventilates itself (yes, ventilates
itself) every time it's used?**

Here it is! A quick look will tell you that this American-Standard Luxor* is totally new. The tank is tucked down low, almost out of sight. Flush the new Luxor and you can hardly believe your ears, it's so quiet. Bowl and tank are one piece of fine vitreous china, so easy to clean. But this unique toilet promises more. The optional Vent-Away* toilet ventilator is built right into the Luxor. At a touch of the flushing button it whisks toilet odors

down the drain. The Vent-Away is fast and thorough, with no mechanical parts to install, adjust or service.

This toilet stands knee-high to a buyer. Your prospects have never seen anything so luxurious. Be ready when the national, 4-color advertising breaks this spring. Ask your American-Standard plumbing contractor for literature and prices now or write American-Standard, Plumbing and Heating Div., 40 W. 40th St., New York, N.Y. 10018.

*TRADEMARK AR&SS CORP.

AMERICAN-STANDARD



American-Standard and Standard are trademarks of American Standard & Sanitary Corporation
AMERICAN-Standard
PLUMBING AND HEATING DIVISION

U. S. Steel Homes Introduces

APCO

Unique Apartment Utility Core Design

What is APCO? APCO is U.S. Steel Homes' design concept that utilizes an all-masonry apartment utility core. It enables you to build garden apartments faster, more economically and with almost complete flexibility. This utility core is the perfect complement to U. S. Steel Homes tested and proven, steel-framed exterior and interior wall systems.

APCO can be constructed at any time you choose. The apartment units are added later, after the core is complete . . . the next day . . . a week later . . . or even months later. Build your APCO units in the fall — erect your apartments in the winter. You can construct as many APCO units in a single building as are necessary to service the required number of

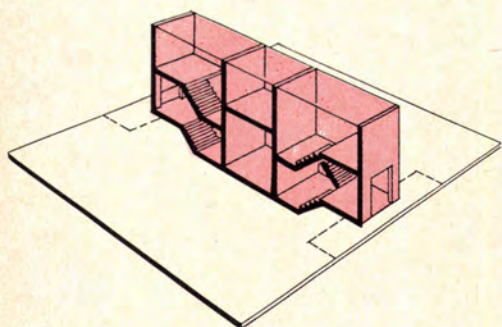
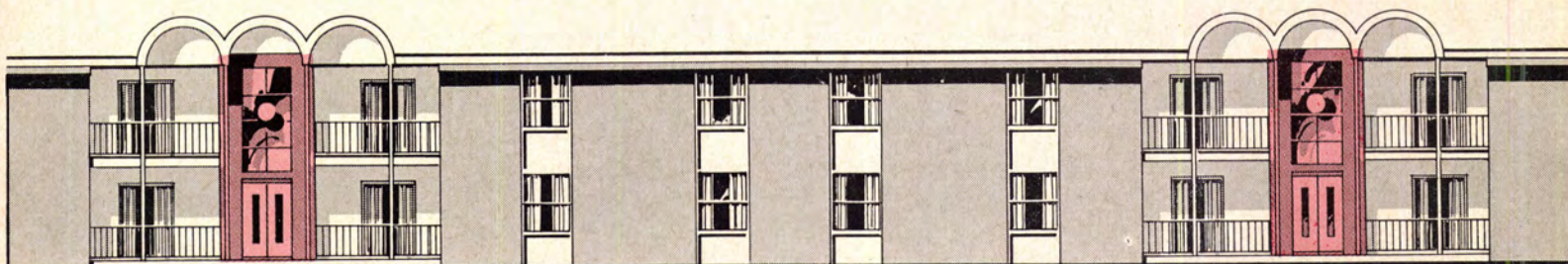
apartments. One APCO unit will service 8 apartment units with all utilities plus laundry or storage space. Two APCO units will service 16 apartments, three will service 24 apartments, etc. Build 1, 2 or 3 bedroom apartments and in mixed combinations.

APCO'S FLEXIBILITY ALLOWS YOU TO COMPLETELY DIVERSIFY YOUR APARTMENT BUILDING . . . TAILOR IT TO THE NEEDS OF THE SITE AND THE DEMANDS OF YOUR PARTICULAR MARKET! Get complete facts

on U. S. Steel Homes' APCO design today, and the USSH apartments that make this package your best multi-family buy. Call or write, U. S. Steel Homes Division, 2549 Charlestown Road, New Albany, Indiana.

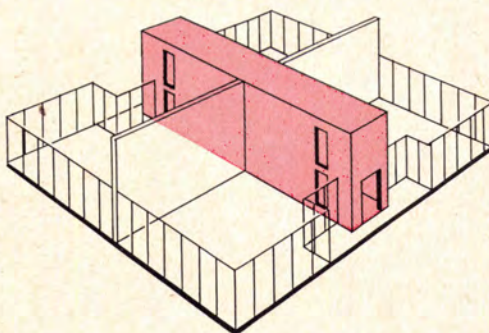


**United States Steel Homes
Division of
United States Steel**

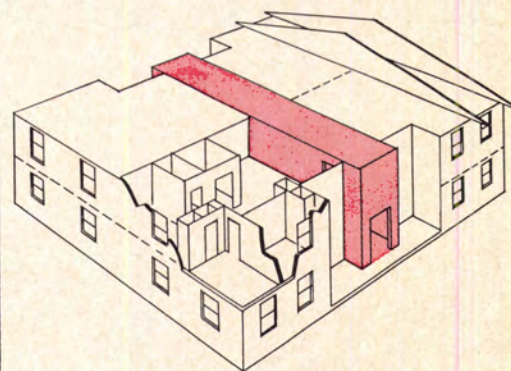


Here Is How APCO Works . . .

A slab foundation is poured to fit a pre-determined number of apartments plus the core. The all-masonry APCO unit (or units) is then constructed in the center of each 8-unit complex. This provides the terminus for all apartment utilities, stairs, intermediate and upper landings.



Size of slab, number of APCO units and party walls are determined by the number of apartment units in the complete building. With these in place, erection of USSH exterior wall system can begin.



This drawing shows a cut-a-way section of completed apartments in relation to the core. The ease and speed made possible with USSH exterior and interior wall systems, with their near-fool-proof erection procedure, will save you time, dollars, and make possible faster occupancy.

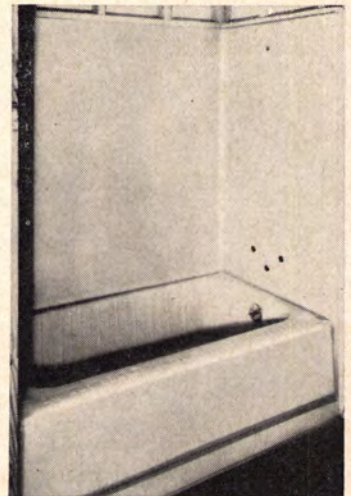
Baths



Brightly colored lavatories are available in Antique red, Espresso brown, Jade green, Blueberry and Citron yellow. New colors are intended to blend with other bathroom fixtures in white and pastels. Kohler, Kohler, Wis. (Circle 206 on Reader Service card)



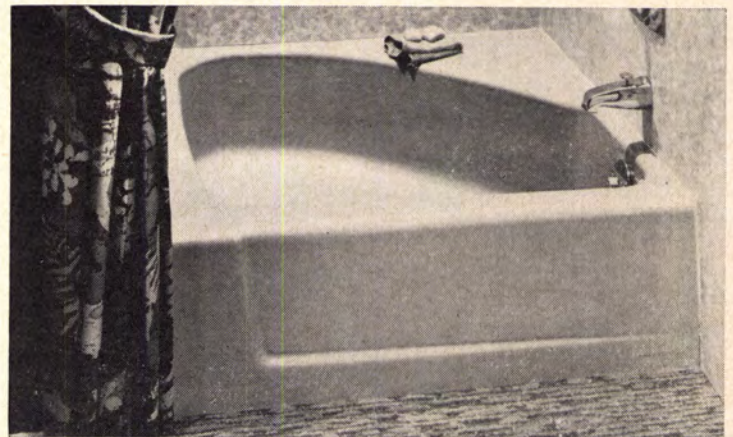
Corner shower unit has a lightweight shower floor and an angled shower enclosure. Door folds open from either side and panels are unbreakable. Floor surface is nonskid. Seven colors are offered. Size: 36" x 36". Showerfold Door Corp., Chicago. Circle 207 on Reader Service card



Glass-fiber bathtubs are shipped in molded plastic protectors. Tubs can be installed while house is framed, so units can be shipped directly to job site and stored outside. Protector eliminates settlement of dirt. Universal-Rundle, New Castle, Pa. Circle 208 on Reader Service card



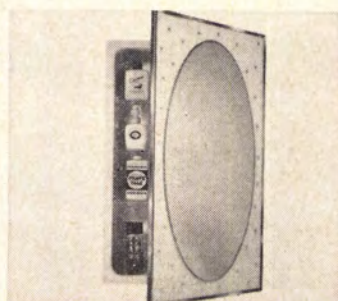
Oval lavatory, called the Corona, is vitreous china. A soap receptacle is hidden under front rim. Basin is offered in seven colors and white and in two models, Early American (above) and Rose Spray. Crane Co., Johnstown, Pa. (Circle 209 on Reader Service card)



Receptor tub is shower-stall size (38" x 39" x 12"). The manufacturer suggests the unit is ideal for elderly people because of low sides, corner seat, showering footrest and convenient faucet control. American-Standard, New York City. (Circle 210 on Reader Service card)



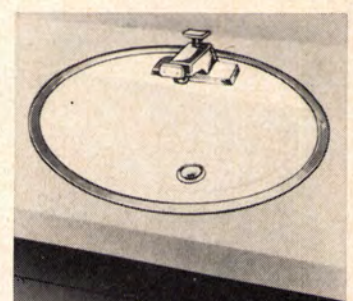
Wall tiles called Wenzel Weave are sculptured ceramic tiles with a continuous basket weave pattern. Nondirectional designs come in white, gray, blue, pink, cinnamon, aqua, beige sparkle and white sparkle. Wenzel Tile Co., Trenton, N.J. Circle 211 on Reader Service card



Recessed bathroom cabinet has stainless steel trim, full length piano hinges and seamless one-piece body. Cabinet is reversible for right or left hand opening. Mirror gives cameo effect because of patterned setting. Dura Steel Prods., Los Angeles. Circle 212 on Reader Service card



Danish-cut mirror is made of plate glass highlighted with rosettes. Twin cabinet with 29" x 19" wall opening lists for \$68.30. Single cabinet has 13½" x 19" wall opening and lists for \$34.15. General Bathroom Products, Elk Grove Village, Ill. Circle 213 on Reader Service card



China lavatory for countertops has a fittings ledge designed into the 19" x 17" oval. Advantages of the integral ledge, according to the manufacturer, are narrower countertops and drainage into the basin. American-Standard, New York City. Circle 214 on Reader Service card

New products continued on p. 151

This could be a \$5,250,000 question. Are you ready to answer it?

When 5¼ million readers of LIFE magazine take a look at this ad, things are going to happen! We don't know just how many of them will be asking you the \$1.00 question, but we'll bet *you* get some action.

And, after reading this ad, a lot of people will know why they're getting *added value* when they buy a home with Insulite Vinyl-Bond Siding.

Insulite is ready with the silver dollars, be sure *you're* ready with the answers to their questions on painting costs and the whole story on Vinyl-Bond Siding.

If you'd like more information, write us. But hurry, the ad runs in the April 30 issue.



INSULITE®
VINYL-BOND SIDING

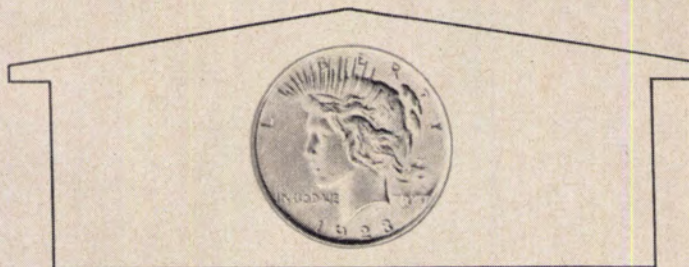
Vinyl-Bond is a T.M.

Insulite Division of Minnesota and
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Minneapolis, Minnesota 55402

ADVERTISED IN
LIFE

\$100 FREE
(ONE SILVER DOLLAR)

If you ask one question when you visit a model home



Ask how much you'd save
on painting  costs in 10
years if you build with new
Insulite Vinyl-Bond Siding!

Beautiful Insulite Vinyl-Bond Siding is so durable we guarantee in writing that the finish won't blister, peel or crack for 10 years. You shouldn't have to paint it for at least that long.

Any builder should be able to figure out just what that could save you in painting costs from now till 1975. But, we'll save him a little time by answering a few of the other questions you might have about Vinyl-Bond right here. For instance...

What's it made of? Vinyl-Bond Siding is made of the same wood fiber material used in regular Insulite Primed Siding... a material that's been proven on over 500,000 homes since 1957.

What about the coating? To the basic board, we first fuse a layer of tough fiber mat as a primer. Next one... and then a second coat of liquid vinyl is fused to the siding in a new high-temperature baking process. This is the same

kind of tough, industrial-quality coating that protects washers and dryers... even railroad cars that carry corrosive chemicals.

How about colors? Vinyl-Bond is available in 4 beautiful easy-to-match colors: Super White, Seaspray Green, Sandstone, and Whisper Gray.

How does it come? You can get regular horizontal lap siding, or plain panels for vertical board and batten construction.

How do you care for it? Under normal conditions of exposure, you just wash it off. That's all for at least 10 years.

If you request it, we'll send you a complete brochure on Vinyl-Bond Siding when we send you your dollar, but...

Don't forget the big question. Be sure to take this coupon when you visit model homes. Ask the builder just how much you could save on paint costs in 10 years if you build with Insulite Vinyl-Bond Siding.



PUT THE ANSWER HERE

\$

That's how much you could save with
Insulite Vinyl-Bond Siding

Attach the builder's business card (or his sales representative's card) to this coupon and send it to:

Insulite Vinyl-Bond Siding, Box 9355
St. Paul, Minnesota 55177

We'll see that you get your silver dollar. (It could be the easiest and most valuable dollar you ever earned.)

NAME _____

ADDRESS _____

CITY _____

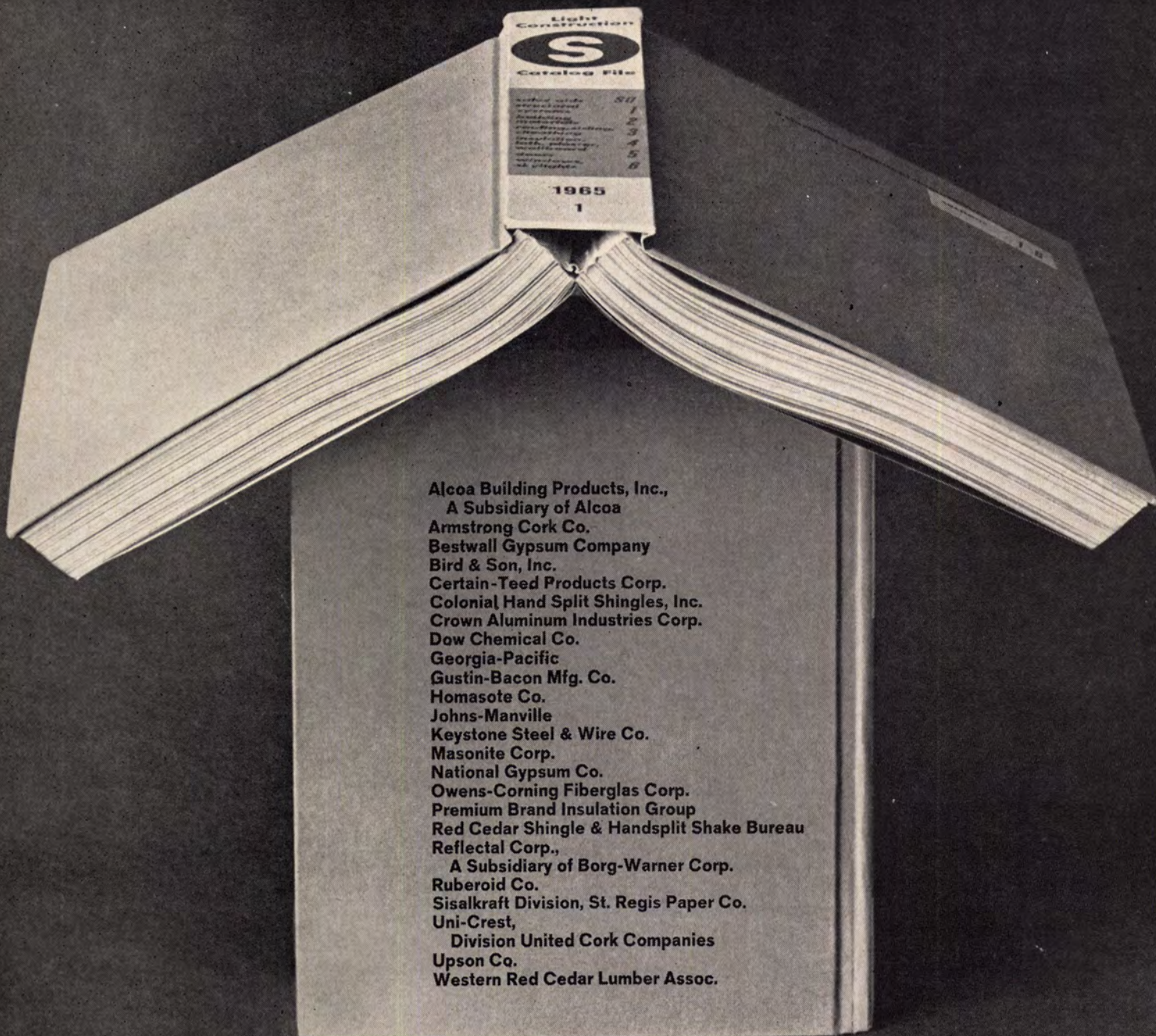
STATE _____

Limit: 1 to a family. Coupons must be postmarked before midnight, June 15, 1965.
Offer void where prohibited, taxed or otherwise restricted by law.



INSULITE
VINYL-BOND
SIDING





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Armstrong Cork Co.
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Under a single roof...

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As convenient as a patio roof...and just as useful. Saves time, makes it easy to evaluate and compare products or to make a point with a prospective home buyer. Sweet's is always there...within easy reach...to help you build, to help you sell.

Sweet's information supply also includes: structural systems...building materials...kitchen, bath, furnishings...

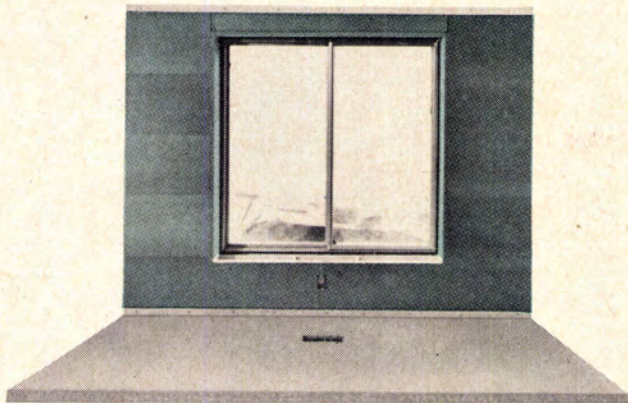
doors...windows, skylights...hardware, door, window equipment...flooring, floor, wall covering...surfacing, paneling, paints...mechanical and electrical equipment...builders tools.

A few words of caution though. Sweet's is so useful that it becomes habit forming.

Sweet's Catalog Service, F.W. Dodge Co., Division of McGraw-Hill, Inc., 330 West 42nd Street, New York, N.Y. 10036



81.6 % OF NAHB MEMBERS NAMED SWEET'S NO. 1 PRODUCT INFORMATION SOURCE.



Remember Styrofoam.

(Use it to insulate masonry walls. Finish with wallboard or plaster. Costs about the same as furred, uninsulated walls. Good deal?)

You bet. That's one of the things you'll like about Styrofoam® FR brand insulation—its versatility in accepting finishes for masonry walls. Going to use wallboard? Easy does it. Styrofoam FR applies quickly to walls with the help of Styrotac® bonding adhesive. No furring. Then wallboard goes up. No nails to "pop" or holes to fill.

Or if you're using plaster, it can be applied directly to Styrofoam FR.

This insulation's textured surface provides an excellent key for wet plaster. And eliminates the need for furring and lathing.

Whichever method you use, Styrofoam FR resists the passage of moisture, eliminates the need for a vapor barrier, takes care of itself.

Permanently. The result is a solid, insulated wall at nearly the same cost as a furred, uninsulated wall.

To make Styrofoam FR even more memorable, we've made it blue.

There's nothing like it. For more facts worth remembering, see Sweet's Light Construction File 4a/Do.

Or write us. The Dow Chemical Company, Plastics Sales Department 1321BP4, Midland, Michigan.

Styrofoam is Dow's registered trademark

for expanded polystyrene produced by an exclusive manufacturing process.

Accept no substitutes . . . look for this trademark on all Styrofoam brand insulation board.



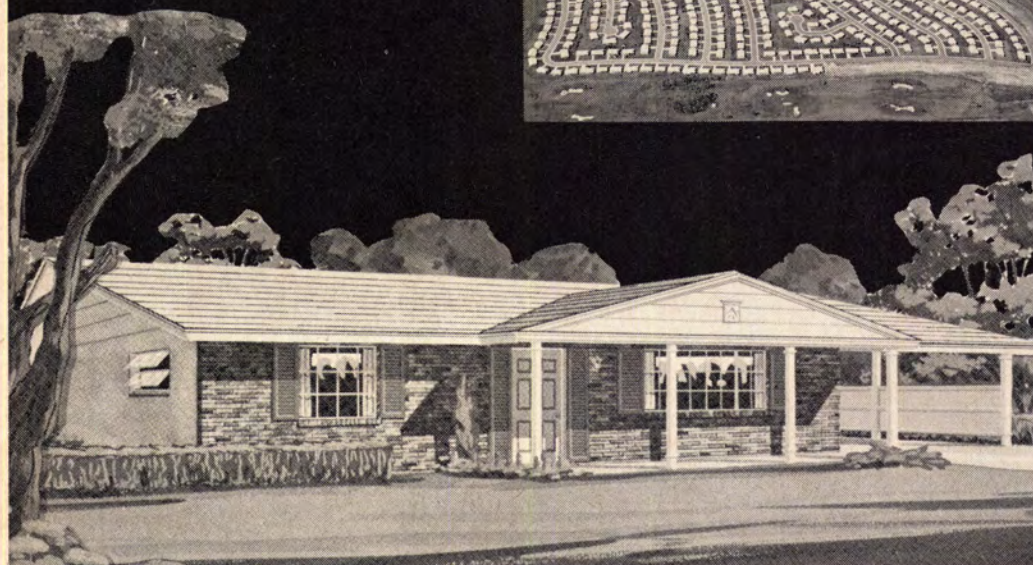
O.K. Now forget it.

(You'll never have to worry about it again.)



X-panda SHELF®

"WINNER"
in Del Webb's
SUN CITY
RESEARCH HOUSE

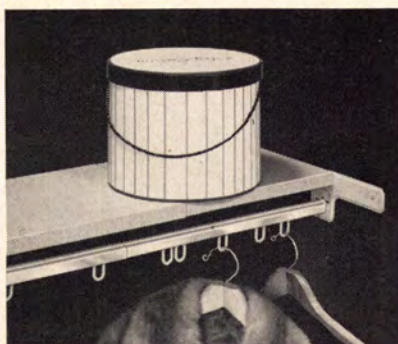


Smart builders like the dollar-saving features of X-Panda Shelf — customer-pleasing, strong steel shelving that installs for less because there is never any sawing, fitting, painting or hook rail needed. Home buyers like X-Panda Shelf, too — proven by one of America's most successful consumer-and-quality-conscious builders — Del Webb. They report:

"During the recent opening of our Research House to the residents of Sun City, Arizona, X-Panda Shelf won approval over wood shelving and over a competitive product by a comfortable margin. On new models here in Sun City, X-Panda Shelf will be given every consideration when closet shelving is selected."

HARVEY SHAHAN
NEW PRODUCTS RESEARCH
DEL E. WEBB CORPORATION

X-PANDA SHELF is factory finished in five fashion colors . . . with Bonderized steel construction . . . in a variety of styles to fit any type of wardrobe, linen or utility closet — including continuous shelving on storage walls. Send coupon for details.



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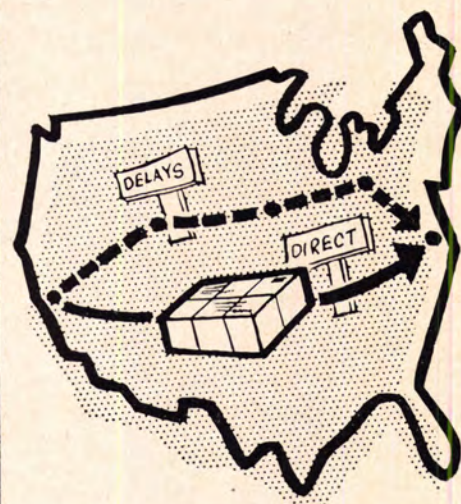
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ZIP CODE SPEEDS YOUR PARCELS



1. Packages are shipped by more direct route.
2. They are handled fewer times.
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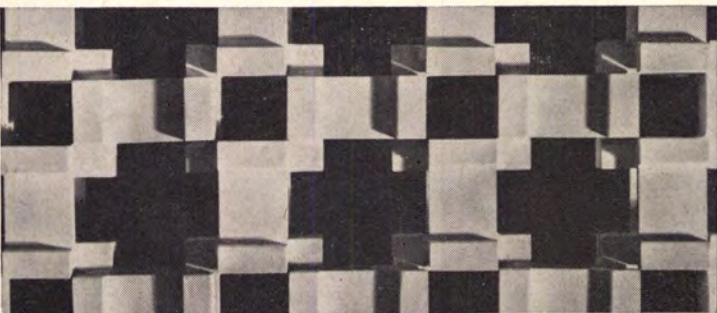
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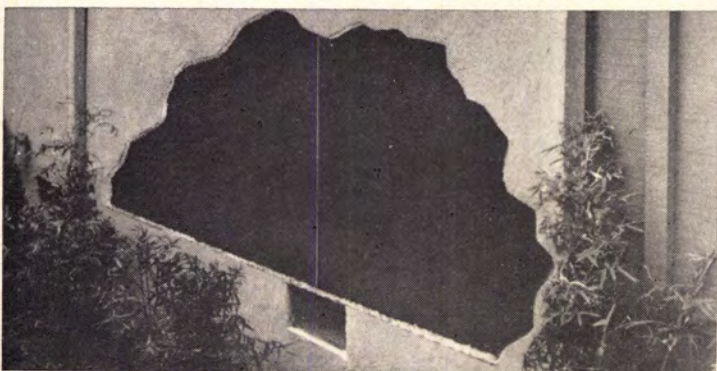
Exterior materials



Exterior deck surfacing is made up of a waterproof, elastic base sheet bonded to the deck and a surface of resilient tile. Decking is said to be completely watertight. Cost: \$2 to \$2.50 a sq. ft. including labor. Armstrong, Lancaster, Pa. (Circle 231 on Reader Service card)



Three-dimensional concrete blocks create light-diffusing interior and exterior screen walls. Units measure 8" x 8" x 4", weigh 4 lbs. and cost \$1.50 a unit. Available in beige and off-white. Arts for Architecture, Garden City Park, N.Y. (Circle 232 on Reader Service card)



Waterproofed wallboard comes in regular or type X gypsum core. When installed, material can be painted, wall papered or tiled. The manufacturer suggests its use for breezeways and soffits. Kaiser Gypsum Co., San Francisco. (Circle 233 on Reader Service card)

New products continued on p. 152



Olympic Solid Color Stains can do anything paint can do.

(Except crack, peel, or blister.)

Don't ever make the mistake of thinking that paint doesn't have its place. It does. Used over plasterboard, concrete, stone, metal or what-have-you, paint is dandy stuff.

But when it comes to wood, nothing does a better job than



Olympic Solid Color Stain. Take the word of W. H. Litchfield, President of Puget Construction Company, Inc., Seattle, Washington. Mr. Litchfield says, "Olympic Stain definitely looks better for years longer. That's why we've used it for years. Because it can't crack, peel or blister, we never have any complaints when we use Olympic Stain."

The reason for Olympic's high performance? Olympic Stain soaks in. Unlike paint it doesn't hide the texture or form a film. Olympic penetrates — actually becomes a part of the wood.

That's because Olympic is designed especially for wood. Its whole purpose in life is to make exterior woods look good, years longer. And that's exactly what it does. We guarantee it.

FOR A NEW A.I.A. BROCHURE AND COLOR SAMPLES ON WOOD, WRITE: OLYMPIC STAIN, 1118 N.W. LEARY WAY, SEATTLE, WASHINGTON 98107

Circle 74 on Reader Service Card

151



*nobody but nobody
tailors a disposer line to fit
your project and your price
—like In-Sink-Erator*

Low cost homes? Medium priced? Deluxe? Custom? Apartment buildings? Makes no difference. There's a blue-ribbon quality In-Sink-Erator, with exclusive money-saving features, that's perfect for your particular needs.

For instance, take Model 77, world's most popular continuous feed disposer. The patented automatic reversing switch makes it last twice as long because the disposer grinds in both directions. Exclusive Self-Service Wrench frees accidental jams, cuts down complaints and costly call-backs.

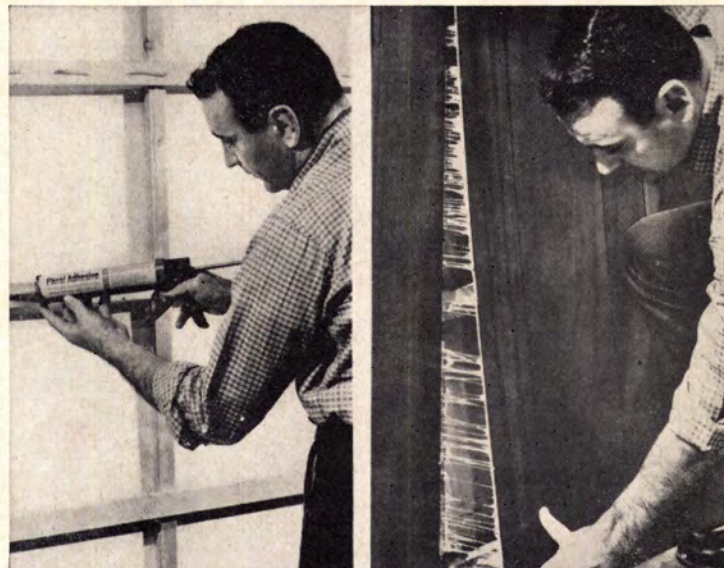
Exclusive Detergent Shield prevents corrosion damage from harmful caustic agents. And nobody offers a 5-year protective warranty the equal of In-Sink-Erators!

Get all the facts. Call your Plumbing Contractor. Or write for full information and free sales aids.

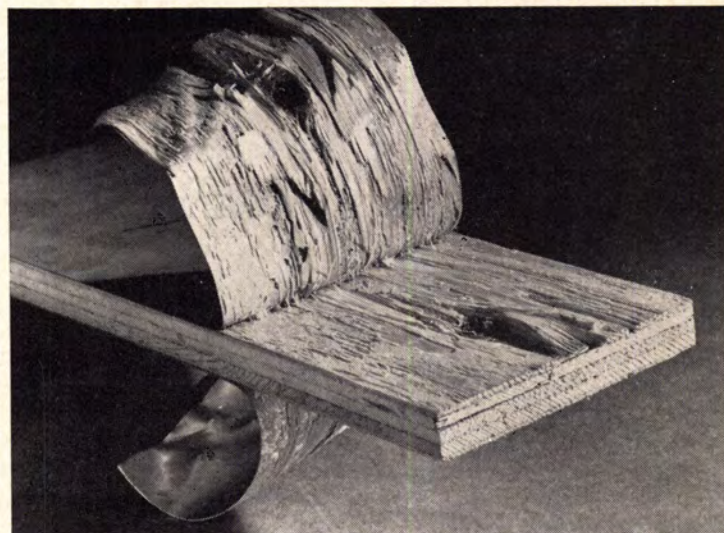
ISE® In-Sink-Erator®
Originator and perfecter of the garbage disposer

IN-SINK-ERATOR MANUFACTURING CO. • RACINE, WIS.

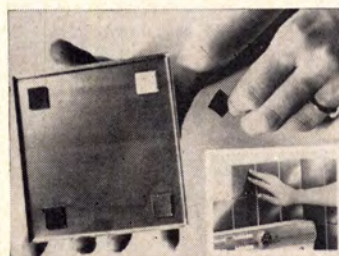
Tapes and adhesives



Panel adhesive is said to make installation of plywood paneling 50% faster than with nailing. Consistency of adhesive allows ample time to move panels into perfect alignment before final bonding. U.S. Plywood, New York City. (Circle 215 on Reader Service card)



High-strength contact adhesive produces bonds between a large variety of core and facing materials. The reinforced elastomer is exceptionally strong as illustrated by the torn plywood above. Swift & Co., Chicago. (Circle 216 on Reader Service card)



Double-faced tape is used to speed installation of metal wall files. Quick Stick tape has release paper on both sides. Scissors are the only installation tool needed. Tape eliminates mastics and clean-up work. Vikon Tile, Washington, N.J.

Circle 217 on Reader Service card



Epoxy adhesive comes in a 3¼ ounce Meter Tube which automatically mixes the resin and its hardener in the proper proportions. Epoxy Putty bonds together almost any kind of materials. It lists for \$2. Permalite Plastics, Costa Mesa, Calif.

Circle 218 on Reader Service card

NEW PRODUCTS

start on p. 137



New masking tape (lower roll) grabs surface on slightest contact, provides 100% surface adhesion. Scotch tape #232 reportedly provides sharper, cleaner edges for painting and better holding for packaging and splicing. 3 M Co., St. Paul.
Circle 219 on Reader Service card



Ceiling-to-wall tape is designed to conceal ragged edges where fitted ceiling tiles meet walls. The preshaped white vinyl tape, backed with a pressure-sensitive adhesive, retails for 11¢ a ft. Tape may be painted. My-Ko Chemical, Milwaukee.
Circle 220 on Reader Service card



Wallboard adhesive is designed for trowel or spotting application of foamed plastics, plasterboard, plywood and other decorative paneling in above-grade installations. No clamps, braces or nails are used. Armstrong Cork, Lancaster, Pa. (Circle 221 on Reader Service card)



Low-cost panel adhesive is applied with a caulking gun. It does not require disengagement of the panel from the studs after application as do some other systems. Panels can be applied up to 30 minutes after the adhesive. Evans Prods., Portland, Ore.
Circle 222 on Reader Service card



Sound deadening tape uses friction, tension and counteraction to reduce noise in ductwork, motors, blowers, cabinets and other metal surfaces. Self-adhering, metallic-like Quietape comes in 2' strips. Daubert Chemical, Oak Brook, Ill.
Circle 223 on Reader Service card

New products continued on p. 154

THE COMPETITIVE EDGE

WITH
ALLIANCE Genie®

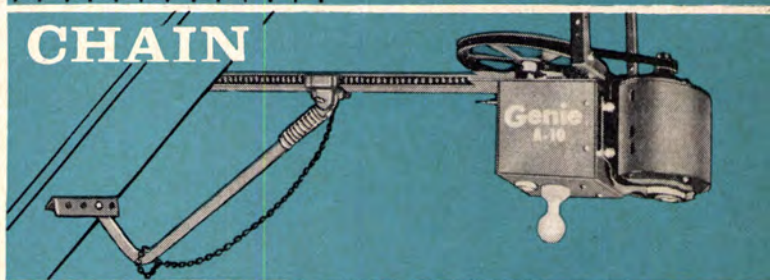


Genie® Automatic Garage Door Operators

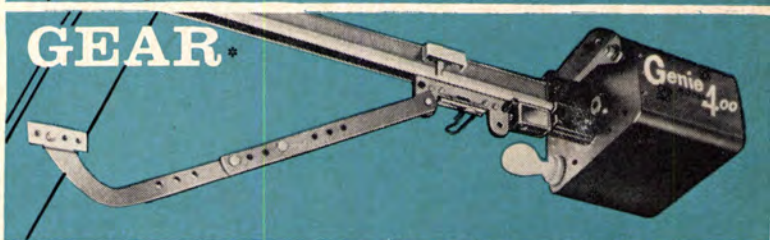
FRICTION



CHAIN



GEAR



What a pleasant surprise, when prospects find this quality convenience already installed on your houses! Choose from three types of Genie radio, remote control garage door operators — friction, chain and gear — to fit your building needs. All are available from one convenient source — Alliance. ■ Genie is distributed nationally. Factory service is available everywhere. Contact Alliance today for full information.

GENIE KEEPS YOU IN THE DRIVER'S SEAT!



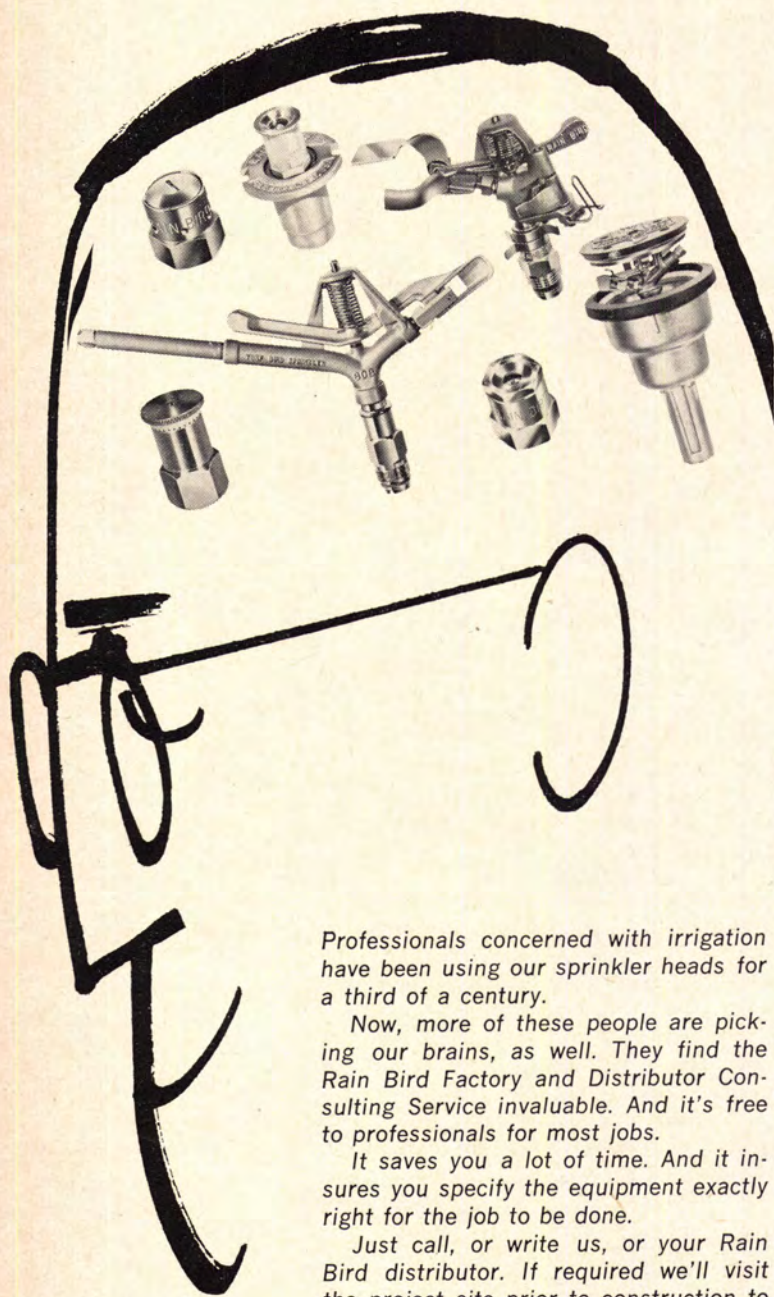
The Alliance Manufacturing Co., Inc.
Alliance, Ohio

(Subsidiary of Consolidated Electronics Industries Corp.)



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our heads
these days.



Professionals concerned with irrigation have been using our sprinkler heads for a third of a century.

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Just call, or write us, or your Rain Bird distributor. If required we'll visit the project site prior to construction to evaluate the problems. We'll figure the budget with you, discuss and illustrate the design criteria, and provide a complete sprinkler system specification for the equipment and installation procedures. We can visit the site again, during construction, to smooth out any field problems.

We can provide complete or partial turf irrigation systems, complete piping schematics, pumping plant details and water costs.

Next tough irrigation design problem, why not keep your head—and use ours?

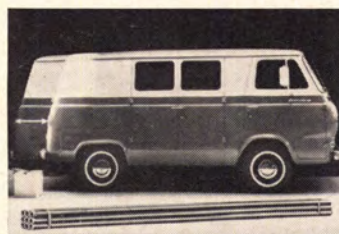
RAIN BIRD

(In the East and Midwest): Rainy Sprinkler Sales, Div. L. R. Nelson Mfg. Co., Inc., 1012 West Pioneer Parkway, Peoria, Illinois, Phone 309 685-7656.
(In the West): Rain Bird Sprinkler Mfg. Corp., Glendora, Calif., Phone 213 335-1203.

Production equipment



Drainage ditch excavator has V-shaped bucket that excavates trenches with a 12" flat bottom and a maximum 71" width. It digs smooth, finished ditches in a single pass without clean-up or hand work. American Poclain, Rahway, N.J. (Circle 224 on Reader Service card)



Enlarged compact truck is offered with a body 18" longer than the regular model. Called the Econoline SuperVan, it can carry 23% more cargo than standard models and long items like 14' lengths of pipe. Ford Motor Co., Dearborn, Mich. (Circle 225 on Reader Service card)



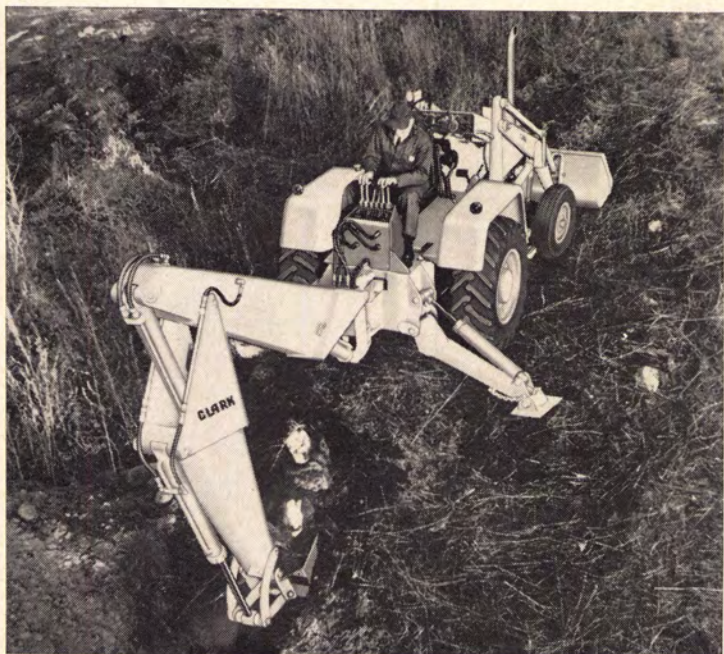
Tractor crawler series offers three bulldozers, a loader, backhoes, sideboom, ripper, cable plow and specialized logging equipment. JD350 is powered by a high torque three-cylinder engine in both gasoline and Diesel versions. John Deere, Moline, Ill. (Circle 226 on Reader Service card)



Small excavator has 2-cu.-ft. all-position bucket, a low silhouette and only 3.7 psi ground pressure which permits it to be used to dig beside existing buildings. It can dig to a depth of 11 ft. Harnischfeger, Milwaukee. (Circle 227 on Reader Service card)

NEW PRODUCTS

start on p. 137



Backhoe-loader is an integrally designed unit with a single full-swivel seat from which driver can control all operations. Clark 700 has an 18' 6" backhoe reach and an 80"-wide bucket loader. Clark Equipment Co., Battle Creek, Mich. (Circle 228 on Reader Service card)



Half-cab truck easily transports extra-long building materials and equipment. The Contractor has a cab only 34" wide and can be mounted on Ford, Chevrolet, Dodge, GMC or IHC chassis with 122" or 125" wheelbases. DeKalb Body, DeKalb, Ill. (Circle 229 on Reader Service card)



Compact backhoe handles 75% of the ditching done by a conventional backhoe for one third the investment. The Little Monster moves up to 2½ mph on the job but can be towed at highway speeds. It digs to depths of 8'4". Davis Mfg., Wichita. (Circle 230 on Reader Service card)



Wheel loader has articulated steering that can turn 35° to either side and swings the full 70° in 2.5 seconds. The 22,500-lb. loader has dual brakes for each axle, a static tipping load rating of 16,750 lbs. straight ahead and 15,250 lbs. in full turn. Caterpillar, Peoria.

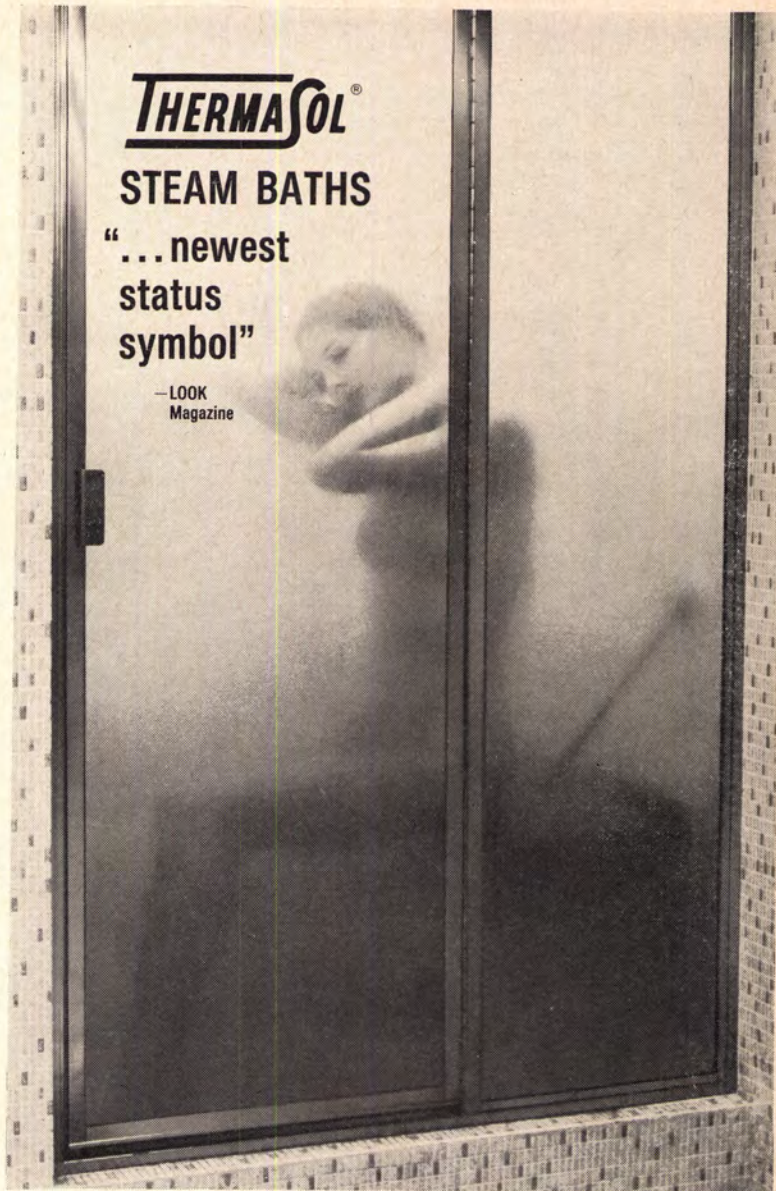
New products continued on p. 156

THERMASOL®

STEAM BATHS

"...newest
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symbol"

—LOOK
Magazine



They speed new home sales and apartment rentals!

Here's the exciting feature you've been looking for to make you stand out from the competition. The Thermasol Steam Bath is the bathroom luxury everyone is talking about. It draws attention to your ads; lures traffic to your model homes and apartments; helps close sales and leases faster, at higher profits. People tell friends about your homes and apartments—and newspapers write about them—when there's a Thermasol in the bathroom! **Real Estate Forum** says it's "a must for the progressive builder."

Thermasol is inexpensively installed in any bathroom . . . under construction or already built. The stall shower or tub doubles as a steam room, and serves its normal use as well. Thermasol takes up no bathroom space. An amazingly compact steam generator hides away in vanity, closet, ceiling or floor. A steam outlet head and timer switch complete the set-up. FHA-approved, Thermasol adds only a small fraction to the cost of a bathroom. For apartments, the equipment can be leased for as little as 22¢ a day.

Safe, simple, foolproof, Thermasol is U.L.-listed and guaranteed against steam damage to tile, bathroom walls or decor.

As easy to use as a shower bath—and even easier to install—the Thermasol Steam Bath is the most appealing home "appliance" you can offer.

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Please send complete literature on Thermasol individual Home and Apartment Steam Baths.

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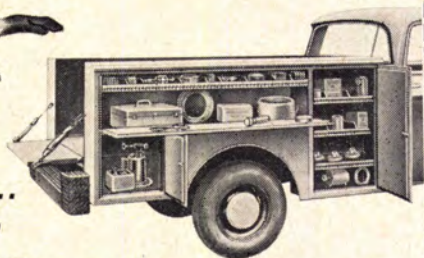
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JOB-PLANNED UTILITY BODY

Made by master mechanics for master mechanics. See your local truck dealer . . . or for name of local distributor send this advertisement with your name and address.

READING BODY WORKS, INC., Dept. HH-45,420 Gregg Avenue, Reading, Penna.

Circle 79 on Reader Service Card



the feature that melts snow...sells more homes

Give prospects something special to think about—Chromalox electric snow-melting step mats that make steps safe at the flip of a switch. This ready-to-install assembly is specially designed for embedding in concrete steps. Basic 2-step and 3-step mats can be combined for four or more steps. Other Chromalox snow melting equipment available for driveways and sidewalks. Write today for Bulletin M60100.

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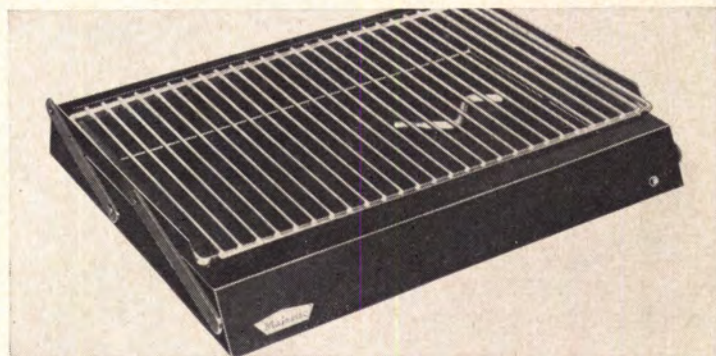


CHROMALOX electric heat

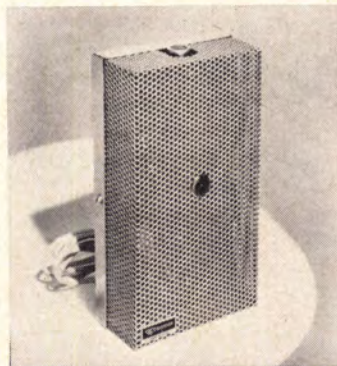
Edwin L. Wiegand Company, 7770 Thomas Blvd., Pittsburgh, Pa. 15208



Gas fireplace has remote push-button control. Seven models are available, including a custom model with a variety of facing materials. Installation takes an hour and costs half as much as masonry fireplaces. Dyna Mfg., Los Angeles (Circle 239 on Reader Service card)

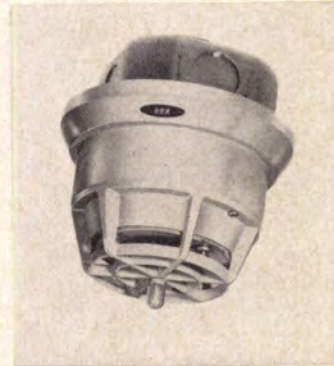


Charcoal cooking grille can be used in any standard fireplace that has a flue. Barbecue has space for charcoal and a 20"x12" cooking area. Portable unit can also be used outdoors. Majestic, Huntington, Ind. (Circle 240 on Reader Service card)



Smoke and heat detector sounds warning signal when 4% per ft. obscuration by smoke particles exists. A red pilot light remains lit to show unit is in good working order. Operates on standard current. Edwards, Norwalk, Conn.

Circle 241 on Reader Service card

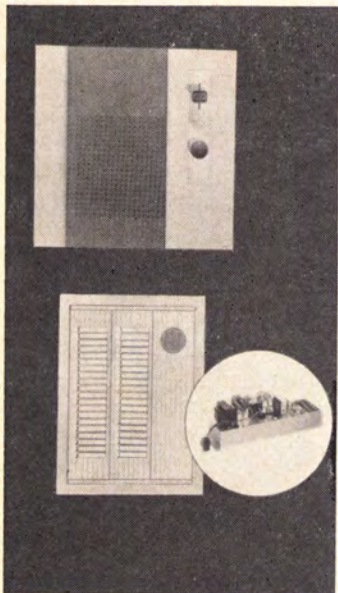


Fire protection device detects smoke and combustion gases before flame starts. Unit fits flush with ceiling and works on 110 volts. Pilot light assures proper functioning and shows location of danger when alarm is sounded. BRK, Skokie, Ill.

Circle 242 on Reader Service card

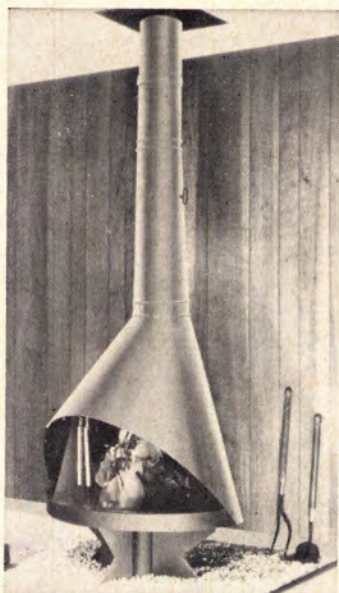
NEW PRODUCTS

start on p. 137



Intercom system has an organ chime that plays through the apartment speaker. Individual and entire-unit volume control are included. Available finishes include sprayed aluminum and brass or solid brass. Jensen Inds., Los Angeles.

Circle 243 on Reader Service card

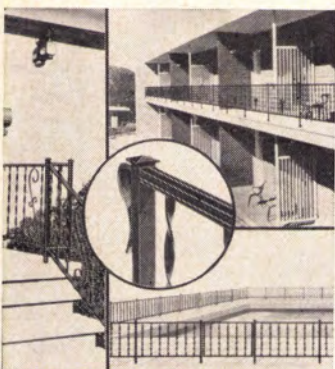


Decorator fireplace is portable. Called Glo-Lite, fireplace can be installed in four hours. Factory built unit is 36" high with a 7" flue. Available in red or black porcelain. Thulman Eastern Corp., Ellicott City, Md. Price: \$98.50.

Circle 244 on Reader Service card



Shelf and pole brackets in one piece support shelf and two poles. Closet unit is made of steel finished with white baked enamel. Wooden hook strip and clothes hooks are not necessary. Barney Gardner, St. Paul, Minn. (Circle 245 on Reader Service card)



Heavy-duty railing of wrought iron is weld-free and has sculptured top rail. No drilling is necessary for installation. Rust-free "Durado" railings come in heights from 29" to 44" and in 4', 5' and 6' lengths. Versa Prods., Lodi, Ohio.

Circle 246 on Reader Service card

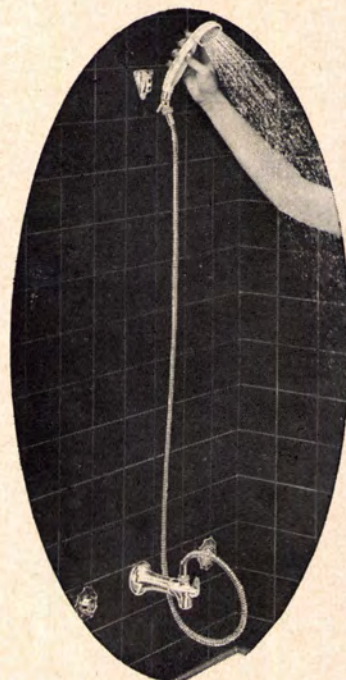


Gas barbecue has ceramic briquets that give even heat, are self-cleaning and long lasting. Burner is of cast iron, rest of unit is rust-proof cast aluminum. Two models available, one for permanent installation. O'Keefe & Merritt, Los Angeles.

Circle 247 on Reader Service card

New literature starts on p. 159

how to shower your wife with luxury...at our expense!



Get TWO terrific new showerall flexible showers for only \$20⁰⁰

RETAIL PRICE: \$24.95 EA.

Here's why we're offering you this steal of a deal: We want you to watch your wife fall in love with the SHOWERALL you install in your own home. Then see the same head-over-heels response from every woman who spots spectacular SHOWERALL in your model home! Husbands flip for it, too. Here's why:

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SHOWERALL is distinctively styled with chic phone-shaped shower head of super-sturdy Cyclocac...handsome top-quality fittings throughout!

SHOWERALL is the surefire clincher that can make your model homes real showplaces...turn prospects into live customers!



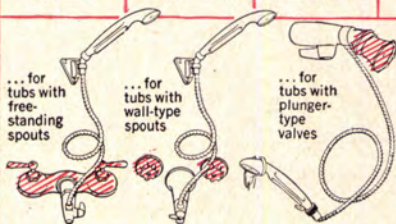
So don't stall! Take advantage of this amazing SHOWERALL offer pronto! Be sure to include name and address of model home. Offer includes display material that tells and sells prospects on SHOWERALL!

MODEL A

MODEL B

MODEL C

JACLO, INC.
P.O. BOX 122 PRATT STA., BKLYN, N.Y.



I understand that, to take advantage of this wonderful offer, I promise to install one unit in a model home. Enclosed find my check (or bill me) for \$20.00, covering purchase of TWO (2)...SHOWERALLS

showerall

MODEL A _____ MODEL B _____ MODEL C _____

Name & Address of my model home _____

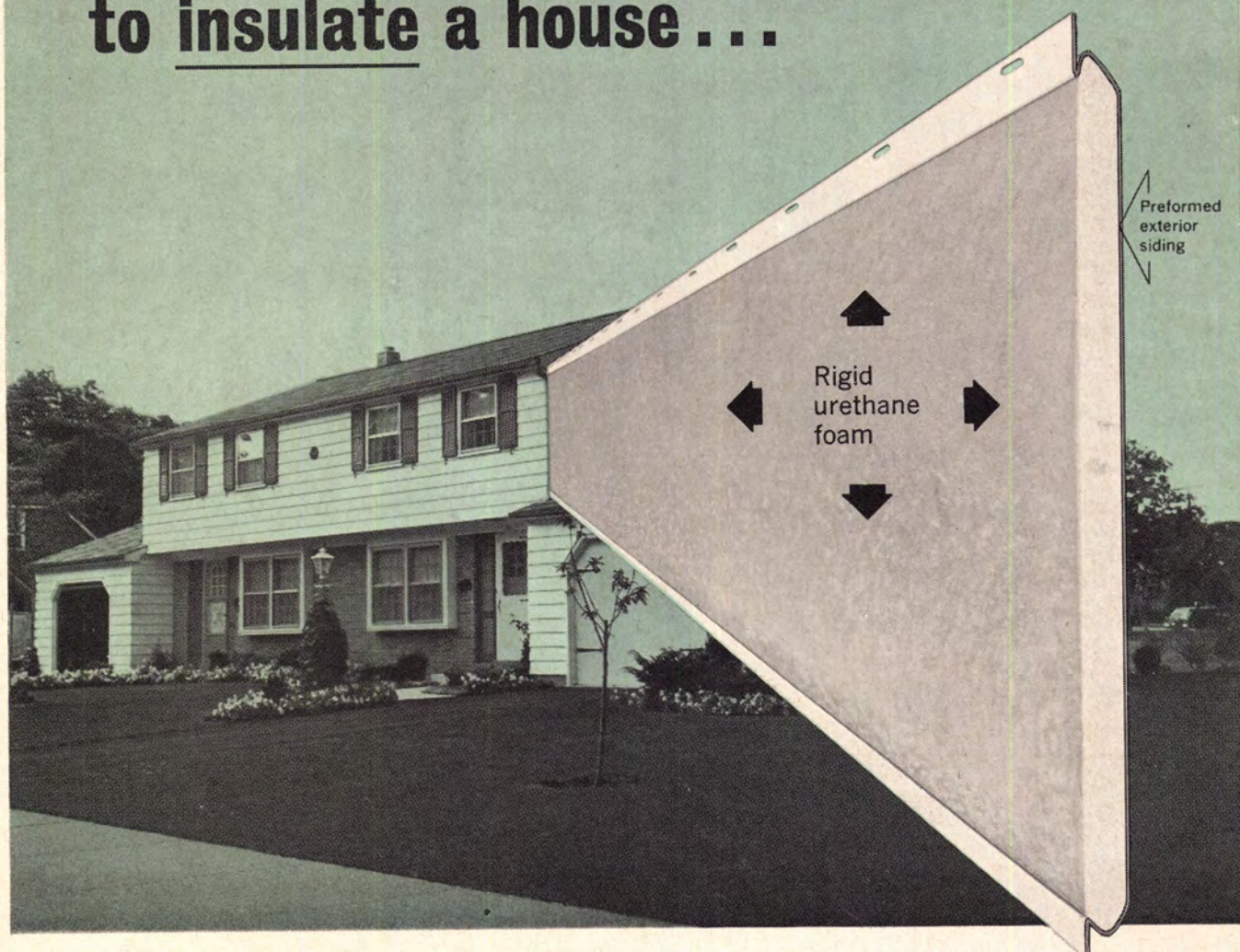
Name & Address of my plumbing supply dealer or contractor _____

My name _____

Address _____

City _____ State _____ Zip _____

Urethane foam-backed siding is the newest, easiest way to insulate a house...



and can save your customer up to 30% in heating and cooling costs

This new, unitized siding was developed for the builder who finds himself dealing with home buyers who are getting a lot smarter about insulation.

Preformed interlocking panels are backed with closed-cell rigid urethane foam that is permanently bonded to the substrate to form a strong, weather-proof, moisture- and fire-resistant barrier that can save up to 30% in home heating and cooling costs. Urethane-backed aluminum siding is accepted by the Architectural Standards Division of the FHA.

Urethane foam's high efficiency as an insulating and structural material is well-known and established in the refrigeration and transportation fields. Now you can build its sales advantages into your structures with pre-finished panels that complete the painting,

insulating and siding jobs in one quick operation.

This is another development from the fast-moving urethane foam industry that is engineering home-building improvements designed to give the home owner a better buy for his money and to put more of the profit dollar into your pocket.

Write for the full story about urethane building products and a list of urethane material suppliers who are ready to serve you with cost-saving methods you'll find hard to believe—until you check out the arithmetic yourself.

MOBAY CHEMICAL COMPANY
Code HO-4, Pittsburgh, Pa. 15205



NEW LITERATURE

For copies of free literature, circle the indicated number on the Reader Service card, page 147.

Morgan-Wightman lists 640 more items

The new building materials catalog has 152 pages, up 18 pages from last year, and includes a 14-page full-color section. Many new nationally known and advertised products have been added to its already large selec-

tion of standard and specialty items. New quantity discounts and a uniform freight charge plan make mail order purchases more attractive for builders. Morgan-Wightman, St. Louis.

Circle 302 on Reader Service card

DFPA siding booklet has 32 full-color pictures

Called *Guide to Distinctive Plywood Siding*, the booklet is designed to help builders and architects specify and select plywood sidings. Most of the apartment buildings and single-family houses shown as examples are of contemporary or transitional style, but a few traditional houses are included. Detail drawings show various applications, both over sheathing and directly fastened to studs. Window and door details for both types of application are also included.

Another section of the booklet

discusses the insulation value of wall sections with plywood sidings, also covers strength tests and durability.

Types of siding included in the guide are: Texture 1-11, channel-grooved, saw-textured, striated, overlaid and coated plywood designs. Vertical and horizontal applications are shown for most types. A folder listing manufacturers of each type of siding is included with the 24-page booklet. American Plywood Association (DFPA), Tacoma, Wash.

Circle 301 on Reader Service card

Georgia Pacific issues catalog with prices

The 62-page booklet combines seven separate catalogs into one convenient three-ring binding. The sections cover: 1) decorative paneling, 2) overlaid, surfaced and specialty plywood, 3) softwood plywood, 4) siding and sheathing, 5) hardboards, 6) composition boards and 7) Appalachian and Southern hardwoods. Almost every product is

shown with colored photographs of every type of wood available. Specification data, physical properties and list prices are also included. Sections are thumb-indexed with a detailed product index for each section. The catalog ends with a list of sales offices and distribution centers. Georgia-Pacific, Portland, Ore.

Circle 303 on Reader Service card

U.S. Gypsum offers partition selector

Designed in the form of a slide-rule, the selector gives instant information on sound and fire ratings and physical characteristics of 24 different types of partition assemblies. Thickness, weight, cross-section drawings,

components needed and nonload bearing height limits are also given. The slide rule case is printed with a selector guide for dry-wall screws. United States Gypsum, Chicago.

Circle 304 on Reader Service card

Wallpaper Council issues decorating guide

The 24-page, full-color booklet is illustrated with handsome photographs showing how to use wallpaper professionally. It discusses textures, color schemes, patterns, moods and contemporary and traditional periods. It shows how to use wallpaper in living rooms, dining rooms, bedrooms, kitchens and bathrooms. Though primarily a consumer

booklet, it is full of good ideas for builders and decorators. *How to Decorate with Wallpaper* was written by Mary Davis Gillies, Senior Editor of McCall's magazine. It carries a cover price of 25¢ and is available in bulk at \$9 for 50 copies.

Write to: Wallpaper Council, 969 Third Ave., New York City, N.Y., 10022.

Weyerhaeuser catalog of 62 prefinished panels

The 8-page booklet contains color illustrations, descriptions, and long- and short-form specifications on every stock type of hardwood plywood offered by this company. Four grades are cov-

ered: architectural grade, custom specified, Craftwall and Forestglo. Many of the items listed are priced. Weyerhaeuser Co., Tacoma, Wash.

Circle 305 on Reader Service card



built-in four-slice toaster

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built-ins for better kitchens



FREE... SEND TODAY!
Complete catalogs, including product specifications, to help you design better, more beautiful kitchens.

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This Act of Congress takes the risk out of getting rich in the motel business.

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By this new Act of Congress, your building "know-how" is joined with the knowledge and experience of Congress International motel specialists. A new Congress Inn franchise is being awarded every 48 hours.

This Act of Congress provides you with:

A full scale economic survey. Complete preliminary plans, based on, and right (in size) for your site.

A detailed financial package ready for financing presentation.

Training of your staff or management services if you prefer.

Advertising, promotional and public relations campaigns to fill your Congress Inn rooms.

The most important investment minute of your life is this minute! Take the minute. Fill in this coupon.



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Gentlemen:
Your Act of Congress
intrigues me.

I'm interested. Rush details.

Name _____
Address _____
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State _____ Zip No. _____
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New literature continued on p. 161



**How would you
heat 600 rooms
on Chicago's
chilly lake front?**

HOLIDAY INNS CHOSE HUNTER HEATLINER CONVECTION BASEBOARD

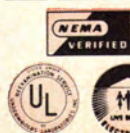
(electric heat as modern as the revolving restaurant on top!)

Chicago visitors will find welcome warmth at the new high-rise Holiday Inn on North Lake Shore Drive. Every room has Hunter Heatliners—as convenient as the five-story garage with spiraling traffic ramp . . . as dependable as the Holiday Inn reputation for style and service. Hunter's Heatliner is a natural choice for first class motor hotels, as well as homes, offices and apartments.

Six lengths, two power levels—Individual thermostats permit room-to-room variations of indoor climate. Architects can choose from six lengths (3,

4, 5, 6, 8 and 10 feet), two power levels (187 or 250 watts per lineal foot). Beige finish blends with any decor (or units can be painted to match walls, woodwork). The Heatliner Baseboard is a Hunter engineering triumph. It's NEMA Verified, UL approved, easy to install, completely safe—backed by Hunter's 80 years of experience.

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NEW LITERATURE

starts on p. 159

Catalogs

ARCHITECTURAL METAL PRODUCTS. 36 pages. Bronze and other metal railings, contemporary trellage designs, decorative screen systems and expansion-joint covers. Julius Blum, Carlstadt, N.J. (Circle 308 on Reader Service card)

FLUSH DOORS. 20 pages. Standard constructions and special purpose constructions (e.g., lead-lined and static shielded doors) are illustrated along with technical information and suggested specifications. U.S. Plywood Corp., New York City. (Circle 309 on Reader Service card)

SOUND CONTROL. 12 pages. Sixteen systems of sound control for floors and walls are illustrated, described and rated for sound transmission. Cost index figures permit accurate estimation of local costs of each system. Celotex Corp., Chicago. (Circle 306 on Reader Service card)

FOUNDATION DRAINAGE. 4 pages. Importance of proper drainage, use of pitch-fibre pipe and proper installation procedures are described and illustrated. Bituminous Pipe Institute, South Milwaukee, Wis. (Circle 307 on Reader Service card)

SOUND-DEADENING BOARD. 4 pages. Methods for using polystyrene foam/paper laminate in wall, ceiling and flooring applications. Monsanto Co., St. Louis. (Circle 310 on Reader Service card)

PRESURFACED WALL PANELS. 8 pages. Specifications, detail drawings and photographs of curtain-wall panels faced with ceramic tile, travertine, slate, granite, limestone, marble and aggregates. Mosaic Tile Co., Cleveland, Ohio. (Circle 311 on Reader Service card)

OUTDOOR LIGHTING. 32 pages. Cast aluminum bulb holders and decorative shaded fixtures for outdoor use. Colored lenses, canopies, cover plates and other accessories. Swivelier, New York City. (Circle 312 on Reader Service card)

Product bulletins

MULTI-PURPOSE HYDRONIC HEATING SYSTEM. 6 pages. Combines hydronic heating, domestic hot water, indirect swimming pool heating and snow melting system into a compact multi-purpose unit. Dimensions, diagrams and descriptions are included. Raypak Co., El Monte, Calif. (Circle 313 on Reader Service card)

PACKAGED LIGHTING CONTROLS. 16 pages. Multiple dimming systems for churches, schools, amateur theaters, night clubs, lodges, motion picture theaters and display windows. Superior Electric Co., Bristol, Conn. (Circle 325 on Reader Service card)

MINERAL FIBER SIDING PANELS. 4 pages. Colors are shown. Advantages and warranty are discussed. Philip Carey Mfg., Cincinnati. (Circle 333 on Reader Service card)

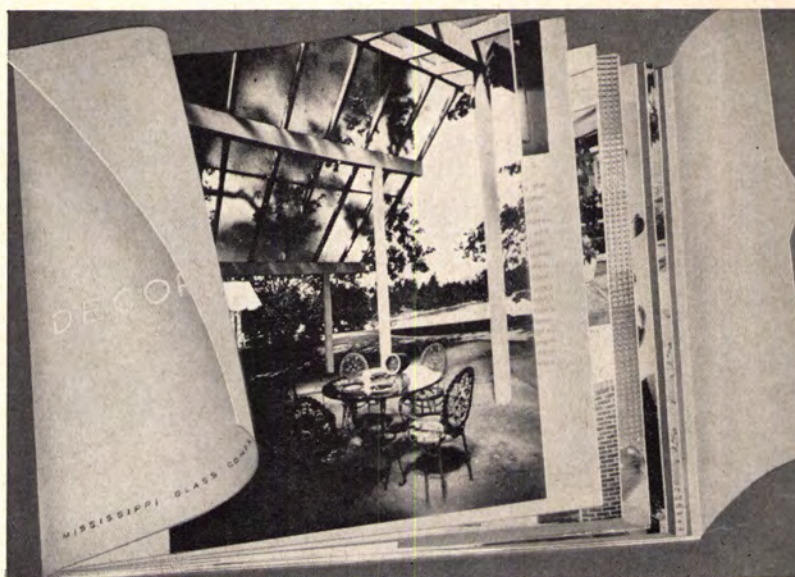
HOME USES FOR CLEAR ACRYLIC PLASTIC. Six folders show how and where to use plexiglas for sliding cabinet doors, luminous ceilings, room dividers, shower enclosures, storm doors, wind screens and valence lighting strips. Rohm & Haas Co., Philadelphia. (Circle 327 on Reader Service card)

FLOODLIGHTING. 16 pages. Incandescent and mercury-vapor fixtures and accessories for floodlighting applications. For industrial, commercial and school applications. Thomas Industries Inc., Louisville, Ky. (Circle 328 on Reader Service card)

WROUGHT-IRON RAILINGS. Catalog sheet. Prefabricated railings that adjust to any size or slope and can be installed with hand tools. Photographs, drawings, description and instructions. Versa Products, Lodi, Ohio. (Circle 326 on Reader Service card)



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LARGEST DOMESTIC MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

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NEW LITERATURE

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CONTINUOUS DOOR HINGES. 4 pages plus price list and instruction sheet for new extruded and anodized aluminum full-length door hinges. Roton Corp., Coral Gables, Fla. (Circle 319 on Reader Service card)

THREE-DIMENSIONAL CERAMIC-TILE FACING. 12 pages. Installation pictures in color of 12" squares used as exterior wall coverings. Interpace, Los Angeles. (Circle 320 on Reader Service card)

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COLOR MASONRY CEMENT. 4 pages. Color chart and specifications for custom colors and standard colors. Medusa Portland Cement Co., Cleveland, Ohio. (Circle 322 on Reader Service card)

SUBMERSIBLE PUMP. 4 pages. Description plus selection chart for pumps with capacities ranging from 100 to over 1400 GPH. Reda Pump Co., Bartlesville, Okla. (Circle 323 on Reader Service card)

PREFINISHED RED CEDAR SHAKES. 8 pages. Shakes, shake panels (up to 8' long), hand-split shakes, metal corners and colored nails are shown and described. Shakertown Corp., Cleveland, Ohio. (Circle 324 on Reader Service card)

STEEL BOILER RATINGS. 32 pages. Contains all ratings of steel boilers in effect on Aug. 17, 1964. Institute of Boiler and Radiator Mfgs. New York City. (Circle 314 on Reader Service card)

ARCHITECTURAL DESIGN DATA. Folder with 9 two-page inserts covering design, installation and mounting of Plexiglas panels. Rohm & Haas, Phila. (Circle 315 on Reader Service card)

RESILIENT FLOORS. 28 pages. Technical and installation data, specifications. Congoleum-Nairn, Kearny, N.J. (Circle 316 on Reader Service card)

GLASS AND ALUMINUM DOORS. 4 pages. Heavy-duty aluminum-framed panel door is described. Advantages and specifications are given. Aluminaire, Phoenix. (Circle 334 on Reader Service card)

EXPANSION COUPLERS. Catalog sheet. Piston slide-type couplers to compensate for expansion in fin-tube baseboard heating systems. Description, specifications, diagrams and a chart for easy determination of the linear expansion of copper tubing. American Tube and Controls Inc., West Warwick, R.I. (Circle 330 on Reader Service card)

Technical Literature

MANUAL OF GYPSUM LATHING AND PLASTERING. 40 pages. Photographs, charts and tables cover plaster bases, basecoat plasters, aggregates, finish coat plasters, types of finishes, design factors and solutions to plaster problems. Gypsum Assn., Chicago. (Circle 337 on Reader Service card)

WOOD DECKING. 8 pages. Tables, drawings and photographs describe patterns, sizes, grades, species, properties, insulation and fire resistance factors, nailing and span systems, span tables, deflection, allowable stresses, pitched-roof design and specifications. Potlatch, Chicago. (Circle 339 on Reader Service card)

CORRUGATED ASBESTOS-CEMENT ROOFING AND SIDING. 4 pages. Construction details show staggered and straight-joint application, square and cut corner sheets, fasteners, clips and bolts, ridge and corner rolls and asphalt felt enclosure strips. Specifications are given. Philip Carey Mfg., Cincinnati. (Circle 340 on Reader Service card)

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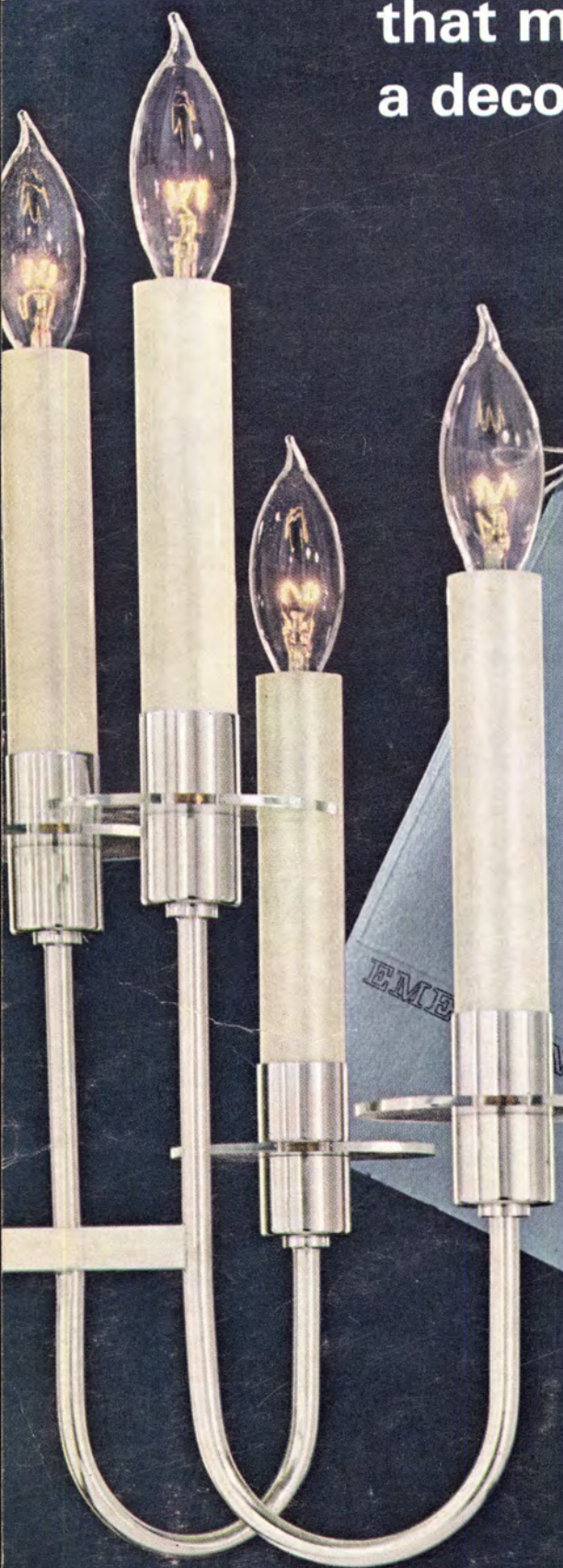
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