

House & Home

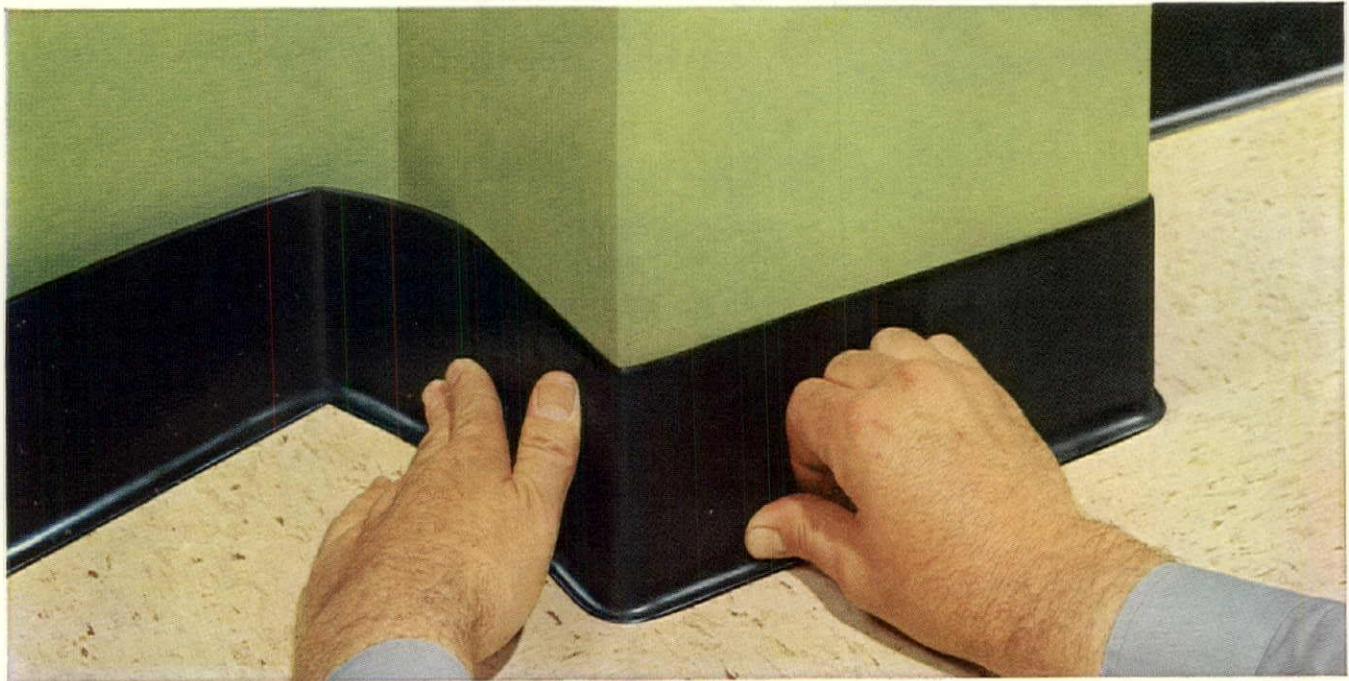
MANAGEMENT MAGAZINE OF THE HOUSING INDUSTRY

SEPTEMBER 1964



The land-price spiral: what the housing industry can—and must—do to ease its No. 1 cost problem

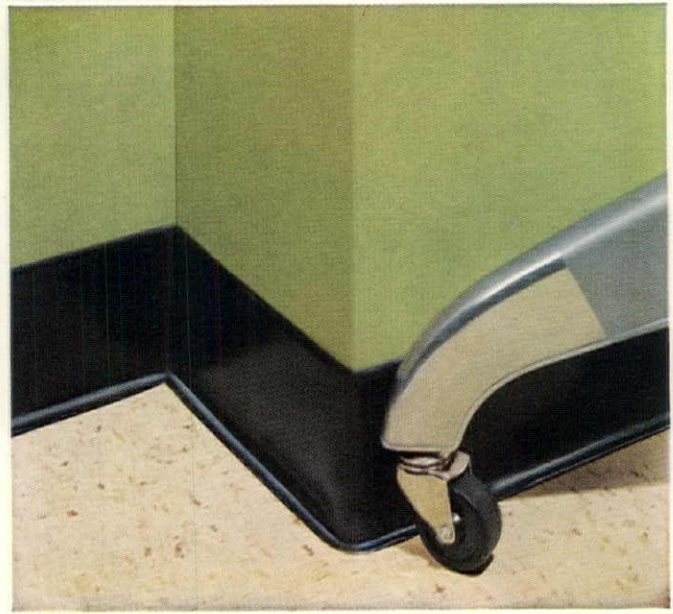
GOOD THINGS TO KNOW ABOUT
KENCOVE
 FULL-THICKNESS VINYL WALL BASE:



1. FORM CORNERS RIGHT ON THE JOB with KenCove's 48" lengths. Eliminates unsightly seams of factory preformed corners. And KenCove's uniform height and accurate cut assure ends that meet together perfectly.



2. MORE ATTRACTIVE INSIDE AND OUTSIDE CORNERS. Because base and corner are one piece, there's no danger of shade variation when you use KenCove Vinyl.



3. CORNERS WON'T KICK OFF. KenCove corners are part of the base itself, not separate pieces. Ruggedly suited to stand up under accidental abuse.

NOTE: No shrinkage problem with KenCove® Vinyl. And shading is uniform throughout. Never needs painting. Easy to clean. Colors: 9; heights: 2½", 4", 6"; length: 48".

KENTILE FLOORS

**NOT
THIS..**



..THIS!

NUTONE'S RANGE-OVEN HAS *Smokeless, Closed-Door Broiling!*

OPEN-DOOR BROILING DAMAGES CABINETS. Broiling steaks, hamburgers and other meats in ordinary ovens can be an ordeal for the housewife. She must open the door to release excess heat, greasy smoke and steam which build up inside. And when she does, they pour out into the kitchen and cause discomfort. Walls and furnishings suffer too . . . showing the 'tell-tale' smudge marks from the ordinary ovens which have open-door broiling.

NUTONE gives you **CLOSED-DOOR Electric Broiling** and it's **SMOKELESS!** NuTone's patented, built-in oven-exhaust system does it. Simply turn the oven-broil lever and you can broil meats without excess heat, greasy smoke or moisture pouring out into the kitchen. No discomfort. No damage to cabinets. And you get tastier steaks, too! Get the edge on competition! Feature this new idea in YOUR homes, apartments and remodeling.

SEE NEXT PAGE 

NUTONE

NOT THIS..



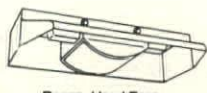
..THIS!

U. S. Patent No. 197,103. Other Patents Pending.

NUTONE'S RANGE-OVEN HAS A Safety-Level Control Panel!

Controls on the cook-top . . or back of range . . can be a nuisance! Reaching over hot surface-units is risky . . heat, steam and spattering grease can burn . . children can accidentally turn them on. Range-top controls also clutter-up the cooking surface, take up space utensils should have. They collect grease and spill-overs, are 'pesky' things to clean and can cause service problems.

NuTone offers you a SAFETY-LEVEL Control Panel, at adult eye-level . . out of children's harmful reach, away from heat, steam and spattering fried foods. It avoids service problems . . provides a neat, smooth range-surface, with more room for pots and skillets. And NuTone's Safety-Level Controls are out in front, clearly marked . . easier to see . . easier to operate.



Range Hood-Fans



Exhaust Fans

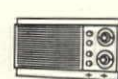


Door Chimes

NUTONE



Electric Heaters



Intercom-Radio



Food Center



Built-in Stereo

See previous page

Mail this coupon for your Free Range-Oven "Fact-File"

Write to NUTONE, Inc., Dept. R8, Cincinnati, Ohio 45227

Firm _____

Your Name _____

Address _____

City _____ Z _____ State _____

Free
"Fact-File"
for You!

House & Home

EDITOR

Richard W. O'Neill

MANAGING EDITOR

John F. Goldsmith

SENIOR EDITOR

James P. Gallagher

NEWS EDITOR

Kenneth D. Campbell

ASSOCIATE EDITORS

Maxwell C. Huntoon Jr.

Edwin W. Rochon

Robert L. Siegel

H. Clarke Wells

ART DIRECTOR

John Martinez

EDITORIAL ASSISTANTS

Patricia Betz

Susan J. Land

Grace P. Micciola

Susanna Opper

Jenepher Walker

EDITORIAL CONSULTANTS

Jonathan Aley

Carl Boester

James T. Lendrum, AIA

Carl Norcross

INDUSTRY CONSULTANTS

George A. Christie Jr., Economics

Clyde Shute, Statistical

Clifford G. Dannels Jr., Field Research

Daniel J. Howe Jr., Public Relations

Richard E. Saunders, Washington

Myron L. Matthews, Building Costs

McGRAW-HILL WORLD NEWS

John Wilhelm, Director

Domestic News Bureaus—Atlanta, Chicago,

Cleveland, Dallas, Detroit, Los Angeles,

San Francisco, Seattle, Washington, D.C.

International News Bureaus—Bonn, Brussels,

London, Mexico City, Milan, Moscow, Paris,

Rio de Janeiro, Tokyo

PUBLISHER

Eugene E. Weyeneth

ASSISTANT TO PUBLISHER

Blake Hughes

CIRCULATION MANAGER

Henry G. Hardwick

PROMOTION & RESEARCH MANAGER

Richard H. Freeman



HOUSE & HOME, Sep. 1964, Vol. 26, No. 3. Published monthly by McGraw-Hill Inc. Founder: James H. McGraw (1860-1948). Subscription rates for individuals: U.S. and possessions and Canada, \$6 per year; single copies, if available, \$1; Latin America & Philippines, \$15; elsewhere, \$20. Executive, Editorial, Circulation and Advertising offices: McGraw-Hill Building, 330 West 42 Street, New York, N.Y. 10036. Telephone: 971-3333. Printed in New York, N.Y. Second class postage paid at New York, N.Y. and at additional mailing offices. Title ® in U.S. Patent Office. Copyright © 1964 by McGraw-Hill Inc. All rights reserved. The contents of this publication may not be reproduced either in whole or in part without consent of copyright owner. Officers of McGraw-Hill Publications: Shelton Fisher, President; Vice Presidents: Robert F. Marshall, operations; Robert F. Boger, administration; John R. Callahan, editorial; Ervine E. DeGraff, circulation; Donald C. McGraw Jr., advertising sales; Angelo R. Venezian, marketing. Corporation Officers: Donald C. McGraw, president; L. Keith Goodrich, Hugh J. Kelly, Harry L. Waddell; executive vice presidents; John J. Cook, secretary; John L. McGraw, treasurer. This issue of HOUSE & HOME is published in national and separate editions noted or allowed for as follows: Western, W1-W16; Eastern E1-E14; North Central N1-N10; Midwest M1-M8; Southern S1-S6; Swing SW1-SW6; Canada C1-C2.

House & Home

A McGRAW-HILL/DODGE PUBLICATION VOL. XXVI NO. 3 SEPTEMBER 1964

SPECIAL REPORT ON LAND

Land is still housing's No. 1 problem 41

Every year we are squandering one million acres on underplanned, overpriced urban sprawl, and the time for remedies is fast running out

Spiraling land prices limit the housing market more and more 42

Over the past decade these price rises have ranged from 100% to 2,000%. If they keep on, the detached-house market may be in serious trouble

Archaic zoning formulas ignore today's housing needs 46

Communities that use rigid, big-lot zoning to slow down homebuilding are actually hurting themselves—both aesthetically and financially

Unequal tax assessments encourage land speculation 50

Low tax rates on most raw land makes it easy—and cheap—to hold for big profits. Result: higher land prices and urban sprawl

Better land plans create better—and less costly—communities . . . 52

Eleven case studies prove that land can be used more imaginatively and more profitably—even under today's zoning restrictions

New towns: the best potential answer to the land problem 64

Two examples show why these preplanned, self-contained communities could be the most effective long-range approach to better land use

Land development: five ways to cut its cost 70

Four builders and an earthmoving subcontractor show how to save money on excavating, street building, lighting, tree planting and sewage disposal

NEWS

New housing law gives builders bevy of new aids 5

Also: Survey finds FHA accepting more appliance items than ever in its mortgages . . . New figures dispel fears of widespread overbuilding . . . Alsides quits home manufacturing . . . complete NEWS index on p. 5.

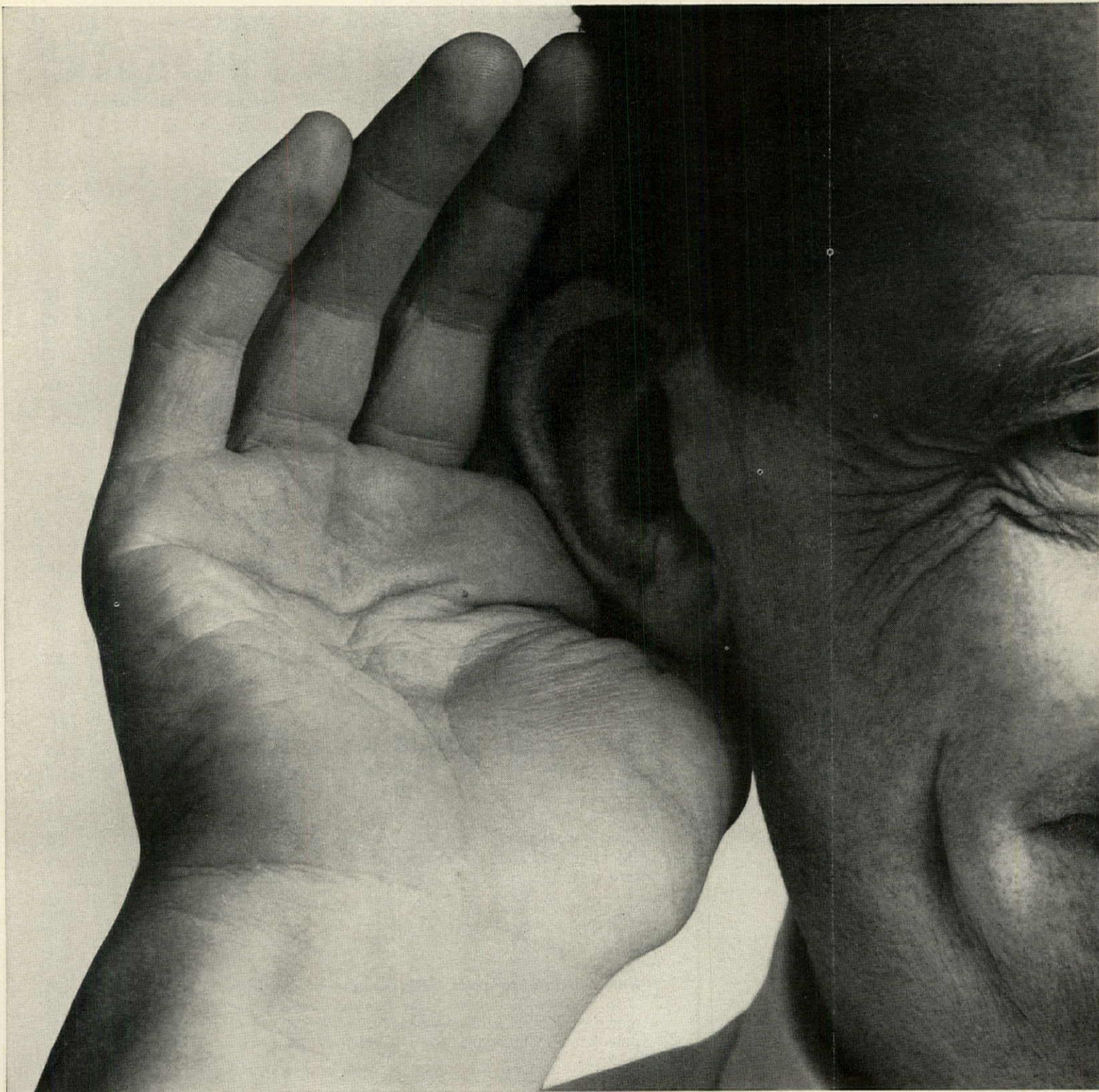
DEPARTMENTS

What the leaders build	24	New products	103
Letters	35	New literature	134
Technology	79	Advertising index	146
		Reader service card	129

Cover: Crofton, Md. Developer: Hamilton Crawford. Photo: Warren Ballard. For story, see p. 68.

NEXT MONTH

New sales-building ideas in bathroom design . . . 13 award-winning houses . . . Chicago's Old Town: how remodelers profit in private urban rehabilitation



Some people act as if they just heard of quiet.

All this noise about no noise. You'd think that *sound conditioning* was something new. Especially in appliances for new homes.

For the record: Back in 1950 Waste King Universal inaugurated its now famous "Hush" principle, suspending a garbage

disposer in sound-absorbing rubber. A couple of years later our first dishwasher had sound-squelching fiberglass padding. Today, Hush Mounting and Aero Space sound barrier techniques are used where sound threatens.

The point: Some manufac-

turers are just about up to where Waste King Universal was 14 years ago. And making all kinds of noise about it.

When you're ready for some quiet conversation, call the Waste King Universal man. He's conquered sound barriers the rest haven't heard of—yet.

MORE GOOD REASONS:
Specialists. We make kitchen appliances only.
Reputation. Over 3½ million people own our products.
Quality. Same high standards low end to high.
Service after the sale to protect your reputation.
Single source—for all your kitchen appliances, including the new Char-Glo.

Leadership in sound conditioning—one more reason why the thoughtful builder considers:

**WASTE KING
UNIVERSAL**

3300 East 50th Street,
Dept. 209, Los Angeles 58, California

HOUSE & HOME

WASHINGTON INSIDE

▶ **Dry-lumber standards still alive**

The Commerce Depts' rejection of proposed dry-lumber standards (because the lumber industry is not in "general concurrence") does not end the battle. Lumber producers are too deeply committed to producing dry lumber. Note that Rep. James Roosevelt's special small business subcommittee is going ahead with hearings on the issue anyway. And the American Lumber Standards Committee, which drafted the original plan, is seeking a compromise.

▶ **Can NAHB unify codes?**

NAHB has asked four proprietary building code groups to join in writing a nationwide code for residential building. The sudden move—until now NAHB has publicly urged local communities to adopt one of the four model codes—caught the code men by surprise. They are consulting their members.

Best bet: code groups will agree to the idea, first broached at a 1958 HOUSE & HOME roundtable. Biggest stumbling block is, as always, money.

▶ **Closing costs to be disclosed**

In quick response to complaints about high closing costs (NEWS, Aug.), FHA has decided to make builders and mortgage lenders show buyers the closing costs included in FHA house values—and do it before the actual closing. Buyers could back out if dissatisfied.

▶ **Shift at HHFA**

General Counsel Milton P. Semer of HHFA will be appointed to the deputy administrator's post vacant over a year.

▶ **New chief for NAHB?**

Insiders persist in pegging General Services Administrator Bernard Boutin as the next executive vice president of NAHB. Boutin, two-time Democratic candidate for New Hampshire governor, will take the reins after November.

News index

New survey finds FHA accepting more items in mortgage packages	6
New figures show fears of heavy overbuilding are unfounded	9
FHA to put local market research in a goldfish bowl	13
Face lifting sells foreclosed houses .	13
U.S. may restrict mortgage funds, but supply remains ample	14
FNMA ups prices in 25 states	14
Congress tightens rules for publicly owned companies	15
Aside gives up on its aluminum house	17
Materials producers continue to revamp their marketing	18
Mortgage market quotations	14
Housing stock prices	15

Bipartisan housing bill ends FHA room counts, holds subsidies and boosts condominiums

WASHINGTON—Private housing groups have scored a major victory by adding some of their key proposals to the 1964 housing bill. At press time the bill's passage was a certainty.

Congress shaped the final bill after President Johnson pressed for its passage before legislators quit for the Democratic convention. Private industry groups filled the hectic days before the deadline with a flurry of the strongest lobbying they have mustered in years and won inclusion of items they had all but written off for 1964. At each step toward passage, private requests were tacked onto the bill, with the biggest gains in the House housing subcommittee of Rep. Albert Rains (D., Ala.).

What emerged from the push was the least partisan housing bill in memory. Republicans in both House and Senate accepted housing and urban-renewal subsidies at present levels in return for Democratic support of a GOP plan to put federal muscle squarely behind housing-code enforcement in cities. In so doing, the Republicans brushed aside pleas by both the National Association of Real Estate Boards and the U.S. Chamber of Commerce to cut subsidies this year. Sen. John Tower (R., Tex.) promised to seek lower subsidies by asking the 1965 Congress to let public-housing tenants buy their apartments on a condominium plan. But GOP willingness to retain present subsidies foreshadows defeat for any effort to end them next year.

Exit room counts. After 26 years Congress scrapped its mortgage limits based on the number of rooms in FHA apartments. Congress adopted room counts in 1938 to prevent luxury apartments.

But the room limits proved unrealistic, and in 1960 FHA began giving credit for foyers, balconies and similar areas. The expectable result: warped design to get the maximum room count, leading eventually to such anomalies as balconies in Alaskan apartments (H&H, May '63). Last fall the General Accounting Office blasted room counts, and the push for abolition was on (NEWS, Jan.).

The new bill substitutes these mortgage limits based on number of bedrooms:

	BEDROOMS			
	0	1	2	3
Low-rise	\$9,000	\$12,500	\$15,000	\$18,500
Elevator	10,500	15,000	18,000	22,500

The FHA commissioner is authorized to increase the limits in high-cost areas.

Lower down payments. Rains' committee added these builder-backed FHA changes:

• Down payments for higher-priced new houses were cut from 10% to 7½% of the FHA value between \$15,000 and \$20,000, and from 25% to 15% of the value over \$20,000. The 3% down payment on the first \$15,000 remains unchanged. The new plan would cut down payments on a \$25,000 house from \$2,200 to \$1,575 and let FHA builders compete with conventional

financing offering as little as 5% down. Passage is expected but not final.

Bigger loans. Congress approved a \$2,000 boost—to \$11,000—in Sec. 203i mortgages for low-cost housing, but rejected President Johnson's proposal to open Sec. 203i to vacation homes. Many home manufacturers use 203i for houses outside urban areas.

At Rains' behest, the House version of the bill jumped maximum Sec. 203b loans from \$25,000 to \$30,000. But passage by the Senate is uncertain.

Boost for condominiums. Congress ironed out four bugs which had troubled builders using the popular Sec. 234 (condominiums). Changes:

• Down payments become the same as Sec. 203b (see above) up to \$20,000; buyers must pay 20% down above that amount. Old limits were 3% of the first \$13,500; 10% of the next \$4,500, and 30% over that. The loan term is lengthened from 30 to 35 years.

• Builders no longer have to begin condominium projects under other FHA multifamily programs and then switch to Sec. 234. They can now get blanket mortgages of 90% of replacement cost if they agree to make a reasonable effort to sell units as condominiums.

• Builders can now switch an investor co-op under Sec. 213 to Sec. 234.

• One-story buildings and even detached single-family houses can now be sold condominium.

Remodeling push. The lagging big-ticket remodeling and rehabilitation programs get these shots in the arm:

• In a fundamental change in federal-city ties, Congress approved using federal money to pay two-thirds of the cost of enforcing city housing and building codes in formal renewal areas. The law lets cities designate "code enforcement" projects in which building owners will be told to rehabilitate their properties.

The change, urged by the National Association of Housing and Redevelopment Officials, was resisted by the Administration, which feared being accused of meddling in local affairs.

• The HHFA administrator gets \$50 million to lend to homeowners and businessmen at 3% interest to fix up their properties. Loans will be up to 15 years, will not exceed the fix-up cost. Limits: \$10,000 for homeowners, \$50,000 for businessmen. This House-passed plan was expected in the final bill.

• The faltering Sec. 203k program for 20-year, \$10,000 remodeling loans outside renewal areas is sweetened by removing the requirement that loans be "economically sound." This change lets FHA lend in aging neighborhoods it has previously shunned and only 1,250 loans have been made since its 1961 writing.

FHA mortgage package: district offices now let builders include more equipment than ever . . .

NEW YORK CITY—Check-marks on the table at right show the multitude of appliances and other equipment for which FHA offices now give full appraisal credit in calculating a house mortgage. And there are more checks on this table than in either of two previous similar summaries (Feb. '58, Sep. '61) by HOUSE & HOME.

The table was compiled with the cooperation of FHA's 75 district directors and Neil A. Connor's architectural standards division in the Washington office. It includes both built-in items, normally considered part of a house because their removal would deface the property, and easily removable items, which can be included in the mortgage by agreement of lender and buyer. It is also a guide to what conventional lenders include in their mortgages because FHA practices reflect both state laws and local customs.

Gainers. *Window air conditioners* are now accepted by 34 district offices—three more than in 1961. The three additions: Minnesota and Buffalo (for built-in units only) plus the Santa Ana, Calif., office opened since 1961.

Jalousies gain two offices—San Francisco and Santa Ana—for a new high of 66. Four additional offices—Newark, N. J., North Carolina, Montana and Santa Ana—now accept *water softeners*, but two others—Tampa and Arkansas—have withdrawn acceptance. The net gain of two makes softeners acceptable in 65 offices.

Dehumidifiers are now approved by nine offices—one more (Arizona) than in 1961. *Fences* get credit in 62 offices—up one (Santa Ana) from three years ago. One addition (South Carolina) has boosted approval of *fireplace screens* to 28 offices. Thirty-six offices include *food freezers* in the mortgage, a net gain of one with acceptances in South Carolina and Santa Ana and the loss of Arkansas.

Two FHA offices—South Dakota and San Diego—have dropped their requirement that *clothes dryers* be built in. And three offices—South Carolina, San Diego and Los Angeles—no longer insist on built-in refrigerators. But three others—Pittsburgh, Grand Rapids and Santa Ana—now insist that refrigerators be built in. Overall, 70 offices accept refrigerators.

Newcomers. The current survey covers six new items more widely used than in 1961 or relatively new to the housing market. The sextet:

1. *Electric heating*—accepted by 62 offices, of which seven require built-in systems. Many Northern offices say they receive few requests to approve electric heat. "Our experience with these systems is very limited," says Minnesota Director Joseph F. Gabler, "although we give them credit."

But *space heaters*, used in some bathrooms and special-purpose rooms, have lost four offices which formerly approved them

and are now accepted by 32 offices.

2. *Intercoms*—accepted by 52 offices, although some directors say they have received very few requests for approval. "Intercoms are becoming quite popular with purchaser-borrowers of the higher-priced homes," sums up New Mexico Director Roy Walker. "But buyer demand has not reached the point where the builder includes an intercom in the basic house. The addition is generally by a change order."

Oklahoma City Director W. M. Bell says he does not accept intercoms because they "are not considered as enhancing the value of the typical house processed in our office." Some other offices exclude intercoms from the mortgage on grounds that they are primarily room-by-room record-playing or radio devices. San Francisco, for example, includes the actual intercom but excludes its supplementary radio equipment.

3. *Built-in vacuum cleaners*—accepted by 42 offices, although, again, directors say builders are not asking for approval. Minnesota's Gabler reports "no experience with market acceptance." Mississippi's Army Rhoden reports "little demand." And

. . . but surprisingly few builders show interest

WASHINGTON — That fact showed up in FHA's first tabulations of appliances included in new houses (NEWS, MAY). Some of the surprises: over half of FHA homes included only one appliance—the range; garbage disposers were included in only 32%, dishwashers in 14.5%, refrigerators in 8%, washers and dryers in 5% and central air conditioning in 4.7%.

Why are FHA builders passing up the opportunity to include more equipment in the mortgage? Mostly because of three current fallacies:

Fallacy No. 1: appliance and amenity items cost more when packaged into a mortgage. "We have stopped including appliances because when they are financed on a mortgage for 25 or 30 years, the cost to the purchaser is in reality many times their value," says a press release from a New Jersey builder.

Even conservative FHA underwriters call this "crazy arithmetic," because the builder can buy appliances much cheaper than the individual can, and because he can slice installation costs by putting them in during construction. Example: central air conditioning can be installed for as little as \$350 in a new house vs. \$1,000 and up in an existing house.

Fallacy No. 2: appliances soon lose much of their value, leaving a house worth less than the mortgage. On the contrary, evidence is mounting that amenity equipment—be it an air conditioner lasting 20 years or a washer with a five-year life—is necessary to keep houses from losing value and

New Mexico's Roy Walker says, "This item at this time is not demanded by the typical purchaser-borrower."

Assistant Director Robert Fetherston of Wisconsin expresses a typical FHA reaction: "While built-in vacuum systems and intercom systems are not too common in this area, their inclusion [in the mortgage] is given favorable consideration when specified in the builder's mortgage applications." Wyoming Director Donald A. Beaton tempers his acceptance by giving credit only for the value of a new vacuum sweeper.

4. *Range hoods*—accepted by all 75 FHA offices.

5. *Storm windows*—accepted by all offices in cold-weather areas.

6. *Drop-in (or push-in) ranges*—accepted by 65 offices. Offices approving drop-ins note that they usually look like built-in ranges, which are accepted by all 75 offices.

Losers. Some equipment, like space heaters, is now accepted by fewer offices than in 1961. Forty-nine offices now accept *awnings*—a drop of three. Some offices—Buffalo, for example—approve only metal awnings.

Sixty-two offices approve *washing machines*—a net loss of one. North Carolina and Arkansas drop previous approvals, but an added approval comes from the new Santa Ana office.

to keep them competitive with new models. The evidence: FHA studies of foreclosures show that a \$10,000 house—usually minimally equipped—is five times as likely to be foreclosed as an \$18,000 model—generally far better equipped. Low-priced homes declined so much in value that 4.5% of owners said they could neither sell nor rent. Higher-priced homes held their value, and were more easily resold if the owner got into financial hot water.

More evidence: appraisers and mortgage lenders, who have traditionally held down package mortgages by refusing to give full credit for appliances, now recognize their value. The U.S. Savings & Loan League says appraisers are becoming increasingly conscious that, among other factors, inadequate home appliances and equipment may reduce the long-term value of a house just as much as normal wear and tear. The League's new *Construction Lending Guide*—which reaches more than 5,000 S&Ls—says, "New developments [in housing] will place a premium on homes that minimize physical and functional obsolescence."

Fallacy No. 3: today's second and third-time buyers don't want a fully equipped house because they already own appliances. The remodeling industry is burgeoning largely because of its success in persuading these same homeowners to scrap their obsolete equipment and modernize.

And many new-house builders are using a complete package of equipment to sell second-time buyers who have already tried to make do with a bare-bones house.

“As a woman designer and builder,
I am especially conscious of what
the average homemaker desires...



This is why I've
used a total
Kelvinator
kitchen in
my plans.”

“In my houses,” writes Colleen Gekler, builder and general contractor of Robert Brooks Associates, Portland, Oregon, “the focus is on liveable floor plans, more than ample storage, cheery colors and decor, and—of chief importance—an ‘efficient’ kitchen. The Foodarama with its convenient double doors for a more-than-generous refrigerator-freezer combination, and the ‘terrific’ foil-lined double ovens, teamed with the surface unit and dishwasher, have great sales and eye appeal.” Why not take a woman’s word for it and give *your* houses this great sales and eye appeal? Write or wire for complete information today!

Kelvinator



Division of AMERICAN MOTORS CORPORATION, Detroit, Michigan 48232
Dedicated to Excellence in Rambler Automobiles and Kelvinator Appliances

Overbuilding: new figures show no factual basis for current pessimism

NEW YORK CITY—The figures—from FHA postal surveys in 20 markets and HOUSE & HOME soundings in 18 key metropolitan areas—reveal no reasons for worries now voiced publicly by government economists.

Privately, the economists started worrying about overbuilding when the seasonal rate of private nonfarm housing starts dropped below 1.5 million units in April and May.

The closely watched but erratic starts series—it has reversed itself 25 times in the past 42 months—rebounded in June to last year's level of 1,549,000 units (*see table*). But the Office of Business Economics suggests overbuilding of higher-priced apartments in a few large markets makes a quick pickup unlikely.

OBE analysts say they are concerned because 1) apartment permits are down in seven of the 25 biggest rental markets—New York City, Cleveland, Houston, Atlanta, Seattle, Denver, Buffalo—and 2) vacancies are rising in units renting for over \$100. Apartments in the over-\$100 category jumped from 14% to 20% of all rental vacancies in one year. And apartments built since 1960 now account for 12% of all vacancies vs. 8% last year.

H&H and FHA findings suggest government statistics are only now sensing fundamental housing-market changes that have taken place since 1960.

Apartment builders have been saying for two years that the end of a shelter market about 1960 merely returned apartments to a normal six-month to one-year rent-up period. Some urban renewal builders report two-year renting periods are common.

So concern over month-to-month gyrations in housing statistics masks two facts:

- Since 1960 builders have put up houses and apartments 55% faster than new families have been formed to fill them.

- Builders have filled these units by drawing buyers and tenants from a sizable segment of the 4.5 million urban families who lived in substandard quarters in 1960. Urban renewal, expressways and public housing have been demolishing these units at a 270,000 yearly clip. Other families are using soaring incomes—up 6% in a year and 20% since 1961—to move from inadequate and obsolete quarters. These junkers are then being retired from the market. The evidence: rental units without plumbing have shrunk from 32% to 22% of all vacancies in just two years.

Some problem areas. Scattered pockets of vacant luxury units do persist. Some sections of Philadelphia have a 40% vacancy rate (vs. a citywide rate of 7%). Los Angeles, the nation's biggest apartment building area, has a surfeit of higher-priced units on Wilshire Boulevard, but few problems in cheaper suburban units.

In San Francisco, fourth largest apartment market last year, higher-priced units are meeting a "temporary period of indigestion," says President Joseph Eichler of Eichler Homes.

Heartening facts. FHA's expanded postal surveys have accumulated enough data to show that widespread worries about overbuilding aren't backed up by the facts in many cities.

San Francisco is a case in point. In late spring postmen counted vacancies there for FHA and found only 1.4% of houses and 3% of apartments unoccupied.* Only one-fourth of the 5,099 vacant apartments were in new buildings. Likewise, the other 19 recent FHA postal surveys, made in spring and early summer, show only 19% of 54,659 vacant homes and 34,904 vacant apartments are new units.

FHA says the postal surveys cover areas it is studying closely because of some market problems—suspected overbuilding or sluggish growth, for example. So ordinary nationwide conditions are not reflected in these results:

- New units account for over one-fourth of apartment vacancies in six of the 20 areas—Northwestern Cook County, Ill., 40.6%; Waukegan, Ill., 32.1%; St. Petersburg, 32%; Suffolk County outside New York City, 40.6%; Reno, 27.3% and San Francisco, 25%.

- New houses account for over one-fourth of vacant houses in four areas—Reno, 38.9%; Eugene, Ore., 33%; northwest Cook County, 49%; and Suffolk County, 29%. Suffolk builders have 2,345 homes under construction, equal to 55% of vacant houses and highest ratio among the cities.

Basic strength. Over-all, housing-industry economists see these signs of a healthy market:

- "Medium and higher-priced housing appears to be enjoying a higher sales vol-

ume than houses in the lower-priced markets," says the U.S. Savings & Loan League after getting reports from 150 S&L leaders.

- "Building permit figures turned upward (in June) reaching an annual rate of 1,306,000 units. The unused building permit rate, which has slowly increased since the latter part of 1963, reached the 143,410 level, down from April's 146,700," says NAHB's economics department.

- Mortgage delinquencies have dropped steadily this year and on June 30 stood 14.5% below the record high of last Dec. 31, according to a Mortgage Bankers' Assn. survey of 3.1 million loans. MBA foresees a "period of adjustment to changes in demand . . . it will not produce conditions sufficiently adverse to disturb the continuance of a broad economic expansion."

- Contracts for residential construction this year will top 1963 by 5% on a total of \$21.6 billion, forecasts Economist George Christie of McGraw-Hill's F. W. Dodge Co. division. Through June, apartment contracts ran 17% ahead of 1964 while one-family homes led by 3%. But, he cautions, "It has become increasingly apparent that the peak housing months of 1964 are already behind us."

- Builders' plans for apartments and multi-house developments (in advance of contracts), tabulated by *Engineering News Record*, are running 28% ahead of 1963, with apartments up 66% (*see table*).

- Commerce ticks off "several considerations that would tend to favor a continued high rate of homebuilding activity . . . There is no tightness in money markets . . . family incomes have been rising steadily and are expected to rise further this year . . . the next several years should see a sizable increase in the number of young married couples who ordinarily move into an apartment."

NEWS continued on p. 13

HOUSING INDICATORS

		1964	1963	% Change
		DOLLARS (millions)		
Dodge residential contracts	June	1,996	1,966	+ 2
	6 months	10,798	10,094	+ 7
ENR advance housing plans	July	741	623	+ 19
	7 months	5,042	3,946	+ 28
		UNITS (000)		
Starts, private nonfarm	June	152.0	151.6	UC
	6 months	772.7	757.3	+ 2
Starts, seasonal rate	June	1,549	1,554	UC
One-family starts	June	99.8	98.3	+ 2
	6 months	480.1	480.9	UC
Multi-family starts	June	52.2	53.3	- 2
	6 months	294.4	276.5	+ 6
Permits, seasonal rate	June	1,306	1,363	- 4
New houses sold	May	52	59	- 12
	5 months	238	231	+ 3
New houses for sale	May	264	244	+ 8
		QUARTERLY PERCENTAGES		
Rental vacancies, met areas	June	7.2	7.2	UC
House vacancies, met areas	June	1.5	1.4	+ 7
Mortgage delinquencies	June	2.82	3.09	- 9

UC—unchanged or change less than 0.5%. Sources: F. W. Dodge Co. division of McGraw-Hill, Inc.; Census Bureau; Engineering News Record; Mortgage Bankers Assn.



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

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

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

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

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

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

Like Hobart Smith, builders all across the country

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

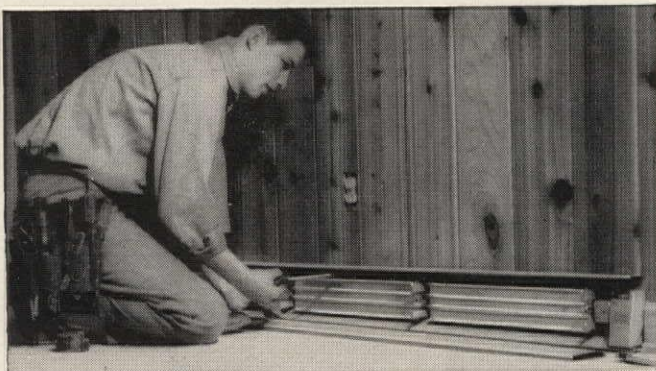
Chances are you can profit by using flameless electric heating in your homes. Why not find out now? Talk to your local electric utility representative first chance you get.

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



*Certification mark—NEMA

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



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



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



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



Yes, I've read the Italian report.



And it's simply amazing.



Italians invented asbestos-cement.



But their big cities are switching.



They prefer cast iron pipe.



They say cast iron really lasts.



Actually costs less over the years.



Frankly speaking . . .



. . . I agree.

Most water specialists do—including many in Italy, where asbestos-cement pipe originated. Actually, Italian private and municipal water officials prefer cast iron pipe nearly 2 to 1*. Like their colleagues in America, they've learned from experience: you can't beat cast iron pipe for top performance and economy through the years.

* Based on an independent research survey in 30 of Italy's largest cities.

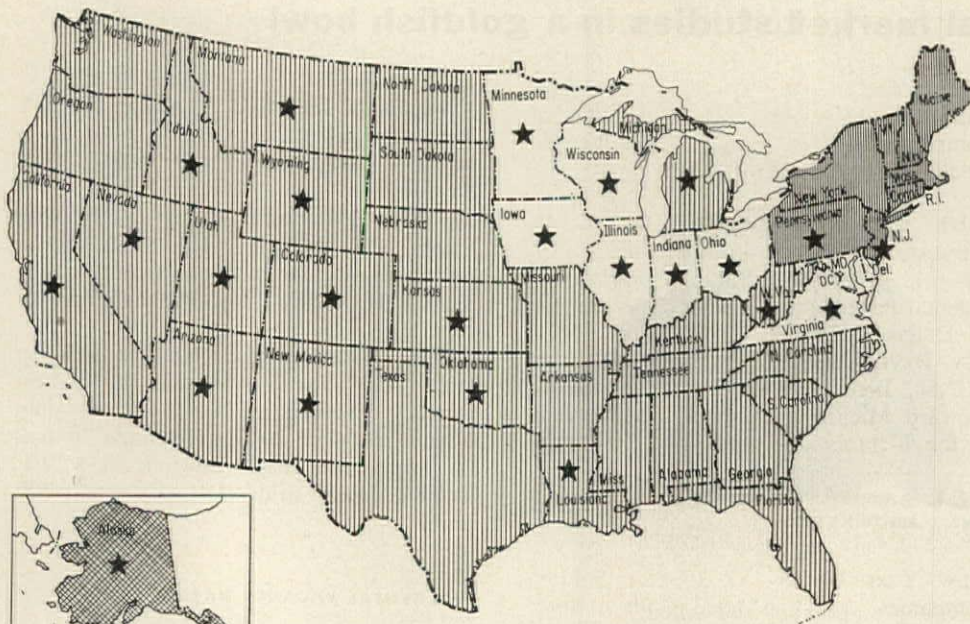


CAST IRON PIPE

THE MARK OF PIPE THAT LASTS OVER 100 YEARS

CAST IRON PIPE RESEARCH ASSOCIATION, 3440 Prudential Plaza, Chicago, Illinois 60601

AN ASSOCIATION OF QUALITY PRODUCERS DEDICATED TO HIGHEST PIPE STANDARDS. Alabama Pipe Co. • American Cast Iron Pipe Co. • Glamorgan Pipe & Foundry Co. James B. Clow & Sons, Inc. • Lone Star Steel Co. • Lynchburg Foundry Co. • McWane Cast Iron Pipe Co. • Pacific States Cast Iron Pipe Co. • United States Pipe & Foundry Co.



NEW FNMA SECONDARY MARKET PRICES

95 1/4 97 1/4 97 3/4 98 1/4 ★ Up graded 1/2% in regrouping

Curb on U.S. loans to S&Ls won't restrict builder money

NEW YORK CITY—The 12 regional Home Loan Banks and their Washington supervisor, the Federal Home Loan Bank Board, are moving to restrict loans to S&Ls.

But their go-slow course—decided at a meeting of the 12 presidents and the three-member board in Spokane, Wash.—should not reduce the flow of conventional mortgage money to builders except in rare cases on the West Coast. Reason: S&Ls are not expected to seek advances as eagerly in coming months because new savings are rising after a spring lull (table below).

The regional banks, owned by 5,000 S&Ls, borrow on the open market and lend to those associations whose demand for mortgages is greater than can be met from savings. Because the banks loaned a record \$6.1 billion to S&Ls in the year ended June 30, they came under pressure from Board Chairman Joseph P. McMurray to discourage borrowing by associations which might be making risky loans.

As a result of the Spokane meetings, regional banks will study S&Ls' loan experience and operations in deciding whether to make or deny advances, says McMurray. S&L men expect the new policy to discourage advances to the few associations with heavy slow-loan holdings.

Reports of the federal decision are having no immediate effect on FHA mortgage prices. HOUSE & HOME's survey of 18 key cities finds FHA discounts firm (see table).

FNMA raises its secondary mortgage prices in 25 states

WASHINGTON—The Federal National Mortgage Assn., which buys government-insured mortgages from private lenders, has rearranged its geographical price areas for the first time since 1954. In 25 states (stars, above) it will pay 1/2% more for loans.

The price spread between the lower discounts in the Northeast and higher discounts in the South and West (excluding

Alaska) narrows to 1%. Net prices after marketing fees and stock purchases for 5 1/2% loans with less than 10% down are 98 1/4 in the Northeast, 97 1/4 in the West.

Mortgage men say private mortgage investors have already narrowed their East-to-West range. With private investors charging smaller discounts than FNMA, the agency is expected to get few new offerings.

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgage who retains servicing). As reported to HOUSE & HOME the week ending Aug. 7, 1964.

City	FHA 5 1/4s (Sec. 203) (b)				FHA 207	Conventional Loans ^w		Construction Loans ^w
	FNMA 30 year Mkt ^{x,y}	Minimum Down* Immed ^w	35 year Immed	30 year Fut ^w		Firm Commitment	Comm. banks, Insurance Cos.	
Atlanta	97 1/4	98-98 1/2	97 1/2-98	97 1/2-98 1/2	a	5 1/2-6	5 1/4-6 1/4	6+1
Boston local	98 1/4	par-101	a	par-101	a	5-5 1/2	5-5 1/2	5 1/4-6
out-of-st.	—	97-98	97-97 1/2	98	a	—	—	—
Chicago	97 1/4	98 1/2-99 1/2	97-98	97 1/2-99	99-par	5 1/2-5 1/2	5 1/4-6 1/4	5 1/2-6+1-2
Cleveland	97 1/4	98 1/2-99	97 1/2-98 1/2	98-99	99-par	5 1/2 1	5 1/2-6	6+1
Dallas	97 1/4	97 1/2-99	98-99 1/2 ^b	97-98 1/2	99-99 1/2	5 1/2-5 3/4	6 ^a -6 1/4	6 1/2-6+1
Denver	97 1/4	98-99	a	97 1/2-98 1/2	99	5 1/2-6	5 1/2-6 1/2	6+1 1/2-2
Detroit	97 1/4	98 1/2	97 1/2-98	a	99 1/2-par	5 1/4-5 1/2	5 1/4-5 1/2	6+0
Honolulu	97 1/4	97-97 1/2	97	96 1/2-97	a	5 1/4-6 1/2	6-7	6+1-2
Houston	97 1/4	97-98 1/2	97-98	97-98 1/2 ^b	98 1/2-99 1/2	5 1/2-6	5 1/2-6 1/4	6-6 1/4+1
Los Angeles	97 1/4	98	98	97 1/2	99 1/2	5 1/2-6	5 3/4 ^b -6.6	6-6.6+1 1/2-2 1/2
Miami	97 1/4	97 1/2	97	a	a	5 1/2-5 3/4	5 1/2-6	6+0-1
Newark	98 1/4	par	98 1/2 ^b	par ^b	99-par	5 1/2-5 3/4	5 1/2-6	5 3/4-6+1
New York	98 1/4	par	par	par	par-100 1/2	5 1/2-6	5 1/2-6 1/2	5 1/2-6 ³
Okla. City	97 1/4	97 1/2-99	97 1/2-98 1/2 ^b	97 1/2-99	a	5 1/2-6 ^b	5 3/4-6 1/4	6+1-2
Philadelphia	98 1/4	par	99 1/2	par	par	5-5 1/4	5 1/4-6	5 1/2-5 3/4+1
San Fran.	97 1/4	98 1/2-99 ^k	98 1/2	98-99 ^k	99-99 1/2	5 1/2-6 ^d	5 1/4-6.6	5 3/4-6.6+1 1/2-2 1/2
St. Louis	97 1/4	97 1/2-99	a	97 1/2-99	a	5 1/2-6 1/4	5 1/2-6 1/4	5 1/2-6 1/2+1-2
Wash. D.C.	97 1/4	99	99	99	99	5 1/2-5 3/4	5 1/2-5 3/4	5 3/4-6+1

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

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

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

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

Footnotes: a—no activity. b—limited activity. c—for local portfolios. d—limited 6%. e—some 5 1/2% and 5 3/4% available. f—in isolated instances on choice loans. g—1/2 point differential has generally disappeared. h—depending on % of down payment. j—lower rate for companies with prime credit rating. k—higher price offered by correspondent for one insurance company. l—limited 5 1/4%. w—for comparable VA loans also. x—FNMA pays 1/2 point more for loans with 10%. y—prices quoted are net after seller pays 1/2% marketing fee and 1/4% 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 5th Savings Bank; Chicago, Harry N. Gottlieb, vice pres., Draper & Kramer Inc.; Cleveland, David O'Neill, vice-pres., Jay F. Zook Inc.; Dallas, Aubrey Costa, pres., Southern Trust & Mortgage Co.; Denver, Allen C. Bradley, vice president, 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, Jess Lawhorn, Lon Worth Crow Co.; Newark, William W. Curran, asst. vice pres., Franklin Capital Corp.; New York, Gabriel Schwartz, 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, William Taylor, 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)

	April	May	June
New homes	5.79	5.77	5.76
Existing homes	5.92	5.92	5.89
Interest charged by various lenders, new homes			
S&Ls	5.89	5.91	5.88
Life Ins. Cos.	5.47	5.46	5.48
Mortgage companies	5.70	5.62	5.68
Commercial Banks	5.62	5.56	5.60
Mut. Sav. Banks	5.56	5.50	5.51

	Length of loan (years)		Loan to price (%)	
	June	Year ago	June	Year ago
S&Ls	25.1	23.8	77.2	76.5
Life Ins. Co.	27.4	26.6	69.0	69.2
Mortgage Companies	28.1	27.0	76.1	74.1
Commercial Banks	18.8	17.4	59.9	61.8
Mut. Sav. Banks	24.4	24.7	68.1	68.9

Source: Federal Home Loan Bank Board

NET SAVINGS DEPOSIT CHANGES

(in millions of dollars)

	% change from		Year to date	% change from 1963
	Jun '64	Jun '63		
Mut. sav. banks ^a	475	16	1,930	25
S&Ls ^b	1,715	4	5,327	-13
Commercial banks ^c	1,100	22	6,000	-9

a—National Association of Mutual Savings Banks. b—United States Savings & Loan League projections. c—Federal Reserve Board.

NEW YORK WHOLESALE MARKET

FHA, VA 5 1/4s

Immediates: 97-97 1/2 Futures: 97-97 1/2

FHA, VA 5 1/4 spot loans (On homes of varying age and condition)

Immediates: 96 1/2-97 1/2

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 Aug. 7 by Thomas P. Coogan, president, Housing Securities Inc.

U.S. orders unlisted companies to tell more

WASHINGTON—The first major revision of securities laws in 24 years requires unlisted publicly owned companies to tell stockholders more about company affairs.

Fifty of the 96 housing companies regularly covered by HOUSE & HOME have stock traded in the over-the-counter market where the new law applies.

The law requires companies with more than 750 stockholders and \$1 million assets to make the same public disclosures and send the same financial information to stockholders as companies whose stock is listed on national or regional exchanges. After two years companies with more than 500 shareowners will be subject to the law. Previously, companies with less than \$2 million in stock outstanding were exempt.

Within 120 days after a company fiscal year ends, its officers must:

- File certified annual financial statements with the Securities and Exchange Commission and give stockholders the same information in annual reports.

- Tell SEC of dealings in company stock by officers and owners of more than 10% of shares. Under this rule, the company may recapture any profits made in short-term trading by insiders.

- Notify stockholders of candidates for election to the board of directors, solicit proxies from shareholders and disclose pay of officers earning over \$30,000.

Many unlisted companies already follow

these rules voluntarily. But SEC's major study of stock dealing found that 25% of companies did not send financial facts to stockholders (NEWS, May '63).

With the public companies. S. V. HUNSAKER & SONS of Irwindale, Calif., has sold its homebuilding company to Occidental Petroleum. General American Oil of Dallas has bought STOCKTON, WHATLEY, DAVIN, Jacksonville mortgage banker.

Disc, Inc. of Washington has elected Howard Michnick president. He succeeds Irving Lichtman, who stays as chairman.

S&L earnings lag behind steadily rising revenues

NEW YORK CITY—All 17 s&l holding companies posted revenue gains at mid-year. Yet only 12 could convert higher revenues into higher earnings. As a result s&l stock prices are slipping.

One reason for reduced earnings is stiffer federal tax rules which became fully effective this year. FINANCIAL FEDERATION, for example, deferred \$460,000 in loan fees that it formerly would have counted as profit, so its profits slipped 2% to \$5,360,822 for the first half.

President Bart Lytton of LYTTON FINANCIAL says Wall Street is underpricing s&l stocks because they have a 10% to 15% annual growth ahead. Lytton reported

a record six-month profit of \$2.8 million, up 25%, largely because an earlier loss let it pay no income tax. Lytton himself says the s&l business is now so complex he would not start a new association today.

KAUFMAN & BROAD, a Wall Street favorite, posted a 15% gain in half-time profits with \$526,951. Its six-month revenues were \$14.4 million, up 21%. But K&B expects to top last year's \$31.8 million in 12-month revenues by only a small margin.

GENERAL DEVELOPMENT more than tripled profits during the first half of this year—on a 2% drop in revenues—continuing a pattern set last year when cash flow increased 121% while revenues fell.

	Year Ending	Revenues (000)	% Change	Net (000)	% change
American Fin.	Jun 30r	\$3,562	32	\$876	13
Amer. Realty & Pet.	Apr. 30	7,524	-42	2,551	-76
Belmont S&L	Jun. 30r	3,273	43	835	42
California Fin.	Jun. 30r	7,685	13	1,455	x
Cont. Mtg. Insur.	Jun. 30r	408	248	62	y
Coral Ridge Prop.	Apr. 30	9,419	41	1,016	x
Del. E. Webb	Jun. 30r	61,303	x	2,107	8
Deltona Corp.	Jun. 30r	7,598	64	532	48
Far West Fin.	Jun. 30r	NA	NA	2,096	16
Fin. of Santa Barbara	Jun. 30r	4,513	16	607	5
Financial Fed.	Jun. 30r	30,464	22	5,361	-2
First Charter Fin.	Jun. 30r	52,323	17	9,550	3
First Hartford Rlty.	Mar. 31	1,468	21	14	-64
First Lincoln Fin.	Jun. 30r	10,367	43	2,226	47
First Nat. Ralty	Mar. 31r	5,886	8	390	-40
First Western Fin.	Jun. 30r	10,894	33	3,632	14
General Development	Jun. 30r	15,159	-2	713	354
Gibraltar Financial	Jun. 30r	11,179	31	2,260	49
Great Western Fin.	Jun. 30r	47,792	8	6,365	-7
Kaufman & Broad	May 31r	14,428	21	527	15
Lytton Financial	Jun. 30r	19,413	36	2,824	25
McCulloch Oil, Calif.	Jun. 30r	6,100	449	810	z
San Diego Imp.	Jun. 30r	25,320	19	3,399	10
Trans-Coast Invest.	Jun. 30r	9,792	40	2,258	17
Trans-World Fin.	Jun. 30r	9,140	27	1,879	30
United Financial	Jun. 30r	12,297	12	2,526	-7
Wesco Financial	Jun. 30r	12,111	10	2,838	-9

z—loss of \$167,436 in previous year. x—change of less than one percent. y—loss of \$66,269 in previous year. r—six month report.

Housing stocks slide, cooling climate for new offerings

For the second straight month investors rated housing stocks lower, clipping 3.4% from HOUSE & HOME's 86-stock index.

In the same month Dow-Jones industrials slipped 0.1% to 838.12, while the National Quotation Bureau average for over-the-counter stocks edged up 0.3%.

Building-company stocks were the largest losers, falling 6.9% to 5.25. Land development companies ran counter to the trend, rising 3.3% to return to June levels.

Here are the averages for selected stocks in each housing group:

	June 2	July 8	Aug. 5
Building	5.97	5.64	5.25
Mortgage banking	10.74	10.26	10.09
Prefabrication	9.15	8.59	8.35
S&Ls	18.58	18.24	17.08
Land Development	5.68	5.50	5.68
AVERAGE	10.30	9.95	9.61

The falling market cooled some building-company plans to raise new capital by public stock offerings. No housing companies filed new issues with the Securities & Exchange Commission.

Biggest offering of the month was WEST COAST FINANCIAL's \$1,250,000 debenture issue. Underwriters said all but \$75,000 was sold within a week. PEERLESS MORTGAGE Co. of Aurora, Colo., delayed the sale of its \$250,000 debenture issue.

HOUSING'S STOCK PRICES

COMPANY	June 2 Bid/Close	July 8 Bid/Close	Aug. 5 Bid/Close	COMPANY	June 2 Bid/Close	July 8 Bid/Close	Aug. 5 Bid/Close	COMPANY	June 2 Bid/Close	July 8 Bid/Close	Aug. 5 Bid/Close
BUILDING				Albee Homes ..	3 1/2	2 7/8	2 1/4	LAND DEVELOPMENT			
•Adler-Built Inc.	30¢	27¢	23¢	Gt. Lakes Homes ..	6 1/8	5 3/8	5 1/4	All-State Prop. ^b	1 1/2	1 1/8	1 1/8
•Capital Bld. Ind.	2	2.05	1.80	Harnischfeger ^b	23 3/4	25 1/4	27	•American Land	1 3/8	1	1 1/4
Cons Bldg. (Can)	9 1/8	9	10 3/8	Hilco Homes ..	3/4	1	5/8	Am. Rlty & Pet. ^b	2 1/8	1 7/8	1 7/8
•Dev. Corp.				Indand Homes ^b	7 1/8	7 1/4	7 1/8	Arvida	5 3/8	5 1/8	4 7/8
Amer.	1 3/8	1 1/4	1 5/8	Madway	14 3/4	13	12 1/2	Atlantic Imp. ..	16 1/4	15	15
Dover Const. ..	4	3 7/8	3 7/8	Mainline ..	4 5/8	4 3/8	4	Canaveral			
Edwards Eng. ..	4 5/8	4 1/8	5 1/2	Modern Homes Natl.	4 5/8	4 3/8	4	Intl. ^b	3 3/8	3 3/4	3
Edwards Inds.	1 1/8	1 1/2	1 1/2	Homes A.9 ..	3 1/8	2 7/8	3	Christiana O. ^b	5 1/8	5 1/8	5 1/4
Eichler Homes ^k	6 1/8	6 1/2	6 1/8	Richmond Hom.	6 1/4	4	5 1/2	Coral Ridge Prop.	1 1/2	1 1/8	3 1/8
First Nat.				Seaboard Homes ..	3/8	3/8	1/4	Cousins Props.	15 3/4	14 1/2	14 1/4
Rlty. ^b	2 3/8	2 1/8	2 1/8	Steel Crest Hom.	13	12 1/2	11 1/4	Crawford	3 3/4	2 3/4	2 3/4
•Frouge	5	4 1/4	5 1/2	Swift Homes ..	2 7/8	3	2 7/8	Deltona Corp. ^b	10	10 3/8	10
General Bldrs ^b	2 3/4	2 1/2	2 1/2	•Western Shell.	6¢	2¢	1	Fla.			
Hawaiian Pac.	6 3/8	4 3/4	5 1/8	Jim Walter ^c ..	29 1/2	28 1/2	25 3/4	Palm-Aire ..	1 3/4	1 1/2	1 7/8
Kavanagh-Smith	3 1/4	2 7/8	2 1/2	S&Ls				Forest City Ent. ^b	5 3/4	5 3/4	5 5/8
Kaufman & Bdb	24 1/4	23 1/2	19 3/4	American Fin. ..	16 1/4	15 3/4	14 5/8	Garden Land....	6 1/8	5 3/4	5 3/8
Lou Lesser				Brentwood ..	10	8 7/8	8 5/8	Gen. Devel. ^b ..	4 1/4	4	5 1/2
Ent. ^b	4 1/2	3 7/8	3 7/8	Calif. Fin. ^c ..	7 1/8	6 7/8	6 1/2	Gulf American ^b	4 3/4	4 5/8	5 1/8
Levit ^b	6 1/4	6 3/4	6 1/2	•Columbia ..	12 1/8	12 3/4	12 7/8	Holly Corp. ^b ..	1 1/8	7/8	7/8
Lusk	3 3/4	3 1/2	2 3/4	Empire Fin.	14 3/4	13 1/4	15 1/4	Horizon Land ..	2 1/2	2 5/8	2 1/2
Pac. Coast.				Equitable S&L	31	28 1/2	25 7/8	Laguna Nig. A ^b	9 3/4	9 3/8	9 5/8
Prop. ^b	9 3/4	9 1/2	9 1/4	Far West Fin.	25	24 3/4	22 5/8	•Laguna Nig. B ^b	4 5/8	5 7/8	6
Pres. Real. A	7 7/8	8 1/4	8 1/4	Fin Fed ^c ..	51 3/8	48	41 3/4	Lake Arrowhead	9 7/8	9 3/8	9
U.S. Home & Dev.	1	1	3/4	First Char Fin. ^c	36 7/8	33	31 3/8	Macco Rlty.	7 1/4	7 1/2	8 3/8
Del E. Webb ^c	8 1/8	8 1/2	8 1/8	First Fin. West	10	9 3/8	8 1/2	•Major Rlty. ..	27¢	22¢	25¢
Webb & Knapp ^b	3/8	3/8	1/8	First Lincoln Fin.	21 3/4	22 5/8	22 3/4	So. Rlty. & Util. ^b	1 1/2	1 3/8	1 3/8
MORTGAGE BANKING				First Surety ..	13	12	9 3/4	Sunset Int.			
Advance	9 1/4	8 1/2	8 5/8	First West. Fin.	14 3/4	14 1/8	12 3/4	Pet. ^b	6 3/4	7	8 3/4
Associated Mtg.	7 7/8	8	7 5/8	Gibraltar Fin. ^c	30	28	27 7/8				
Charter	1 3/8	1 1/8	1 5/8	Great West. Fin. ^c	13 3/8	13	12 3/8				
Colwell	14 3/4	14	14 3/4	Hawthorne Fin.	10 3/8	10 1/4	9 5/8				
Cont. Mtg.				Lytton Fin.	23 3/4	19 3/4	18 7/8				
Inv.	18 1/8	19 1/8	19 1/8	Midwestern Fin. ^b	4 5/8	4 1/8	3 7/8				
•FNMA	77 3/8	82 1/2	82 1/4	San Diego Imp. ^c	10 1/2	10 3/8	9 7/8				
First Mtg Inv.	17	15 1/8	14 7/8	Trans-Cst. Inv.	14 1/2	13 7/8	13				
MGIC	28	27 7/8	25 1/2	Trans Wrld. Fin. ^c	15 1/4	14	13 3/4				
Palomer	3 5/8	2 3/4	2 3/8	Union Fin.	9 1/2	9 1/2	9 3/4				
United Imp. & Inv. ^b	2 7/8	2 5/8	2 7/8	United Fin. Cal. ^c	23 3/8	22 7/8	20 1/4				
Wallace Invests	4 1/2	4	3 1/2	Wesco Fin. ^c ..	42 5/8	36 3/4	34 3/4				
PREFABRICATION											
Admiral Homes	1 3/8	1 1/4	1 1/8								



"The Yellow Pages brings me at least one new contact a day!" says Milton B. Norton, general manager, Home Market Sales Company, Seattle, Washington. "When people come to us we ask them how they found us. About 25 per cent say they found us through the Yellow Pages. Of course, the Yellow Pages won't rent or sell a house for you...that's the salesman's job. But the Yellow Pages does the one thing we require of an advertising medium . . . it brings customers into the office! We plan to continue and probably increase our Yellow Pages advertising program."

Advertise for action...



Display ad (shown reduced) runs under REAL ESTATE. Call your Yellow Pages man to plan your program. Find him in the Yellow Pages under: ADVERTISING—DIRECTORY & GUIDE.

City Wide
RENTALS

HOMES

APARTMENTS

DUPLEXES

FURNISHED...UNFURNISHED

HOME MARKET SALES CO.

OPEN EVENINGS

SU4-8000

706 N.W. 65th.

Kenneth Cole



ALSIDE DISPLAY CENTER in Akron drew 50,000 visitors but few buyers.

Alside quits home manufacturing after nine-month, \$8-million trial

AKRON—Alside Inc., which waded into home manufacturing last fall with highly publicized display centers like the one above and hopes of selling 10,000 aluminum houses a year by marketing them like automobiles, has washed out of the market on a riptide of red ink.

President **Jerome J. Kaufman** says the parent company is dropping its Alside Homes division to eliminate losses. His announcement came as no real surprise. For the nine months ending June 30, the division's deficit had soared past \$8 million—over \$3.3 million in net operating losses and a \$4.8-million write-off of inventory, display centers and a new \$5-million push-button plant.

There is also the matter of \$10 million invested in Alside Inc. in 1962 by Libbey-Owens-Ford to finance the aluminum homes venture. The Toledo glassmaker holds common shares and notes against this money.

Alside's two other divisions, aluminum siding and mortgage finance, earned \$2.2 million on \$19 million sales in the nine months, but the home division's \$8.1-million debit converted this profit into a net operating loss of \$5.9 million.

Despite the loss, Kaufman emphasizes that the parent company is in sound health, with a net worth of \$13.2 million and a 3-to-1 asset-liability ratio.

Alside Homes made its debut with 22 aluminum-and-glass models by **Emil Tessin II**, a 32-year-old architectural engineer and an Alside Inc. vice president. Tessin and Alside staffers spent six months developing the models. His first public showings drew 50,000 visitors in Akron and 60,000 in Detroit. The Akron *Beacon-Journal* and Detroit *News* carried slick-paper supplements advertising the models, and one New York securities house told clients:

"There should be a more than adequate market for such a prefab that can be tailored to meet space and layout requirements, a home which can be bought in much the same manner as an automobile."

Some metal prefabs have found acceptance among today's homebuyers. For instance, San Diego Builder **Irving Kahn** has found a ready market for steel-framed houses made by Modular Components of Fullerton, Calif., a Rohr Aircraft subsidiary. But Alside was taking an ultra-modern design into two of the nation's most traditional markets.

Even the comments at the first showings revealed an undercurrent of warning. Said a drug salesman in Detroit: "They'll never catch on here." Added another: "Too wild." An Akron man wondered, "Can my wife ever get used to all that glass in the bedroom?" And a housewife summed up: "One of the nicest motels I've ever seen."

The first rumblings came at year's end when Tessin and Alside quietly parted company (News, Feb.).

"The houses have been moving slowly," said Kaufman at that time. "Let's not kid ourselves. They were priced too low for the quality home we promised."

The division lost \$1,377,324 the first fiscal quarter. It pared its second-quarter loss to \$1,073,589 but closed its display centers to do so, then discontinued direct consumer sales and depended solely on dealers. When the third-quarter balance sheet still showed a loss of \$861,728, Kaufman threw in the towel.

How many houses did Alside actually build? Nobody will say, but at his January meeting Kaufman disclosed shipments of 94—30 for consumers and 64 as models. Best estimate on total production: less than 200 units.

U.S. convicts dentist in Dallas FHA fraud

DALLAS—A federal jury has convicted Dr. **Daniel Gevinson** of submitting false subcontract bids to get a higher FHA insurance commitment on his \$10-million Turtle Creek Square apartments.

The Miami dentist-developer was indicted for falsely claiming he took the lowest bids.

"Why do I specify ARI-Certified Central Air Conditioning? Because I want my houses to deliver what I promise."

Jack L. Wallick,
Columbus, Ohio

"Most new houses in our building area feature central air conditioning. One of the strong points in our sales talk is *certified* equipment. The ARI seal means protection all around—for me as a builder and for the people who live in the houses I sell. I like the security it provides my customers."



When you specify *ARI-Certified* for unitary air conditioning, you're sure that the equipment will produce the cooling capacity claimed. Equipment bearing the ARI Seal of Certification must function satisfactorily under maximum operating conditions, resist ice formation, provide adequate insulation and condensate disposal. Certified equipment is subject to random selection from field stocks by the Institute. An independent lab subjects this equipment to intensive testing and verification under adverse conditions. The seal is withdrawn if the equipment fails to deliver. Members' equipment claims are subject to challenge by other members. Ratings are in precise British thermal units per hour rather than in imprecise tons or horsepower.

Supported by manufacturers making more than 90% of all unitary* air-conditioning equipment rated below 135,000 Btuh, the ARI Certification Program removes all doubt about the capacity of specified equipment.

Consult your local air-conditioning contractor—and specify *ARI-Certified* for your next project. Free directory of certified equipment upon request. Write Dept. 208.

*Unitary includes packaged air conditioners, whether single units or two-piece ("split") units, less than 135,000 Btuh in capacity, but not including room air conditioners.



AIR-CONDITIONING AND REFRIGERATION INSTITUTE

1815 North Fort Myer Drive • Arlington, Virginia 22209

Send for sample copy of "Central Air-Conditioning ... What to Consider in its Selection and Purchase"

Circle 7 on Reader Service Card

Materials producers pick leaders, ready new products to boost sales

NEW YORK CITY—The ferment among materials producers, which last month produced two new marketing plans, continues.

Two of the largest appliance makers have just named new top officers. Philco Corp., subsidiary of Ford Motor Co., reached into rival Borg-Warner Corp.'s big Norge Division, to pick **Alonzo B. Kight**, 49, as its president.

Borg-Warner promptly switched its international division president, **Robert O. Fickes**, 55, into Norge's top slot.

Both Norge and Philco bulk large in appliance sales to homebuilders, and the changes at the top may presage significant changes in their sales policies.

U.S. Gypsum Co. is ready to enter the radiant-heating market with a new electrically heated gypsum ceiling panel. Test marketing will begin in Chicago, Indianapolis and Chattanooga, and Chairman **C. H. Shaver** expects the biggest volume to be in new building. The gypsum panels are covered with a paper on which

conductive wires are painted. Panels can be nailed in place with special insulated nails and either painted or wallpapered.

Two other manufacturers are making major bids for the remodeling market. NuTone Inc. of Cincinnati, primarily a homebuilders' manufacturer, is putting its new electric range-oven on the retail market. Chairman **J. Ralph Corbett** plans two-week promotions in major department stores across the country but says NuTone will maintain its close ties to distributors and refrain from direct sales to the department stores. "The remodeling market is one we are most anxious to get, and we think we can get it best through the department stores," he says.

U.S. Steel has picked Dallas for its first big promotion of steel siding. The steelmen are challenging aluminum siding and hope to start a hot competitive struggle. U.S. Steel introduced the siding on U.S. Steel Homes Division houses in January.

Previews rides a housing boom on busy Grand Bahama Island

LONDON—Previews International, the real estate clearing house that sells genuine castles in Spain or almost anywhere else, has just sold Britons almost \$600,000 worth of land on Grand Bahama Island—97% of it for cash.

Tom Ferris, former senior vice president of General Development Corp., applied American promotion methods to the Previews sales campaign. His effort has contributed to a housing and hotel boom on the flat limestone rock 100 miles northeast of Miami.

The bonanza started in January with the opening of the \$7.5-million Lucayan Beach Hotel and its casino, built by the Canadian financier **Louis A. Chester**. Since then land prices have gone from \$8,000 to \$25,000 an acre, and Grand Bahama is heading for all-season status as a major tourist attraction.

Most of the development is sponsored by the Grand Bahama Development Co., which Ferris and Previews represent. The company has purchased more than 100,000 acres from the Grand Bahama Port Authority, a private company.

Several developers have begun building houses priced from \$16,000 up. Although mortgage rates run to 9% and down payments are heavy, brisk sales are

reported. Many homes sell for cash.

Apartments also are rising, but a housing shortage persists. The number of Bahamians coming from other islands has nearly doubled the population and the boom has drawn hundreds of workmen from the U.S. And three airlines are seeking clearance for direct jet service from New York.

Other housing men in the news:

Alan Preston Maginis has become general operating engineer for the Golden Gateway, San Francisco's gleaming new urban-renewal apartment complex. He was formerly a property manager for a San Francisco realty company.

John Slayter heads the new engineering division set up by Richardson Homes Corp., Elkhart, Ind., prefabber. As president of Building Components Research Inc. of Newark, Ohio, Slayter began trucking completely finished houses in major sections from assembly line to site (H & H, Sept. '62).

George S. Summers is the new director of marketing for Sunset International Petroleum's six residential communities in California. He was a vice president with a New York and Washington investment firm.



CFA's OSTTHAGEN
Firm hand on handouts

Community Facilities getting a new chief

WASHINGTON—**Clarence H. Ostthagen** has just been named commissioner of the Community Facilities Administration to succeed **Sidney H. Woolner**, who shifts to President Johnson's anti-poverty program.

CFA, part of HHFA, oversees four disparate loan and grant programs: interest-free advances of federal money to plan local public works, grants to help build sewer and water lines, loans to build college housing and grants to boost public employment under the accelerated public works plan. A somewhat unwieldy operation, it is expected to undergo substantial tightening under Ostthagen, a frank and outspoken industrial engineer who has directed a building modernization program for the Post Office since 1963.

Formerly he directed the Tidewater (Va.) Development Council.

Lumber dealers lead remodeling winners

NEW YORK CITY—The growing role of lumber dealers in remodeling is reflected in the spring remodeling awards just announced by the National Home Improvement Council. Four of the six awards went to lumber dealers. The winners:

Cordell Lumber Co., Dublin, Ga., for an over-\$3,500 exterior remodeling job.

LaMarca Construction Co., Winchester, Mass., for an under-\$3,500 exterior remodeling job that included patio and terrace.

Bennett Lumber Co., St. Luzerne, Pa., for an over-\$3,500 interior remodeling project.

J. R. DeLay Lumber & Building Co. of Houston for an under-\$3,500 structural addition.

Hamilton Home Improvement, Detroit, for an over-\$3,500 structural addition.

M. H. Paulsen Lumber Co., Milwaukee, for an over-\$3,500 structural addition.

Career lender chosen head of Canada's FHA

OTTAWA—**Herbert F. Hignett**, 51, with the Central Mortgage and Housing Corp. since its founding as Canada's FHA in 1946, has been appointed president to succeed the late **Stewart Bates** (NEWS, Aug.).

Hignett's appointment to the sensitive mortgaging post was generally applauded by Canada's builders, among whom he is well known and widely respected. They had feared the position might go to a political appointee. The agency president does not set housing policy but is in effect the government's senior advisor on housing.

Hignett's first action: cutting the number of inspections on new houses from five to three.

Landlord hires social worker to aid tenants

BALTIMORE—Real estate operator **Howard Offit** says he will hire a social worker to counsel tenants in his 1,000 row houses.

A woman with a master's degree in social science will be paid \$8,000 a year to advise tenants on family problems and educate them in better home-making techniques. She will work in an urban neighborhood of two and three-story attached houses occupied principally by Negroes.

Executive Director **Harold C. Edleston** of Baltimore's Health and Welfare Council says the social worker will "deal with problems the landlord wouldn't be aware of, but which can lead to property destruction, moving and falling behind in rent."

DIED: **William Edward Witt**, 44, president of Viking Construction Corp. of Virginia Beach, Va., July 8 in Virginia Beach. Witt made Viking one of the largest building companies in the Tidewater region. In the late 1950s he was a major producer of Sec. 221 homes for displaced, building over 1,000 units. Later he expanded his operation to include higher price ranges. Always open to new ideas, he was a leader in applying market research and business machines to his operation. He was a former president of both the Tidewater and Virginia homebuilder associations, a national director of NAHB and a member of FHA's low-cost housing advisory committee; **William Stanley Parker**, 86, nationally known architect, July 24 in Boston. A Fellow of the American Institute of Architects, he lectured at Harvard, Massachusetts Institute of Technology and Columbia.

**STYLING LEADERSHIP
YOU CAN SEE...
PROFIT YOU CAN BANK ON**

The custom-floor beauty of Azrock vinyl asbestos tile* is designed to enhance the sales appeal of your homes . . . but Azrock's profit performance for you doesn't stop there. You can build more house for less money. Here's how: ■ **YOU CUT MATERIAL COSTS** because Azrock vinyl asbestos tile costs less than cork, rubber, other types of vinyl, terrazzo or wood flooring. ■ **YOU CUT ADHESIVE COSTS** because vinyl asbestos needs no costly adhesive . . . even over concrete below grade. ■ **YOU CUT LABOR COSTS** because vinyl asbestos tile can be installed faster and easier than sheet flooring or more expensive vinyl tiles. And vinyl asbestos is ideal for installation over concrete slab, today's lowest-cost construction method. See all 70 colors and styles at your Azrock dealer now.

another fine floor by **AZROCK®**

floor shown: V-423, Autumn Haze; V-427, Romany Beige



Nationally advertised in American Home, Better Homes & Gardens, House Beautiful, House and Garden, McCall's and others. For free samples, model home merchandising kit, write Azrock Floor Products Division, Uvalde Rock Asphalt Company, 555B Frost Building, San Antonio, Texas 78206.

*Also known as Vina-Lux®

Which is wood?

*...and which is Ruberoid's
new Dura-Shake siding?*

The siding on the left is wood. Or is it the siding
on the right? It's hard to tell them apart!*



*Dura-Shake is the siding directly above. The siding at the left is wood.

AND LOOK AT THIS FOR SALES APPEAL!

Getting the look of wood without the cost of wood sold U. S. Home & Development Corporation on Ruberoid's new Dura-Shake siding for 1500 homes!



Phil Frank's first use of Dura-Shake is in the 1500 home Whittier Oaks Development at Marlboro Township, N. J.

Mr. Philip Frank, V. P. in Charge of Production at U. S. Home & Development, compared expensive wood shake and new Dura-Shake in an actual siding construction test. The favorable *comparative* appearance of Dura-Shake, and other advantages, sold Mr. Frank on making extensive use of the product. In fact all exterior walls calling for a shake appearance in his new development will be Ruberoid's Dura-Shake.

The saving to his company will be substantial. In the initial cost of siding material...in easy handling and application...in the complete elimination of a painting operation.

For the distinctive look of shake without the cost of shake, use new Dura-Shake—in a home-flattering new 12" x 24" shingle by Ruberoid.

NEW DURA-SHAKE has deeper striations that add distinctive textural elegance to sidewalls.

NEW DURA-SHAKE comes in 5 most sought after colors created by Color Helm—famous home stylists—sealed in rockhard polymer plastic for lifetime beauty. *Never needs regular sidewall painting.*

NEW DURA-SHAKE won't rot, warp, buckle or dent. It's weatherproof, termite proof and can't burn.

NEW DURA-SHAKE is made by America's leading manufacturer of mineral fiber products. It's quality made for easier handling and faster application—saving you time and money in construction cost. Laminar structure gives it extra strength and handleability.

Think of the added value and saleability Ruberoid's new Dura-Shake Siding can add to your home—*without adding cost!* Include Dura-Shake Siding with your order for other Ruberoid building materials: roofing, insulation, floor tile, wall board and other quality products.



Dura-Shake provides the heavier shake-like appearance home buyers are looking for—with mineral siding's low cost, low maintenance.



Riviera Blue



Dawn Gray



Fawn Beige



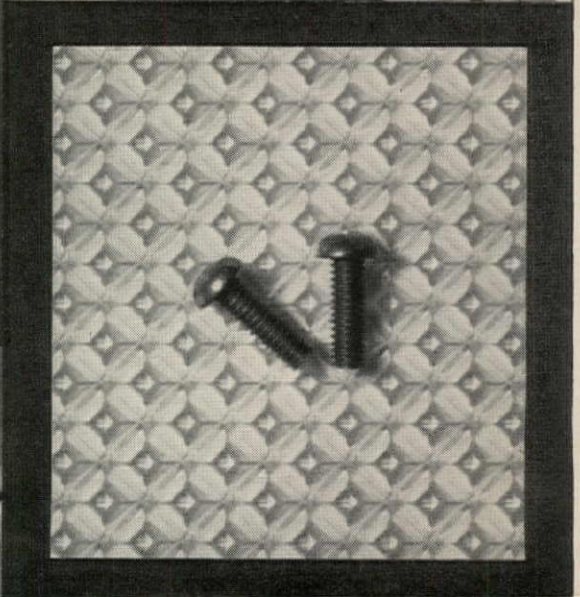
Leghorn White



Bayberry Green

RUBEROID®

The RUBEROID Co., 733 Third Ave., New York, N. Y. 10017



Pampering a woman or helping a builder...this ceiling shines at both!

(Lowest installed cost in the business)

What's a luminous ceiling to a woman? Flip the wall switch and you'll find out. The "Ah!" is instinctive. All the while she's under its bright spell, she's impressed!

A luminous ceiling takes any bathroom or kitchen out of the humdrum and puts it in the luxury class. Talk about a salesman!

To builders, on the other hand, this Emerson-Pryne Floating Luminous Ceiling, with improved plastic panels, is another kind of marvel. It's an "extra" without extra effort. Two screws fasten the fixture to the ceiling junction box. From the fixture, chains hold the frame for the plastic panels.

When a man can install a ceiling of light in less time than it takes to smoke a cigarette, you know that no matter what its price, its installed cost *can't* be high.

Actually, we'll bet even its over-the-counter price will surprise you. See your Emerson wholesaler soon for the fastest-fitting ceiling on the market . . . the "ceiling that's a salesman."

The complete Emerson Electric Builder Products Package:

HEAT . . . Baseboard Heat, Built-In Heaters, Radiant Heating Cable, Bathroom Heaters from Emerson Electric and Emerson-Pryne.

LIGHT . . . Interior and Exterior Lighting Fixtures from Emerson-Imperial and Emerson-Pryne.

AIR . . . Kitchen Hoods, Exhaust Fans, Attic Fans from Emerson-Pryne and Emerson Electric.

SOUND . . . Intercoms and Door Chimes from Emerson-Rittenhouse.

EMERSON  **ELECTRIC**
BUILDER PRODUCTS DIVISION

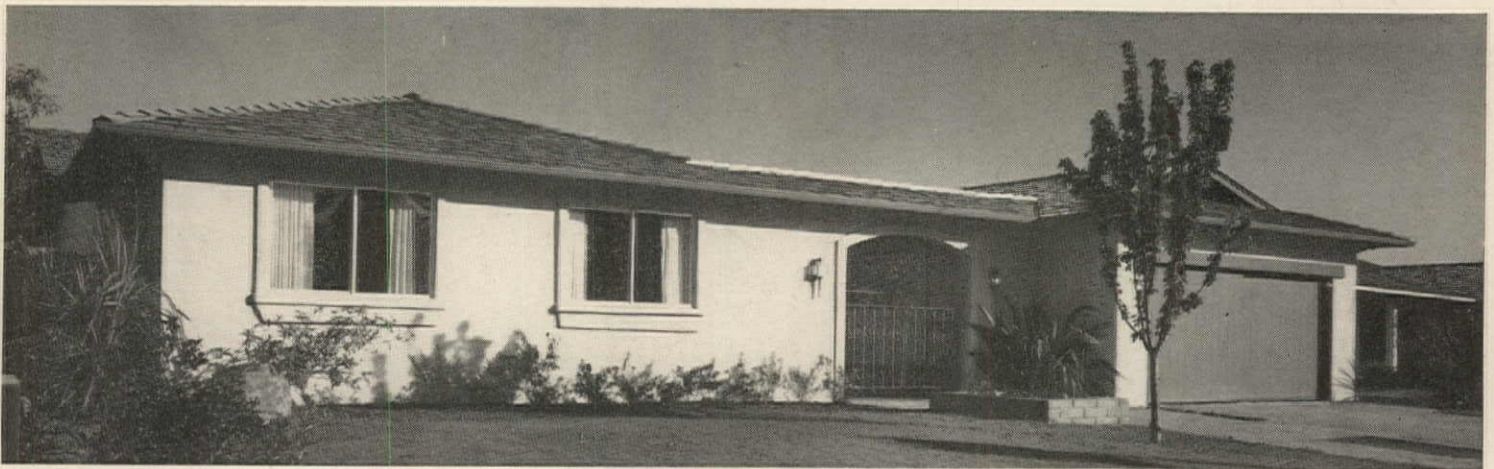
EMERSON ELECTRIC • EMERSON-PRYNE • EMERSON-IMPERIAL • EMERSON-RITTENHOUSE

© 1964 by The Emerson Electric Mfg. Co.

Emerson-Pryne Floating Luminous Ceiling takes just two fixture screws to install.

Now with new sparkling clear prismatic styrene diffuser panels.

WHAT THE LEADERS ARE BUILDING



Photos: Ernest Braun



ENTRY COURT creates a Mediterranean mood that is echoed by the tiled foyer in foreground.

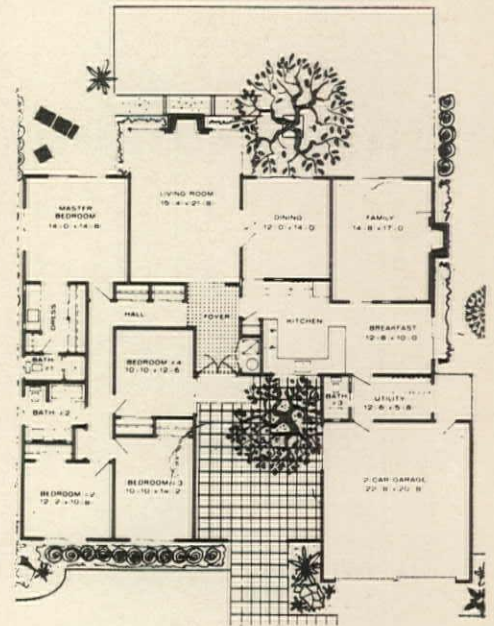
Big entry court clicks with buyers

The 30' entry court (left) is a key reason why this \$35,450 model has accounted for 11 sales in 3½ months, according to the builder, Brown & Kauffmann of Palo Alto, Calif.

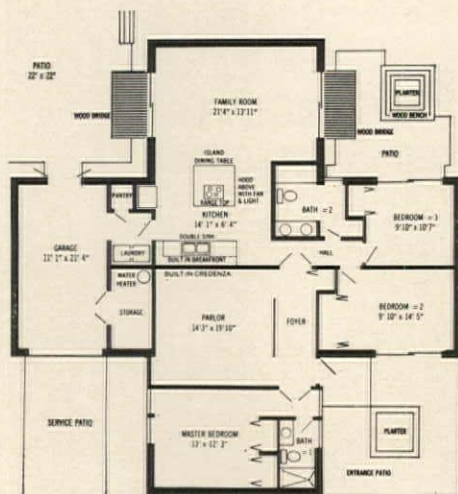
Buyers like the court because it forms an impressive entrance and because it serves as a secluded outdoor-living-area—an important plus in the California market where high land costs dictate relatively small lots. This model, for example, is built on a \$9,500 lot.

Many of the ideas in the 2,386-sq.-ft. house, designed by Architect Alexander C. Prentice, were suggested by a panel of 15 B&K homeowners who meet regularly with partners Wayne Brown and S. H. Kauffmann. Other sales features include two patios (one off the master bedroom, the other off the living, dining and family rooms), fireplaces in both the living and family rooms, a beamed cathedral ceiling in the living room, centrally located kitchen with two ovens and an extra bath off the utility room, which also serves as a mudroom and has doors to the garage and side yard.

The house is one of five models at B&K's Dry Creek development near San Jose. Community features include underground utilities and a master TV antenna.



PLAN divides house into three distinct zones—sleeping, formal living and informal living.



X-PLAN separates master bedroom from children's rooms, family room from parlor.

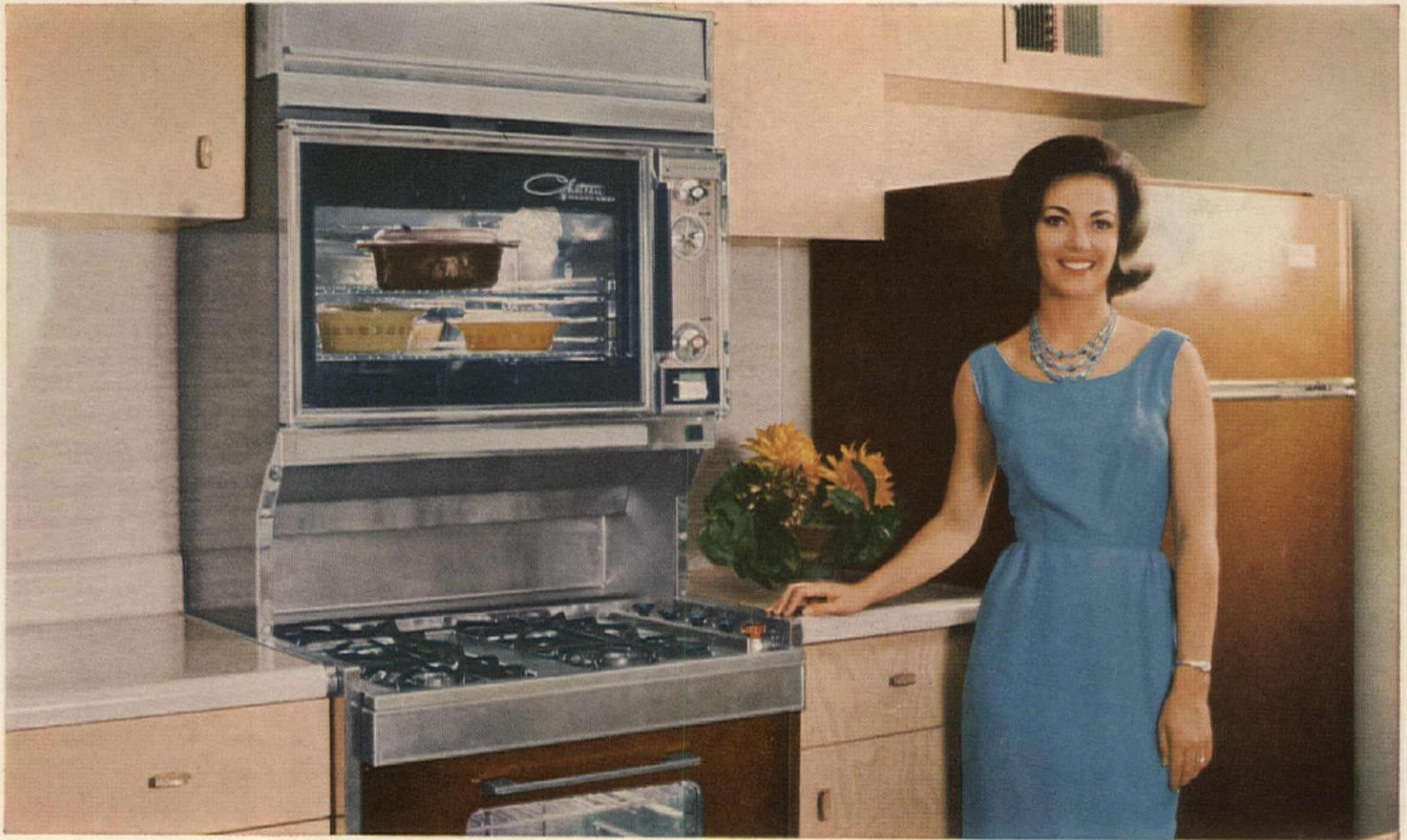
ENTRY PATIO is between master bedroom, left, and children's bedroom wing. Lot is 85' x 100'.

X-shaped house attracts the curious

Crowds have flocked to Sengra Development's Miami Lakes (Fla.) community to see why the house below was designed with a crossed plan. Architect James Deen's reasons: 1) to relieve subdivision monotony, 2) to improve the separation of indoor areas and 3) to tuck private patios between the four wings of the

house. But, Sengra Development reports, the \$23,500 experimental house has not sold. Buyer's don't take to the unconventional plan, are also chary of the island range and the proximity of the foyer to the master bath. Concludes Sengra: the design may be ahead of its time.





Spacious, modern Foothills kitchen features new Magic Chef Chateau

“San Antonio homemakers prefer Magic Chef...” Clifford Morton, President, Community Properties, Inc.

Extensive market research with hundreds of San Antonio homemakers led to the choice of Magic Chef for kitchens in The Foothills . . . a new community of 200 homes priced from \$12,500 to \$21,000.

“This study covered the entire house with special emphasis on kitchen appliance preferences,” Morton explained. “We found Magic Chef was a brand name recognized by more homemakers than any other.

“In addition, Magic Chef’s new line offered design and quality

features not available in other kitchen equipment,” he pointed out. “The dependability of Magic Chef is not new to us. We’ve chosen it for the past five years.”

Community Properties President Morton has been a key figure in the widely known Quincy Lee organization for several years. The Foothills is the first of three major Magic Chef communities the firm will open this summer.

Leading builders from coast-to-coast share Morton’s views. No wonder . . . more women cook on Magic Chef than any other range.



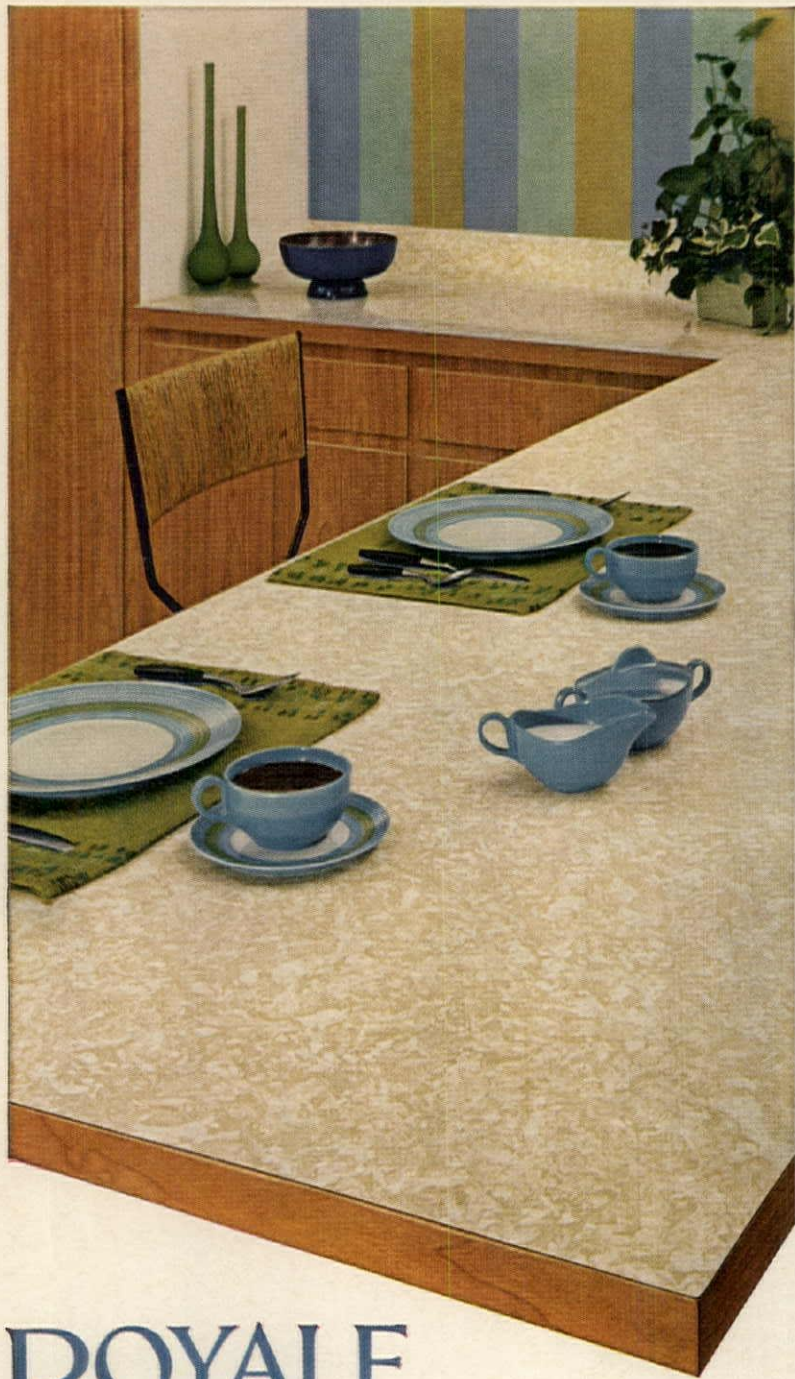
Marketing Director Buz Buckley; President Clifford Morton



Foothills homes, airy design with a Western accent



MAGIC CHEF
CLEVELAND, TENNESSEE



ROYALE

for counters in kitchen or bath

The gentle floating design of this Textolite Royale pattern combines subtle pastels with a soft white background for extreme versatility in color coordination. Colors are Aqua, White, Melon and Champagne (above). G-E Textolite laminated plastic is heat, stain, scratch-resistant . . . wipes clean with a damp cloth . . . stays beautiful for years. There's sales appeal in the other delightful Textolite colors and patterns, too. Look for Textolite dealers and fabricators in the Yellow Pages.



Textolite®
LAMINATED PLASTIC

GENERAL ELECTRIC



AQUA ROYALE

WHITE ROYALE

MELON ROYALE

General Electric Company, Coshocton, Ohio, Dept. HH-94

Send Royale samples. Send "selling aids" details.

Name _____
Firm _____
Street _____
City _____ State _____

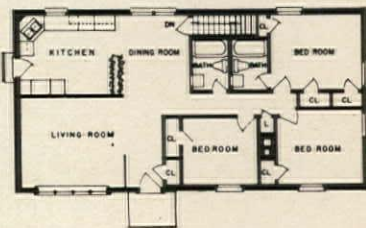
WHAT THE LEADERS ARE BUILDING

starts on p. 24



Here's a hot seller in the Washington area

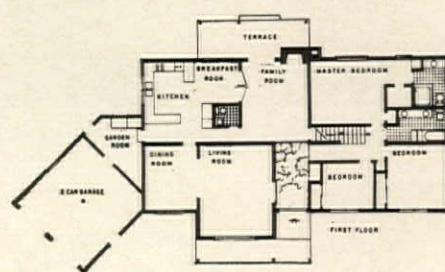
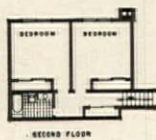
Albert Turner racked up 258 sales in 16 months with this \$20-750 ranch. His promotion costs: only \$17 per house. The model, in an 1,800-unit tract near Beltsville, Md., features a striking kitchen with a planter, mural, desk, mirror and soffit lighting. Turner offers selection of 24 kitchen-color schemes. Popular extras are a carport (\$950), recreation room (\$750) and fireplace (\$450).



Front and back—this house has buyer appeal

Few builders give the rear of their models as much styling as General Builders Corp. has given this \$34,000 ranch at Huntington, L. I. Like the front (top photo), the rear (lower photo) has a porch, split-shake siding and balanced window treatment. The

2,600-sq.-ft. ranch includes a 29' master bedroom suite, 3½ baths and 600 sq. ft. of unfinished second-floor space. Other sales features: a paneled, oak-floored family room, slate-floored foyer, dishwasher, chopping block. Family-room fireplace is optional.





Only 35³/₄ inches wide

New Admiral Duplex 19. Model ND1949. No defrosting. 11.8 cu. ft. refrigerator; 246 lb. freezer. Automatic ice maker available.

New! The only stand-up freezer/refrigerator just 35³/₄" wide!



Only From Admiral! The hottest home-seller in appliance history!

The Duplex 19 with 18.8 cu. ft. capacity makes the kitchen the focal point of the house. It has a beautiful built-in look without the expensive built-in cost.

The Duplex 19 helps sell your new home with features women want . . . convenient stand-up design and big capacity in a compact cabinet just 35³/₄" wide and 64³/₁₆" high.

If you're an apartment builder, the Duplex 19 offers unique prestige and quality. That's why the beautiful Admiral Duplex was selected for Chicago's new, 40-story, 1300 Lake Shore Drive apartments.

For remodeling jobs, the Admiral Duplex 19 gives you the distinction of providing *both* a full-size freezer and full-size refrigerator in any of the most modern kitchen designs.

And if you're in the replacement market, the Duplex 19 will fit 9 out of 10 existing kitchens. Take your choice of 5 fashion-tone colors in 4 models.

Want more information? Send this coupon today!

•••••
 ••••• **Manager, Builder Division**
 ••••• **Admiral Corporation**
 ••••• **3800 West Cortland,**
 ••••• **Chicago, Illinois**
 •••••

I'd like more information about the new Duplex 19. I am a apartment house builder, home builder, real estate manager, remodeler, architect.

Name _____


Firm _____

Address _____

City _____

State _____

Admiral Duplex 19

 MARK OF QUALITY THROUGHOUT THE WORLD




TWO WAYS TO WIN A WOMAN: **OPENING NIGHT...**



OR MOE LIGHT

Moe Light color-crystal chandeliers give her something special to remember about your houses. For more ways to win a woman with lighting, write to Moe Light Division, Thomas Industries Inc., 207 E. Broadway, Louisville, Ky.

Circle 14 on Reader Service Card



HIGHLAND TOWERS
AKRON, OHIO
BUILDER: IRVING BOTNICK

METALBESTOS HELPED THIS BUILDER SAVE \$180,000

Irving Botnick is an Akron, Ohio, Builder with a wide reputation for quality high-rise construction. At his Highland Towers Apartments he provides individual heating and cooling control for tenants with a system that was installed at a savings of \$180,000.

"We demand fingertip control of heating and cooling at low maintenance," he reported. "And we found it with individual heating and cooling units for each of our 96 apartments.

"This is a system that provides every advantage of a three-pipe installation yet cost me \$180,000 less. It has phenomenally low noise level, no maintenance problems, and most important, enthusiastic tenant acceptance."

A compact, 2 x 3 closet, off the apartments' balconies, encloses gas-fired, warm-air furnaces, cooling coils and Metalbestos gas vents—the largest only 6" in diameter. Condensers are built right into the balconies themselves (see photo above).


Mr. Botnick also reported that last winter the total gas bill for the Highland Towers was less than \$800 per

month (about \$8 per apartment) and included the operation of 16 gas dryers, two 1.5 million BTU water heaters and garage heating. In regard to the venting installation, he remarked:

"Venting these 96 units would have been a terrible problem—economically unfeasible with masonry. Fortunately, our local Metalbestos man, Ted Semchuck, had the answer with an engineered venting system for high rise."

He was referring to a new technique called Metalbestos multi-story venting, which is helping builders save thousands of dollars in mechanical costs from coast to coast.

There's a Metalbestos representative near you who can give you the full details on cost-saving heating and cooling installations. May we send you his name? Write: P. O. Box 137, Belmont, Calif.

**METALBESTOS**
DIVISION OF THE WILLIAM WALLACE COMPANY • BELMONT, CALIF. • LOGAN, OHIO
METALBESTOS IS THE REGISTERED TRADEMARK OF THE WILLIAM WALLACE COMPANY.
WORLD'S LARGEST MANUFACTURERS OF TYPE B GAS VENT AND ALL-FUEL CHIMNEYS.



Details make the difference

Pure design simplicity using *SPA Southern Pine

The laminated beam is firmly fastened between flanks of a unique spaced column. With this solid support, a wood deck does double duty as first floor ceiling, and walking surface for rooms above. The technique creates design integrity, as well as economy in apartments and commercial buildings.

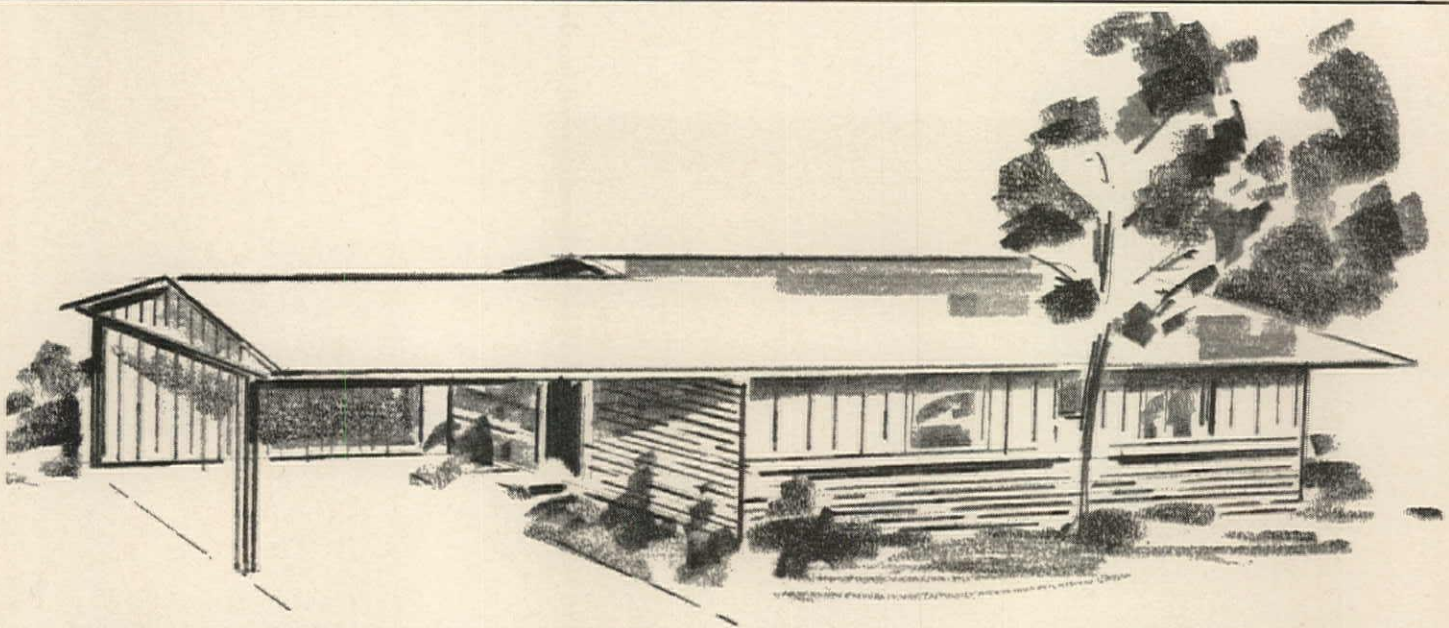
Such efficient details are made possible by the exceptional strength and precision of SPA Southern Pine. This lumber is size-stabilized by carefully controlled seasoning to minimize shrinkage and swelling.

For further information on □ columns, □ laminated lumber and □ fastenings, Write: *Southern Pine Association, HH-9, P. O. Box 52468, New Orleans, Louisiana 70150*

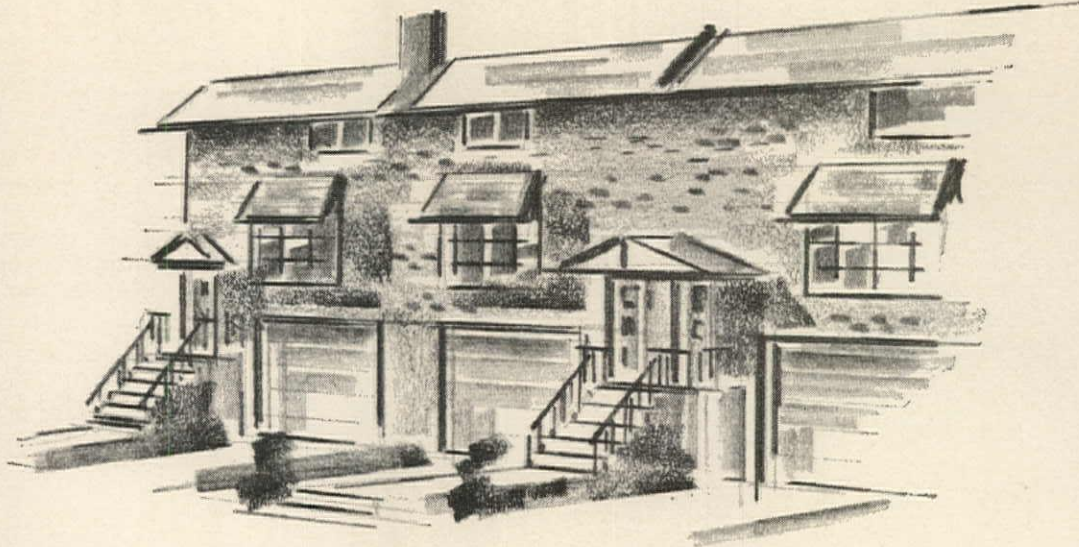


Southern Pine Association

**Trade-marked and officially grade-marked*



Boulder, Colo. The first of Jim Hudson's ranch houses were occupied in 27-below weather with 40-mile winds. Snug comfort, provided by the \$470 hydronic system, helped sell all 100 homes in record time.



Philadelphia, Pa. Paul Biggans and Louis Feldsher invaded warm air territory with 120 row houses. The trifling extra cost of hydronics (just \$510 installed) was more than offset by faster sales.

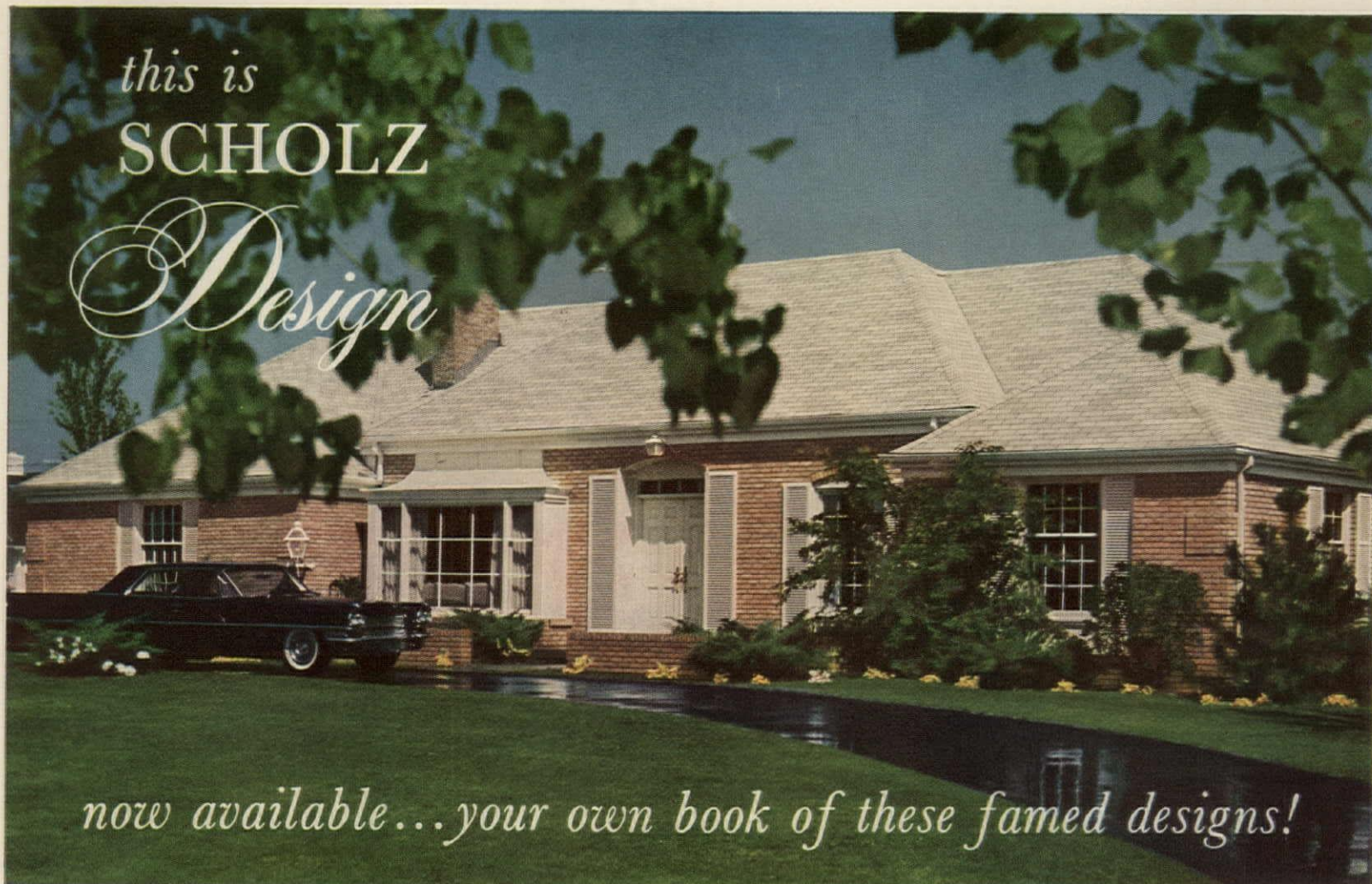
Hydronic* heat at warm air prices it gave these builders a real sales edge

People buying homes today are looking for something better. You have a definite sales edge when you offer them superior hydronic heat—clean, quiet and draft-free. If you've thought hydronic heat was out of the question, look again—as these builders did. American-Standard has dramatically slashed hydronic system costs with new products, new system design methods

and new timesaving installation short cuts and tools. So when you consider the heating system for your new homes, don't just specify "the usual." Ask your American-Standard heating contractor for full details on hydronic heat at warm air prices. Or write American-Standard, Plumbing and Heating Division, 40 West 40th Street, New York, N.Y. 10018.

*The science of heating or cooling with water





Scholz Homes sales jumped 87% in 1963!

1964 SALES ARE NOW 126% OVER '63!

and:

**Scholz builders are working on the industry's
biggest profit margins!**

And selling faster than ever before in history!

why?

Scholz designs intrigue!

**They sell on solid profit margins . . . because
they have what the buyer wants!**

Scholz quality . . . Scholz designs . . . sell themselves!

They can work for you.

**We are everywhere
east of the Rockies!**

**Send for the "Famed Scholz
Design Collection" today!**

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

NAME

STREET

CITY

ZONE

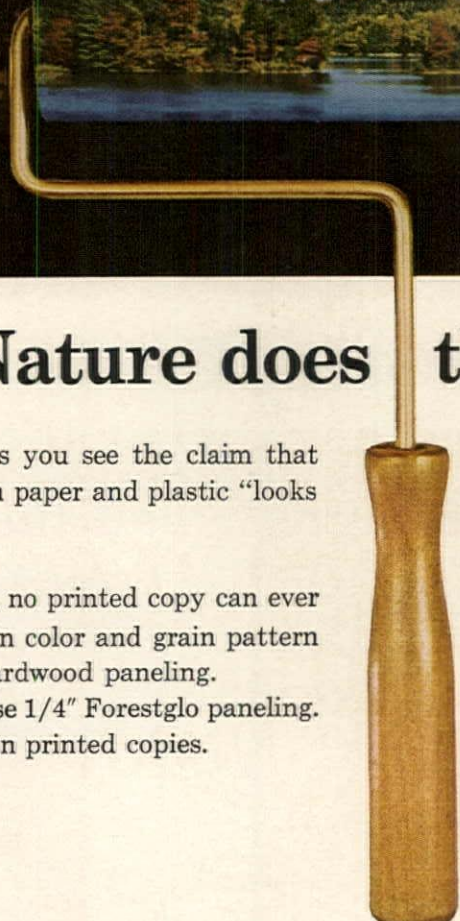
STATE

PHONE

We are interested in building in the _____ area.

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

HH9



Selected for the House of Good Taste, N. Y. World's Fair

Nature does the printing

Consider how many times you see the claim that imitation printed paneling in paper and plastic "looks like real wood."

Actually it never does.

No matter how ingenious, no printed copy can ever duplicate the individuality in color and grain pattern of Weyerhaeuser genuine hardwood paneling.

In built-for-sale houses, use 1/4" Forestglo paneling. It costs very little more than printed copies.

For commercial or specialized applications, extra-thick 7/16" Craftwall is recommended. It's about the same price as most thinner premium grade panels.

There's a wide choice of hardwood species and tones. All are selected for the most beautiful grain and color, and then given a rich, lustrous finish.

Matching hardwood doors and trim are also available. For more information see your dealer, or write us at Box B-12, Tacoma, Washington.



House & Home move to McGraw-Hill . . . case of the copied house plan

Reader reaction to H&H move

H&H: Your magazine has contributed greatly to the housing industry over the years, and I am glad to learn that you will continue to publish with new vigor under the McGraw-Hill banner.

We have had differences in the past, and we will have them in the future. We will each be critical of the other, but I trust that these exchanges will be more constructive—to the mutual benefit of HOUSE & HOME, the Housing Agency, the homebuilding industry and the nation.

ROBERT C. WEAVER, administrator
HHFA
Washington

H&H: I look forward to continuing to receive this excellent magazine.

OLIVER W. DE WOLF, acting executive director
National Association of Home Builders
Washington

H&H: . . . glad to learn that the liaison HOUSE & HOME has had with industry people is to be continued under the new management. I don't think there is any question but that you will have the wholehearted cooperation HOUSE & HOME has had in the past.

CLARENCE A. THOMPSON, president
Thompson Lumber Co.
Champaign, Ill.

H&H: . . . delighted that the HOUSE & HOME staff will continue with McGraw-Hill and the F. W. Dodge Co. This insures continuation of a very useful magazine to our industry.

JOSEPH A. GRAZIER, president
American-Standard
New York City

H&H: . . . an opportune time to point out how much benefit our company has gained from HOUSE & HOME. Every key executive here reads the magazine almost from cover to cover, and we have been stimulated constantly by the excellent articles on everything from initial land planning to sales closing techniques.

WAYNE R. BROWN
Brown & Kauffmann Inc.
Palo Alto, Calif.

H&H: . . . HOUSE & HOME is a tremendous force in the building industry. It is hard to overstate the value of this publication in the past. I am sure that your effort will be strengthened in your new situation.

ARTHUR TEMPLE, president
Temple Industries
Dallas

Subscribers: HOUSE & HOME is available only by paid subscription. The publisher reserves the right to refuse non-qualified subscriptions. Position and company connection must be indicated on subscription orders forwarded to address shown below. Please address all correspondence, change of address notices and subscription orders to Fulfillment Manager, HOUSE & HOME, P.O. Box 430, Hightstown, N.J. 08520. Change of address notices should be sent promptly; provide old as well as new address; include postal zone number if any. If possible, attach address label from recent issue. Please allow one month for change of address to become effective. Postmaster: Please send Form 3597 to Fulfillment Manager, HOUSE & HOME, P.O. Box 430, Hightstown, N.J. 08520 Unconditional guarantee. The publisher, upon written request, agrees to refund the part of the subscription price applying to the remaining unfiled portion of the subscription if service is unsatisfactory. Member: Audit Bureau of Circulations and Associated Business Publications.

H&H: HOUSE & HOME occupies a position of leadership in the housing-magazine field. To the extent that we have mutual interests in better housing for the nation, we will be pleased to cooperate with your staff. We will continue to offer encouragement and criticism, as indicated.

P. N. BROWNSTEIN, commissioner
FHA
Washington

H&H: We had wondered about the future of HOUSE & HOME, particularly as it reflected, in our judgment, a tremendous position of leadership in the light construction industry. I am certain most people in housing will look forward to the continuing leadership of a magazine that is something other than a trade publication.

T. T. SNEDDON, executive vice president
National Lumber & Building Material
Dealers Assn.
Washington

H&H: . . . delighted that you are continuing to give full coverage to housing activities.

LEONARD L. FRANK
Past president, NAHB
Hicksville, N.Y.

H&H: It is nice to know that most of your editorial staff chose to stay with HOUSE & HOME. I am sure they will continue to do the excellent job they have done in the past.

F. T. HUGHES, vice president
Pittsburgh Plate Glass
Pittsburgh

H&H: I will cooperate to the very limit in helping to make HOUSE & HOME even bigger and better than it is so properly reputed to be at present.

ERNEST G. FRITSCH, president
Ernest G. Fritsche & Co.
Columbus

H&H: . . . very happy to hear the magazine will continue to be a management magazine giving full coverage to all segments and trends in the housing industry.

MATT M. JETTON, president
Sunstate Builders Inc.
Tampa

H&H: We have had high regard for your publication and for the people who have been involved and look forward to continued interest in HOUSE & HOME.

EARL SWANSON, president
Andersen Corp.
Bayport, Minn.

H&H: . . . glad to hear the new management intends to continue improving this great news media.

LLOYD E. CLARKE, president
Clarke Corp.
Bettendorf, Iowa

H&H: You are indeed fortunate in retaining the majority of your competent editorial staff. I am sure HOUSE & HOME will continue its significant contribution to the housing industry.

G. DONALD KENNEDY, president
Portland Cement Assn.
Chicago

H&H: . . . glad to learn that no major changes are contemplated and that constant efforts will be made to improve the magazine.

PAUL B. SHOEMAKER, executive vice president
Masonite Corp.
Chicago

H&H: . . . sure HOUSE & HOME's new connection will be good for the staff and the magazine as well.

SAMUEL E. NEEL
Mortgage Bankers Association of America
Washington

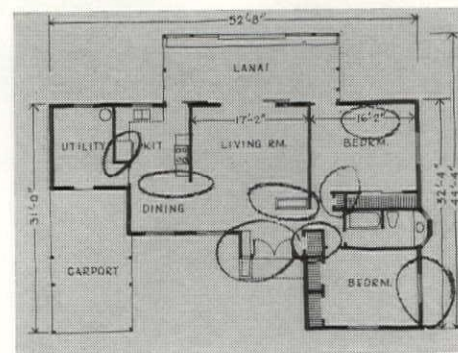
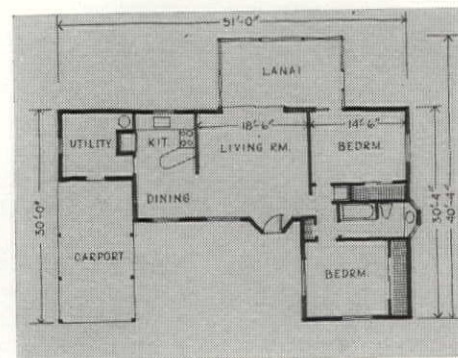
H&H: I have appreciated my relationship with HOUSE & HOME through the years and sincerely hope to continue so in the future.

J. W. (BILL) UNDERWOOD
J. W. Underwood
Jackson, Miss.

Copied plan

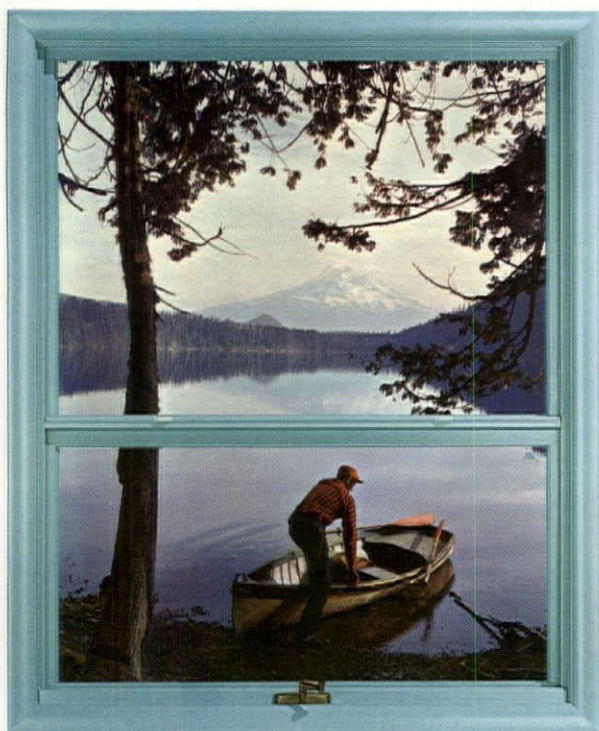
H&H: The copied plan (case of Designer Ruth Richmond vs. Midstate Builders, NEWS, June) is much superior to the original Richmond plan. Since we are all working together to make this world a better place to live in, and since the building industry plays a great part in this action, why not share all ideas we can exchange with one another?

RALPH EARL GUIDERO, A.L.B.D.
Riverside, Calif.



Erratum

HOUSE & HOME's June cover showed the kitchen of a Point Richmond, Calif., house designed by the architectural firm of Goetz and Hansen. H&H erroneously placed the house in Oakland, Calif., and gave sole credit for the design to Architect Jens Hansen.



Andersen Beauty-Line Windows give your homes picture-window beauty at a practical price. Removable grilles pop in or out for easier cleaning. Selected wood is specially treated for permanent protection from termites and decay.

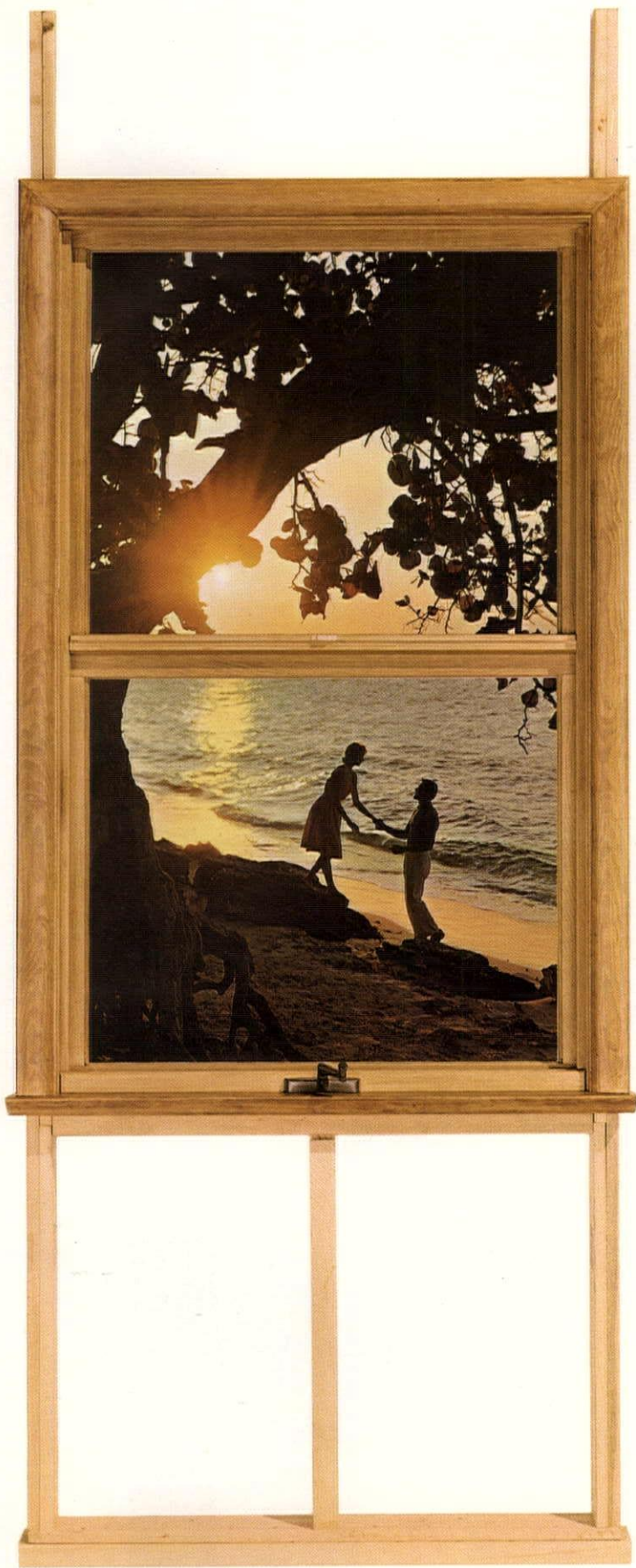


Andersen Gliding Windows are a wonderful way to frame a beautiful view . . . add even greater appeal to your home. Provide top-to-bottom ventilation, yet close extra tight for snug, year-round comfort. Companion Gliding Patio Door adds distinctive touch to your homes . . . opens them (and your prospects' imagination) to the world of indoor-outdoor living.



Andersen Casement Windows . . . shown here as a beautiful Casement Picture Window combination . . . add curb appeal to any home . . . are recognized as the "trademark" of elegance in fine homes. And they are the standard for comfortable, draft-free living . . . so weathertight your owners save 15% or more on fuel cost in the homes you build. Beautiful Andersen Casement Windows are available with welded insulating glass and removable grilles.

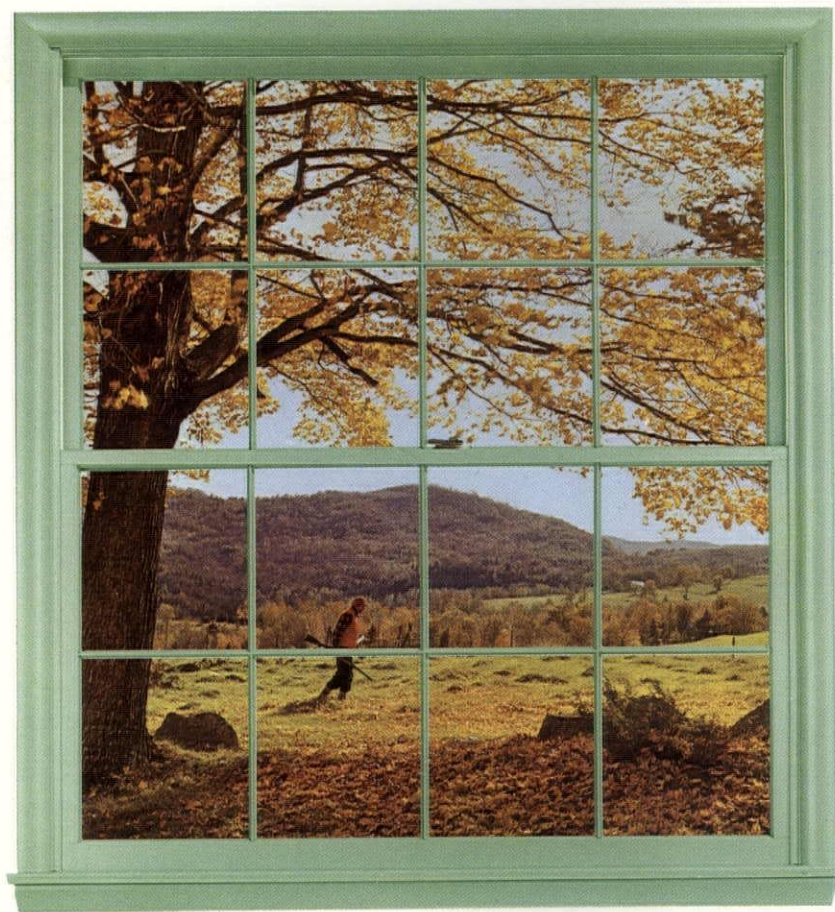
**These 6 beautiful window
greater curb appeal**



Andersen Strutwall* Windows . . . both Casement and Beauty-Line styles . . . come as a complete window-and-wall component. Cut installation time to the bone . . . save 3 man hours or more on every unit!



Andersen Flexivent® Windows are one of the most economical units you can use. And they're remarkably versatile . . . unusually weathertight. Use them singly . . . in stacks, ribbons, or picture-window groupings. With Flexivents, you can achieve any number of functional groupings that will add distinctive beauty.



Andersen Narroline Windows offer smooth operation and convenience never before found in a double-hung design. They're so extra weathertight, welded insulating glass is practical and economical . . . eliminates need for storing and handling storm windows.

***styles can help you build
into your homes***



Andersen Windowalls
TRADEMARKS OF ANDERSEN CORPORATION
 ANDERSEN CORPORATION • BAYPORT, MINNESOTA



HOW ADHESIVES AND CAULKING GUNS MAKE STRONGER WALLS WITH FEWER NAILS

New Ful-O-Mite® Black Stuff grabs fast — develops a strong, solid bond — eliminates “ringing” or “thumping” in drywall construction. Makes a solid, unitized wall structure. Photos show typical construction applications.



Easy to apply by gun, pump or trowel.



Bonding polystyrene foams — does not collapse foam.



Stud adhesive — bonds to wood and metal.

Black Stuff Adhesive is smooth, tacky, easy to use. It goes through automatic pumping systems, pushes easily and effortlessly through hand caulking guns, and is easily trowelable. It will not sag off or run off vertical surfaces.

Black Stuff cuts down on nailing and nail hole patching, eliminates nail popping, reduces hammer marks when working with decorative paneling.



For paneling — reduces nailing.

Black Stuff is available now in 1 and 5 gallon containers plus 1/10 gallon and 1/4 gallon cartridges. Check with your distributor or write directly to H. B. Fuller Company.



H. B. Fuller Company

1150 Eustis Street, St. Paul, Minnesota 55108, Dept. 3668
INDUSTRIAL ADHESIVES SINCE 1887



Weldwood PF-15 Sidings are available as Lap Siding, Flat Panel Siding, and, soon, Vertical Pattern Siding. Each comes in white, gray, green, beige, and yellow. Also available are matching accessories for a neat, weathertight installation.

If this siding needs to be painted before 1979, we'll foot the bill*—Weldwood PF-15 Sidings

(PATENT PENDING)

This is a new, practically maintenance-free building material. The surface is the new miracle film, DuPont Tedlar**, which we guarantee will be paint-free for at least 15 years. Underneath is Weldwood® exterior plywood, which, like all Weldwood Exterior Sidings, is guaranteed for the life of the building.

It's the combination that makes PF-15 (patent pending) Sidings the best and most practical sidings ever developed for residential and light commercial or industrial use. They are strong, tough, easy to install. You'll build faster—sell faster. Here's why.

First, you're offering buyers extremely low maintenance. No paint for 15 years or more. An occasional hosing will remove loose dust and dirt. But if an owner should want to change the color of his house, Tedlar is an excellent paint base.

In addition, your homes will be stronger, more rigid because of the inherent strength and stability of plywood. More comfortable because plywood is a natural barrier to heat, and because there are fewer sidewall joints. More dent-and-damage-resistant because of

the natural resilience of wood and cross-lamination—plus the extra protection from abrasion and scratching offered by Tedlar. Electricity poses no special problems—from lightning or fallen power lines, or in installation of convenience outlets—because, unlike metals, Weldwood PF-15 Sidings are *nonconductive*.

And here's how you save time, money, and trouble in construction. You can install PF-15 Siding in any weather that crews can work. When it's up, the walls are finished—no waiting for dry days to paint.

There'll be no call-backs. The color is smooth and uniform, and it's on to stay. The siding is resistant to splits, dents, or warpage.

Add to this all the other advantages of plywood siding. PF-15 Siding can be

installed directly on studs, eliminating sheathing. Siding is handled and installed in bigger pieces, cutting labor, waste, and overhead costs. And with PF-15 Lap Siding you get a bonus—super-fast installation because of a unique concealed-nailing, self-aligning system.

Send in the coupon on the back of this page for samples and complete information—also read about the exciting new Weldwood Textured Sidings on the opposite side of this page.

**DuPont registered trademark

WELDWOOD®

PF-15 SIDINGS

(Paint-Free, 15-year guarantee*)

*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 elements.)

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.



WELDWOOD PLANKTEX® SIDING—Rough-sawed sections create a lap effect with distinct shadow lines every 8". Apply it vertically, with or without battens, or horizontally for a lap-siding look. In redwood or fir.

WELDWOOD EARLY AMERICAN™ CEDAR—A classic pattern that produces a board-on-board or board-and-batten effect, without the material and installation cost of battens. Faces and groove bottoms are cedar.

Real wood textures for variety . . . and economical stain finishes—Weldwood Textured Sidings

United States Plywood, Dept. HH 9-64
777 Third Avenue
New York, New York 10017

- Please send me samples of Weldwood PF-15 Sidings 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.
- Tell me about your builder merchandising plan.

Name

Firm

Address

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

For the change of pace that attracts buyers, turn to the natural texture of wood—and the wide variety of rich stain colors. And with Weldwood® Textured Sidings, the possibilities for varying the exteriors of your houses are almost unlimited.

In addition to the bold, abraded grain of cedar and the rough-sawed effects on redwood and fir (shown above), you can choose from:

Weldwood Weldtex® Siding — large striated panels with closely spaced grooves of varying widths, which create intriguing highlights and shadows.

Weldwood Formtex® Sidings — a unique texture of soft-rounded grooves regularly spaced. Available in large panels and as lap siding.

Weldwood Texture 111 and Ivy League Sidings in cedar and fir—large panels with deep regularly spaced "square" grooves

which produce interesting shadow lines. Groove spacings are 2", 4", 8", or 16" on centers. Texture 111 panels are 5/8" thick; Ivy League, 3/8" thick.

All provide the structural and installation advantages inherent in other Weldwood Sidings. They resist denting, splitting, and damage. They produce exterior walls of great strength and rigidity that insulate against cold and summer heat. And they do not conduct electricity. Send in the coupon for complete information about the full line.

Read about the amazing new PF-15 Sidings, on the opposite side of this page.

WELDWOOD®

SIDINGS

Products of United States Plywood

LAND

It's still housing's No. 1 problem — and time for remedies is running out

Land is a problem because it already costs more than it should. In the last decade average land prices have more than tripled, and some urban and suburban land has skyrocketed as much as 2,000%.

Land is a problem because land prices will continue to shoot up as long as land values increase faster than land taxes. Land taxes are so low that they make vacant land a top investment. The best way out of this price squeeze is to drive tax-sheltered speculators out of the land market by making assessments on vacant land equal to assessments on improved property.

Land is a problem because it threatens to price housing right out of the market. In the next decade land cost could easily triple again while homebuyers' average real income will rise only 30% to 40%.

Land is a problem because its rising price is spawning unplanned urban sprawl at a rate of one-million acres a year. Sprawl results when builders are forced to leapfrog over expensive close-in land to cheaper far-out land. And the leaps can only get longer and more frequent because in the next 35 years 50 million more people will be living in urban and suburban areas.

Up to now we have always been able to deal with our crises of land and urban expansion on a crash basis, rather than by long-range planning. Now we can no longer afford this seat-of-the-pants approach, and we can no longer afford to ignore a basic question: does ownership and local control of the land include the right to consign cities and suburbs to chaos? In the foreword to his book, *The Quiet Crisis*, Secretary of the Interior Stewart L. Udall, says: "Each generation has its own rendezvous with the land, for despite our fee titles and claims of ownership, we are all brief tenants of the land. We can misuse the land and diminish the usefulness of its resources; or we can create a world in which physical affluence and affluence of the spirit go hand in hand."

Clearly, we have reached our rendezvous with the land. We should act now, and we can act with established precedents. For instance, in the public interest the United States has already legislated exhaustively against trade restraints that produced high prices by withholding commodities and manufactured goods from the market. Yet our land taxes, our taxes on land profits and our laws not only permit but even encourage the speculator's interference with a free land market.

The government is already deeply involved in land, even though the single most distinctive feature of this involvement is its shotgun pattern. Congress has reacted to specialized pressures, but it has never faced up to the need for a coordinated land-use policy. Federal aid to interstate highways fixes land-use patterns along the way. Federal aid for sewer and water supply, and for the open space-land program, can double land values overnight. And federal aids through the Defense, Agriculture and Interior departments all shape land use.

But to date both federal and state governments have made land speculation almost a cinch by bowing to local governments and letting them impose chaotic land-use patterns on entire metropolitan areas. HOUSE & HOME believes the looming land crisis will soon force federal and state governments to recognize their obligations to the land and to the nation.

Against the time when federal and state governments come to grips with the problem, every professional in our industry should make it his business to educate his community's leadership about the land crisis—because in the last analysis only this leadership can take the proper measures, with or without government help.

To assist the industry in this mission, this issue of HOUSE & HOME is designed to draw increased attention to our land problem, to show some of the ways it is already being dealt with and to suggest some other possible solutions.

LAND-1

Land prices keep spiraling up, limiting the market for housing tomorrow's younger families

In the last decade increases in prices of raw, usable land have ranged from about 100% in slow-growing areas like Pittsburgh and Detroit to as much as 2,000% for choice land in Los Angeles and Houston. In the desert country of the southwest, land that was once priced at 50¢ an acre can bring up to \$1,000 an acre, if water can be found by drilling. Today U.S. land prices range from nothing per acre in Alaska—if you want to homestead—to almost \$13 million per acre on New York City's Fifth Avenue.

Land costs can rise overnight or in a few hours. In California last spring, one builder auctioned beach-front lots with a starting price of \$22,500. Sales were so good that by the afternoon he had raised his prices \$10,000 per lot. In a six-hour period his prices had increased almost 50%.

Land is set apart from the ordinary market action of supply and demand. Of all commodities, only land can escalate in price with such wild abandon. Why? First, because desirable land is a limited quantity in any fixed location. Second, because preferential tax treatment makes vacant land one of the best investments possible. Assessment ratios far below those on improved land let speculators keep good land off the market until they get their price. Fifty years ago land carried nearly half the total tax load. Today land, which is one-third of our national wealth, carries less than 5% of the total tax load.

The growing imbalance of land costs in the total cost of housing is the principle reason why the market for single-family detached houses is rapidly shrinking. The estimated average price for new one-family homes varied from about \$17,500 in 1962 to about \$18,500 in 1963, clearly beyond the means of most U.S. families. Today the average family has an income of less than \$6,600 a year. This means that the top price such a family can pay for housing is about \$13,500, using FHA's current ratios of house price to gross income.



In our sprawling cities

Today, a miscalculation in the ratio of site-costs to house- or apartment-unit cost can price a builder right out of his market, and right out of his business.

Most experts agree that the average price of a house has risen \$2,000 to \$5,000 in the last decade, through land price alone. In the Los Angeles metropolitan area the average developed site rose in price from \$1,514 in 1950 to \$4,574 in 1963. Nationally the price of the average FHA finished lot doubled from \$1,456 in 1954 to \$2,972 in 1963, and went from 12% to 18% of the finished-house price. Most of this increase was in raw land costs, because land development costs increased only 10% to 30% in the same period.

Relating these costs to the market has created some new guide lines for balancing land and site expenses against type and price of residential units:

- In single-family houses, traditional ratios of house-to-site costs are being broken. Ten years ago an improved lot was about 12.5% of the selling price of a house. Today, in most markets, improved and finished lots for conventional finished houses cost between 20% and 30% of the house price.

- In California's Orange County finish-



Denver, Colo., from the air, is an almost perfect example of leapfrogging sprawl. Subdivisions have pushed almost to the edge of Cherry Creek Dam, foreground, eight miles southeast of downtown. Bypassed parcels of farmland are being held off the market in the hope of getting 1980 prices for the land today. The leapfrog has put crippling traffic loads on inadequate roads leading to the new areas, and the growth of ugly strip commercial areas along these arteries makes bottlenecks even worse.

The actual city boundaries are a zig-zag mosaic, since annexation has followed the undisciplined growth of new subdivisions, and at this point, Denver is within 12 miles of cutting neighboring Arapahoe County in half. Builder Marcus Bogue's Hampden Hills development, left center, surrounded by vacant land, was annexed to the city over the protests of the county and the suburban school district.

relating land prices to the market is the key decision

ed lots may constitute over 30% of the house price. Cheap land there now costs \$20,000 per acre and better land runs \$32,000 per acre. Finished quarter-acre lots run from \$7,000 to \$11,000 for houses priced from \$22,000 to \$36,000.

- In Los Angeles proper, the ratio is even higher: developers there have been selling houses in the \$37,500 to \$46,000 range, on \$14,000 lots.

- A HOUSE & HOME spot check around the country shows that builders plan multi-family units on almost any land priced over \$1 per sq. ft., or \$40,000 an acre.

- FHA underwriters use a rule of thumb that Sec. 207 apartment projects must not involve land costs of more than \$1,000 per family unit, depending on density.

- At a land cost over \$30 per sq. ft. (\$120,000 an acre) only luxury apartments or office buildings can be built. The record so far: in New York City on land priced at \$291 per sq. ft. (\$12,700,000 per acre), the Winston-Muss Corporation is building an 18-story luxury cooperative with apartments priced from \$48,600 to \$189,900.

Land prices segregate population by income, can inhibit an area's growth

In Brookline, Mass., 15 minutes from

downtown Boston, land prices have catapulted from \$1.00 a sq. ft. in 1960 to about \$5.00 a sq. ft. today. In the past five years high-rent apartment houses have cropped up by the dozens. Brookline homes are \$3,000 to \$4,000 more expensive than those in comparable communities just a mile or two away.

But rising land costs have driven out most young marrieds, as well as a large portion of medium-income families with school-age children. Today there are more people over 65 in Brookline than there are children in the town's public school system.

Over the past five years, due mainly to the exodus of the 20-to-35-year-old group, Brookline's population has dropped more than 3,500 persons. The town has passed zoning laws which decree that new homes must be built on one or two acre lots. This added cost makes it almost impossible for most prospective homeowners to buy in Brookline, cuts the tax base of the community and could, in time, make the community completely static.

California's San Fernando Valley is a Brookline magnified a hundred times. By 1970, one in every 16 persons in California will live in the Valley, according to

Los Angeles market researcher Sanford R. Goodkin, but consumers earning less than \$10,000 a year are being frozen out. One in ten families there now lives in houses valued at \$37,500 or more, and 2.3% of them live in homes priced at \$60,000 or more. Nearly a third of the families in the whole area have incomes above \$10,000 per year. Most families with incomes under \$10,000 moved to the Valley long before land prices raised house prices high enough to freeze them out.

Changing population mix can only intensify the land-cost squeeze

According to Sociologist Philip Hauser of Chicago University, the key single-family home buying age group, 25 to 54, will show only a 10% increase in households between 1960 and 1970. On the other hand, households with heads under 25 years old will increase 90% during the decade, and these are almost all prospects for multi-family housing.

The problem of changing population mix looms biggest in southern California. UCLA's Dr. James Gillies says that this area must double its supply of housing within the next 17 years to accommodate the expected population growth.

Even though southern California is a

continued

high-income area—Orange County's average family income is \$7,200—any house priced over \$16,000 will not serve this expected growth. Family units headed by the 25-year-olds cannot be expected to have incomes averaging much more than \$5,000.

What can happen if the land-price spiral is not slowed up is anybody's guess. But conservative observers of the scene see nothing but trouble ahead. At present 280 acres of land are being developed each day in the eight southern California counties. By 1970 this demand will rise to 400 acres per day. But land speculators may seriously inhibit the area's growth by sitting on their acreage waiting for prices to rise beyond the point where young renters can absorb the cost. Moving to cheaper land even further out may not be the answer. When residential areas are too far from industrial and commercial centers, it

can become uneconomical for homeowners to commute great distances to their employment. As a consequence, centralized industry suffers from a scarcity of industrial and white-collar workers.

Leapfrogging to cheaper land may not cut prices in the long run

Builders who bypass expensive close-in land may find the technique self-defeating once the total costs of such a development become apparent. On page 51 is a startling example of how much sprawl does cost, a cost now paid for by home buyers and the community. Some experts believe suburban sprawl may cost our communities billions of dollars per year. Sprawl multiplies the cost of roads and utilities, compounds the expense of daily life, draws consumer markets away from the center city and frustrates the primary purpose of cities, which

is to let people live and work together to utilize and enjoy the maximum advantages of community facilities.

At the moment the only way a community can stop sprawl is by a zoning ordinance. For instance, St. Louis (page 46) is trying to zone far-out land for five to twenty acre sites in an effort to get builders to build closer to the city. The plan ignores the fact that buyers and renters will take the economic brunt of this move, and that speculators who own close-in land will be the only ones who profit by it.

Studies like the "Bluegrass Leapfrog" (page 51) may eventually lead communities to remedy the situation in the only fair way it can be remedied: by equitable assessments that will discourage the land speculator.

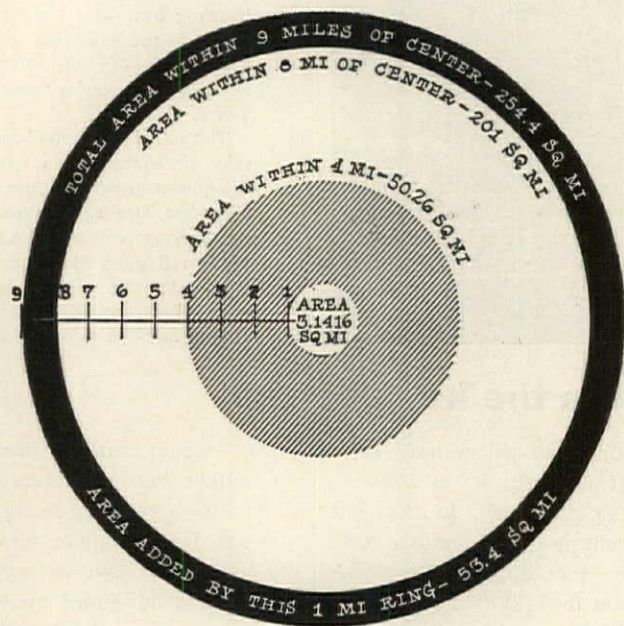
The crazy-quilt of local zoning around metropolitan areas inhibits the market

Builders in the New York metropolitan area must deal with 509 separate city and town zoning ordinances within 50 miles of Times Square. Each suburban town controls its land, resulting in an urban growth that is no more than a jigsaw puzzle of relatively meaningless land-use patterns. Orderly development of open land is virtually impossible, and the speculator thrives by holding on to his pieces of land.

The desperate need for better metropolitan area planning and overall land use policies is ignored by each town in its devotion to local home rule. Yet the land-use problems that face communities today are not local but regional. For instance, a huge influx of new people in an area like California is a state problem: no one community created it and no community is big enough to handle it. Clearly, the use of our most vital natural resource—land—is a matter that transcends local parochialism.

True, there are many arrangements by local governments to deal with problems which cut across political boundaries, but most new residential development is in areas where effective local government evolves only after the project is well under way. Usually it is located outside the jurisdiction of city government, in an unincorporated area in a country, in a small township or in a village.

In attempts to come to grips with this problem, planners in many major metropolitan areas have proposed area-wide controls, within metropolitan governments. Such governmental bodies have been advocated over the past three decades, but today there are only two in operation: Miami-Dade County in Florida and Nashville-Davidson County in Tennessee. There are two reasons why there are so few: 1) planners disagree on the best relationship of the city to the suburbs and to other



Land scarcity is a myth, urban growth a drop in the bucket

Builders complain that the shortage of buildable urban land is their worst problem, but a simple geometric diagram (above) shows that a modest extension in the urban limits means an enormous increase in potential home sites. When new highways extend the easy-to-reach suburbs of a city from eight to nine miles from the center, the extra mile adds enough new land to house 400,000 more people (at a density of four families per acre).

The perimeter mile adds more square miles than all the area inside the four mile circle, and 17 times as much as all the land within one mile of the center.

Urban areas are crowded, but all of our urban areas together take up only 1% of the country's 2.3 billion acres. By the year

2000, gobbling up a million acres a year for urban growth, we will still be using only 2.5% of our total land area.

The federal highway program is unlocking a tremendous amount of hitherto inaccessible acreage. As of now, almost 18,000 miles of the interstate highway system are open to traffic, and the remainder of the 41,000 mile system is scheduled for early completion. Naturally, the land price spiral is most dramatic along these new arteries. Three years ago you could buy all the land you wanted along Houston's Southwest Freeway, then under-construction, at \$3,000 per acre, to produce houses selling for \$15,000-\$18,000. With the Freeway open, the same acreage is priced at \$6,000-\$7,000 per acre, homes at \$25,000-\$30,000.

cities in the area and 2) many cities cannot even begin to plan because they entirely lack the mechanism for planning. Smaller cities in particular often lack a planning board or commission and have no one in the local government competent to plan.

Traditionally, states have given their towns and counties zoning rights. This legal framework originated to control land use in the agrarian society of the past, but it is not equal to the task of allocating land the way we want it allocated today. Although the planning problem seems hopeless, there may be a way out, say some political observers: recapture from towns and counties the right to zone and return that right to the states or to metropolitan government structures.

Placing the planning and zoning authority back at the state level is a distinct possibility, say some politicians. Under the reapportionment rule handed down by the Supreme Court earlier this year, new state legislatures may better reflect urban needs and the thinking of urban leaders. States like California and New York, in time, may be much more amenable to consideration of metropolitan area planning, handled from the state level.

Rx for the land problem: new towns beyond the edges of urban sprawl

In the United States today there are 180 new towns of 1,000 acres or more in the planning stage or being built. Many believe that these new communities are the wave of the future. When completed, they will eventually house close to 15 million people, and may represent a total outlay of as much as \$100 billion. In full swing, they could account for as much as 20% of our annual production.

New towns range from big "bedroom" subdivisions and retirement communities, like those shown on pages 64-69, to complete urban complexes with their own industry and services. The central problem in creating the new towns—which HOUSE & HOME will discuss in detail in the December issue—is land and land development financing. Although raw-land unit costs are low, assembling the land, developing it with streets, sewers and water supply and scheduling construction over a three- to four-year period before cash starts flowing in is usually too big a task for most builders. For them, short-term land development money is the most expensive money they can borrow. They can go broke before they get started.

New legislation, defeated this year in Congressional committee but sure to be resurrected in 1965's Housing Act, should open up the new-town potential for many more builders. It will insure money for land purchase, installation of utility lines, water plants and water supply, sewage sys-

tems, streets, curbs, gutters, sidewalks, storm drainage facilities and park and recreational areas.

Safeguards against boondoggling are built into the proposed legislation:

1. Traditional state authority to regulate local government and/or to establish new types of agencies to deal with urban area problems would not be infringed.

2. Local control would not be superseded but, on the contrary, local action would be encouraged and credit assistance provided to carry out the projects.

3. Only projects consistent with plans prepared by local officials and planning agencies to take account of local needs and wishes would be eligible.

4. Review procedures would ensure that people of all income levels would be able to buy or rent homes in the developed tract and that exorbitant profits would not be made on the land.

5. Housing costs to the ultimate homeowners would be reduced.

6. Adequate public facilities and open spaces would be provided.

7. The small builder would get access to a larger supply of developed land, either by buying sites from the developer, or by joining with other builders as syndicate sponsors of the new community.

Opponents claim that this legislation would be simply another form of unneeded federal control, but its adherents say that it does not differ from other kinds of federal aid which builders and land developers accept today. These programs include the inter-state Federal Highway Program, federal assistance for flood control and irrigation, river and harbor improvements, airport construction and facilities, dam and power installations and federally aided water purification and treatment installations.

Why site valuation tax is no panacea for land problems

Henry George, a 19th-century economist, proposed abolishing all taxes except those on land. Proponents of his ideas say that such a single tax would force land into its highest and best use and eliminate land speculation, slums and ugly sprawl. Land speculators would not be able to hold desirable land off the market—taxes would rise faster than value. Slumlords would have to improve their property because it would be too costly for them to keep run-down buildings on high value land.

The trouble is that it wouldn't work that way. Says St. Louis Economist Roy Wenzlik: "It is impossible to separate economic land value from the total value of a property which is developed to its highest and best use. Once improvements are made, the land and building become a joint product like a chemical compound in which the elements no longer exist in their pure state." Modern legal thought, backed by many precedents, holds that assessments must carry two figures, one on the land itself and one a total of land and buildings, but only the total assessment may be considered for judicial review.

Here are eight factors that opponents insist single tax ignores.

1. A single tax could eventually drive down land values which would counteract zoning efforts to sustain or increase land values. Reason: if each political jurisdiction in the metropolitan area were allowed to use different formulas, competing factions might attract developers by lowering land values until the single tax could no longer be used as a device for allocating land uses.

2. A single tax would encourage intensive development of land not desirable or compatible with public policies for control-

ling municipal development.

3. Under depressed conditions, such as Appalachia's coal region, preferential land taxes would not incite development but would only give rise to tax delinquency and confiscation, thereby adding to the general depression.

4. Zoning restrictions could concentrate demand for available sites so that the single tax would only work if zoning justified the improvements. Preferential land value taxes that encouraged improvements that the market couldn't support would only lead to loss and this could mean poor development and higher prices for housing.

5. Single taxes are hardly sufficient to cure the many causes of urban blight. Code enforcement, master planning, assimilation into the general culture of ethnic and racial groups are all needed to eliminate blight. Furthermore, single tax on slums would probably make slumlords milk their tenants even more to preserve their profit margins. In other words, increasing tax burdens in slum areas could lead to more exploiting of each tenant and less money spent on repairs.

6. A single tax confuses value with capitalized income such as total slum rents. Assessments ideally should be tied to income. This is the only equitable way of assessing property. Failure to use income as a base for property tax is the error, not that improvements are taxed.

7. Pressure to develop underdeveloped land under the single tax could create even worse urban sprawl.

8. Under the single tax the need for zoning to assure preservation of open space might be so great that the administrative problems might be worse than those which the single tax might eliminate.

LAND-2

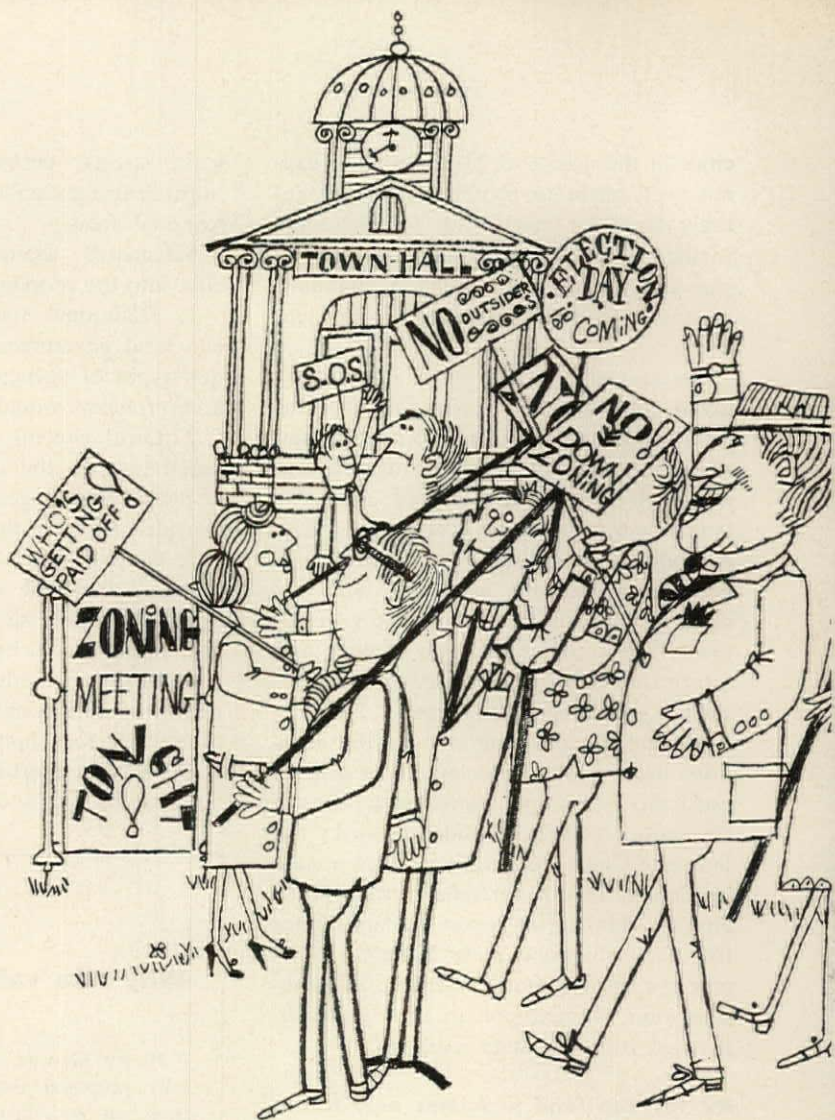
Zoning and assessing: how they put a brake on new-house sales

Artificial large-lot zoning and too-low assessments contribute more to the high cost of housing than anything else in the price structure.

Low assessments support land's high prices by encouraging land speculation: land holders keep land vacant at a very low tax cost in expectation of a high return (see p. 50).

Large-lot zoning increases the high cost of land, thus tends to price housing out of the market. Many communities mistakenly use zoning to achieve sociological and economic aims, but only manage to discriminate against homebuyers at every income level. A case in point is St. Louis where the County Planning Commission is trying to cut the cost of sprawl (i.e., the extension of roads, utility lines and other facilities to new subdivisions). Specifically, the commission is pushing a zoning ordinance that calls for five to twenty acre plots in outlying areas. The aim: to force builders to develop land adjoining built-up communities. When builders objected that they would be at the mercy of land speculators in this restricted area, the *St. Louis Post-Dispatch* commented, "If land costs do tend to rise, that is part of the price of controlling growth in the interest of the whole community." The newspaper ignored the point that the price of controlling growth would be paid by a handful of homebuyers and pocketed not by the community but by a handful of landowners and speculators.

In New York State the Urquhart Report on zoning and subdivision abuses (NEWS, Nov. '63) found that zoning in many towns simply segregated buyers by income and curbed any appreciable increase in population. The report confirms what builders in every state have known for some time: zoning, used for whatever lofty purpose, usually fails to serve the community or the homebuyer.

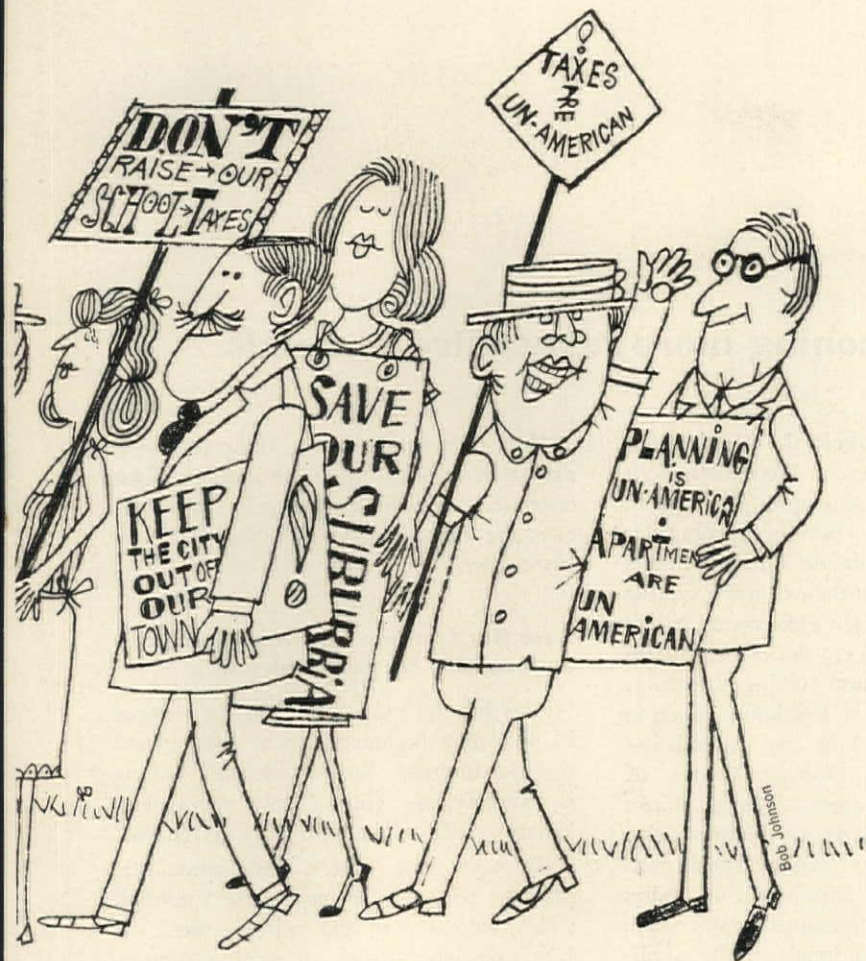


Zoning: yesterday's land-use

In 1916 when New York City invoked its police power to adopt land-use controls—and was upheld by the courts—city after city followed suit. Today the same half-century-old concepts still govern most communities. And every effort to change existing patterns only roils the already muddy zoning waters. Professional planners charge: 1) inflexible zoning can't begin to cope with changing needs; 2) each request for a variance becomes a battle fought with more heat than light; 3) in suburbia's home-rule atmosphere, zoning is usually used to throttle community growth—and thus avoid the need for new facilities and new taxes. And, planners say, today's zoning practices simply impose a crazy-quilt pattern of land use that creates many more problems than it solves.

1. Today's zoning practices spawn bad site design

Rigid lot sizes, dimensions and setbacks control land density, but in the least desirable way. They create absurdly miniature versions of country estates and prevent the use of many new design ideas that would create more pleasant living. Example: atrium houses that enclose the small lot open space for private family use.



formulas ignore today's changing conditions

Many of these lot restrictions inflate the cost of houses. For instance, a 6' increase in setbacks, imposed on Omaha Builder W. L. Jacobs when he was half-way through a 125-house subdivision, boosted his costs by \$50 a house.

In irregular terrains rigid zoning often forces builders to bulldoze amenities like trees, streams and natural contours just to meet standard setback requirements.

2. Today's zoning practices spawn bad subdivision design

Where zoning sets standard lot sizes and setbacks, subdivisions multiply this standardization into wasteful—and monotonous—land-use patterns. Builders who propose more flexible cluster plans or planned unit developments (PUD) usually run into iron-bound resistance. For example, on a half-acre-zoned estate in California's San Fernando Valley, Eichler Homes tried to get lot sizes reduced without any change in over-all density; Eichler proposed putting all the land saved into a 26-acre park to include an existing mansion, stables, a swimming pool, etc. The planning commission and city council reaction: a flat no. Disgusted—and out \$60,000—Eichler gave up and sold

the property to another developer who cut it up into conventional half-acres.

Because zoning is law, it resists change and freezes long-outdated land-use concepts. Phoenix still demands 16' alleys in all developments within city limits, but surrounding Maricopa County discourages them even if a builder were addled enough to suggest their use.

3. Today's zoning practices spawn bad community design

Separation of incompatible uses is a prime aim of zoning, but today's zoning lags far behind today's realistic land uses. Example: commercial zoning of all main thoroughfares and intersections ignores the ever-lengthening shopping radius of today's mobile two-car families. Professor William Weismantel of St. Louis' Washington University says, "Strip commercial and four-corner zoning has ruined almost every major street and busy intersection in the city [St. Louis] and county. I estimate this has cost the people some \$8 million in ruined streets. Zoning has encouraged ribbon residential development along quiet country roads, destroying the beauty of the countryside."

Because the typical zoning ordinance is

prohibitory—it says what you can't do, not what you can do—oversights or just plain change can leave loopholes for unwanted uses. Baltimore found its ordinance didn't mention motels, had to pass a special law to keep one out of an exclusive residential area.

And when zoning is selfishly perverted to keep out unwanted houses and apartments for fiscal reasons, unmarrieds, young couples and older people must leave the community to find housing. The Nassau County (N.Y.) Planning Commission found "a large number of apartment dwellers [had] moved from single-family homes in the same area. This indicates that changes in family structure require varied types of housing in the same community." And a Long Island township says, "A very real need for multiple dwellings exists among single, young married and older persons, including prospective school teachers." Yet most requests for multi-family zoning bring out irate taxpayers in a they-shall-not-enter mood.

How can the housing industry and the communities it serves make better use of present zoning procedures? *For some answers—plus two examples of a flexible approach to zoning—turn the page.*

continued

Here are three broad ways to make zoning more responsive to needs

Builders, developers, land planners and local officials can all take a hand in removing some of the restrictive—and unrealistic—practices from today's zoning. For example:

1. Builders can work more closely with planning and zoning boards

To get cluster zoning in Marin County, Calif., Builder Reuben Kaehler gave the planning and zoning boards renderings and drawings showing how his finished project would look, complete cut-and-fill plans showing how damage to the terrain would be minimized and pictures and diagrams showing how unsightly conventional R-1 platting would be. Says Kaehler: "We showed them that clustering houses on little flat spots wouldn't butcher the land—and that convinced them."

Sometimes it helps to work out a good plan for an area that everyone agrees needs improvement. Florida Builder Jay Kislak bought an abandoned sand and limestone pit, zoned "industrial," but surrounded by expensive homes. He submitted a master plan for the whole area for both low- and high-rise apartments, plus a firm agreement to develop the property exactly as proposed. Adjoining homeowners and public officials, relieved to have the potential industrial use eliminated, offered no opposition.

Builders approach zoning boards armed with many convincers—renderings, scale models, prestigious consultants, economic data, etc. But too often they act only as individuals. Los Angeles Planning and Zoning Consultant Don Cunningham insists that local NAHB chapters and other builder organizations should do more to influence major planning and zoning decisions. Several Los Angeles builders have now taken Cunningham's advice—and hired him to represent them jointly before public bodies.

2. Zoning ordinances can be made more receptive to new ideas

Planned unit developments, cluster plans and density zoning are difficult to get under the usual rigid legal boundaries, and most planners agree that zoning should permit routine consideration of such ideas. For instance, Baltimore is revising its zoning to make it affirmative rather than

negative—and thus avoid the ill effects of oversight and unforeseen land uses. Both Los Angeles City and County have given their officials wide power to consider planned unit developments on their merits and without going through complex zoning changes and variances. This opens bright prospects for developing the city's remaining hillside land without ruining its beauty.

Zoning is usually a legislative function performed by a town or city council, but Town Councilman Edward Poulos of Oyster Bay, N.Y., (*opposite page*) thinks it might serve better as an administrative function. "Lawmakers cannot attach conditions to laws, but administrative bodies like planning commissions can make their approvals conditional on the applicant performing certain safe-guards."

3. New—and more timely—zoning systems can be developed

"All of the basic assumptions on which our standard acts are based are now out of date. There are no provisions for such postwar uses as shopping centers and airports. Urban renewal is not covered, nor the broader questions of Federal participation in city planning."

So says Harvard Professor Charles Haar, who is heading a \$350,000 study of basic zoning concepts for the American Law Institute. Haar hopes to come up with "a reasoned, integrated and comprehensive body of principles incorporated in a model code." His final proposals are still four years off, but he says cooperation by local officials has already been excellent. Among the ideas being considered: compensation for property owners hurt by zoning decisions and planning systems (like Great Britain's) which give great flexibility to administrators working within the context of total community needs.

Other promising possibilities:

- A single municipal code covering zoning, building, health and related regulations. Says Cleveland City Planner Calvin S. Hamilton: "It doesn't make sense to have things spread around."

- Performance standards, rather than rigid specifications, to govern land use in residential areas. Such standards are already applied to some industrial areas and proposed for some commercial zones.

How can a community make a new—and realistic—approach to zoning? Two case studies—one from a new California city, the other from a 300-year-old New York town—offer some answers.

Case No. 1: new city gives builders an incentive for better planning

"Cities haven't even scratched the surface in providing builders with a good incentive to improve their land use. Zoning is stereotyped. Cities lack excitement. What we want is a little planned chaos."

So says Roy Potter, an iconoclastic planner who has helped turn Fremont, Calif., into one of the nation's most exhilarating laboratories of zoning innovations. Potter and Fremont got together in 1958 when the city was writing a zoning ordinance. By then Fremont leaders had a two-year history of planning awareness. Five small towns had merged in 1956 to create California's third largest city in area—and within months had adopted a master plan to guide development of its 96 square miles of largely open land.

Potter pressed city fathers to adopt a planned-unit-development ordinance allowing a combination of cluster housing and green space for parks.

"At first the local people were concerned. They called it row housing and wanted to run us out of town on a rail," he recalls. Potter argued back: "Low density is not economically feasible. From the city's standpoint, low density means more streets and increased service costs." Councilmen narrowly supported him.

"Once one developer had provided a common green, the competition began falling into line," he says. "People looking at houses would say, 'Where's your park?' It started as a sales gimmick. But we were able to show the developer that he didn't lose any units and at the same time saved money on utilities and street costs." Since then over 15 PUDs have been built in Fremont (*for one example, see p. 57*) and population tripled from 21,000 to 63,000.

The acid test came recently when Potter asked the city council for a new planned district ordinance to guide development of Fremont's unscarred hills. "We'll give the developer 35% more units if he'll go to apartments or some other dwelling

that would cluster or retain open space," explained Potter. Councilmen approved.

Case No. 2: old town keeps reviewing—and updating—its zoning

"Zoning cannot be static. The best master plan is not untouchable, but must be looked at in the light of constantly changing conditions and influences."

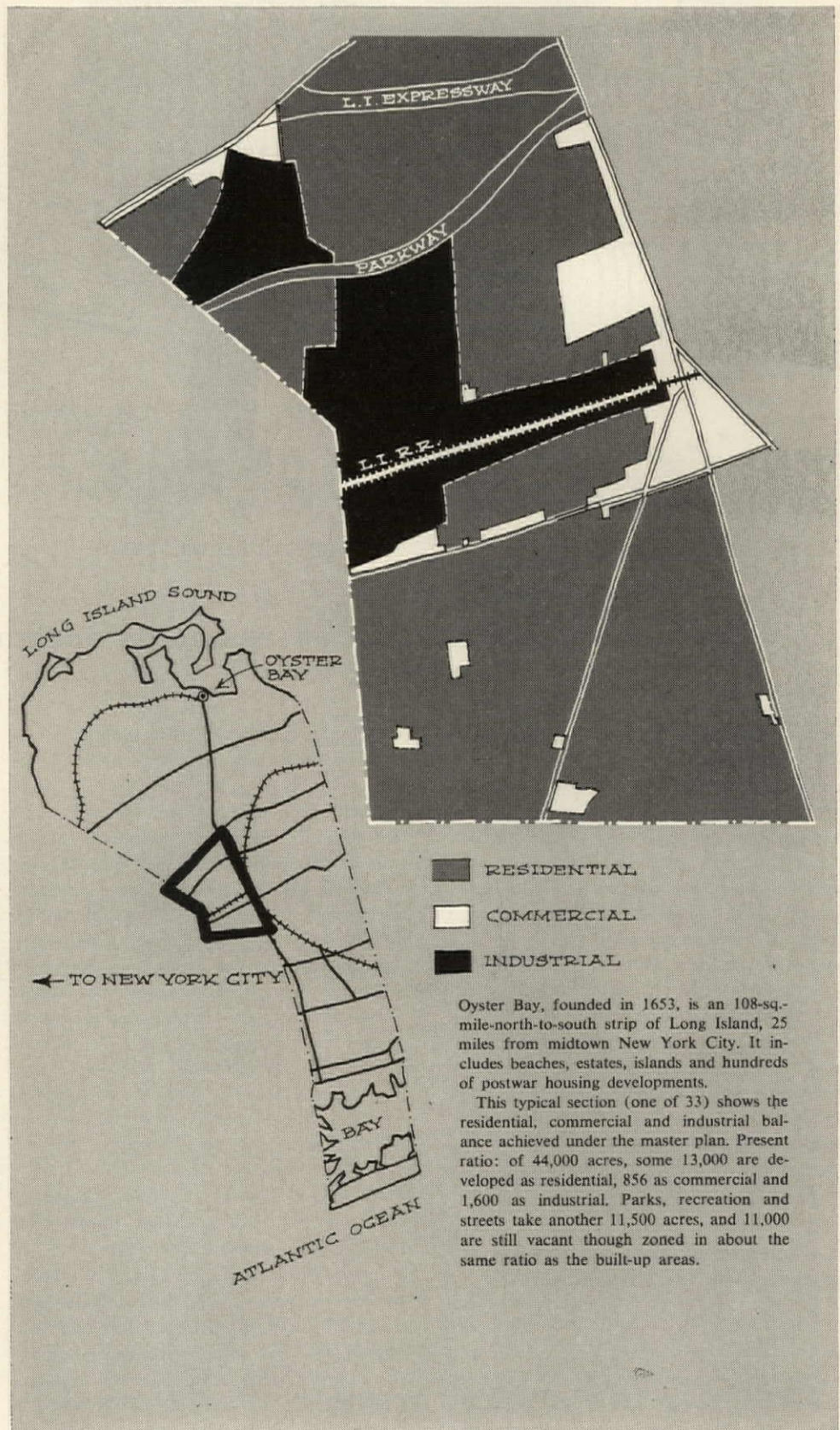
That, in the words of Town Councilman Ed Poulos, is the zoning philosophy of Oyster Bay, N.Y. And it is the main reason the 108-sq.-mi. Long Island town was able to absorb a four-fold population increase (from 80,000 to 320,000) in a decade, to develop a healthy industrial tax base for its mushrooming facilities and to provide the commercial services needed by its growing population. (right)

Oyster Bay's zoning, established in 1929, was obviously obsolete by the 1950s, so the town hired Community Housing & Planning Assn. to set up a comprehensive master plan for the area. The plan, based on a 1953 projection of normal needs, was outdated almost before it was law, so it was completely revised in 1959 to reflect previously unforeseen conditions. Today the planners have a contract to advise the town council on changes.

"We tried to strike a balance of residential, business and industrial use—how much of each and where to put it," says Councilman Poulos. "We kept in mind not only the most suitable terrain but considerations like school district lines for an equitable sharing of the tax base."

But the very flexibility that permits change brings constant problems from homeowner groups who object to all down zoning, even when the need seems self-evident. For example, a new expressway made a former one-acre zone unrealistic. A builder submitted a plat for the whole (123 acres) that would have yielded 260 houses on lots ranging from a quarter acre to one acre. But community opposition was adamant, and the plat was turned down.

Oyster Bay's zoning pattern is mathematically geared to commercial and industrial development. Under the guidance of the council and the planners, the once-rural township is becoming a municipal complex with few growing pains.





Local Tax Assessor

Vacant Land Owner

Land Buyer

Unequal—and illegal—tax assessments encourage land speculation

Local tax assessors may well be the biggest single group of lawbreakers in the country. Every state's laws require that all property be assessed at its full value or a fixed percentage of its value—and on a uniform and, therefore, fair basis. Yet only Arkansas and Oregon, the 1962 Census of Governments showed, have average ratios of assessed value to full value that approach the legal requirement; both made their legal assessment ratios conform with the prevailing too-low ratios.

Frederick L. Bird, author of a recent report on property taxes and an expert on municipal finance, calls local assessment practices "the most flagrant and widespread disregard for constitutional law and statute among public officials anywhere in the U.S."

Are unequal assessments a form of favoritism for all taxpayers?

Far from it. In fact, the only big beneficiaries are the owners of raw land and vacant lots, including speculators who hold land off the market while prices zoom, and thus force two costly alternatives on the

homebuilder: either he pays inflated prices for this deep-freeze acreage, or he leapfrogs over it (*see box*) to a far-out site—and adds to wasteful urban sprawl.

Nationally, acreage is assessed at an average of only 18.6% of true market value, vacant lots at 19.9% and nonfarm residential property (84% single-family homes) at 31.9%. So the vacant-lot owner pays only 62¢ in real estate taxes for every dollar paid by the homeowner next door.

But the averages—bad as they are—hide even worse inequities in some of the nation's most active housing markets:

In Orange County, outside Los Angeles, a county official charged that raw land was being assessed at an average of 5% of value and homes at 22% to 28%.

In Nassau County, on New York City's border, a board of assessors, sampling of the tax rolls showed that while 80% of all properties (including almost all houses) were assessed at 33⅓% of value, the other 20% (mostly vacant land) averaged only 13%, and some were on the books for as little as 1%. One example: a parcel listed on the tax rolls at \$1,700 cost the county \$170,000 when it was condemned

to make way for a highway.

A bitterly fought reassessment, still in the courts, jumped the low ratios to about 30%. If the reassessment survives the court fight, it is expected to bring the county \$7 million a year in new taxes—enough to cut annual taxes on the average house by \$17.50.

Why is vacant land—especially farmland—underassessed?

The chief reason is the assessor's practice of valuing land on the basis of current use instead of on the basis of "highest and best use under current zoning." The last three words are critical, for any assessing of land on the basis of what might be done with it under different zoning could be confiscatory. And confiscation (or forced sale) is what is feared by many opponents of equalized assessment—especially farmers.

Farmers' fears are understandable because, the U.S. Agriculture Dept. reports, "Annual increases in market value of farm land have been as large or larger than the annual returns from farm production in

'Bluegrass leapfrog': how underassessment led to costly urban sprawl

How high is the price paid by builders, homebuyers and the community at large when the subsidy of underassessment inflates the cost of vacant land?

It can be very high indeed, judging from a recent case study—aptly called "Bluegrass leapfrog"—in Lexington, Ky. The study—made for the Fayette County Planning Commission by Roy W. Bahl of the University of Kentucky's Bureau of Business Research—stemmed from these developments:

Four years ago an influx of new industry added to Lexington's already growing housing demand. Building partners Jesse Bollinger and George Martin saw the market opportunity and started looking for conveniently located sites. They found 750 acres of vacant land, but it was either held off the market or priced too high for housing. So Bollinger-Martin was forced to leapfrog over the close-in land to a 450-acre tract two miles from the edge of Lexington and half a mile beyond any other subdivision. Other builders followed—and created a huge demand for new public and private services. Result: a howl by taxpayers—and Researcher Bahl's study.

Bahl found that owners of the land bypassed by Bollinger-Martin and others were paying \$13,105 less in taxes than they would have paid under the median county tax ratio. But that tax concession was dwarfed by the costs to the leapfrogging builders, their buyers and the public. Here are the extra costs traceable to the far-out location of Bollinger-Martin's 600-house Gainesway subdivision:

- \$185,851 in first costs. This total, 58% of which was paid directly or indirectly by Gainesway homebuyers, included installation costs of roads, sewers, water lines and other utilities and services.
- \$580,126 in annual costs, 58% of which is also borne by Gainesway homeowners. This figure covers the operation of utilities and services, including schools and bus lines, plus

the residents' extra commuting costs (although items like auto operation and driving time are debatable).

If five other subdivisions that followed Gainesway have roughly equivalent costs, annual extras will total \$3½-million, of which \$2 million will come out of the new homeowners' pockets and \$1.5 million from public funds.

And what about the high-priced vacant land that started the whole costly leapfrogging process? Its value was increased by the development of Gainesway and other far-out subdivisions, Researcher Bahl points out. Meanwhile, underassessment continued to keep its taxes so low that the owner could afford to leave the land idle.

In 1956, Bahl reports, Lexington's vacant land was assessed at 5.2% of its market value compared with a median of 31.6% for all county properties. By 1962 this negligible assessment had shrunk to 3.8% vs. a median of 24.8%.

Says Bahl: "The speculator seeking the greatest net return can hold land off the market as long as the annual increase in market value exceeds the property taxes—and assuming that the land brings in no revenue and costs nothing to maintain." During 1962, he estimates, the mean increase in market value of Lexington's vacant land topped taxes on the land by \$125 an acre. And the owners enjoyed a mean net return on total value of 3.8%.

Bahl also notes that two other factors contribute to land speculation: 1) treatment of profit as capital gains when land is finally sold; 2) granting of federal and state income-tax deductions for property taxes paid on the land.

Local communities can do nothing about capital gains treatment or income tax deductions which shift the cost of local taxes to all other income-tax payers. But the most hurtful and inequitable concession—the underassessment of raw land—is the one favoritism easy to rectify locally.

five of the past thirteen years." So even if a farmer does nothing with his land and simply holds it for sale in the current sellers' market, he may eventually reap a bigger return than from farming it.

But higher assessments can turn a profitable picture into one so unprofitable that the farmer can no longer afford to hold onto his land. In Marion County, Ohio, a court ordered the reassessment of land to full market value. Result: although half the county is still agricultural, assessments on land along developed roads skyrocketed from a standard \$300 an acre to between \$3,000 and \$5,000. Observes Economist Frederick Stocker: "The stakes in the land-market poker game are high, and an *ad valorem* tax raises the ante. The farmer is bluffed out before the game gets fairly under way."

Another economist, the University of Kentucky's James Martin, pooh-poohs the farmer's fear of confiscation: "You are not forcing him to sell; you're just forcing him to pay his share of the freight, just like everyone else."

Martin's view is not shared by state legislatures, which set the rules for local

assessing, and are still dominated by rural interests (although urban interests are gaining power under U.S. court orders for redistricting of states).

In fact, most states, by practice or statute, permit lower valuation of agricultural land regardless of potential. Even within the city limits of Dallas, farmland pays a lower rate. In Florida an "agricultural" plot gets favored tax treatment even when surrounded by subdivisions. And in Connecticut, acreage gets special tax treatment if designated as open space by local planners or certified as forest land by the state forester.

Many assessors favor such preferential treatment as a means of preserving open space, but are wary of the methods used. Says Horace V. Kramer of Nassau County's board of assessors: "This should be done only under an official land-use policy combined with a comprehensive overall plan—not by the assessor compromising the principle of the equal-assessment ratio."

Outright critics say preferential assessment ratios are no guarantee that the land will not be developed later and are as much

of an incentive for speculators as for farmers or other landowners.

Should all land assessments be based on the same ratio to market value?

Not surprisingly, many builders who inventory land—and especially those who speculate in it—say they would be hurt by higher assessments.

But builders whipsawed between rising land prices and their buyers' ability to pay, think higher assessments are long overdue. Says California Builder Ray Cherry: "The biggest problem we have is the underassessment of land that should be taxed for its potential. The low values placed on this land mean my new-house buyers pay higher taxes." And Realtor Roscoe Dalton of Louisville argues, "When land is valued at \$5,000 an acre and assessed at \$150, there is an incentive to hold it. Why not apply fair market value?"

Realty Economist Roy Wenzlick of St. Louis, long-time foe of underassessment, says, "Anything that prevents developing land for its highest and best use is detrimental to the community."

LAND-3

How to plan the land to produce better—and less costly—communities

The cluster subdivision pictured at right is a rare sight in today's homebuilding market—which is a great pity.

It is a pity because the cluster typifies the kind of land planning that can go a long way toward solving the worst of our land problems: high development costs, lack of natural green space, and the monotony of endless rectangular lots with most of their area wasted because of archaic setback rules.

The key elements of today's cluster and green-area planning—smaller lots, better siting, shorter streets and utility lines, less through traffic and more open community areas—are shown by the case studies on the following ten pages. All the plans you will see create better—hence more saleable—communities; most of them provide appreciable savings over conventional plans; and most of them have been approved, developed and accepted by homebuyers.

Translation of these planning ideas into successful projects is significant because it shows that unusual land plans can be approved by local planning boards and FHA offices. The builders and developers won approval by dint of careful research, intelligent presentation and, above all, by insisting on good plans drawn up by top-flight land planners. Moreover, not all the plans required special approval: the ordinance under which the St. Louis green-area plan on p. 61 was approved has been on the books for four years, yet only a handful of builders have taken advantage of it.

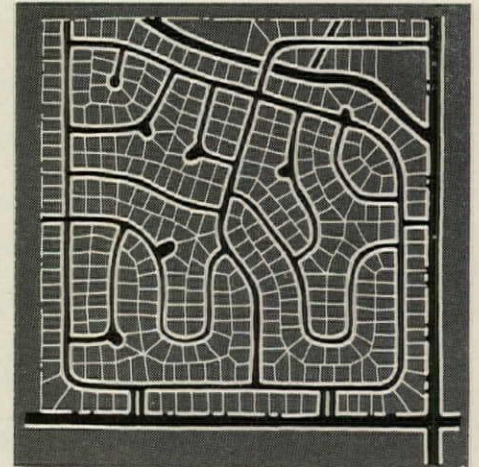
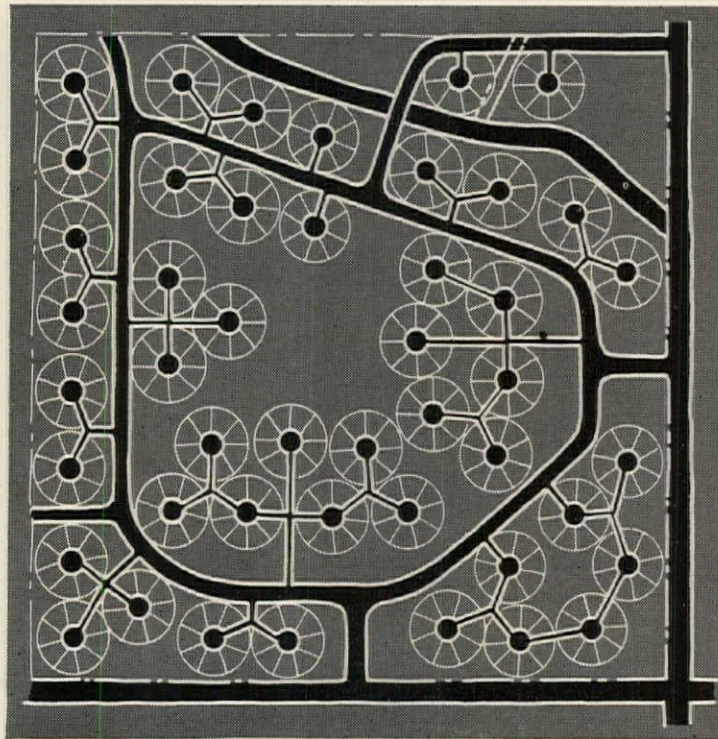
For a close look at the ideas behind better land use, turn to page 54.



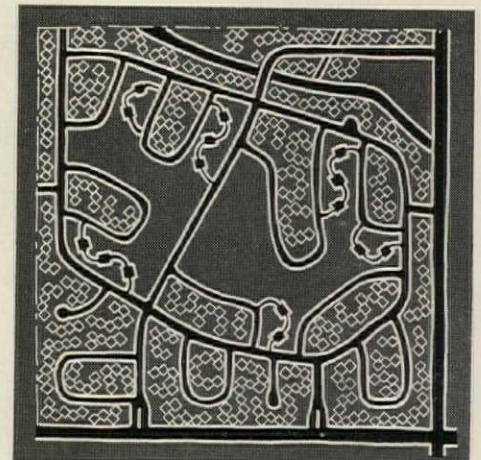
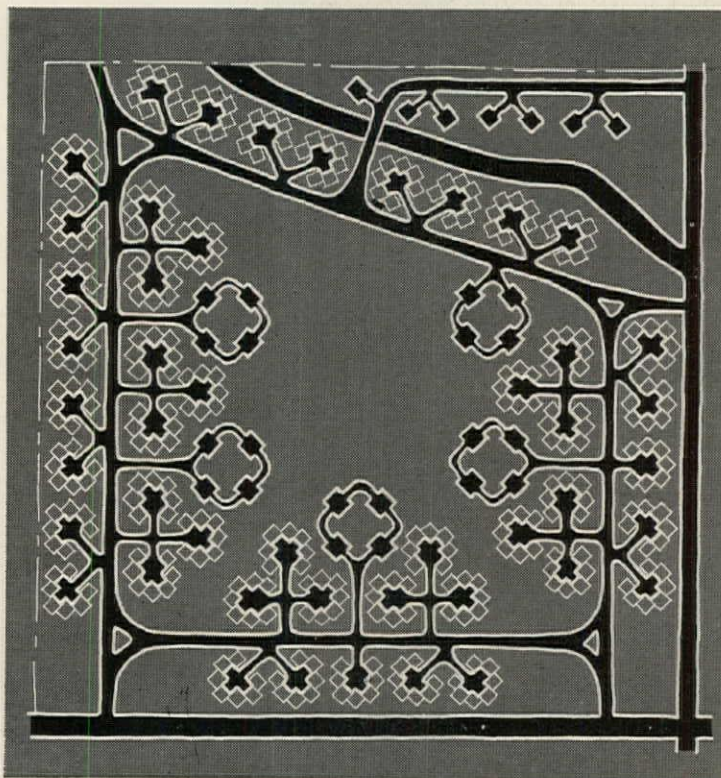
CLUSTER SUBDIVISION near Milwaukee was planned by Nelson & Assoc. and is being built by Forman Construction Co.



continued



DETACHED-HOUSE CLUSTER PLAN (left) groups eight 7,750-sq.-ft. lots around each cul-de-sac. Conventional curvilinear plan of the same site (above) has rows of 12,500-sq.-ft. lots.



TOWNHOUSE CLUSTER PLAN (left) has 555 units, all served by one perimeter road. Conventional plan (above) has only 499 units, requires ten road loops to serve them.

In theory, cluster plans like these are the key to better land use . . .

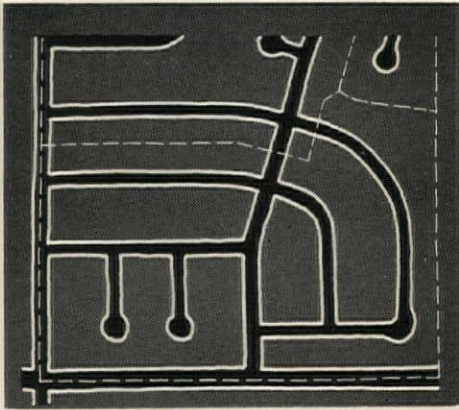
The two pairs of plans above illustrate this fact in dramatic fashion. Taken from Urban Land Institute's Technical Bulletin 47 ("Innovations vs. Traditions in Community Development"), they compare theoretical cluster and conventional platting for an actual 160-acre tract near Denver—first for detached houses (*top drawings*) and then for townhouses (*bottom*). Consider these differences:

Although the two detached-house plans provide roughly the same density (366 units in the cluster vs. 368 in the conventional), the cluster requires only 17,700' of road vs. 23,200' for the conventional layout. Utility line runs would be reduced by roughly the same amount. And the cluster includes 23.5 acres of open land vs. just 1.6 acres in the conventional.

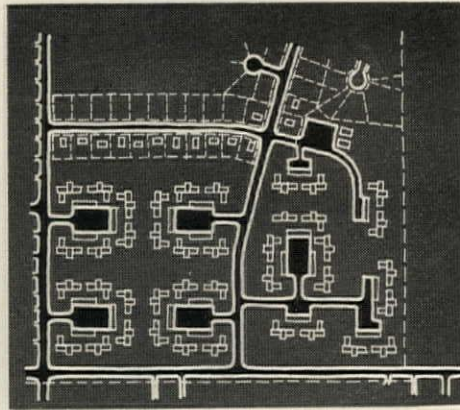
The townhouse plans show an even

sharper contrast. Clusters permit greater increase in density (555 units vs. 499), a greater reduction in road lengths (11,450' vs. 23,400'), and a smaller but significant increase in open land (47.4 acres vs. 31.8 acres).

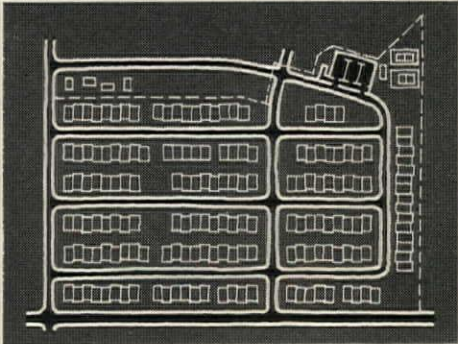
Both cluster plans offer better traffic conditions because all through traffic is carried by a single main loop plus five short feeder streets.



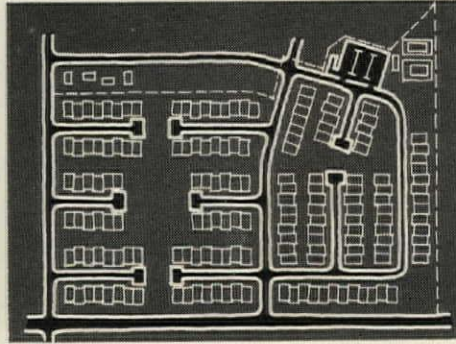
STAGE ONE: A curvilinear layout with about 100 detached houses on 9,500-sq.-ft. lots.



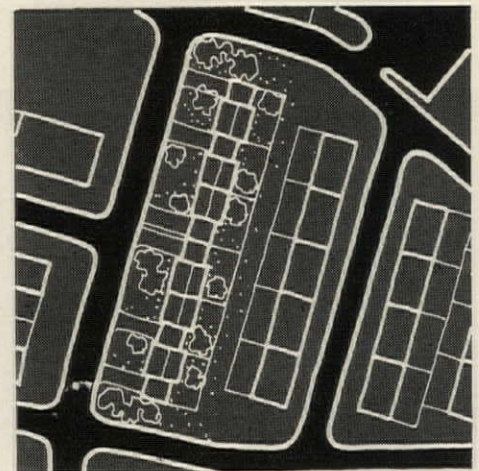
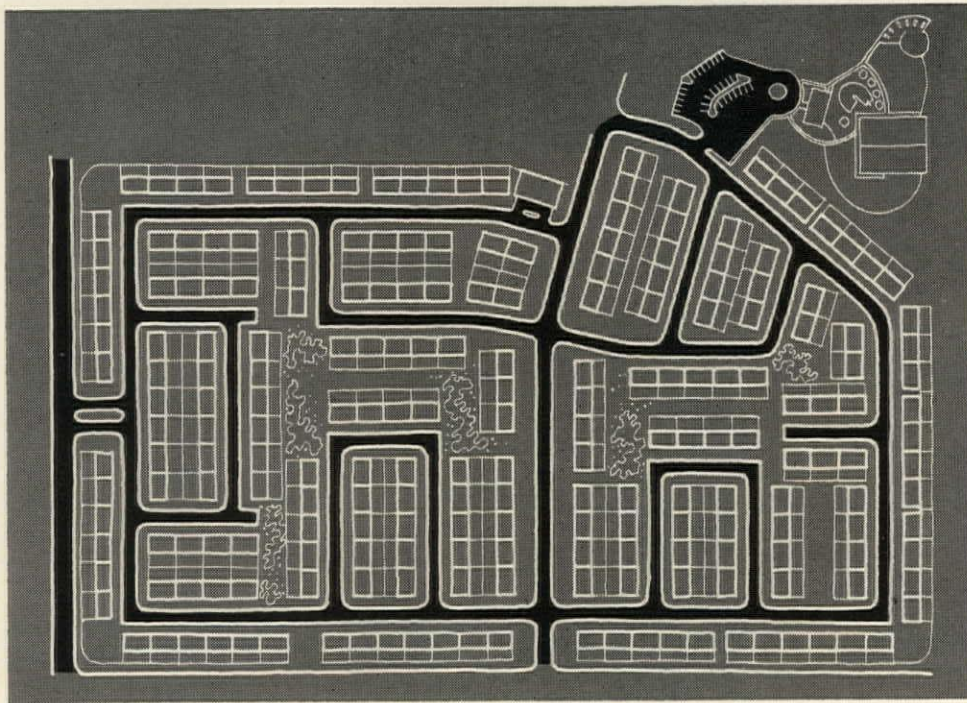
STAGE TWO: A cluster plan with ten groups of townhouses. Largest clusters have 24 units.



STAGE THREE: 170 split-entry townhouses arranged in a conventional grid pattern.



STAGE FOUR: Two superblocks, with most of the townhouses sited along dead-end streets.



STAGE FIVE: A combination plan, with 222 split-entry townhouses. Units will have four bedrooms, two baths, walled gardens and double carports. Estimated price: \$19,500 on a \$3,400 lot.

... but in practice, as this evolving plan shows, compromise is necessary

The evolution of this 33-acre section of Builder Alan Brockbank's Chevy Chase development in Salt Lake City (H&H, Mar. '61) started in 1958 with a detached-house layout. Last month—after 29 revisions—the plan was finally submitted to FHA as a patio-townhouse condominium.

Five of the key planning stages (the first four are taken from ULI Bulletin 47) are shown above. The reasons for aban-

doing all but the last illustrate the facts of life that keep most theoretically perfect plans from becoming actualities.

Stage one was dropped when Brockbank was able to get higher-density zoning.

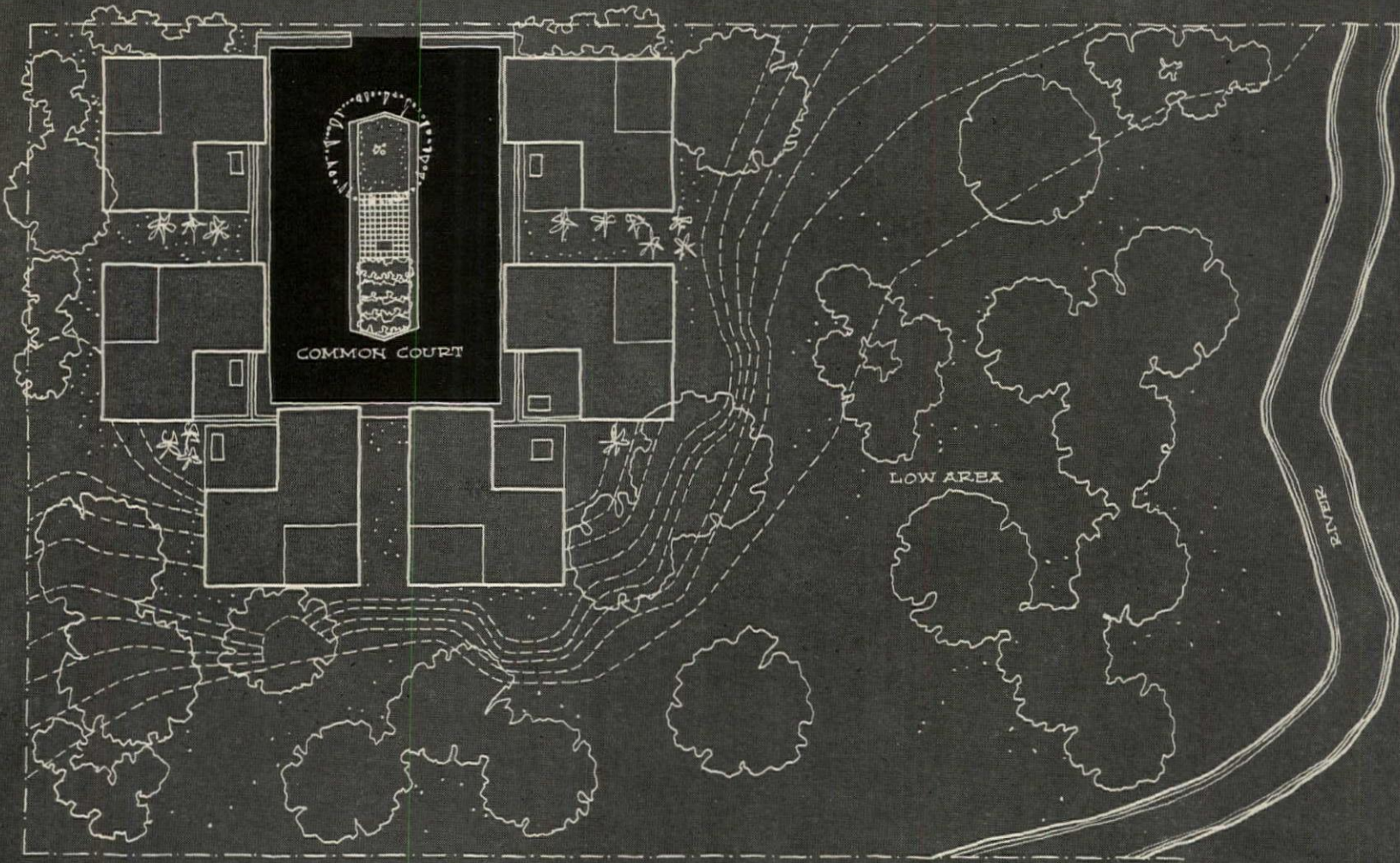
Stage two—158 clustered townhouses—was dropped because of poor parking.

Stage three—178 townhouses—was also dropped because of parking and because Brockbank felt it was too stereotyped.

Stage four—170 townhouses in two super-blocks—was dropped because cost estimates were too high for the market. High land costs were a major factor.

Stage five makes the most of expensive land by providing 222 townhouses. Says Brockbank: "It's a Rube Goldberg that combines clusters, superblocks and conventional grids. But it's a pretty good plan, and it works."

continued



A simple cluster doubles the number of lots on this small site

Baltazar Korab



COURTYARD ELEVATIONS (above) include garage doors and high patio fences. Utility easement runs across landscaped island shown at right.

Baltazar Korab



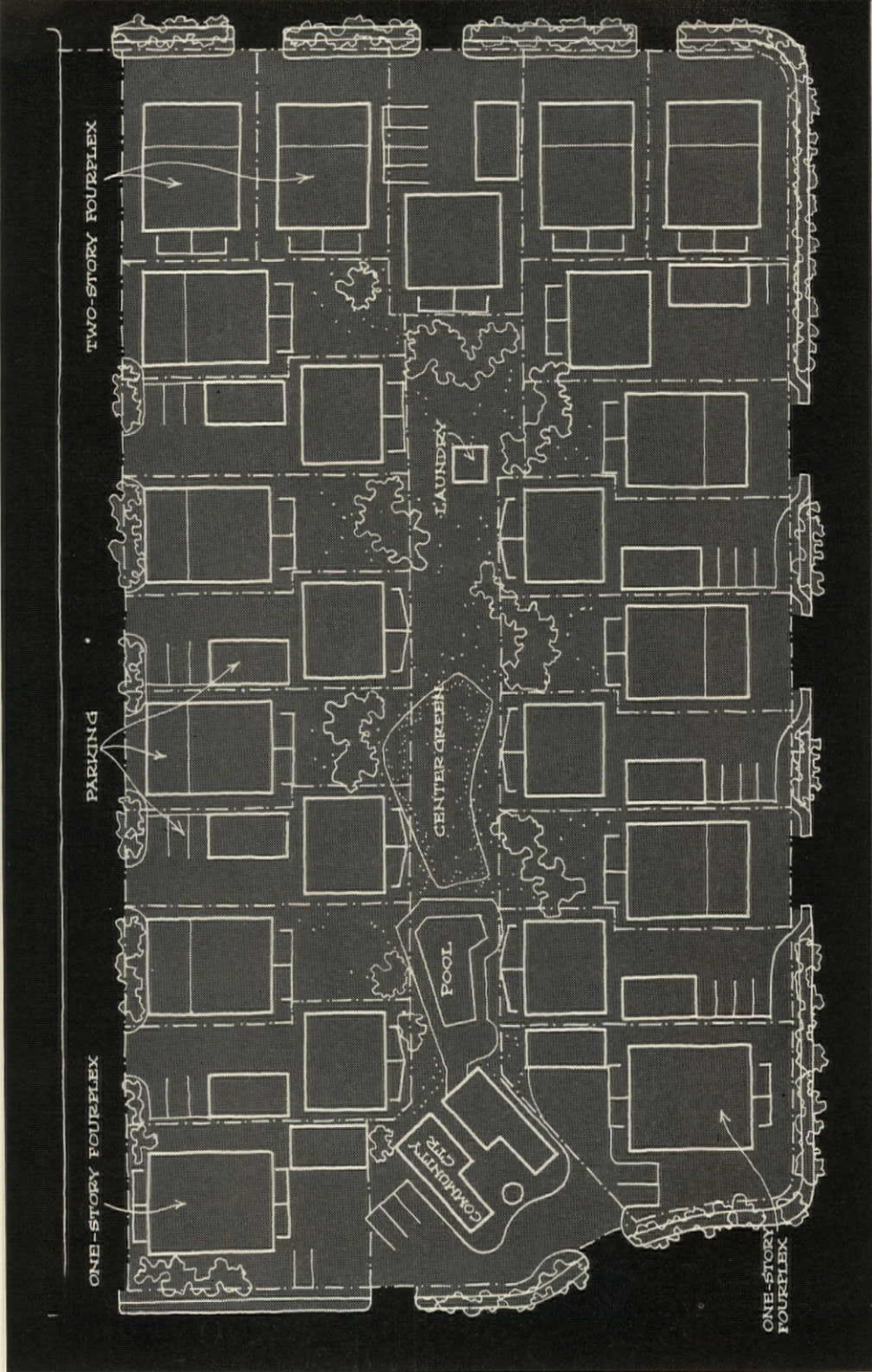
REAR ELEVATIONS (below) have recessed glass walls for privacy. Low land, foreground, is heavily wooded; filling it in would have killed trees.

Only about one-third of the site's 2¾ acres is on land high enough to be buildable; a conventional land plan with lot sizes commensurate with the value of the houses (about \$34,000) would have yielded only three lots at a cost of nearly \$16,000 each. The courtyard cluster shown above allowed Architect Paul Luckenbach to put six houses on the high ground, cut land costs to \$6,500 per unit and leave almost two acres of wooded land in its natural state.

Zoning regulations had a strong bearing on the land plan. Because the houses, in Birmingham, Mich., are rental units under single ownership (H&H, May), the 25' setback required by the Michigan State Plan Act was waived and the houses were built up to the lot lines on the court. Since then, however, Michigan has approved condominium legislation, and the houses could now be sold as condominium units with the open land held in joint ownership.

Because the houses are only 17' apart at the sides, Luckenbach took special measures to insure privacy. Courtyard patios have high fences, side walls of the houses are cavity block to cut noise transmission and windows are arranged so it is almost impossible to see one house from another.

Willets West Co. is owner and builder.



Staggered plan serves a dual purpose in this apartment project

First, it provides two distinctly different types of living—one for gregarious tenants, the other for tenants who want more privacy. Half the project's 22 four-unit buildings are close to the center green; the others are in quieter locations—60' back from the green, with semi-private front yards formed by the walls of adjacent buildings.

Second, the plan makes it possible to switch the 4¼-acre project from rental to condominium housing, with one owner for each fourplex. Architect Kenneth P. Elvin has given each building its own parking facilities, and his staggered pattern provides enough side setback (5') to comply with local subdivision zoning requirements.

"We deliberately sacrificed some rental density to be able to convert to condominium," says A. L. Damon, manager of Pine Ridge Development Co., owners of the Fremont, Calif., project. "We have no plans to convert now, but if we did we'd sell the units for about \$50,000 each, of which \$10,000 would represent land.

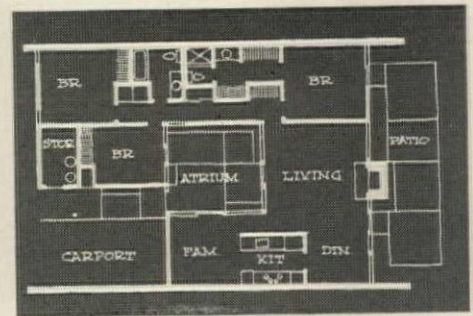
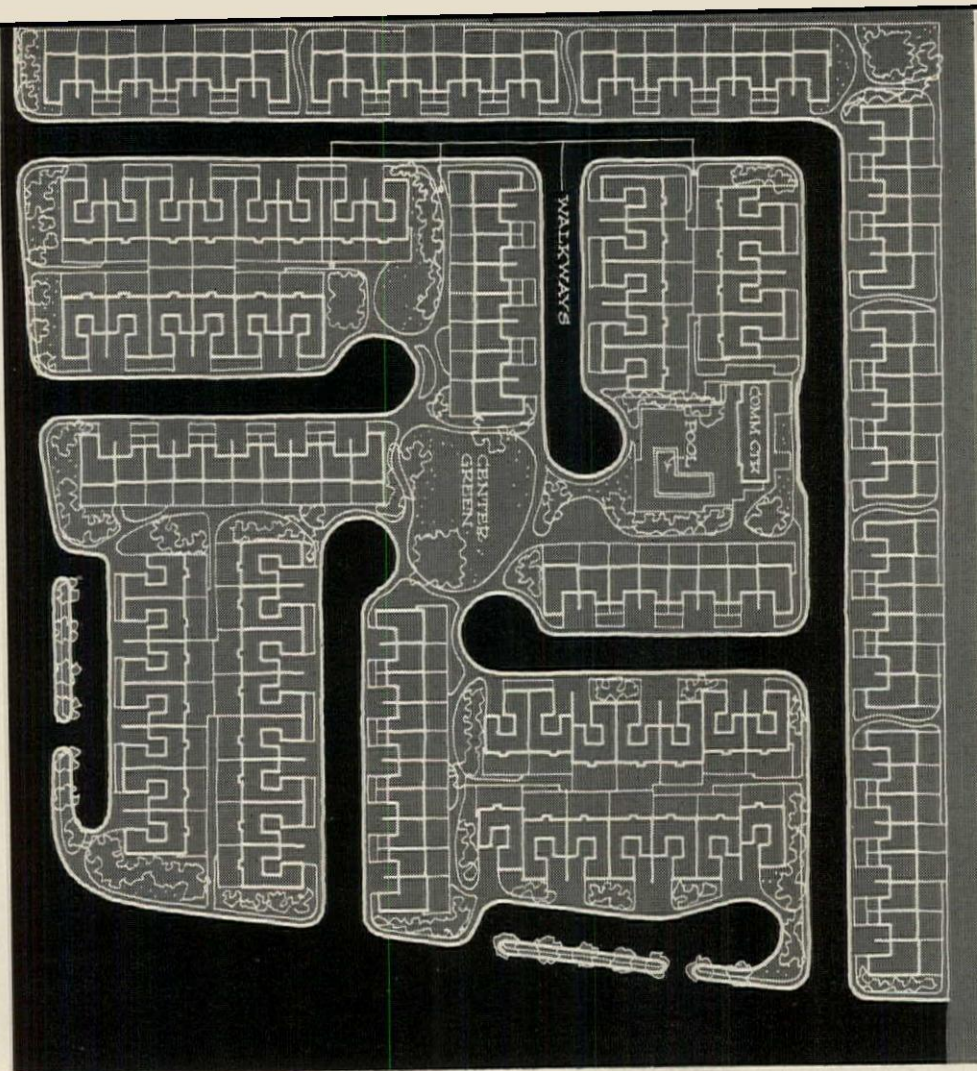
continued

Foto



CENTER GREEN includes swimming pool, in foreground, and laundry, in small hip-roofed building at far end. If the project were converted to

condominium, these facilities would be jointly owned. An individual owner could buy one four-unit building, but not a single apartment.



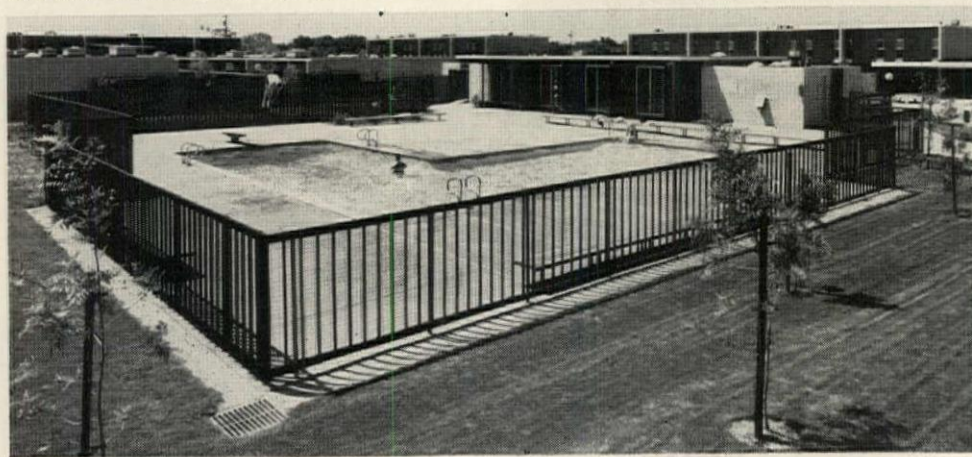
Stub streets add to open area in a high-density townhouse project . . .

Kaiser Graphic Arts



REAR PATIO (above) is heavily landscaped, separated from adjacent patios by high wood fences.

RECREATION AREA (below) has L-shaped pool. Building behind pool is a community center.



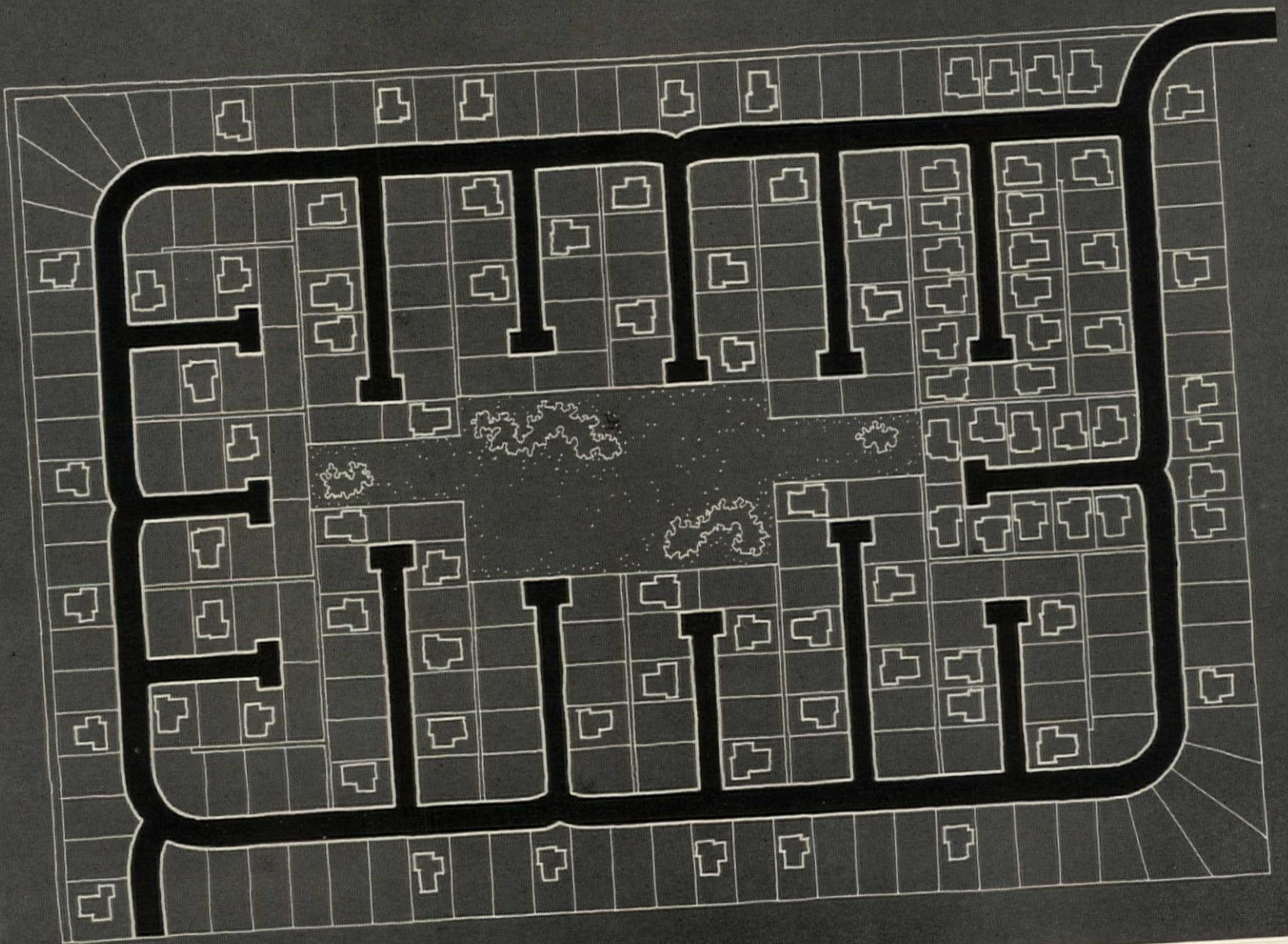
This 118-unit townhouse project, built by Eichler Homes in Santa Clara, Calif., looks—and feels—far more open than its ten units-per-acre density. Reason: Landscape Architect Robert Royston has grouped 88 of the units in a square superblock and brought four offset dead-end streets into the middle of it. Here's what the streets do for the plan:

They add to visual spaciousness. Turn-around areas—80' in diameter—are next to the center park, so they add to its apparent size. And for special occasions the turn-arounds can be roped off from car traffic and used for street parties or children's play areas.

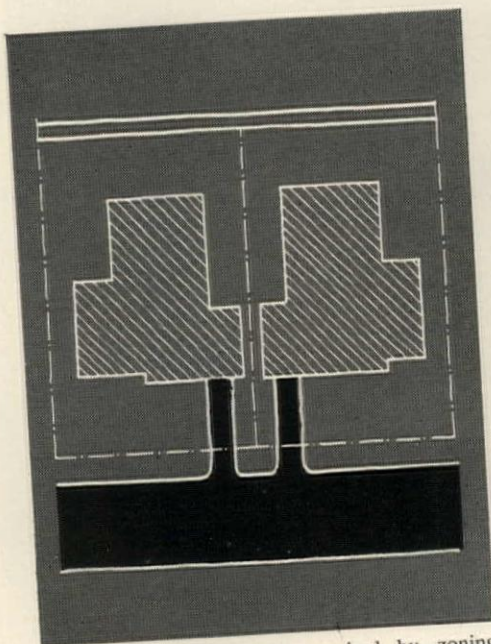
They break up the row-house look. Except for the 30-unit perimeter area, there are never more than 12 townhouses in one line.

They open all parts of the block to foot traffic. Royston has put walkways behind each row of houses, so children can reach the center park or recreation area (photo, lower left) without crossing any streets. And since the stub streets carry no through traffic, crossing them is much less hazardous.

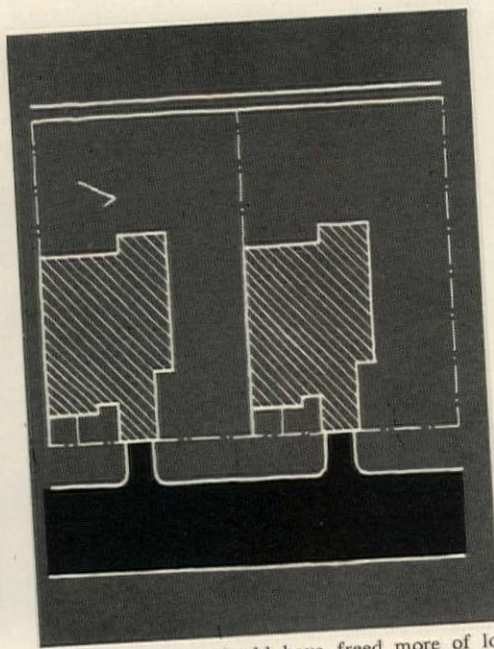
All houses in the project have walled patios, and more than half of those in the center section have interior courtyards (see floor plan, above). Designed by Architect Claude Oakland, they are priced from \$20,400 to \$25,900.



... and turn a conventional grid plan into a cluster superblock



CONVENTIONAL SITING, required by zoning, leaves scant space for private outdoor living.

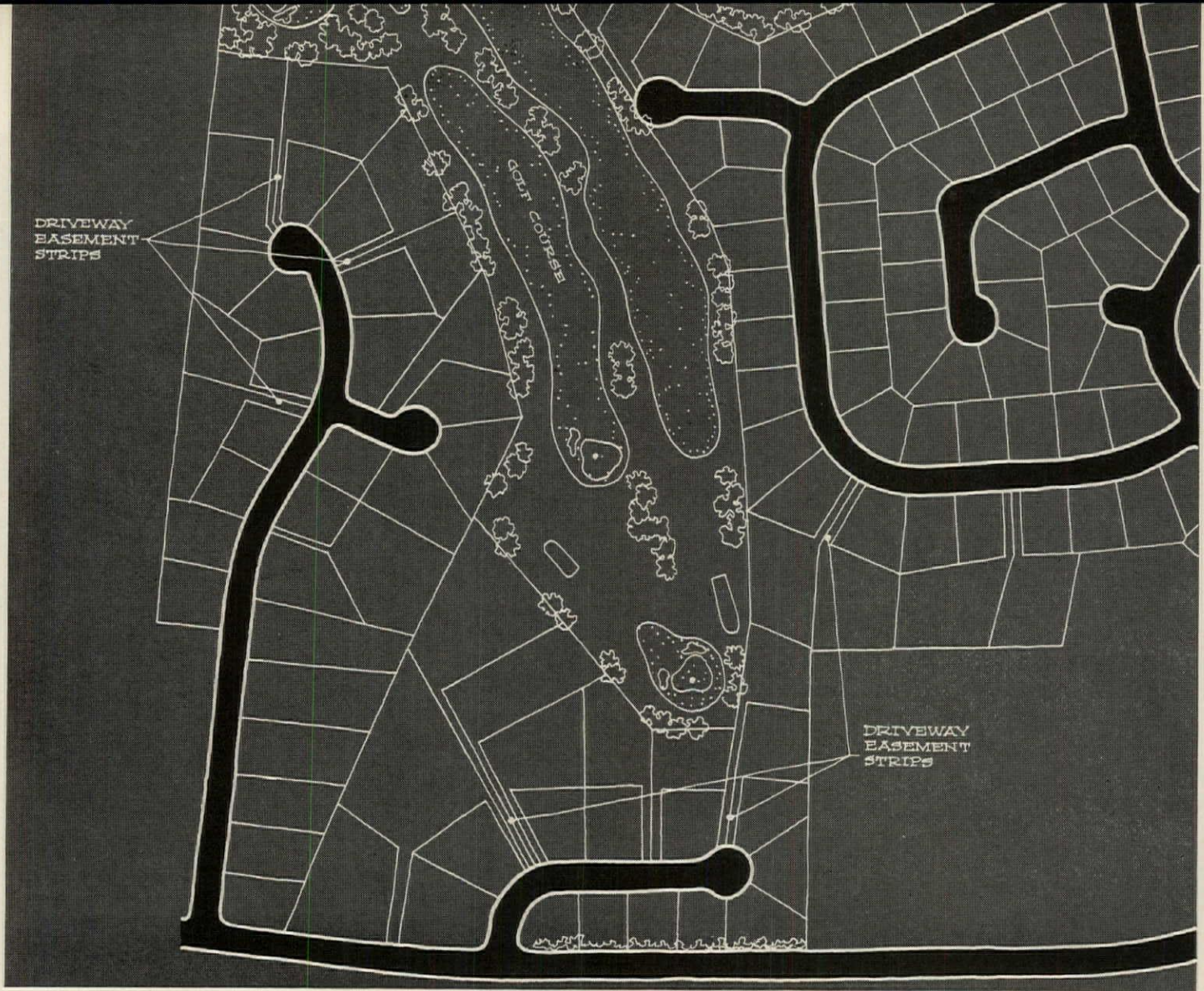


CORNER SITING would have freed more of lot for outdoor living. Walls on lot lines are blank.

As the plan above shows, the superblock idea, with its stub streets and walkways, works as well for a detached-house project as for townhouses. Architect William Rupp laid out this plan for K&R Contractors in Ft. Myers, Fla., and Paul Kane, K&R president, reports that despite problems caused by nearby highway construction, sales in the 60-acre subdivision are better than in other local projects in the same price range (\$11,000 to \$15,000).

Both Kane and Rupp feel the plan could have been even better. Local FHA officials went along with the relatively high density (4½ houses per acre) but would not let K&R run the perimeter road at the property lines, which would have put all lots on stub streets. And a siting plan which would have turned much more of each lot into livable area (*plans at left*) was abandoned when local zoning officials refused to waive setback requirements.

continued



Driveway easements permit more lots on hard-to-build-on land

The plan above—one section of Tantallon, a 668-acre project near Washington, D.C.—includes land so hilly and heavily wooded that house sites are at a premium. If standard 27'-wide roads with 50' rights of way were brought to each lot, they would eat up many of the sites—an expensive proposition when one-third-acre lots (the average size in Tantallon) are valued at \$8,000 to \$11,000.

To save as many sites as possible, Land Planner Theodore Robinson has used the dipper-shaped lots shown in the drawing. Driveways—20' wide and with only 25' rights of way—will run along the dipper handles. They use only half the space of a standard road and eliminate the need for big turn-arounds, each of which could use up a potential house site.

The plan is currently awaiting approval, and the legal handling of the easements has yet to be determined. W. A. Scarborough, president of the Isle of Thye Land Co., sees two possibilities: a common easement or right of way, in which one drive would serve several lots, or individual easements and drives for each lot.



HILLY TERRAIN in Tantallon is visible around this golf-course fairway. The course itself was built up from the swampy bottom of a former

creek bed. House sites along the fairways are more expensive than interior lots; they are priced from \$11,000 to \$15,000.



Green-area planning cuts the cost of these lots by \$1,700 apiece

"If we had been forced to use conventional half-acre lots," says Builder Fred Kemp of St. Louis, "our houses would have been priced out of the market. But with the present layout—12,000-sq.-ft. lots and the rest of the land left in its natural state—we've sold 70 houses since we opened in May, and we hope to hit 150 by the end of the year."

Kemp's green-area plan helped sales in three ways:

1. *It cut developing costs—and thus prices.* The smaller lots are served by shorter roads and utility runs. And steep, heavily wooded areas that would have been expensive to build on were left untouched.

2. *It reduced individual homeowners' lot maintenance.* "Even in our price range

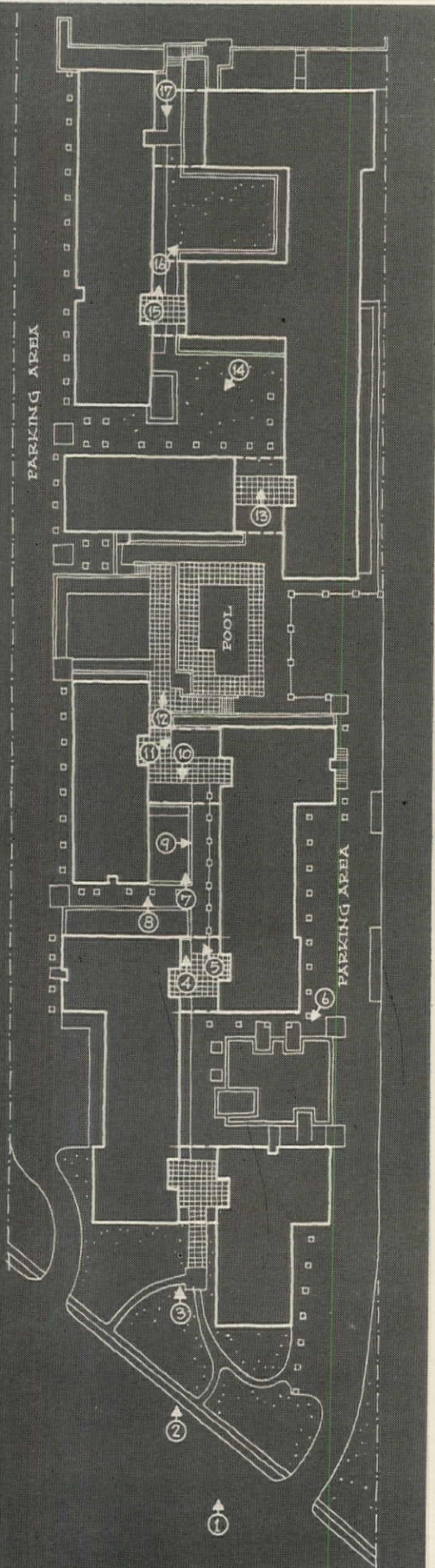
—\$23,000 to \$28,000—buyers in this area don't want big lots and the added upkeep that goes with them," says Kemp. The project's open land is jointly owned, and annual maintenance costs are only about \$4 per family.

3. *It permitted greater privacy.* "This is a privacy-conscious market," says Kemp, "and the majority of our lots back up to woods or slopes."

Kemp—an architect as well as a builder—planned his site under a St. Louis County density ordinance which permits smaller lots with open areas providing the overall density of the project stays within zoning requirements. Lots in a one-acre zone can be reduced to 15,000 sq. ft. and those in a half-acre zone to 12,000 sq. ft.

continued

Can a good land plan be fitted to a narrow site? Walk through this apartment project and see



It is generally conceded to be the most successful garden apartment project in northwest Philadelphia. Vacancies among its 147 units are virtually nil; rentals—from \$85 to \$145—are up to 10% higher than in nearby projects; and in an area where one-year leases and high turnover are the rule, the project has many two, three and even five-year leases.

Even so, the project had two strikes against it before Barlow Holding Co. started to build. The first was the site's shape: 900' long but only 220' wide. The second was the neighborhood—already so full of mediocre apartments that both realty brokers and property owners strongly opposed still another project.

The plan at left and the pictures at right show how the architect and the landscape architect coped with both problems.

Architect Marvin I. Bornfriend sited the buildings so that there is a spine of open courts running down the center of the project. Parking areas (one for each unit) are on the outside edges of the property. And second-story bridges (like the one shown in Photo No. 3) connect the buildings and also create sheltered play areas for children.

Landscape Architect John Rahenkamp made the most of the inner courts by breaking them up into alternating areas of grass, ground cover, cobbles, Belgian block, concrete and blacktop. The landscaping cost including lights, benches and fences was \$61,000—not unreasonable in view of the fact that the resident superintendent, one assistant and a part-time landscaper now maintain the entire project.

The aesthetic success of the project—along with some of its best planning and landscaping ideas—is clearly shown in the photos. Caption numbers, keyed to the plan, indicate the areas shown in the pictures.

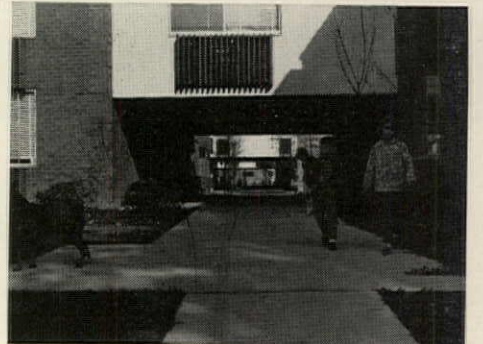
NARROW SITE (left) covers 4½ acres, is only 220' wide. Zoning variance permitted seven smaller buildings instead of one large building, making possible a number of intimate neighborhood courts. Numbers refer to pictures at right, and arrows show direction the camera was facing.



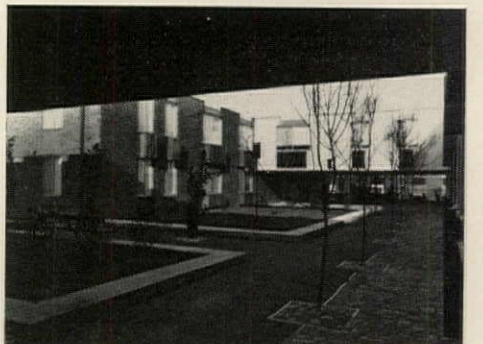
1. Street facade is on the angled end of the narrow site. Frontage is only 285'.



2. Grounds in front of project are grass with concrete walks. Big trees were saved.



3. Entry walk passes under second-story bridge which links individual buildings.



4. Bridge forms a sheltered arcade area where children can play in rainy weather.



5. Court area is blacktopped, with grass plots, left, delineated by raised concrete curbs.



6. Wooden benches are set into the concrete borders of small grassy areas.



7. Small shrubs are planted among Belgian blocks. Ground cover, rear, needs no maintenance.



8. Larger shrubs are planted in blacktop areas. Cobblestones make weeding unnecessary.



9. Belgian blocks, behind tree, are hard to walk on, keep passers-by away from apartment windows.



10. View from third arcade shows varying textures of concrete, Belgian blocks and grass.



11. Wooden bollards, made of sawn-up telephone poles, are used to outline court areas.



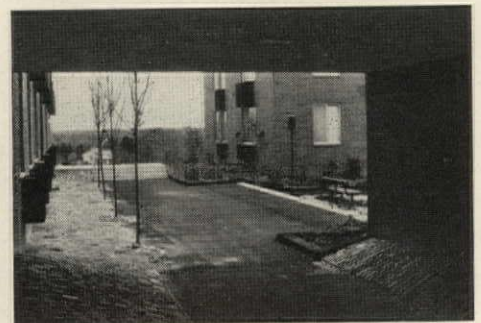
12. Iron fence keeps small children away from L-shaped swimming pool behind tree.



13. Stone wall around tree in blacktopped area is built at right height for sitting.



14. Wide expanse of blacktop in rear court provides space for bicycles and games.



15. Rear of site drops away beyond steps, permits lower-level apartments.



16. Lights in grass court are black cans set on poles and topped with car hubcaps.



17. Sloping areas are paved with Belgian block, right, or covered with wood-chip mulch, left.

LAND-4

New towns: are they the best answer to land-use problems?

In theory, yes. In practice, not yet.

In theory, these preplanned, self-contained communities are the ideal solution to the knotty problems of congestion, sprawl, zoning and lack of open space. Here's why:

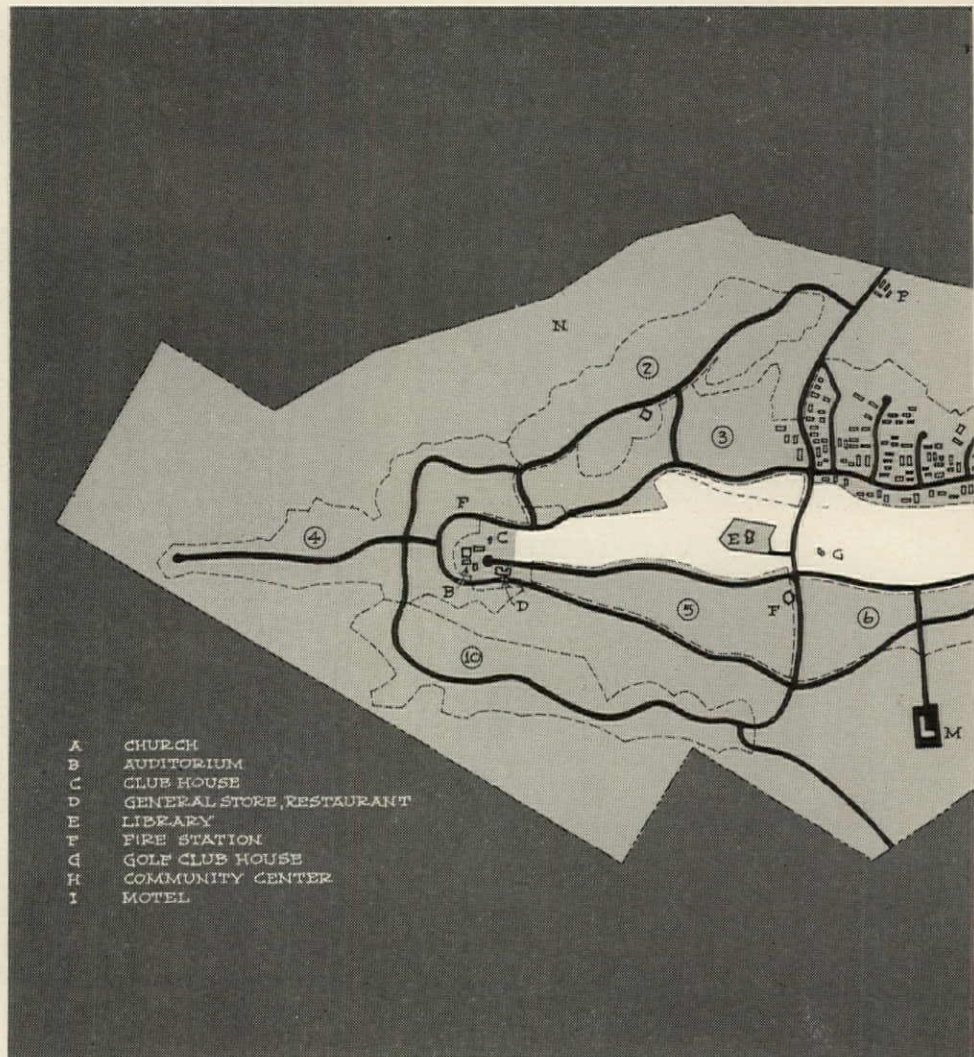
New towns can lessen urban sprawl. They offer the opportunity to create large, integrated communities instead of amorphous, sprawling suburbs. And they can break up solid urban development with belts of open space or parks.

New towns permit the introduction of cluster planning, mixed-density housing, common greens and other facets of better land use. Reason: they are built beyond the limits of existing zoning regulations. Freedom from zoning also permits a mixture of residential, commercial and industrial properties, and this diversity can not only produce a well-rounded plan, but also generates income that will help compensate for large, non-tax-producing areas of open space.

New towns tend to relieve, rather than aggravate, pressure on existing community facilities. Virtually all of them will provide their own recreation, shopping, schools and churches. And many will even furnish their own employment opportunities.

In practice, regrettably few new towns are taking advantage of these opportunities. For one thing, their developers seem hesitant to break with traditional concepts of planning. Also, federal taxation encourages them to plan for quick capital gain rather than long-term income. As a result, many new towns will emerge as hastily developed bedroom communities, distinguished only by their size from earlier suburbs and ordinary subdivisions.

Two exceptions: Crofton, Md., and Rossmore Leisure World in Walnut Creek, Calif. *Their stories begin at right.*



CENTRAL GOLF COURSE (white area) is a focal point at Walnut Creek. Plan shows streets and apartments for first of ten residential areas.

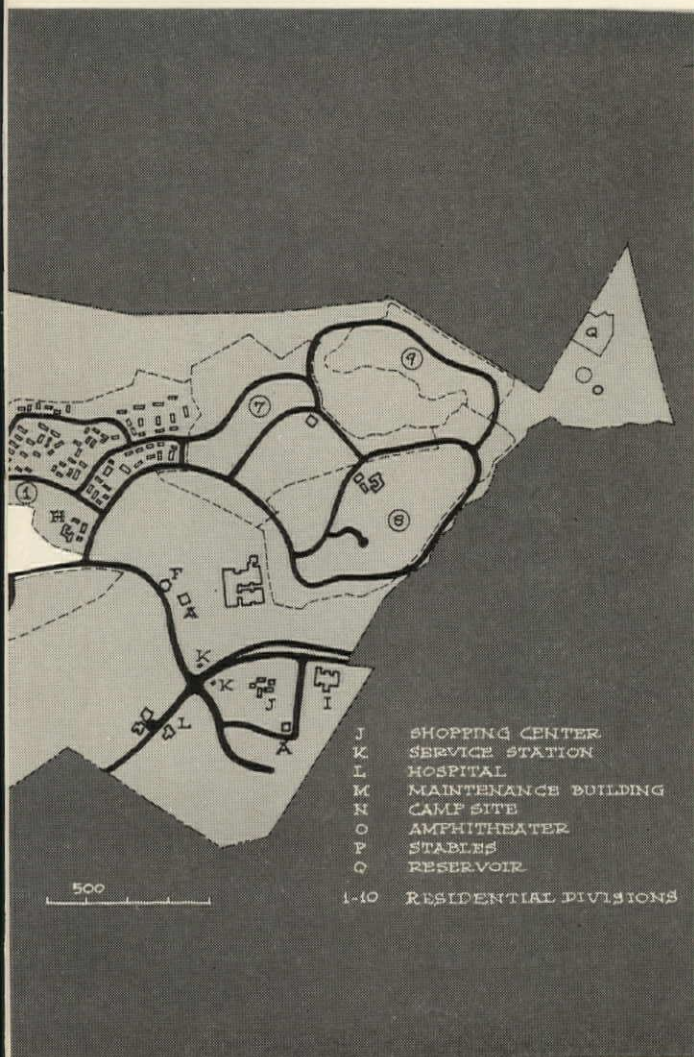
These new towns are

The course at Rossmore Leisure World near Walnut Creek, Calif., cuts a swath of green through the center of the town, while the one at Crofton, Md., meanders through the town and cuts it into a dozen small neighborhoods. Yet both courses are focal points of their communities.

The Walnut Creek course is in the trough of a valley, from which tiers of housing will rise. So the town's hillside housing will look down on a broad expanse of green.

At Crofton, views will be more intimate, and no house will overlook the entire course. Some 370 houses, out of 2,000, will face directly on the course (shielded from errant shots by dense buffers of trees). Another 217 houses are located just across streets from the course. And whole neighborhoods of 50 houses or more will be surrounded by it.

Because it wanders through the town, Crofton's \$1-million course covers an



MEANDERING GOLF COURSE (white areas) cuts Crofton, into neighborhoods. Highway separates research and industrial parks from community.

planned around golf courses—but in two different ways

extra-large area (203 acres vs. about 160 acres for many professional courses) and eats into valuable residential land. But, Developer Hamilton Crawford points out, it compensates for the land it consumes by exposing so many houses to views of fairways and putting greens. Crawford also counts on getting an extra \$1,000 for every house that faces the course. This will recoup a third of the course cost.

Walnut Creek (H&H, Apr.), a 2,200-acre community, will eventually house 18,000 retirees in 10,000 co-op apartments. It is the third California retirement town built by Ross Cortese since 1961. But it is as unlike the first two as nearby San Francisco is unlike Los Angeles (which is an hour away from the others).

At Walnut Creek Architect Charles Warren Callister has created a harmony of land planning and architecture that is unprecedented in a complete town. He influenced purely engineering decisions.

For example: only where a possible landslide threatened future housing did he sanction preliminary scraping of a hillside. He dictated where trees were to be saved. And he even insisted on saving a dilapidated fence that circled an orchard.

Unlike Walnut Creek, which caters exclusively to retirees, Crofton will be a community of 2,000 houses for growing families and 1,000 townhouses for newly marrieds and retired couples. The location of its 1,000-acre site—between Baltimore and Washington—coincides with regional plans for both metropolitan areas.

Model homes priced from \$22,500 to \$33,000 are furnished to appeal to active families—one for golf enthusiasts, one for the nautically minded (Crofton is not far from Chesapeake Bay), one for the artistic family and another for the child-oriented family.

While Walnut Creek's success hinges on the number of residents it attracts,

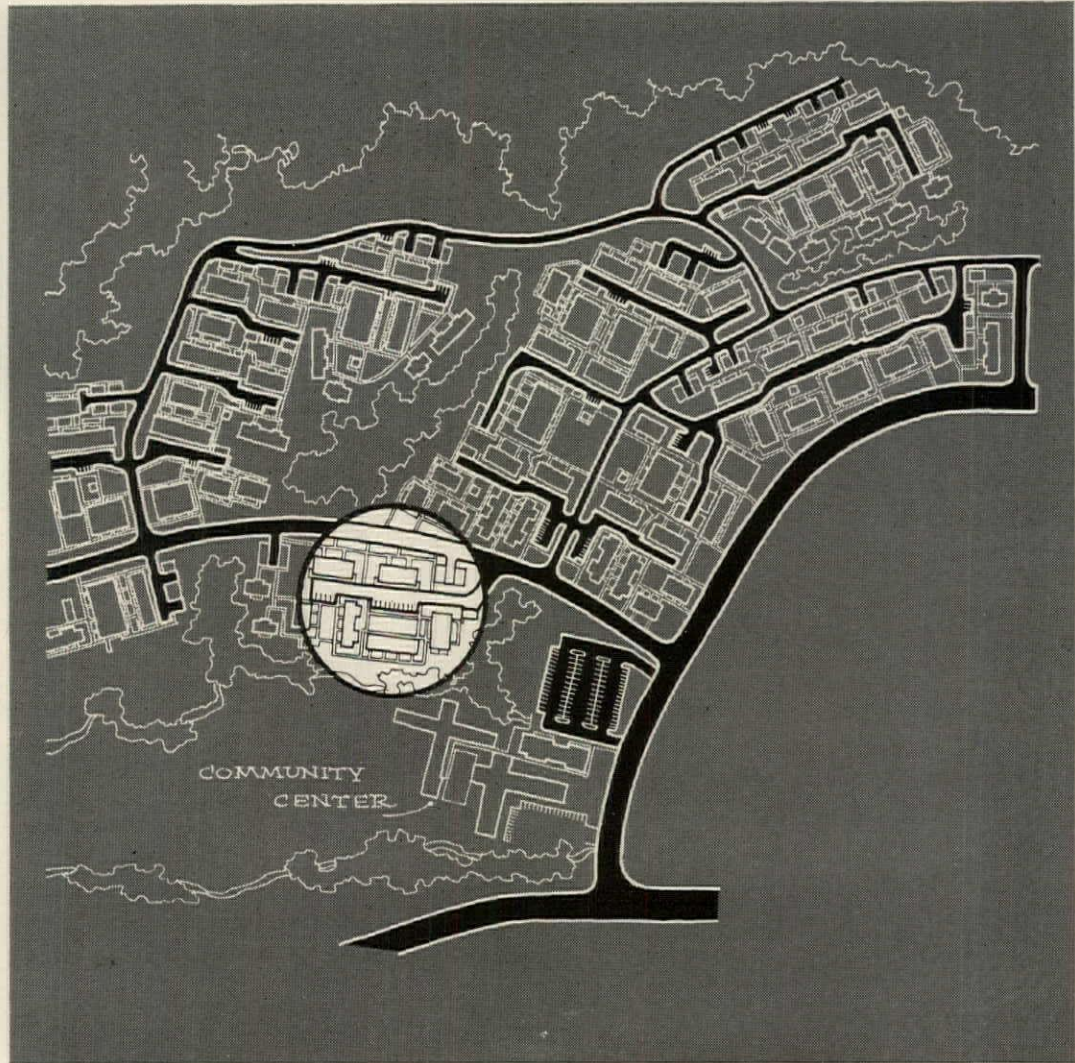
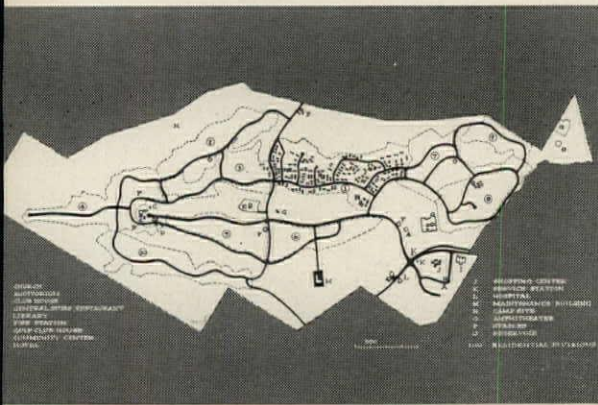
Crofton's success is contingent on its non-residential features. It will have too few single-family homes to defray the cost of sewer lines, underground wiring, a golf-course sprinkler system, highway-quality roads and other expensive facilities.

But there are big opportunities for profit in a regional shopping center and in office and industrial parks. There is also a profit potential in a proposed housing research center, although Crawford views it philanthropically. He has already offered five acres to the National Association of Home Builders for a research institute and would like to include other housing research and a museum of housing.

Residents will start moving into Walnut Creek and Crofton this month. But Walnut Creek began selling early in the year—and, by August, had sold more than 1,000 apartments for a \$17 million volume.

To see more of Walnut Creek, turn the page.

continued



NEIGHBORHOOD (in circle) is formed by grouping of apartment buildings around court.

Hillside terracing turns

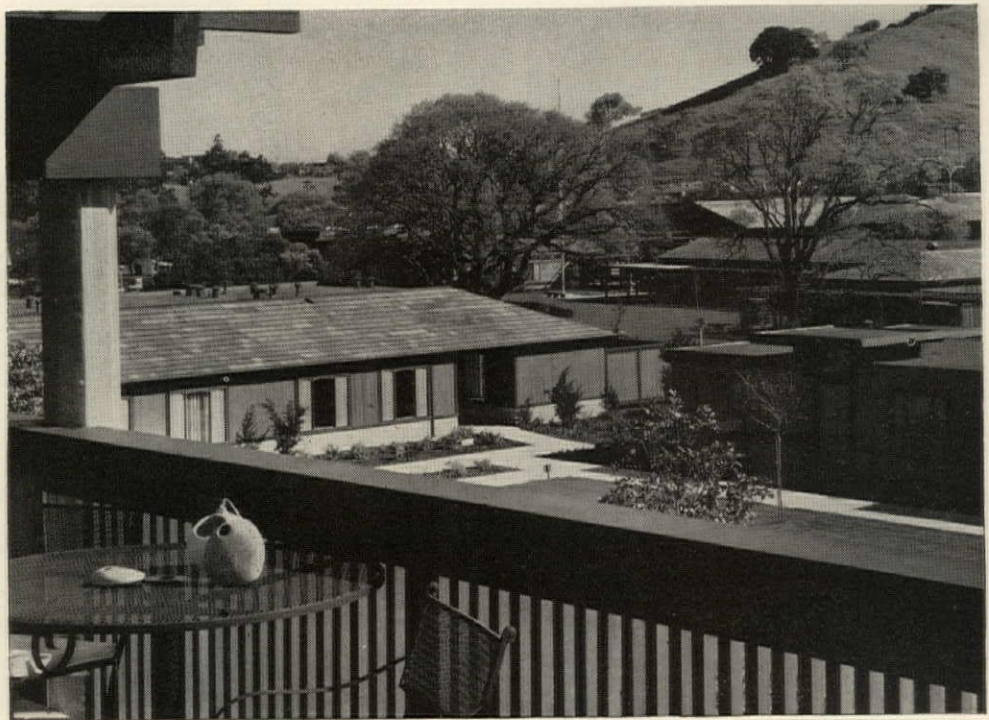


STAIRS to second and third-floor apartments are shortened by bringing grade above first floor.

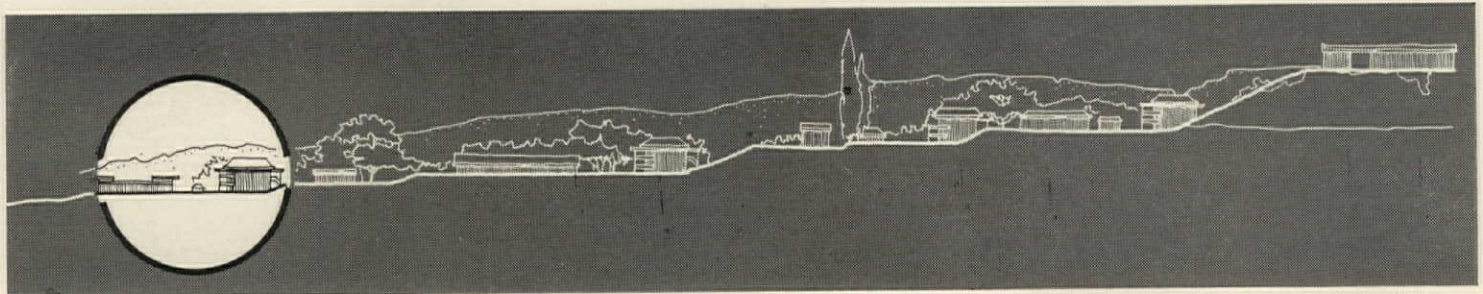
Walnut Creek's neighborhoods, like the one shown in plan above, are small enough to create an intimate atmosphere—and to avoid the sprawling, impersonal feeling of many large projects.

The cross section above shows how neighborhoods are notched out of the hillside a tier at a time. On each tier, buildings are carefully scaled and sited to relate to each other and to the terrain. They are neither too large to interrupt the view nor too small to be dwarfed by the hills. Three-story, eight-unit buildings look down on single-story buildings. At the same time, the four-unit, single-story buildings look across to one another.

This cohesive planning gives residents an awareness of each other's routines—a subtle safety factor that keeps elderly people from ever being left alone for very long. Yet the housing retains its privacy both indoors and out. Apartments in single-story buildings are built around



TYPICAL VIEW from third-floor unit shows one-story units below and community center beyond.



CROSS SECTION shows how neighborhood pattern (in circle) is repeated up the hillside.

a vast valley into tiers of neighborhoods at Walnut Creek

atriums or enclosed terraces—some opening off family or living rooms, others off bedrooms. Three-story buildings have second and third-floor balconies.

Apartments in the three-story buildings occupy only the top two floors. But they are never more than a few steps from the ground because the grade meets the uphill side of each building midway between the second and third floors. The lowest floor is a garage, which opens on the downhill side to serve residents of single-story buildings. This garage arrangement is repeated up the hillside, so residents at every tier never need to leave their own grade to reach their cars.

Other ideas that enhance Walnut Creek's neighborhoods:

- Buildings are arranged to form courts and quiet walkways. Most courts are the same size and repeat the same relationship in building heights. Even service buildings, housing washers and dryers, are sized and

sited to conform with the courts' scale and layout. They are integral parts of each neighborhood—gathering places where women can chat (while their washing tumbles in dryers) and watch the activities in the courts.

- Each building design harmonizes with the neighborhood plan. Architect Callister repeated roof lines where the over-all plan dictated design unity, yet grouped buildings of different heights to achieve interesting variety (photo above).

- Even color contributes to the neighborhood atmosphere. Every neighborhood at Walnut Creek will conform to a master color scheme that was first tested in the field. So roof, stucco siding and wood colors help define each neighborhood.

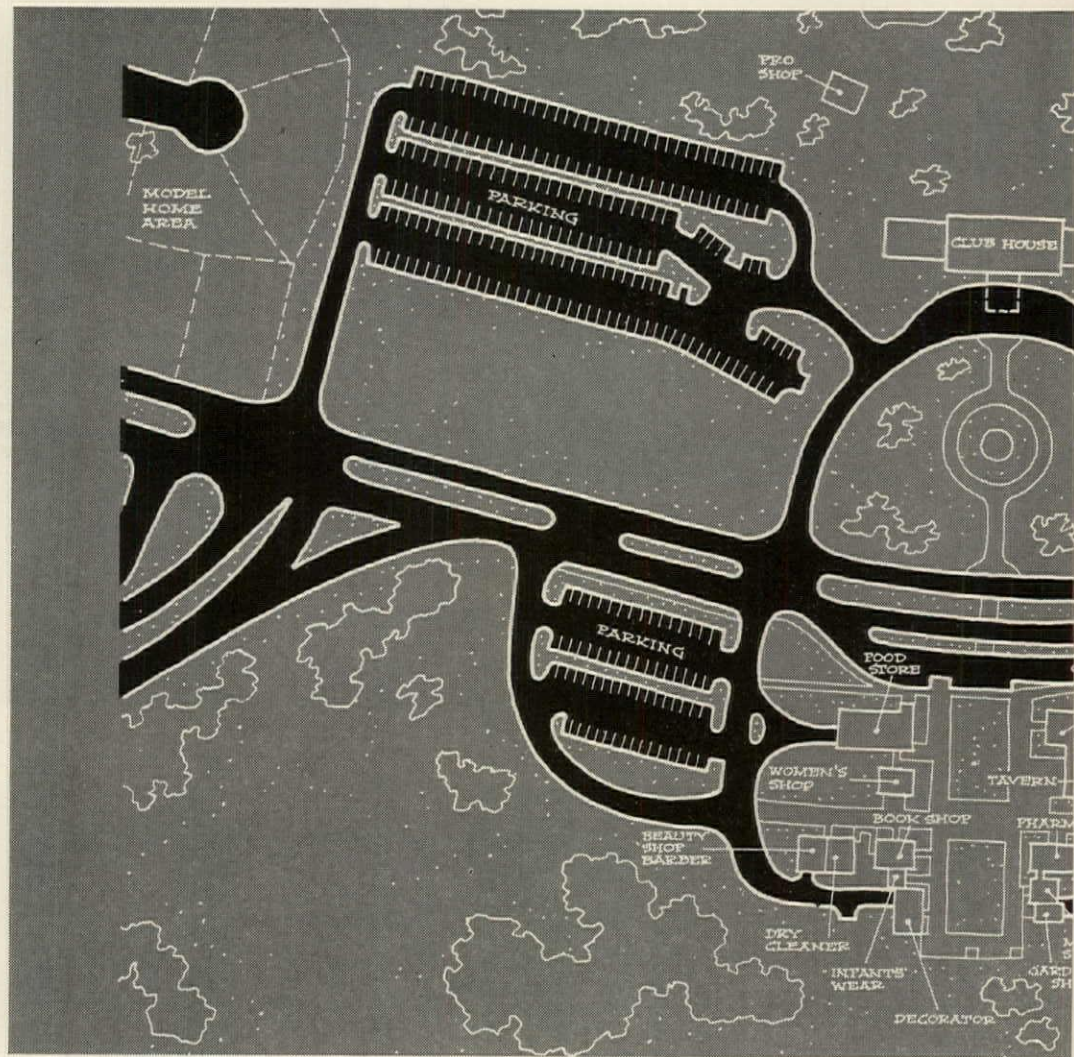
- Finally the streets complete the neighborhood plans. Their layout is mostly rectangular although Callister curved many streets to adjust to the valley's topography and keep grades below 10%. The rec-

tangular plan is a reaction against the meandering streets that turn so many suburbs into labyrinths as well as a repetition of the buildings' predominantly straight lines. These lines reinforce a formal overtone that was meant to reassure elderly buyers. They also echo the lines of traditional San Francisco and give residents a link with the past while easing them into the world of retirement living.

Inside the Walnut Creek apartments, elderly residents will find planning that lessens bending and stretching (for switches and shelving, for example) and bathrooms with safety railings.

Cortese plans to build several other Leisure World retirement towns. Three are already on the drawing boards: one will be at Norbeck, Md.—not far from Crofton (p. 68)—a second near Princeton, N.J., and a third near Chicago. Cortese is also considering other retirement communities in Europe and in Hawaii.

continued



VILLAGE CENTER, surrounded by ample parking, unites specialty shopping and recreation.



T INTERSECTION and culs-de-sac limit traffic and form safe, secluded neighborhoods.

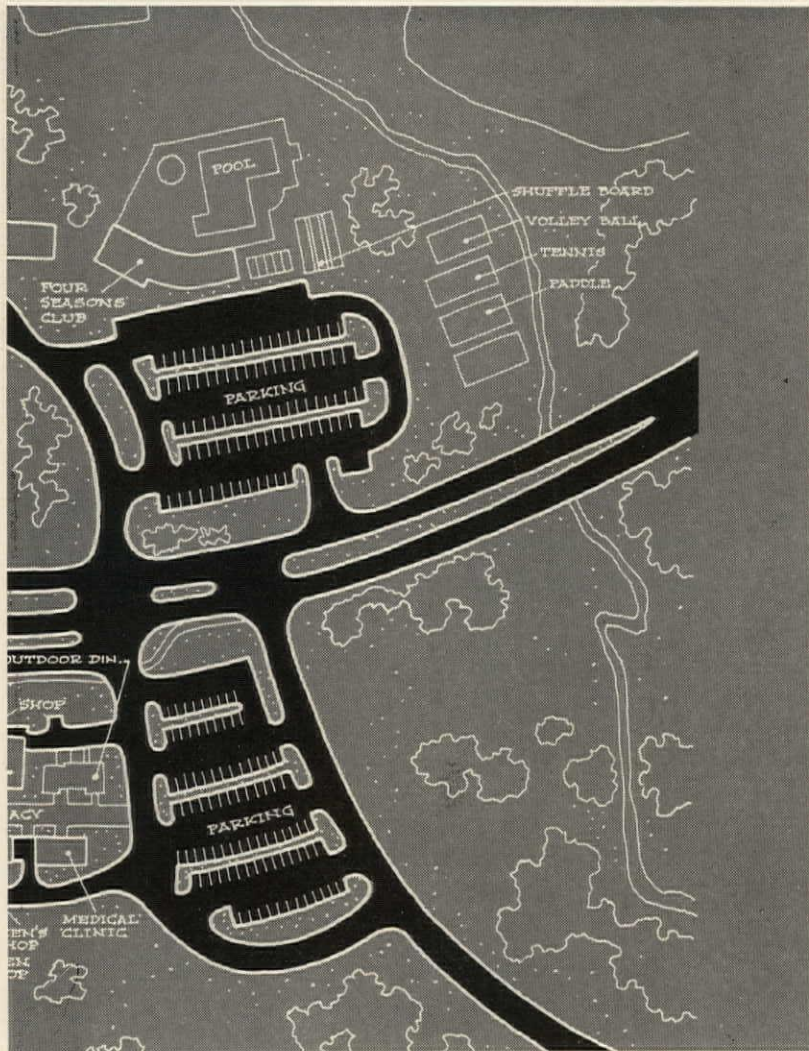
This village center will

It will give residents recreation facilities like tennis and swimming. It will provide space for specialty shops and restaurants. It will include a professional building for medical and dental services. And it will provide meeting places for clubs and social groups.

Crofton's village center revives a principle that all but disappeared in post-World War II development. The principle, set down centuries ago by the Greek planner Hippodamus, holds that good planning should place a community around a rectangular agora or market place.

But most projects are too small for developers to bring together the recreational, commercial and governmental elements that comprise such a center.

Nor is the shopping center a substitute for the town center. Its purpose is almost entirely commercial: it bustles by day when stores are open, but it is deserted at night and on holidays. Furthermore, the



SHOPS and clubhouse, in the distance, will be patterned after Williamsburg architecture.



MODEL-HOUSE AREA (upper left in plan) is typical of wooded neighborhoods at Crofton.

be the nucleus of community life at Crofton

shopping center acquires its personality not from the community it adjoins but from the standards of commercial display—store windows, neon signs and fluorescent lights.

Crofton demonstrates how a project on the scale of a new town can come up with a true village center.

- Crofton was planned as a unit, allowing land to be set aside for a town center integrated with the community.

- Crofton keeps the automobile in its place. Parking lots are behind shops away from the pedestrian mall, relegating cars to a secondary role. (There is, however, one flaw in the Crofton plan: the mall is bisected by the town's main road, which provides access to the center but at the same time interrupts the mall's tranquility.)

- Crofton's village green reflects the community's prevailing colonial architecture. The design of shops along the mall conforms rigidly to a motif patterned after

the design of colonial Williamsburg.

- Crofton's village center escapes the commercial tone of a shopping center because large stores are prohibited. Only specialty shops are planned for the center.

And there are other evidences of good planning at Crofton:

- Residential areas offer mixed-density housing. Single-family homes will take up the bulk of the town's acreage, but pockets of townhouses will be interspersed among them, giving variety to the community and offering housing for a wide range of incomes and family sizes. The townhouses are planned not as buffers between single-family homes and commercial tracts, but as residential areas in their own right. They will be hidden from the street by dense screens of trees, and they will have their own pools and recreational areas.

- Streets are laid out to offer quick access to all parts of Crofton, yet maintain a high degree of safety. Planner Bu-

ford Hayden girdled Crofton with a single collector road which reaches into all major areas. At the same time, culs-de-sac, which form the nucleus of each neighborhood, are kept free of through traffic. These culs-de-sac feed into the main road one at a time, forming safer T-intersections.

- The land plan is fitted to the topography. Curved streets avoid direct encounters with steep grades; a stream, which cuts through the town and nullifies a strip of land for residential use, is converted into a landscape asset for the golf course, which straddles it.

- Trees are saved. Rolling terrain forced Crofton engineers to change the grade of several roads and sidewalks so water would not drain onto neighboring property. This grading would normally have meant the elimination of vast numbers of trees. But Planner Hayden saved them by carving out squares and courts where trees could be left intact.

LAND-5

Five ways to cut the cost of land development—and do the job better

Earthmoving, sewage facilities, landscaping, street lighting, streets—each is a separate threat to profits for the builder who develops big parcels of raw acreage remote from established neighborhoods and utilities. To cope with these threats may well take a heavy investment in the skills of specialists, plus the setting up of new departments and even new subsidiaries with a permanent interest in the development.

For the develop-it-from-scratch builder—and the rising cost of close-in land is forcing more and more builders into this category—the following pages offer five profit-saving approaches:

1. *High-speed earthmoving.* A pioneering San Francisco earthmover demonstrates how to match the machine to the job and then find ways to move it faster. If Arthur “Buzz” Haskins can’t find the kind of machine he wants, he designs it himself.

2. *Expandable sewage plant.* To avoid a big initial investment in a treatment plant, Ohio Homes found a package it could buy in parts—half now for the first 100 homes, half later for the second 100.

3. *Builder-operated nursery.* An 80% saving on big shade trees is the result of raising them from saplings on idle subdivision land. For a 500-home developer of treeless farmland, the saving tops \$100,000.

4. *Leased street lighting.* Low-maintenance units on redwood poles solve the problem of lighting rural streets. Monthly charge (paid by homeowners): \$1.

5. *Soil-cement streets.* A lower-cost material is catching on with community builders because it offers a second benefit: low maintenance.



1. Faster earthmoving

There's no bargain price for grading hilly land a hundred acres at a time. But there is a way to save some financing money: get the job done fast.

To Caesar-Callan Homes, developing several hundred acres of rolling hills (*photo at top right*) in south San Francisco's Westborough area, speed in getting the job done is more important than a low bid. And speed is what Caesar-Callan gets from Earthmoving Contractor Arthur “Buzz” Haskins. A mass-grading specialist in San Francisco's hilly terrain, Haskins can move earth at a rate of 30,000 cu. yds. a day. How does he do it? By designing new machines and by sticking to this operating formula:

Alter grading plans to save time and money. He looks for ways to help his equipment maneuver faster: changing grades a few percentage points; cutting out banks or benches to shorten an uphill haul; realigning streets. Caesar-Callan listens to his suggestions, for while the contract usually specifies fixed sums for clearing land and stockpiling topsoil, cut-



ROLLING HILLS call for careful layout of haul roads to give loaded scrapers downhill runs.

DOUBLE-PUSHING 40-yard scrapers with two 32-ton tractors gets loads out of cuts fast.

wraps up a million yards of grading every 60 days

ting and filling is done at an hourly rate.

Keep loaded scrapers on downgrades. On the Westborough job Haskins is using 14 self-propelled scrapers with heaped capacities of 28 to 40 yards and four 20-yard tractor-drawn scrapers for steep slopes and tight maneuvering. To move the scrapers from cut to fill faster, he lays out haul routes that give them the advantage of a slope.

Spread loads at 35 mph. Arriving at the fill area with momentum gained from a downhill run helps the scrapers distribute their loads at high speeds.

Double-push all loads at the cut. On the Westborough job, four teams of 32-ton crawler tractors—eight in all—get the big scrapers loaded in a hurry (large photo above); four teams of 24-ton crawlers push and draw the lighter scrapers. Half of the tractors have hydraulic rippers to loosen the soil for the scrapers.

Keep haul roads in top condition. A 15-ton grader does nothing but repair and smooth over scraper routes.

Wet down dust repeatedly. Two 3,000-

gallon water wagons sprinkle the haul roads all day, keeping the air clear for the drivers (and neighbors, too).

Speed up compaction. Haskins tamps down new fill rapidly to avoid differential settlement and erosion. He designed his own compactor specifically for hilly terrain (its construction is one of his trade secrets) and he keeps several in constant action. Before a rain, he tamps all new surfaces carefully to minimize the chances of rivulets forming.

Crisscross and reposition haul roads whenever possible. This aids in the compaction job by letting the heavy earthmovers pack down newly filled areas in the course of work.

Service equipment in the field. Two oilers and two mechanics patrol the field 12 hours a day lubricating and repairing Haskins' machines to avoid taking them out of service. The oilers drive custom-designed lube trucks, the mechanics use pickup trucks loaded with tools and spare parts. Two other pickups equipped with welding equipment are also on call, and all the

trucks are in contact by two-way radios. A fully equipped shop is ready for any major overhaul.

Check the job daily. Like most earthmoving subs, Haskins follows an informal schedule subject to hourly change. For the Westborough job he has set a monthly goal of 500,000 to 600,000 yards (working a nine-hour day); if his daily production check shows a lag, he will simply push harder. Now advancing at the rate of 25,000 to 30,000 yards a day, the job has two elements in the earthmover's favor: easy-to-move sandy loam and rolling hills which present few balancing problems.

Get the most maneuverable combination of equipment capacity and speed. Although Haskins' basic operating idea is to run outside equipment at high speeds, he doesn't buy the biggest. In earlier years he operated 50-ton compactors and scrapers that could carry 50 yards heaped. Now, seeking the most efficient equipment, he uses less cumbersome 20-ton compactors and 40-yard scrapers.

continued



SAPLINGS are added to tree nursery each year. Tractor-mounted earth augur speeds up planting.



TRANSPLANTING by wheel loader is simplified by keeping tree roots cut back at nursery.

2. Builder's nursery supplies 30' trees for \$20

How many big trees can a homebuilder plant at \$100 a shot? Not enough to impress a homebuyer, decided one Midwestern builder, so he started raising his own saplings. Now, several years later, he runs a nursery (*above*) as part of his homebuilding operation and gets 7"-diameter trees at an 80% saving. (His cost is so much lower than the assessed valuation that he prefers to remain anonymous.)

This builder develops treeless farmland, but sells largely to second- and third-time buyers who are accustomed to trees—and well established ones. To supply four big trees per lot, which the builder feels is minimum, a commercial nursery would charge him about \$400—or roughly \$200,000 when multiplied by the 500 or more medium-priced homes in his average project. By contrast, he puts in the trees for \$80 per lot—or about \$40,000 for a whole subdivision. Specifically, each tree costs him \$10 to buy and tend plus \$10 to transplant.

Every fall the builder buys bare-root saplings averaging 12' to 15' in height and 1¼" to 2" in diameter. He picks sycamore, elm, tulip, thornless honey locust, birch, gum, hard maple and soft maple, and plants them at the farthest corners

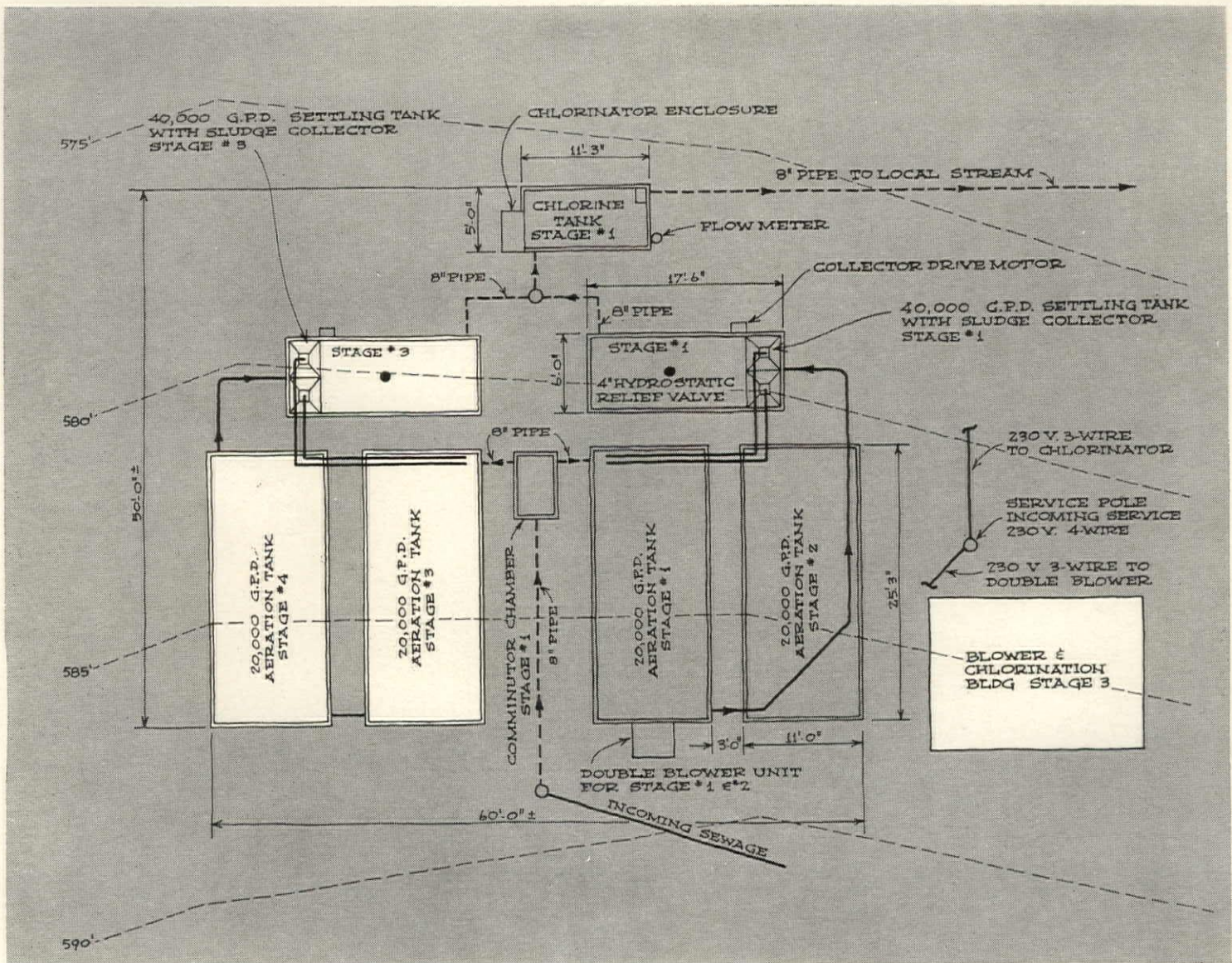
of the subdivision on land to be developed last. When that area is finished, any remaining trees are moved to a new nursery in a different location.

To maintain an adequate stock, the builder plants 500 to 1,000 trees a year and tries to let each mature for five years before moving it to a home site. By that time the tree is 5" to 7" in diameter. Regular pruning has kept it under 30' tall to make the branches fill out faster.

Very little physical work and only the simplest of records are needed to operate the nursery. Six times a year a man with tractor spends two days cultivating the trees, pruning roots and fertilizing. Every other year the builder hires several retired nurserymen to prune branches.

When a home is scheduled for landscaping, the owner is notified and asked where he wants the trees placed. A wheeled loader with a specially designed blade digs a hole at the site, scoops out the tree at the nursery, transports and replants it. One man backfills by hand.

The builder says he now expects to make two changes in his future tree nurseries: 1) add different species, 2) plant 12' on center instead of 8' to give the trees more room to spread.



200-HOUSE SYSTEM is installed in two parts: units in gray first, units in white later.

3. Add-a-section sewage plant grows with tract

"Why buy the whole plant and pay all that interest before we need to?" That's the thinking behind Ohio Homes' decision to buy a sewage treatment package in sections. The first plant's two sections, each serving 50 houses, have been installed in a half-completed, 200-home subdivision near Newton, Ohio. As the next group of houses gets under way, the builder will install the other two sections (white blocks in diagram above).

Ohio Homes would have used septic tanks for this project, but local officials threatened to impose two-house-per-acre zoning, and local lenders were not enthusiastic about that approach to sewage disposal. So the company was forced to find a treatment plant it could afford (with no subsidy from village or county)—and one that would produce no odor, contamination or objectionable noise.

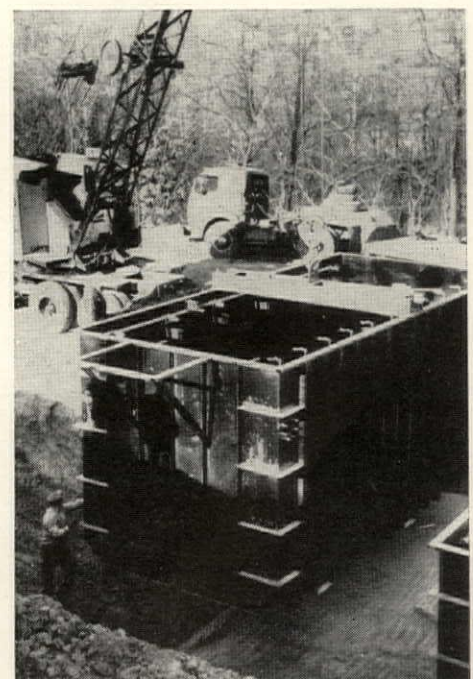
The expandable plant, made by Amcodyne Corp. of Lorain, Ohio, meets all those requirements. It is operated by Martin Utilities Inc., a nonprofit company set

up by the builder and sustained by a \$5-per-house monthly sewage rate. A part-time engineer spends two hours a week testing the effluent for a state report. Otherwise the plant runs automatically.

For the first hundred houses the builder installed a central comminutor (for grinding the sewage), two aeration tanks, a settling basin and a central chlorination tank. To take care of the second hundred he will add two aeration tanks, a settling basin and a blower. Cost of the initial package was \$25,000. Installation and hookup costs (excavation, footers, fences, electricity, pipe, etc.) was \$10,000.

Specifications for the system, installed under the strict supervision of state and local officials, are high. Pipe leading to the plant must be leakproof to keep soil from infiltrating and overloading the machinery. The effluent, piped into a local stream, could be drunk with no ill effects.

Bonus benefits: depreciation allowance for the builder; no future sewer assessments for the homebuyer.



AERATION TANKS—placed by light crane—may be added to plant any time to increase capacity.

continued on p. 76

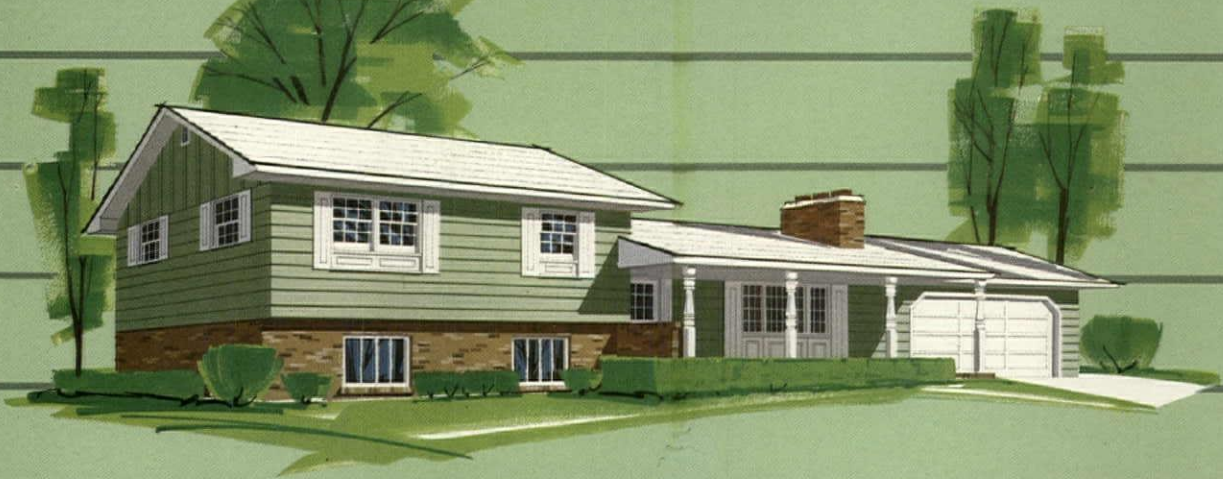
New pre-finished siding won't require painting for 10 years



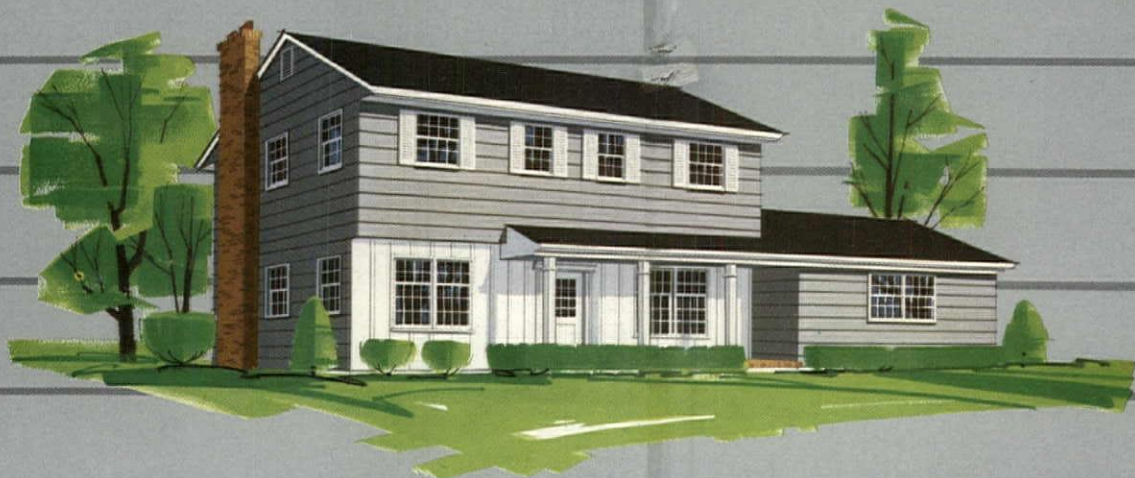
Armor-like vinyl color-coat won't blister or peel



As maintenance-free as metal with the insulating qualities of wood



2 styles, 4 beautiful colors, 6 color-coordinated combinations



{ NEW }

INSULITE VINYL-BOND SIDING

with a factory-finish that's guaranteed for 10 years

Eliminates on-the-job painting. Offers the selling power of lasting beauty, guaranteed performance.

This is the siding you and your home buyers are looking for.

It offers all the advantages of two famous products.

A new high-temperature process fuses basic Insulite Siding, performance-proved on 450,000 homes, with a tough industrial vinyl color-coat.



A product of Sherwin-Williams Industrial Coatings Division, this is the same vinyl color-coating used for over 15 years to protect everything from washers, dryers and refrigerators to railroad gondola cars.

That's why new Insulite Vinyl-Bond Siding is guaranteed in writing . . . no painting for 10 years. It stands up to the worst in weather—sun, snow, rain, heat and humidity. It won't chip, blister, flake or peel!

4 Beautiful Colors. Super White, Seaspray Green, Sandstone and Whisper Gray. Matching trim paint available from 10,000 Sherwin-Williams outlets.

2 Styles. Horizontal lap 12" wide, 16' long; vertical plain in 4' x 8' and 4' x 9' panels. Color-matched metal battens in 8' and 9' lengths.

Forget callbacks. Properly applied Insulite Vinyl-Bond Siding offers lasting beauty and value . . . plus callback-free performance.

Proven dimensional stability. Proven by builders coast-to-coast with Insulite Primed Siding. Joints stay butted; expansion and contraction are all but eliminated.

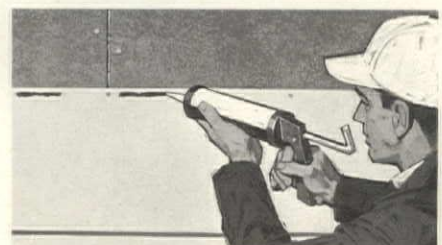
Application's a breeze! Just 5 common accessories needed!



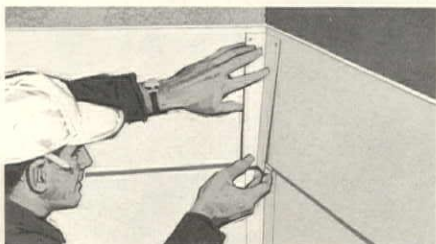
SAW IT LIKE WOOD. Cuts quick, clean. Made of wood fibers; has no knots or grain. Matching touch-up applicator furnished to reseal edges.



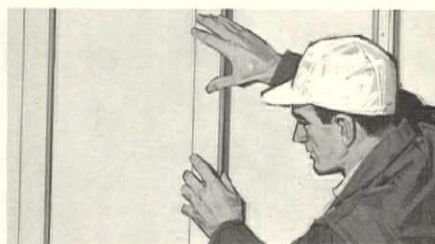
NAIL ALONG TOP EDGE. Siding won't split; vinyl color-coat won't chip. Nails easily, firmly. When complete siding job is done, nails won't show.



APPLY ADHESIVE ALONG TOP EDGE. Next course is held by adhesive at bottom, nails at top. Adhesive comes in cartridges, applies fast with caulking gun.



INSTALL METAL CORNERS. Both inside and outside corners slip under siding at bottom, nail at top. Lengths to match siding width. Vinyl color-coated.



SNAP-ON METAL BATTENS. Fit firmly on clip strips that nail to siding. Available in 8' and 9' lengths, are vinyl coated in colors to match siding.



APPLY CAULKING. Special long-life butyl caulking in matching colors applies like ordinary caulking. That's it. Complete exterior wall is up fast!



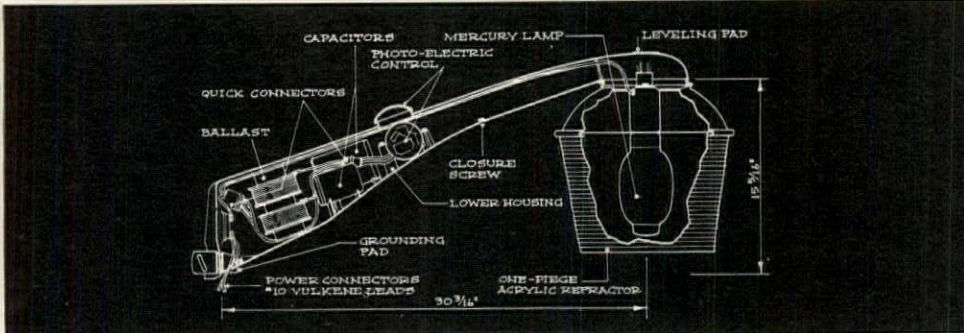
INSULITE VINYL-BOND SIDING

FOR MORE INFORMATION . . . SEE YOUR INSULITE DEALER

or write Insulite Division, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota.



VINYL-BOND IS A TM



PREASSEMBLED LIGHT in Ohio subdivision took 15 minutes to install on 25' redwood posts.

Mercury-vapor lamp lasts 16,000 hours, unit needs little maintenance. Manufacturer is GE.

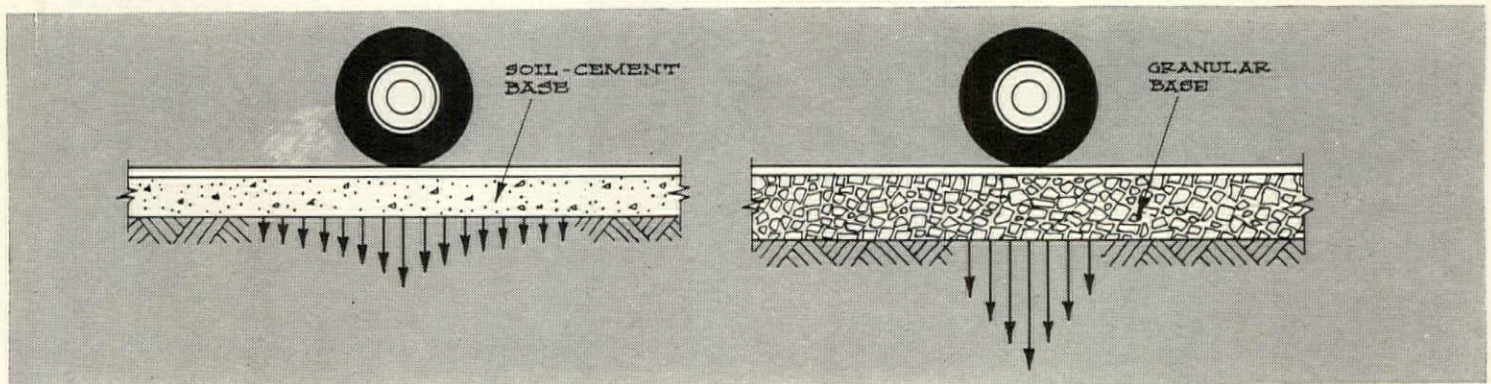
4. Leased street lights —at low cost—help sell rural houses

For \$1 a month, homeowners in E. E. Hammond's Beechwood, Ohio, subdivision can live in the country and still have well-lighted streets.

Leased by a local utility—Hancock-Wood Co-op, North Baltimore—the lights cost Hammond \$3.75 a month until buyers move in and assume the rental, splitting it four ways because one light serves four houses. They sign a ten-year contract with the utility, and the \$1 fee is added to their monthly light bill.

So far Hammond has invested \$300 in leasing the lights, which were installed last fall, but he thinks it is money well spent. The lights encourage prospects to visit in the evening, and buyers say the leasing cost for several years is lower than they would pay to install and keep up their own lights. Half of the 90-house subdivision is now sold, leaving Hammond with a monthly light-leasing bill of \$33.75. The lots are going at a four-a-month rate.

Maintenance of the lights is so low—service calls average only 0.20 a year—that Hancock-Wood expects to cut the fee to 25 cents on the next contract.



WEARING SURFACE over soil-cement outlasts top on granular base because load is spread out.

5. Soil-cement streets—stronger, cheaper to build

Road bases built of a highly compacted mixture of soil, cement and water can save money for two reasons: low first cost and low maintenance.

As the drawings above show, a soil-cement base has greater load-bearing capacity than a granular base because it is a semi-rigid material and distributes the load over a greater area. Its wearing surface needs to be only one-third to one-half as thick as the surface on a flexible base.

Its cost: less than concrete paving and less than granular base except in regions where granular material is abundant. General Development Corp. uses soil-cement

road bases for all of its big Florida projects (Port Charlotte, St. Lucie, Malabar), paying \$12,000 a mile for the base plus asphalt surface. Limerock concrete would cost \$16,000.

There are two ways to lay soil-cement:

1. In an ideal installation, like General Development's, cement is spread directly onto the roadway soil, and the two elements are watered and combined by a mobile mixing machine. Rollers compact the mixture to a 95% density, and a light coat of bituminous material, part of the final wearing surface, is laid immediately to prevent evaporation during curing. The

soil-free—is 75% of the material.

2. If the roadway soil is unsuitable and can't be adapted inexpensively—by adding sand to heavy clay, for example—borrow soils can be used (sandy loam is ideal) and premixed with cement in a plant.

Premixed soil-cement streets cost \$1.85 per square yard, using a 5" base and 1½" hot-mix surface, when J. D. Spears, Leo Brady and other developers built them in Overland Park outside Kansas City. The developers had used a 6" granular base and 2" hot-mix surface for \$1.60 a sq. yd., but were willing to pay a 25-cent premium for longer-lasting streets.



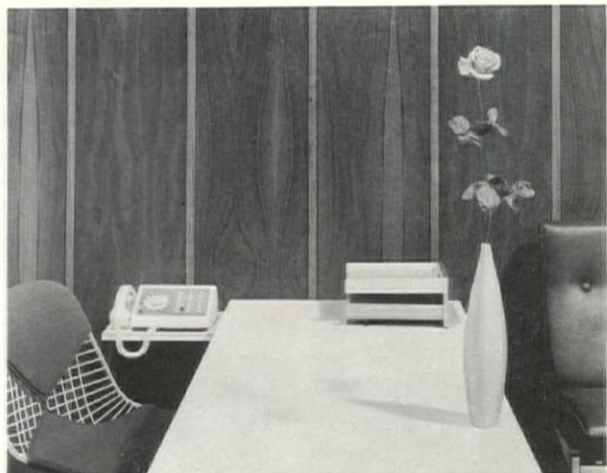
walnut panels with v-grooved pecan inlays

**This luxurious new  Georgia-Pacific
Inlaid paneling will fit any budget!**

(hardwood plywood panels with hand-rubbed look)

turn the page for details >

What you should know about new Georgia-Pacific factory-finished Inlaid paneling



Beauty on a budget

Until now, only custom carpentry could achieve the luxurious look shown in color on the reverse page. Georgia-Pacific has just put Inlaid paneling within anyone's budget limit by producing it in factory-finished plywood panels. Retail price is from \$26.95 to \$29.75 per panel. G-P Inlaid paneling provides the full beauty of custom inlaid work, combined with the practicality of quick, easy installation and a protective, attractive factory-applied finish.

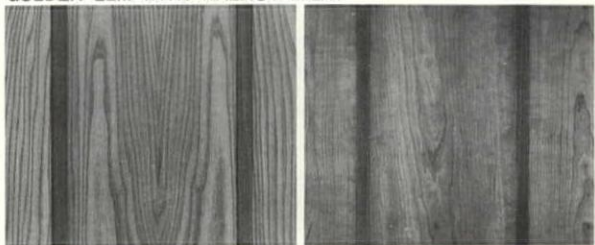
New Acryglas® finish gives hand-rubbed appearance

Both Inlaid and Gold Crest lines feature G-P's exclusive Acryglas catalyzed resin finish in a new application that gives the appearance of a hand-rubbed oil finish. The Acryglas finish is baked on in a 3-coat process, as per government specifications for finishing institutional furniture. This finish reduces flame spread up to 50% as compared to untreated veneers. It resists soils, stains and scuffs.

Specifications

Sizes and Species. Available in 4' x 8', 9' and 10' panels of 3-ply 1/4" hardwood plywood. (Panels of other thicknesses available on special order). Species: Golden Elm with Walnut inlay, Walnut with Pecan inlay, Pecan with Walnut inlay and Heirloom Cherry with Walnut inlay (this features a "distressed"* finish on the Cherry).

GOLDEN ELM WITH WALNUT INLAY



DISTRESSED CHERRY WITH WALNUT INLAY

Face Veneers and Inlay. All face veneers are flat sliced and book matched on 14 3/4" sections, 3 sections per panel, separated by 1 1/4" wide inlaid strips. An inlaid strip is also provided at one edge of each panel for balanced installation.

V-Grooves. V-grooves are used at each joint between the inlaid strip and the sections. Grooves are accent finished.

Backs. Backs are hardwood veneers conforming to the requirements of CS 35-56 and are sealed to minimize moisture absorption.



Also new... Gold Crest paneling



GOLD CREST GOLDEN ELM

Specifications are the same as the Inlaid line, with the exception that 1/2" channels, painted mocha brown, are used instead of inlays. Veneer patterns available are Golden Elm, Walnut, Pecan and Heirloom Cherry with "distressed"* finish.

*Note: "Distressed" Cherry has an antique appearance with Acryglas finish.

SEE INLAID PANELING AND OTHER GEORGIA-PACIFIC BUILDING PRODUCTS AT THE NEW YORK WORLD'S FAIR "HOUSE OF GOOD TASTE"

Mail this coupon for full details on new G-P INLAID Paneling:
Georgia-Pacific Corp., P.O. Box 311, Portland, Ore. 97207

Send full color brochure Have salesman call

NAME _____

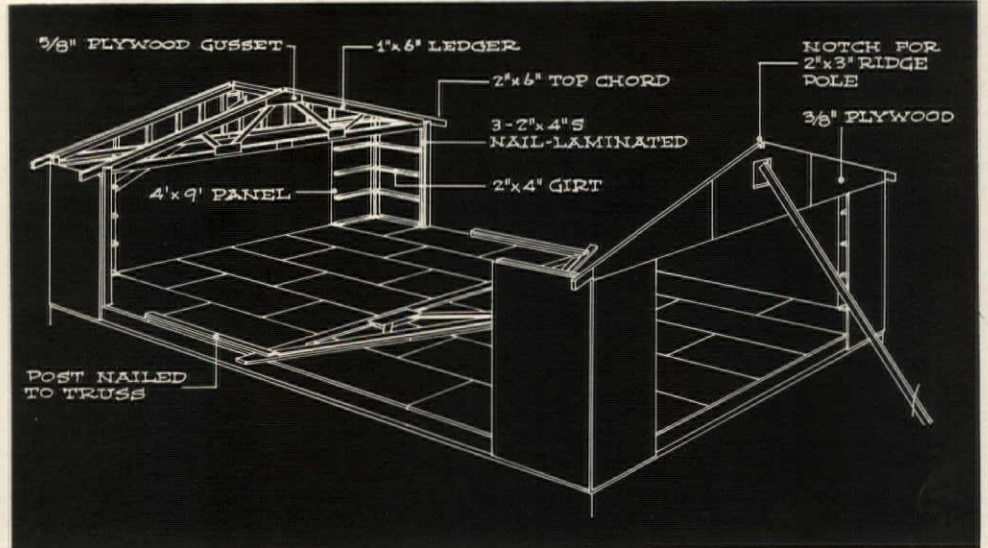
ADDRESS _____

CITY _____ ZONE _____ STATE _____


GEORGIA-PACIFIC
 plywood • paper • chemicals • lumber

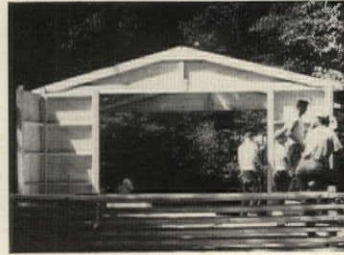


INTERLOCKING FRAME of trusses in slotted posts (*above*) tilts up. Erection (*below*) starts



with gable-end truss and corner panels. Overlapping plywood is nailed to posts, floor beams, sill

plate. Workmen butt next post-truss against panel girts, nail, add two panels and another post-truss.



Truss-and-post prefab system locks roof to walls

Interlocking joints between trusses and posts (*photo, top left*) are the core of a new construction method developed by Forester Homes, Lansdale, Pa. The system, designed for builders with limited equipment, lets a small crew complete a shell in one day with nothing more than hammers. Tolerances are tight—1/16", and costs are moderate—about \$4 a sq. ft. for a shell-and-trim package delivered to franchised dealers.

Posts are made of three nail-laminated 2x4s. The center 2x4 is cut 6" short to form a pocket into which the 2x6 truss end slips. The outer 2x4s are then nailed to the truss end.

Truss-and-post units are assembled flat on the subfloor, tipped erect on 4' centers and connected by 3/8"x4'x9' plywood panels nailed to 2x4 girts. Window-sill panels, like the solid wall panels, are automatically placed at the right height by setting the bottom girt on the edge of the subfloor. Lintels over doors and windows are modified plywood box beams bearing on jack studs.

Roof panels are 1/2" plywood nailed to notched 2x3 purlins which bear on ledgers nailed to the top chord of each truss. Purlin ends are set back 3/4" to let the plywood center on the top chord. At roof ends, 4x4 and 4x8 panels alternate so that joints are staggered. The floor system is similar (*see below*).

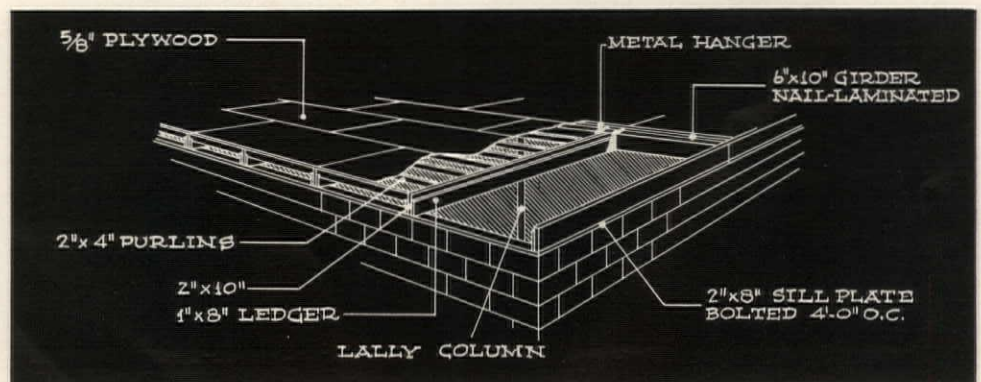
Lumber dimensions must be consistent (the house won't go together on a poorly leveled foundation), so Forester uses only kiln-dried wood.

Every model in the company's line—some 75 designs—is built from stock parts. This standardization, plus a highly mechanized cutting and assembly line, holds down costs. Even with polystyrene-backed aluminum siding and No. 1 oak flooring, the package price is \$4.50 a sq. ft. or less.

The new system (called KeyLok) has been accepted by FHA and approved by the Building Officials Conference of America (BOCA). Patents are pending.



INTERLOCKING FLOOR has panels of 5/8" plywood nailed to notched 2x4 purlins. Beams, 2x10s



with 1x8 ledgers, hang from center girder 4' o.c. Purlins bear on ledgers, are set back at panel ends

to let plywood center on the beam. Same system is used to nail roof panels to trusses.



no painting!



no
scraping!

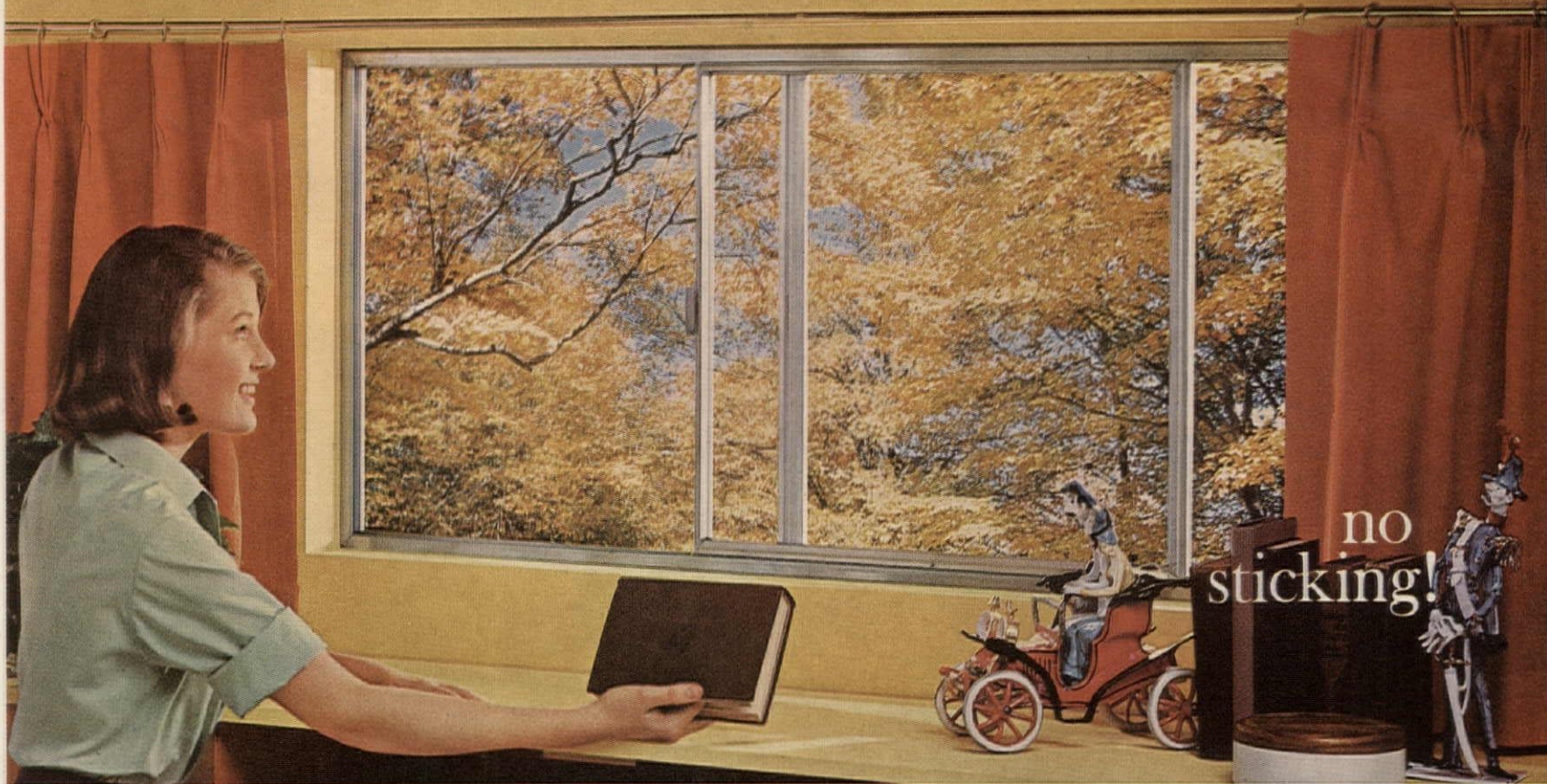
These aluminum windows and doors look out

No more painting, scraping, sticking or warping. Just years of carefree living with windows that look out for themselves. Aluminum windows. Windows were MADE to be made of aluminum—if they are made well and right. That calls for good hardware, good glazing, every edge exactly plumb. There are people who make top-quality aluminum windows and sliding glass doors. Neither they nor we claim windows and doors alone sell houses—but they help. They give you strong and honest talking points—like *easy opening* and *easy sliding*, because moisture

won't make them warp or swell, and *less maintenance* because they ignore weather. So to eliminate future complaints, buy quality . . . buy aluminum windows and doors.

Screens, too, were MADE to be made of aluminum. They're clean, tough, cool, weather-resistant and won't stain adjoining surfaces.

Avoid call-backs and hard feelings . . . make it quality windows, doors and screens of Alcoa® Aluminum and relax . . . let them look out for themselves.



no
sticking!



no warping!

for themselves!

QUALITY CERTIFIED

The manufacturer guarantees by affixing this label that this window or door is a duplicate of samples found by independent test and physical inspection to comply with the specifications of Architectural Aluminum Manufacturers Association.

CODE 00-0



This label on aluminum windows and doors assures you that the product has met or exceeded the quality standards established by the Architectural Aluminum Manufacturers Association.



ALCOA

ALCOA BRINGS YOU AMERICA'S FINEST NEWS SHOW... THE HUNTLEY-BRINKLEY REPORT, ON NBC-TV

Circle 27 on Reader Service Card

Luxurious economy—to combine appeal and savings. Only **Poly-Clad**, the big word in wall paneling, gives you rich-looking, low-cost **Poly-Clad Duro-Grain**. Smart. Inexpensive. With durability that only **Poly-Clad protection** can provide. Cuts many dollars from building or remodeling costs.



Poly-Clad Duro-Grain lets you offer **lifetime beauty** and **wearability** in four handsome, wood-grain finishes—priced to put paneling in every job. Ask your **Certified Plywall Dealer** about this unusual wall paneling, or write:

Plywall^{DIVISION}
evans products company
P. O. BOX 880 • CORONA, CALIF.



SOMETIMES WE WONDER

Smoke-filled rooms, doodles, gadgets and gimmicks... we're never sure what's going on in our Advertising Department or what's coming out next. One thing we are sure of... it takes more than paper airplanes to get a successful advertising or promotional program off the ground. Heil-Quaker recognizes the coordinated advertising activities involved in the successful promotion of new homes in today's highly competitive market. They realize, also, their responsibility in cooperating with these promotional efforts—the need to inform prospective buyers of the value that is built into a home with a Heil central comfort system. A Heil District Manager comes prepared with the material needed to add effective sales appeal to your home comfort story. He is also ready to assist you from the start in building a complete advertising and promotional program. He'll be happy to talk things over with you. We think you might enjoy listening. Just contact Department SM, The Heil-Quaker Corporation, 647 Thompson Lane, Nashville, Tennessee 37204. If new and different ideas are the order of the day, he might just bring along an advertising representative. You'll enjoy talking to him, too. Just remind him to keep the ashes off the rug.

HELL

HEATING AND AIR CONDITIONING
THE HEIL-QUAKER CORPORATION
647 THOMPSON LANE - NASHVILLE, TENNESSEE

A SUBSIDIARY OF THE WHIRLPOOL CORPORATION

“These days, a buyer will pay more for a building when it’s got features that pay for themselves.”

Like FREEDOM WINDOWS of Stainless Steel.

This is fact.

FREEDOM WINDOWS are a premium product. A *standard* premium product, with the most profitable premium you ever paid.

No expensive custom work. No expensive construction delays. No expensive call-backs.

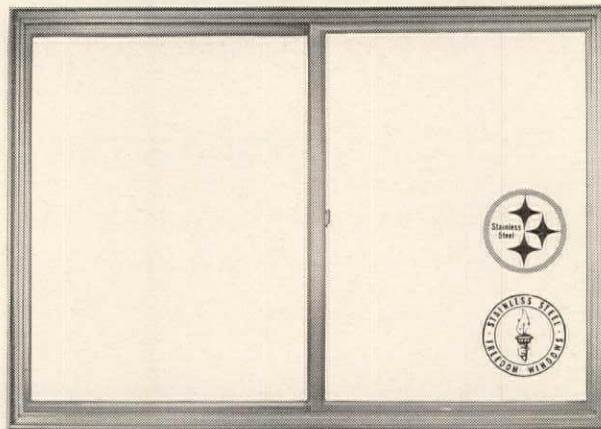
And no painting required. FREEDOM WINDOWS, stainless all the way through, can *never* stick, rust, etch, crack, chip, peel, flake, twist, rot, discolor, warp, swell, shrink, scratch, bleed, rack, or pit.

They’re strong, stronger than steel. They never need fussing or fixing. They come clean easily with soap and water.

In fact, the cost of soap and water is about the only maintenance expense anybody ever has with FREEDOM WINDOWS, single-hung, double-hung, or sliding. And they’ll last somewhere close to forever.

You *know* how people feel about stainless steel. Now you can give it to them without paying a custom price or fretting about delivery or maintenance or anything at all.

Which is what we mean by a feature that pays its own way. Year after year, etc.



FREEDOM WINDOWS of Stainless Steel

For details write us at Dept. HO-8919



MANUFACTURING DIVISION
REPUBLIC STEEL CORPORATION

Youngstown, Ohio 44505



THE MAN FROM
MANUFACTURING

FOR LESS MONEY THAN YOU EVER PAID BEFORE—YOU CAN NOW GET **FLOAT- AWAY'S**

High Quality Construction

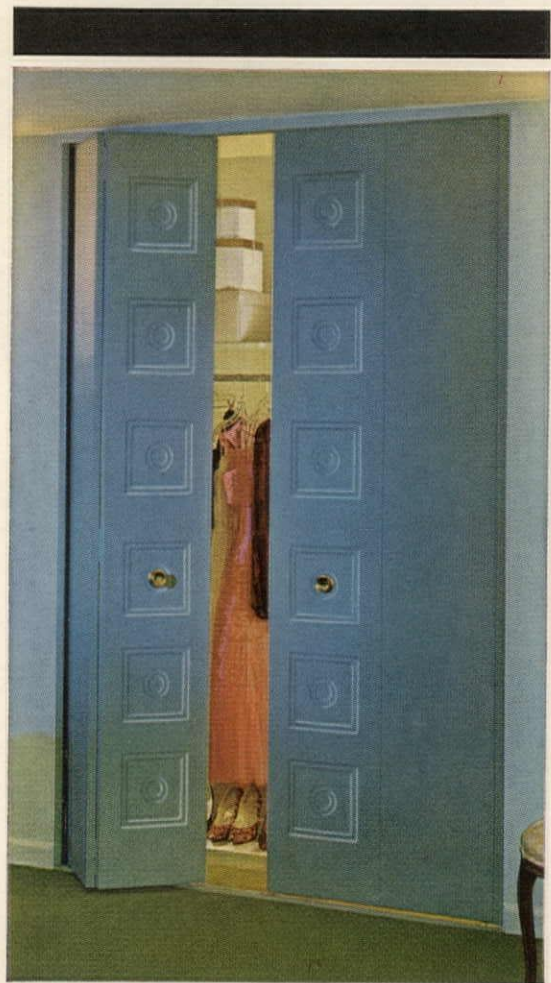
Decorator Designing

Unbeatable Exclusives

Why lower prices with *no change* in product? Volume—and more volume. Builders buying Float-Away doors like never before. Liking them. Cutting costs. Coming back. Result—we've grown big. So big we've become automated and can reduce prices without lowering quality.

Get Float-Away's exclusive 23 gauge steel—10% more than any other metal bifold door. Exclusive zinc coating, bonderizing—rust-free guarantee. Smart, decorator styling.

Get the best folding door for your money! The sturdiest, most trouble-free, smartest-looking door! Now's your chance—slash construction costs *even more!* Wire or write today for details on Float-Away's new lower price offer!



*The "Georgetown,"
one of five decorator designs.*



**FLOAT-AWAY
DOOR COMPANY**

LONDON-LENSCRETE LTD., QUEEN'S CIRCUS, LONDON, S.W.8.
1173 ZONOLITE RD., N.E. • DEPT. H-964 ATLANTA 6, GEORGIA



Sustained Excellence

Sustained excellence in manufacturing kitchen cabinets is the sum total of hundreds of successful operations, from the engineering that predetermines the construction of every part of every cabinet . . . through fabrication by skilled personnel working with the finest tools and machinery available to the industry . . . to utterly dependable shipping demonstrated by years of not missing a scheduled shipment. We are proud of assurances we constantly receive from customers that we have passed every test of excellence, and that for quality alone, or *quality-at-a-price*, or *quality-at-a-price-plus-service*, we have no equal in the kitchen cabinet industry.



"SHY-ick"

"The most beautiful kitchens of them all"

BRONZEGLOW® BIRCH • ROYAL® BIRCH • HEATHER® BIRCH



H. J. SCHEIRICH CO.
250 OTTAWA AVENUE, LOUISVILLE 9, KENTUCKY

Please send full information on Scheirich Kitchens in Bronzeglow Birch, Royal Birch and Heather Birch. Also include literature on Scheirich Bathroom Vanities.

Name _____
 Address _____
 City & State _____
 County _____

H&H-964

The Judge Jeremiah Sullivan House at Madison, Indiana, was built in 1818 and is one of the finest examples of Federal architecture in the Middle West. It is now being restored under the auspices of Historic Madison, Inc. The H. J. Scheirich Company is serving as co-sponsor of the restoration of the first floor kitchen.



Music to go to sleep by

The proud owner of a LENNOX HS6 condensing unit hears a lullaby of silence.

Windows closed tight. Inside is a cool, clean, dry, quiet slumberland.

Nature's Freshness by LENNOX!

The neighbors?

Open-window neighbors may hear a soft, musical tone with a drowsy, sonorous timbre.

Some say it's a pure B flat. Others say it's an A.

The sound is the soft whisper of low RPM, high capacity fans.

These fans move oceans of air through oversize, high efficiency coils. Silently.

And glass fiber insulation further hushes the hush.

Builders and dealers, too, sleep better when an HS6 is chosen.

Fast, fool-proof installation protects profits. Trouble-free performance eliminates call-backs.

Like all fine things the LENNOX HS6 best serves those who have an image of quality to maintain.

Write us for our "SILENT" story.

LENNOX Industries Inc.
344 South 12th Avenue,
Marshalltown, Iowa

LENNOX

AIR CONDITIONING/HEATING



EVERY DAY THE DEMAND FOR QUIET



LISTEN! What was only a whisper a few short years ago has become a powerful voice heard coast to coast—home buyers and renters demanding the modern comfort of Quiet Conditioned Living. And the demand gets louder every day.

Alert builders are not only listening. They're meeting this demand—and clinching sales, too—with Celotex quiet-rated partitions, floor-ceiling assemblies, and acoustical ceilings.

Quiet Conditioning begins with acoustical ceilings by Celotex—in family room, kitchen, wherever noise should be hushed. And you're in for a pleasant surprise when you see the beautiful new Celotex

GETS LOUDER

patterns, new washable finishes—top quality ceilings you'll be proud to install in your finest homes and apartments.

To reduce noise transmission between rooms and apartments, Celotex offers a number of superior wall and floor-ceiling constructions—using Celotex Soundstop Board* and Celo-Rok® Gypsum Wallboard.

The Celotex Corporation has taken the lead in providing you with proved products, systems, and promotional material to help you turn demand into sales and profits. Send coupon for free technical and merchandising booklets. *Trade Mark

THE CELOTEX CORPORATION
120 S. La Salle St. • Chicago 3, Ill.
Subsidiaries: Crawford Door Company; California Celotex, Inc.; Big Horn Gypsum Company; The South Coast Corporation; Vestal Manufacturing Company; Cweco Industries Limited (Canada); Celotex Limited (England). Affiliate: South Shore Oil and Development Company.



Dept. HH-94, THE CELOTEX CORPORATION • 120 S. La Salle Street, Chicago 3, Illinois

Please send me, without obligation, the FREE booklets checked:

- New Building Techniques for Quiet Conditioned Living. Management Guide for Quiet Conditioned Living.

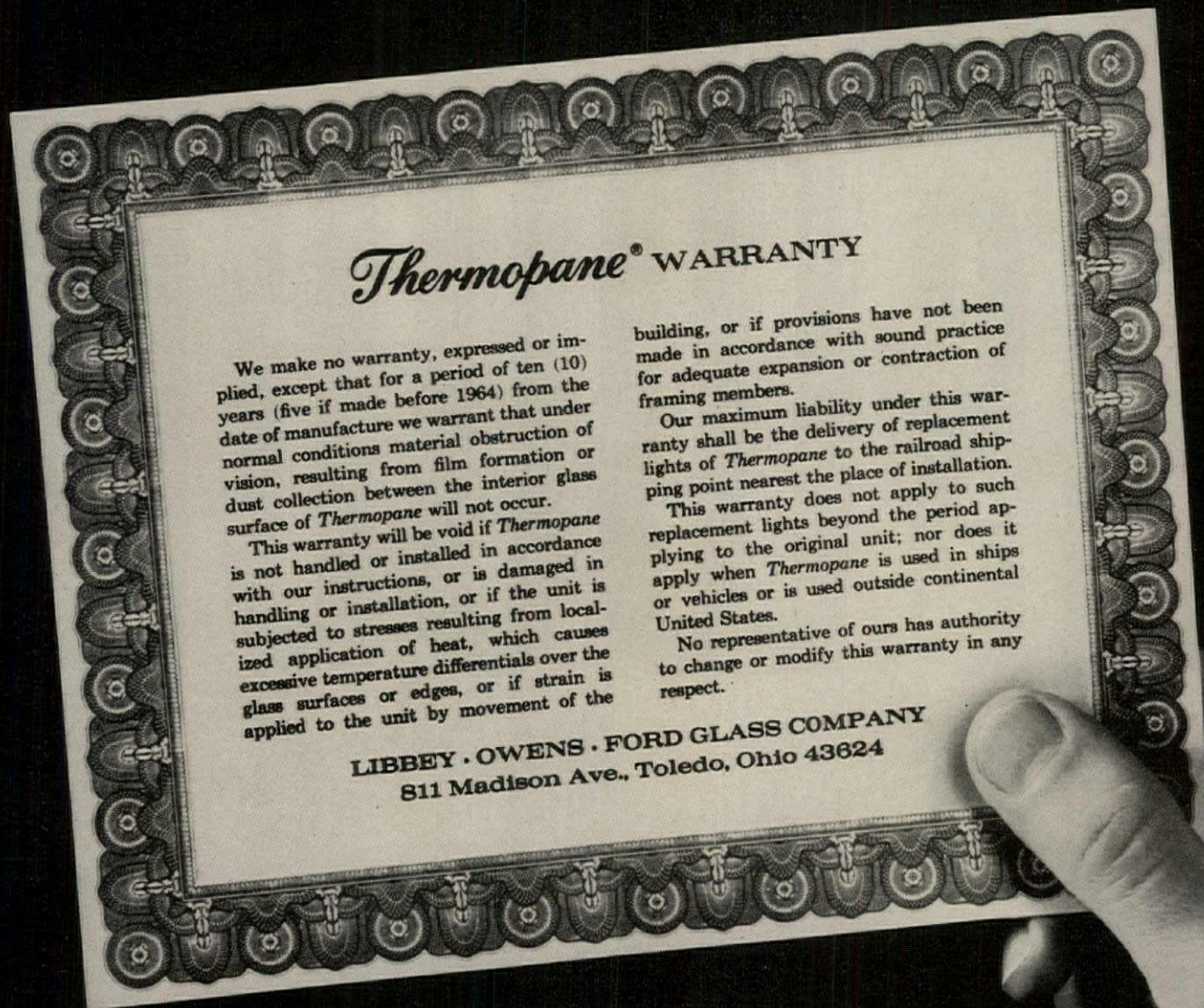
My Name.....

Firm Name.....

Address.....

City..... Zone..... State.....

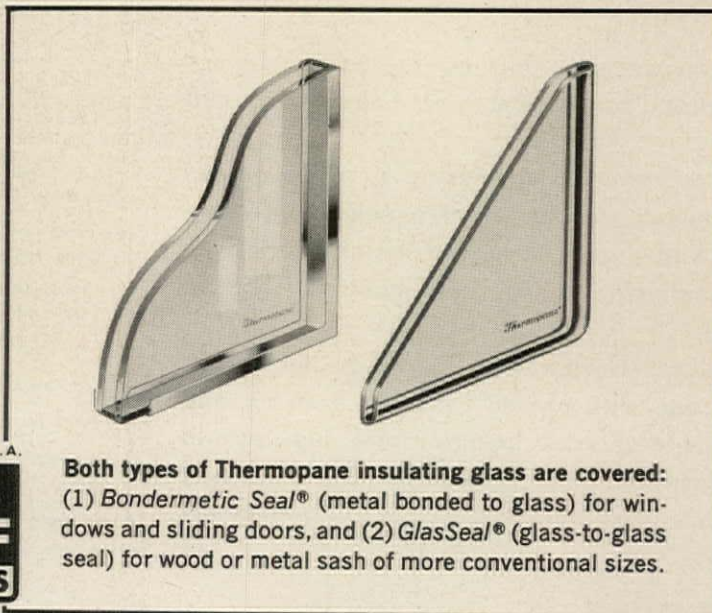
NEW! 10-YEAR WARRANTY ON ALL *Thermopane*[®] INSULATING GLASS



**Helps sell 'em...
helps keep 'em sold**

TODAY, homeowners want protection for every product in their homes. And they want it for a longer period of time. In line with this growing trend, L·O·F has *doubled* its warranty on *Thermopane* insulating glass... the first insulating glass manufacturer to offer the owner and builder such a generous warranty on *every* unit they produce.

Here's a real sales tool! Use it to help sell your homes, speed service, reduce call-backs and support your own home guarantee. Display this new warranty where prospects can see it!



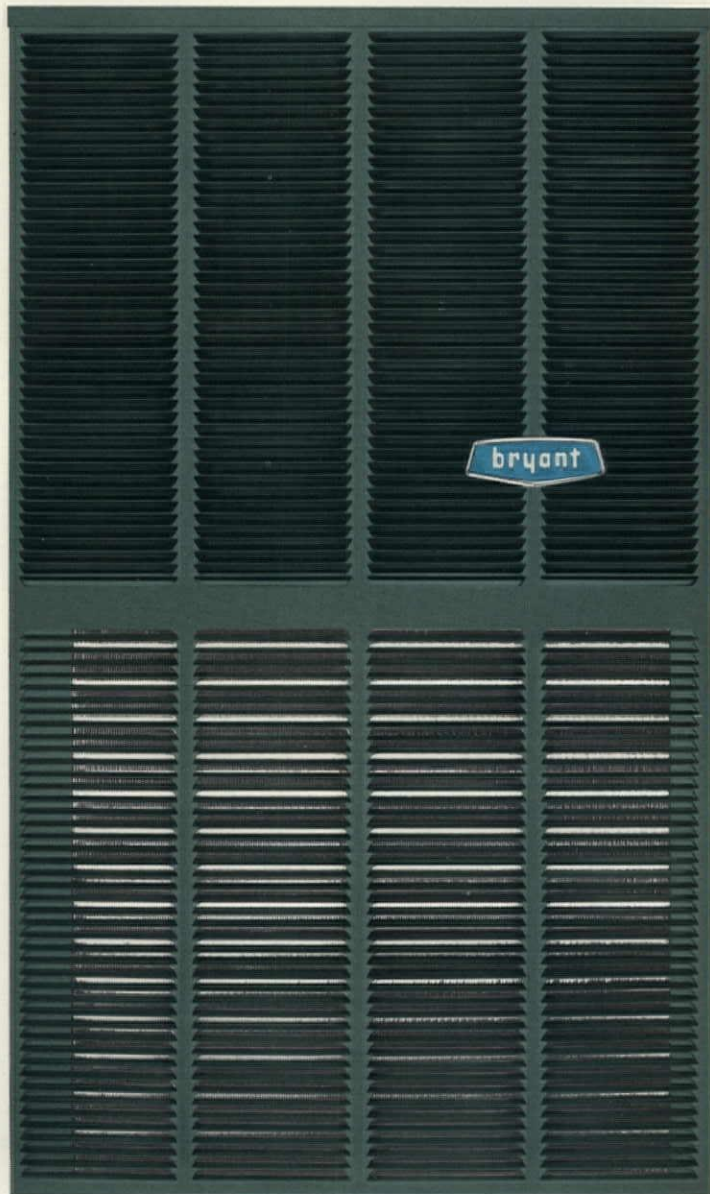
Both types of Thermopane insulating glass are covered: (1) *Bondermetic Seal*[®] (metal bonded to glass) for windows and sliding doors, and (2) *GlasSeal*[®] (glass-to-glass seal) for wood or metal sash of more conventional sizes.

Libbey · Owens · Ford
TOLEDO, OHIO



NEW FROM

bryant



Super-compact
2½-ton
air conditioning
unit



It can save you
up to \$200 per apartment over
conventional heating and air
conditioning systems.

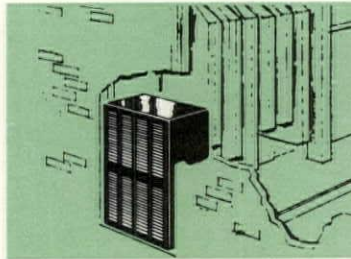
23⁵/₈" wide, 39¹/₄" high, 15¹/₈" deep

MONEY SAVER

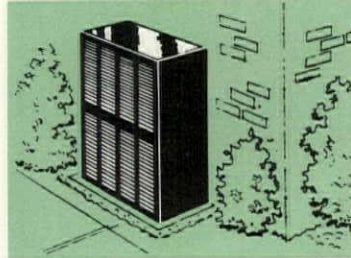
SPACE SAVER

Bryant's compact air conditioner saves you money, takes little space, makes apartments more rentable.

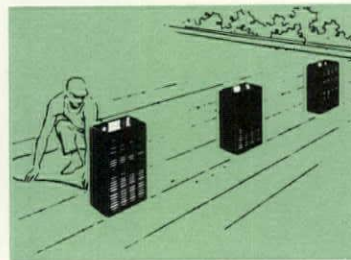
This new 2½-ton unit is the answer to your space/cost squeeze. Anytime you can save up to \$200 per apartment, it's worth looking into. Particularly when many progressive builders have already proved it can be done. The Bryant 564 is engineered and sound-insulated for quiet operation. You can install it directly off living quarters. And, of course, each tenant controls his own climate.



IN THE WALL. The 564 can be mounted in the outside wall of a 24" closet at minimum installed cost. (2½-ton mounts in 30" closet).



ON THE GROUND. Air intake and discharge are on the same side so the 564 fits tight against the building.



ON THE ROOF. Easily connected to the fan-coil assembly which can be mounted on ceiling, wall or floor of apartments below—or connected to furnace and coil in central location in the apartment.

USE IT WITH HYDRONIC HEATING. The companion 509 fan-coil is available with a hot water coil which can be connected to the central hot water system for winter comfort. In summer the 509 fan-coil does the cooling job.

USE IT WITH WARM AIR HEATING. The 564 condensing unit can be used with a downflow, upflow or horizontal system.

NOW 3 CAPACITIES. Bryant 564's are available locally in 1½, 2 tons as well as the new 2½-ton unit. To see it, call your Bryant dealer, distributor or factory branch (listed in the Yellow Pages). He'll bring one out to you. It's so compact he can tuck it into his Volkswagen (if he has one).



**THE FRESHEST, NEWEST
MERCHANDISING
IDEA IN YEARS
!!!!!!!!!!**

Ask about our Springtime Home Promotion to help you rent apartments or sell homes.

Join up with

bryant

the company on the move!!!!!!

THE BRYANT MANUFACTURING COMPANY
Indianapolis 7, Indiana

House & Home

has

TWO BIG ISSUES

coming up

NOVEMBER

*New Products, and
1965 Housing Forecast*

DECEMBER

*Annual Prefabrication
report*

For further information
contact the House & Home
office nearest you



A MCGRAW HILL/DODGE PUBLICATION

DELTA[®] SINGLE HANDLE BALL FAUCETS

LAVA-SPRAY
HAIR RINSE
FOR THE
BATHROOM



Washing children's hair is now simplified by the new Delta Lava-spray. Enjoy the advantages of the finest faucet along with the convenience of the shampoo rinse.

DELTA FAUCET COMPANY

GREENSBURG, INDIANA

Delta Faucet of Canada Ltd. • Rexdale, Ont.

Circle 37 on Reader Service Card



The nation's
most desired
motel franchise
is now available to
qualified builders of new
motels in selected areas.

The Quality Courts Motels franchise offers:

- Professional site planning — including building site inspection and invaluable guidance.
- Proven standard motel plans, with professional architectural assistance: local code checking, plot plan development, complete working drawings and biddable specifications.
- Financing counsel to help you get the best mortgage at lowest cost: up-to-date information on loans, interest rates and brokerage fees.
- Central-purchase savings on furnishings and supplies through M&H, a Quality Motels subsidiary.
- Complete professional assistance in setting up your organization: personnel training, an experienced break-in staff to help you get under way.
- Profitable food and beverage service affiliation with Dobbs House, if desired.
- Assured higher occupancy through Quality Motels' advance reservation system and continuous national advertising program.
- The industry's most favorable franchise agreement, at a cost lower than many offering *half* as much.

If you would like to know more about this valuable franchise opportunity, write Bin Q-17, Quality Courts Motels, Daytona Beach, Florida.

Circle 36 on Reader Service Card



Why spend more for substitute floors that give less value than Oak?

There are more expensive floors than Oak, but none so popular.

You could, for instance, pay up to 50% more for a synthetic flooring material that is a poor imitation of Oak. But how many people want an imitation?

Only Oak Floors give home buyers all these advantages: natural wood beauty, lifetime durability, resilient



comfort, resistance to damage, easy maintenance, sanitary and healthful . . . and low cost.

Oak Floors are one of the best values in home building. They take the risk out of buyer acceptance for builders, offering more real benefits to prospects. Use Oak Floors in homes and apartments for quality construction at a practical price.

N·O·F·M·A OAK FLOORS

National Oak Flooring Manufacturers' Association, 814 Sterick Building, Memphis 3, Tennessee.



Back in **1950**, the latest in model home features was the garbage disposer. Boy, did it sell homes!



In **1954**, it was kitchen built-ins...



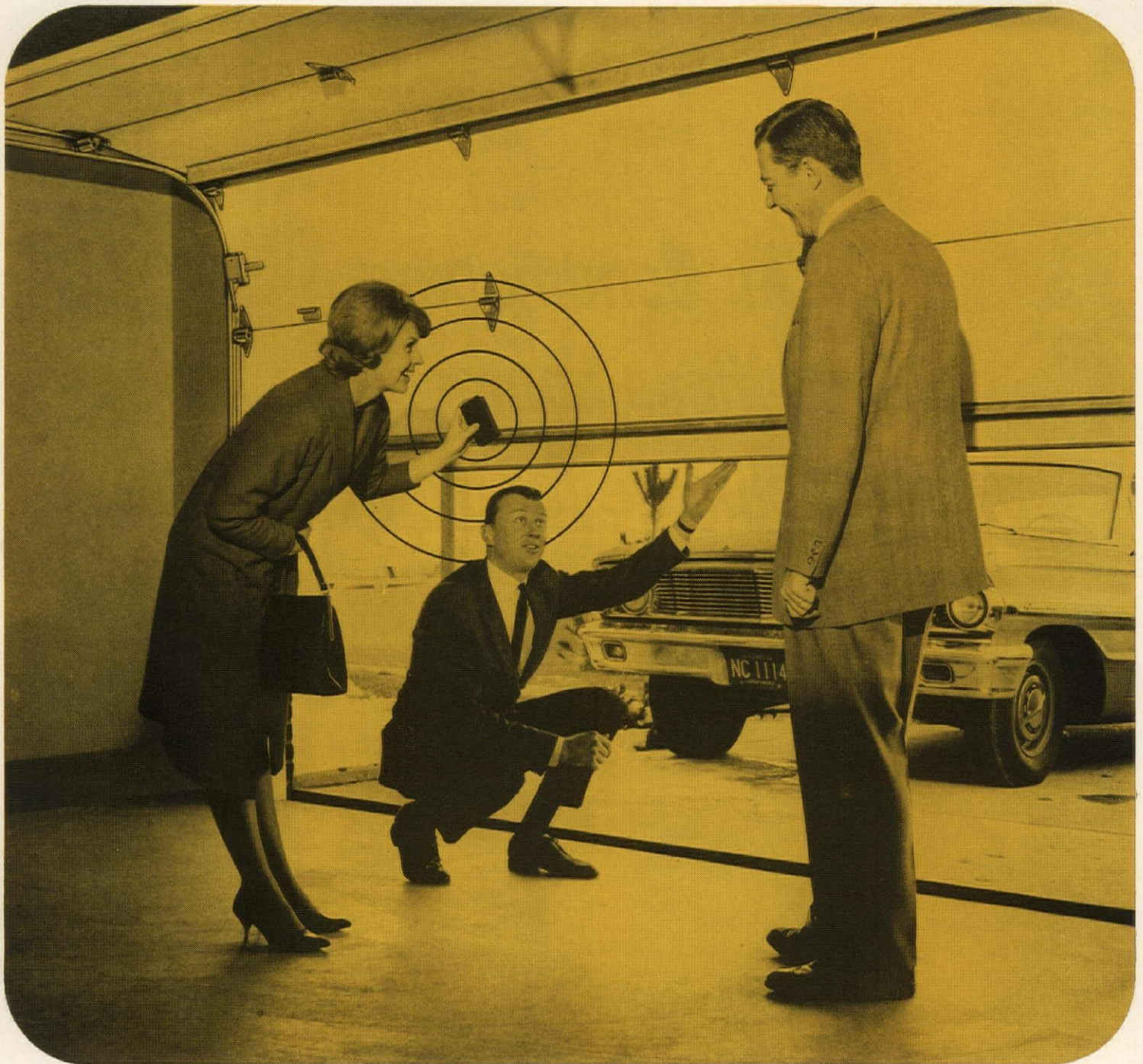
in **1960**, central air conditioning...



in **1963**, refrigerator-freezer combinations were great motivators.



See us at the
New York
World's Fair!



For 1964, the hot sales feature is **AUTO-MATE** automatic garage door operator

This year, professional builders are selling homes faster by giving the public what they want—the convenience and safety of AUTO-MATE!

It makes a convincing self-demonstration. Home buyers want to try for themselves the push-button convenience, when you show them how they

can avoid exposure to bad weather and night-time dangers. They're quick to see the safety factors, too, when you demonstrate and describe safety reversing, overload protection, extra garage-lighting circuits, separate radio, UL approval—features that have made "OVERHEAD DOOR"

operators famous for years.

Here's sales appeal that can help you close a sale faster—save on interest costs—with top mortgage evaluation. And the best part is the low cost to you—less than \$150 installed*! Contact your "OVERHEAD DOOR" Distributor today for details.



*Overhead Door Corporation announces it is producing a quality operator at a price to its distributors which will permit them to sell for a price of less than \$150 installed (less wiring and travel).

made only by

OVERHEAD DOOR CORPORATION

General Offices and Manufacturing Division: Hartford City, Indiana. Manufacturing Distributors: Dallas, Texas; Portland, Oregon; Oxnard, California; Cortland, New York; Hillside, New Jersey; Lewistown, Pennsylvania; Nashua, New Hampshire. In Canada: Oakville, Ontario.

YORK Air Conditioning gives these homes a better climate for living!

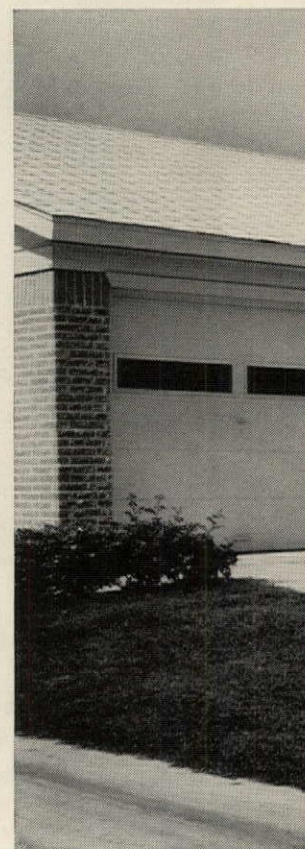
Central air conditioning by York can be a "sales closer" for you . . . a profit-maker, not an added cost! As more and more home buyers want and expect year-round comfort, you can set the pace in your community by offering quality air conditioning, by York.

York systems are versatile, may be installed with any type of heating system. Or you may select a complete package that includes a Borg-Warner oil or gas-fired furnace and the matching York cooling system.

Advanced York features for builders include factory-charged systems, with Quick-connect

couplings that speed and simplify installation on the job-site; a complete line of units that adapt to your specific needs: units that tuck away in attic, carport, basement or utility room. And in every case, each system has been designed with the builders' needs in mind . . . has been engineered to give your homes sales appeal. Yet, York air conditioning systems are competitively priced, give you maximum value for every dollar.

Mail the coupon to York for complete information on the York Builder Program and detailed facts on York systems for fine homes.





Builder Frank Robino offers York Central Air Conditioning in these homes at Heritage Park near Wilmington, Delaware. Both the Holiday House (left) and the Crestwood House (right) were designed by John A. Falini, Architect.



Builder Fred Peek specified York Central Air Conditioning for these fine homes in Richardson, Texas. Architect is David M. Sweeney.

YORK CORPORATION
 Subsidiary of Borg-Warner Corp.
 YORK, PENNSYLVANIA
 THE QUALITY NAME IN AIR CONDITIONING AND REFRIGERATION



WANT MORE FACTS ?

YORK CORPORATION
 York, Pennsylvania

HH-94

Send me complete information on York Central Air Conditioning.

Name _____

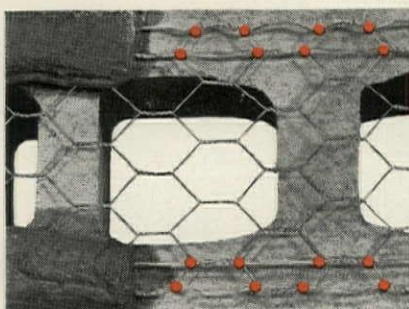
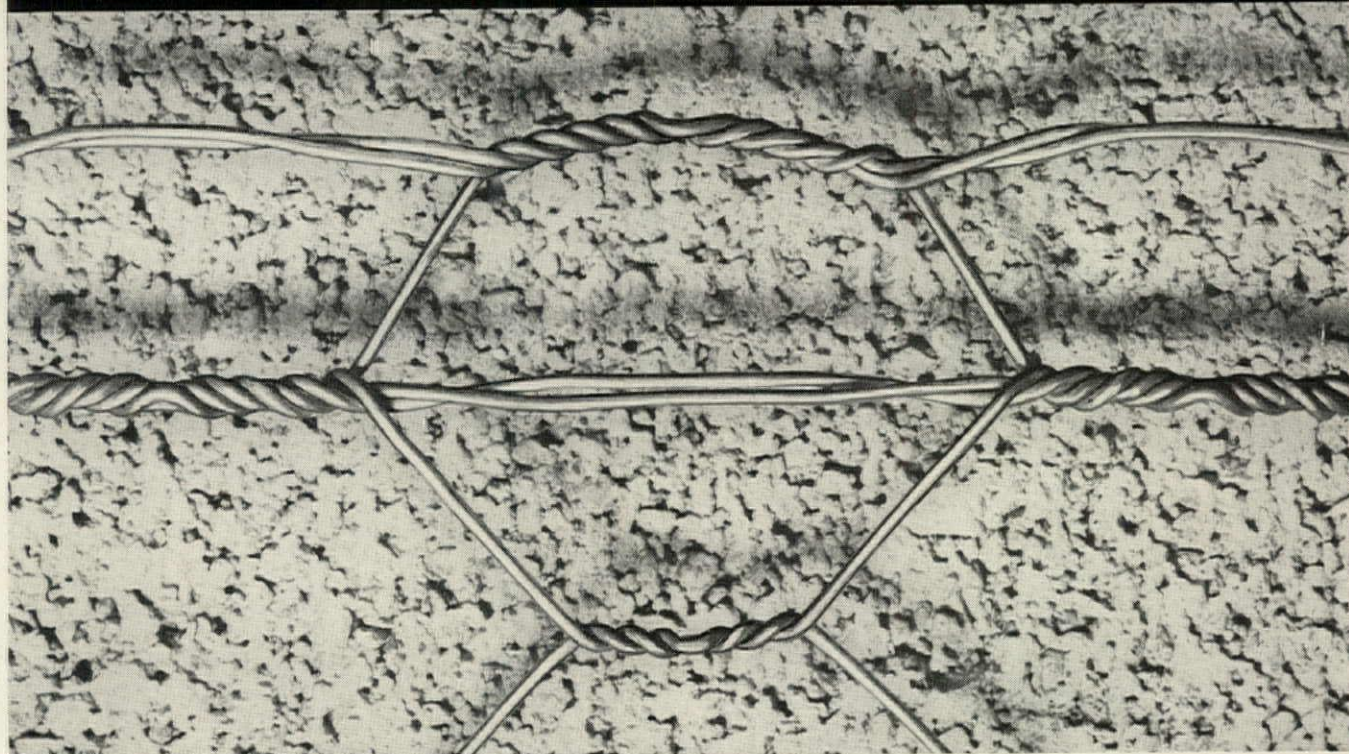
Address _____

City _____

State _____

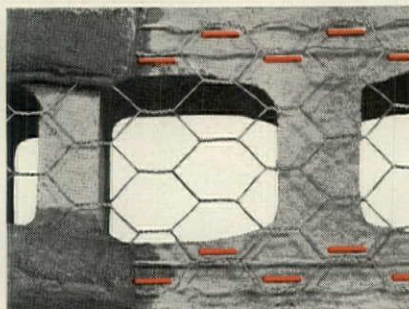
KEYWALL

Galvanized Wire Mesh Reinforcing



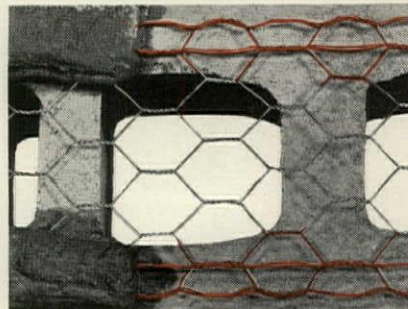
● LOCKS
28 mortar locks to the block foot

The more locks, the more resistance to shrinkage cracks. Movement is restrained at each of Keywall's mortar locks. No one lock has to restrain more than the movement in $\frac{3}{4}$ " of block.



— ANCHORS
14 inches of mechanical anchors to the block foot

Mechanical anchoring restrains thermal movement and shrinkage, too. No other reinforcement comes close to offering the amount of mechanical anchor that Keywall does.



◇ BONDS
22 square inches of bonding surface to the block foot

The more metal in surface contact with the mortar, the better the reinforcement. Keywall's 22 square inches per foot of block is about 55% more than a pair of $\frac{3}{16}$ " truss rods, about 96% more than a pair of 9-gauge truss wires.

KEYSTONE STEEL & WIRE COMPANY • Peoria, Illinois 61607

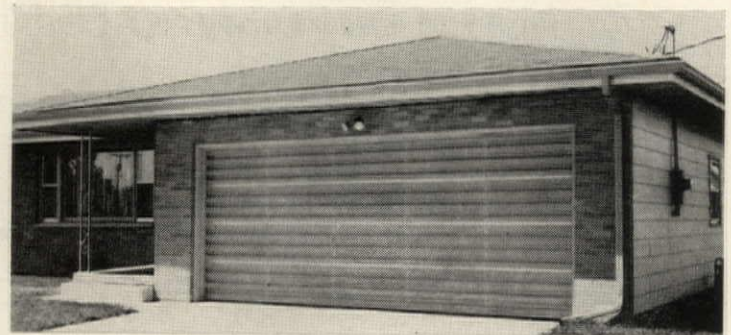
MAKERS OF KEYCORNER • KEYSTRIP • KEYWALL • KEYMESH® AND KEYMESH PAPER-BACKED LATH • WELDED WIRE FABRIC • NAILS

For more information circle indicated number on Reader Service card, p. 129.

Doors and Windows



Wood-framed sliding door comes in six- or eight-foot widths glazed with insulating or sheet glass. Weather-stripped units are primed outside, have dual roller supports with integral leveling adjustments. Andersen, Bayport, Minn. (Circle 200 on Reader Service card)



Translucent door turns garage into a well-lighted bad-weather play area. Raylon door has glass fiber panels, aluminum frame and galvanized hardware. It comes in green, tan or white and in sizes of 8' x 6'6" to 16' x 7'. Raynor, Dixon, Ill.

Circle 203 on Reader Service card



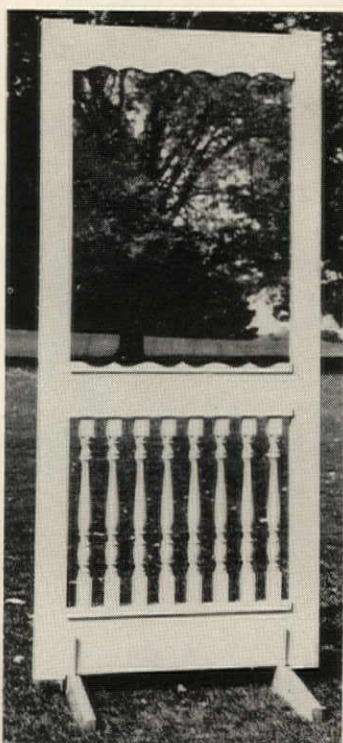
Colonial entrances come in single door, double door and single or double sidelight models with a variety of authentic pediments. New inexpensive line is made of preservative-treated Ponderosa Pine. Lee Millwork, Fair Lawn, N.J.

Circle 204 on Reader Service card



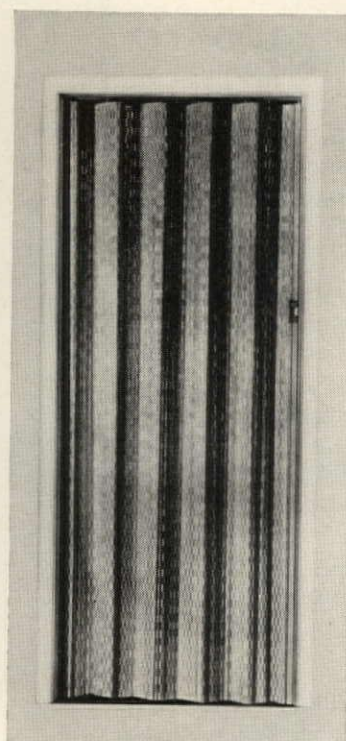
High bow windows are 5'4" tall and come in three widths: 7'8", 9'6" and 11'2". High-lite units have ventilating casements at each end and have modern, colonial or diamond grilles which snap out for cleaning. Joseph C. Klein, Voorheesville, N.Y.

Circle 205 on Reader Service card



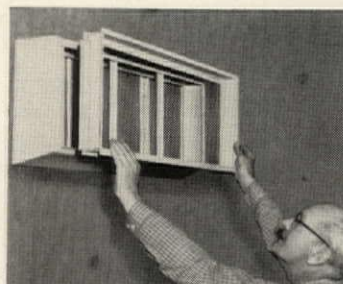
Wood combination door offers choice of panel inserts: Provincial (above), Colonial, with scroll-edged top and bottom panels and Contemporary with scrolled top panel and louvered bottom panel. F. E. Schumacher, Hartville, Ohio.

Circle 201 on Reader Service card



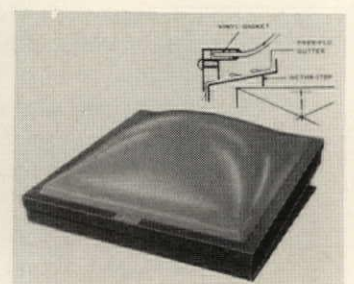
Folding door has Philippine mahogany slats with vinyl interweaving. Tradewind door fits openings up to 32" x 80", has silent nylon glides, warp-proof plastic track and positive closing catch. It retails for \$9.95. Clopay, Cincinnati.

Circle 202 on Reader Service card



Basement windows have steel frames that fit other hopper or sliding vents. Sashes are made of aluminum with a new plastic glazing bead. Slide-vents are weather stripped, screened and glazed. Kewanee Mfg. Co., Kewanee, Ill.

Circle 206 on Reader Service card



Plexiglas skylights have special gutter to collect condensation from inside dome and drain it to outside. Units are offered for curb mounting or as self-flashing units with low, medium or high light-transmission domes. Raymar, Dallas.

Circle 207 on Reader Service card

We have yet to meet the architect, builder,
or home buyer who didn't enthuse about these new

CERATILE MARBLE

NOW... you can add the exciting and distinctive beauty of textured and patterned glazed tile in bathrooms and kitchens...for little more than the cost of regular non-decorated wall tile.

The enthusiasm of architects, builders, decorators and home owners for Ceratile Marble Colors seems almost unbounded. Everyone who sees the lovely subdued pattern and textured quality of these new tiles says they're beautiful beyond description. Home buyers particularly love them.

And for builders—most important is the fact that Ceratile Marble Colors cost very little more than regular, non-decorated wall tile (Actual price differential is less than \$10.00 for an average size bathroom).

Ceratile Marble Colors are particularly suitable for walls and light duty horizontal areas (vanities, counter tops, etc.) in bathrooms, powder rooms and kitchens. They offer unusual design possibilities and can be used effectively in special color panels, in inserts and for background feature walls.

The new Ceratile Marble Colors are available in nine beautiful, decorator colors by noted color authority, Faber Birren. You'll find that these colors harmonize extremely well with all types and all colors of bath fixtures by leading manufacturers.

And to give you a completely color-coordinated job, Cambridge also offers these same nine colors and pattern in Ceratile Marbletex Colors with a textured finish that is particularly suitable for use on light duty floors. Both wall and floor tiles are produced in 4¼" x 4¼" flat tile and in S-4449 4¼" surface trim.

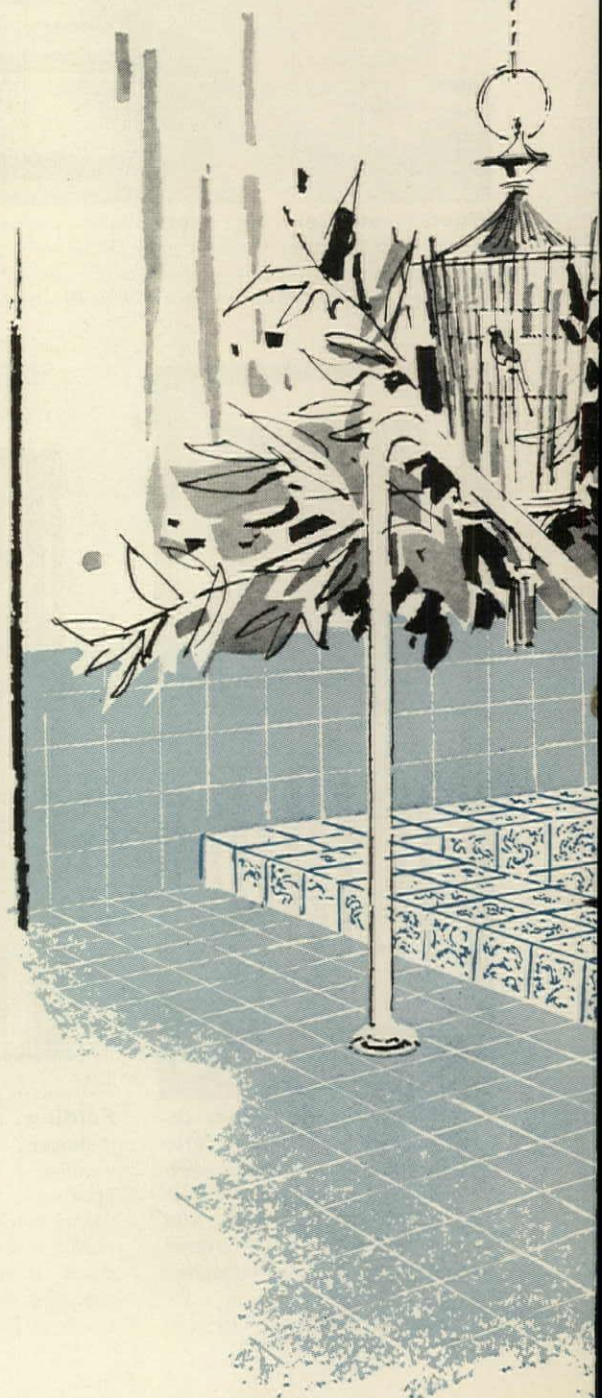
Before you finalize your next bathroom or kitchen design, be sure you see these exciting new Ceratile Marble Colors at your nearby Suntile dealer. You'll find him listed in the Yellow Pages of your classified phone directory.

FREE... Sample tiles showing the beautiful texture and pattern of Ceratile Marble Colors and Ceratile Marbletex will be sent to any architect, builder or decorator who writes us on his official business letterhead. Address your request to Dept. HH-649.

Manufactured by
THE CAMBRIDGE TILE MFG. COMPANY
Producers of world-famous SUNTILE

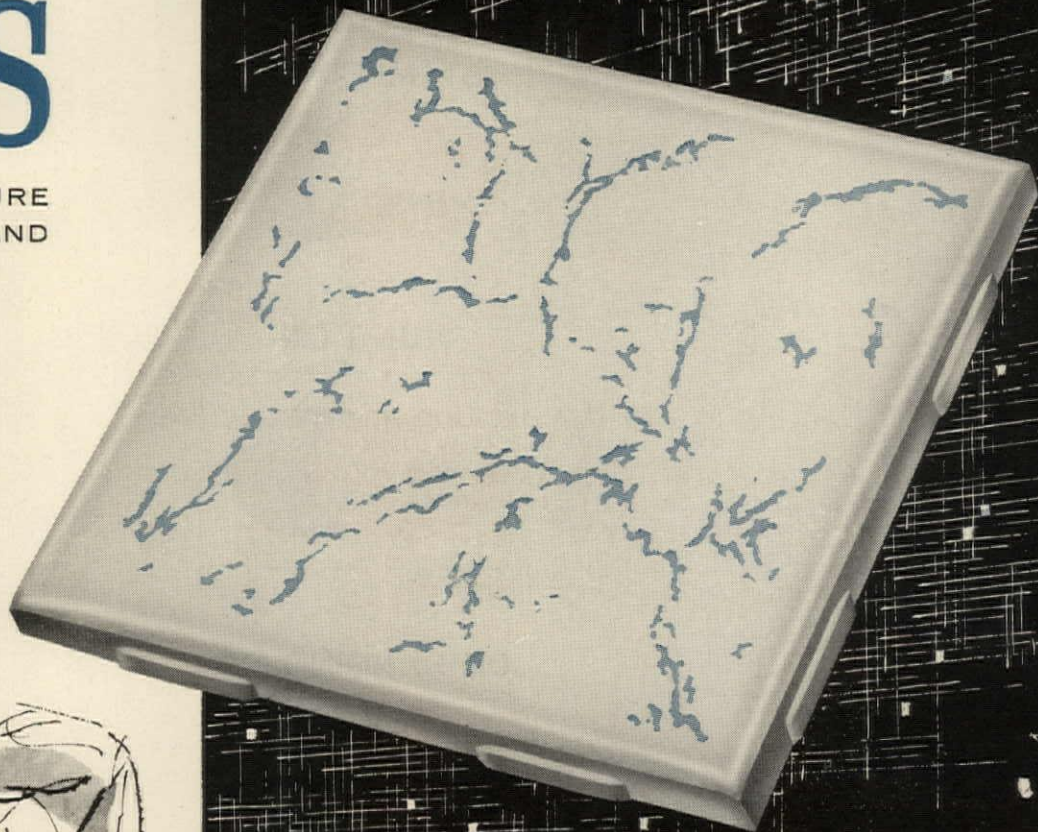
P. O. BOX 15071, CINCINNATI 15, OHIO

Member of the Tile Council of America



COLORS

GREEN • BEIGE • LILAC • AZURE
PINK • BLUE • GREY • GOLD • SAND



WHETHER IT'S
STUCK ON



STAMPED ON



HUNG ON



OR HANGING UP,



THIS
NEW EMBLEM



MEANS
TOP QUALITY

If you're involved in the building business, it's inevitable that you'll be working with products made of rigid vinyls, in whole or in part. If you are also interested in quality, you want assurance that the product represents the best in materials, workmanship and performance. □ That is why we have established an identification program for prod-

ucts that properly use rigid Geon vinyl. This emblem is your assurance that the manufacturer makes a high-quality product of proven performance, using Geon vinyl, "The Material Difference in Building". His guarantee covering workmanship and performance, coupled with his usage of quality materials, is your assurance of many years of

service. □ Soon manufacturers will be using this new emblem. Look for it on building products using rigid vinyl. For additional information about this exciting new building material, write B.F. Goodrich Chemical Company, Dept. EN-9, 3135 Euclid Ave., Cleveland, O. 44115. In Canada: Kitchener, Ontario.



B.F. Goodrich Chemical

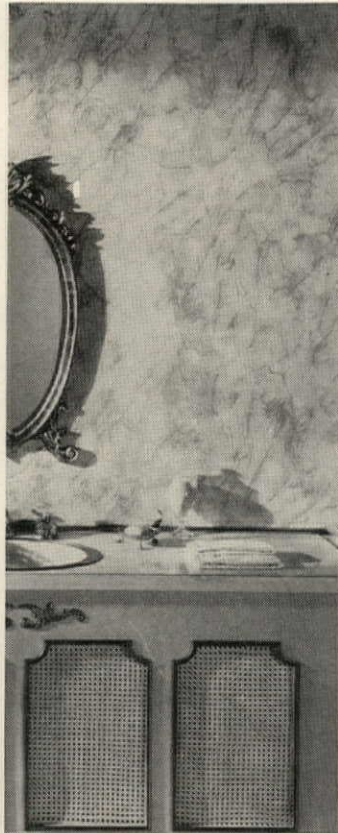
a division of The B.F. Goodrich Company

Interior materials



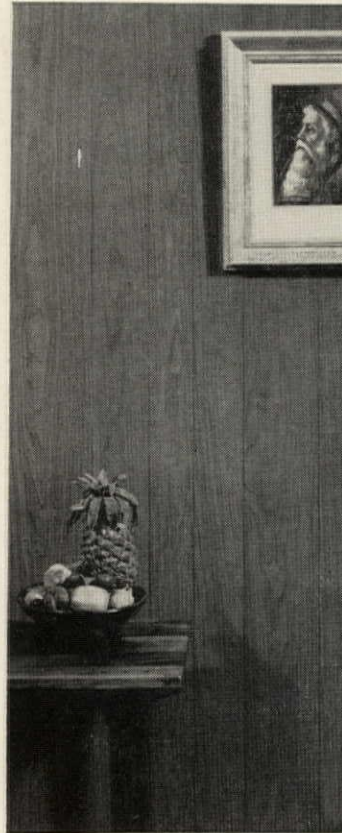
Prefinished plywood has new catalyzed acrylic finish. Vanacite comes in three types of domestic hardwoods and two types of imported hardwoods. Panels are available in 4' x 7', 4' x 8' and 4' x 10' sizes. Vancouver Plywood, Portland, Ore.

Circle 208 on Reader Service card



Hardboard panels come in pink, blue, gold, white, glitter and glitter 4" tile. Panels have melamine plastic finish and measure 4' x 8' x 5/32" thick. Stain-finish, gold-anodized aluminum mouldings are available. Abitibi, Detroit.

Circle 209 on Reader Service card

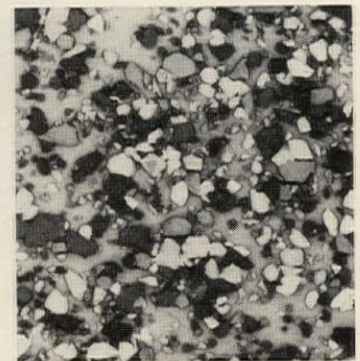


Woodgrain hardboard with walnut pattern has a washable, stain resistant finish. Sable Walnut retails for about 21¢ a sq. ft. in 4' x 8' panels. Panels are random-grooved and grain is mismatched from plank to plank. Simpson, Seattle.

Circle 210 on Reader Service card

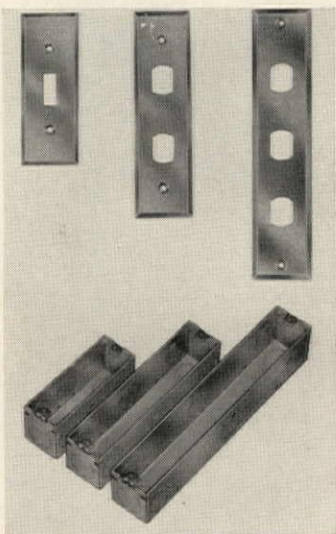


Sheet vinyl flooring has random-sized mosaic chips that appear to be individually set in a swirl pattern. Tuscan Tracine Vinyl Corlon costs about the same as embossed linoleum, and can be installed on or below grade. Armstrong, Lancaster, Pa.



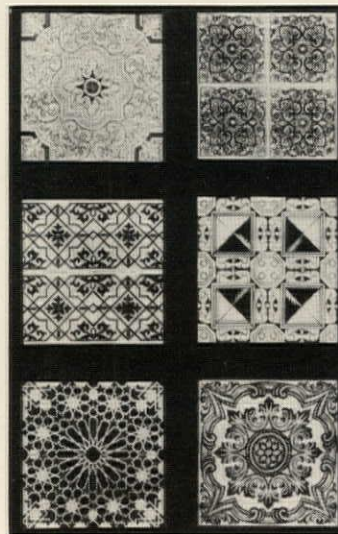
Inlaid vinyl, called Jamaican Pebble, comes in 6' widths and .070 gauge. Design has polished vinyl pebbles set in a translucent wear layer of pure vinyl. Retails for \$6.95 a yard and comes in seven colors. Congoleum-Nairn, Kearny, N.J.

Circle 212 on Reader Service card



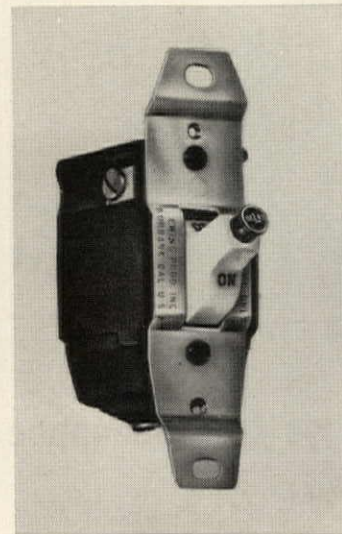
Narrow wall plates and boxes permit switches and outlets to be set in limited areas. Plates come in 1 3/4" or 2 3/4" widths and in one-, two- or three-gang heights. Finishes include brass, stainless steel and aluminum. Bell Electric, Chicago.

Circle 213 on Reader Service card



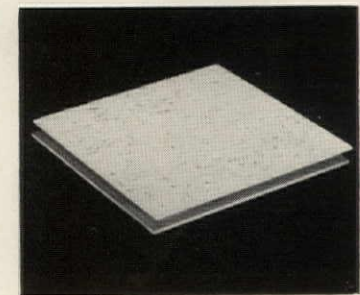
Spanish tiles are offered in authentic classic patterns. The imported clay tiles are made in two sizes: 6" x 6" and 8" x 8". Both single and four-to-a-pattern tiles are offered. Azulejos Decorados, Latco Prods., Los Angeles.

Circle 214 on Reader Service card



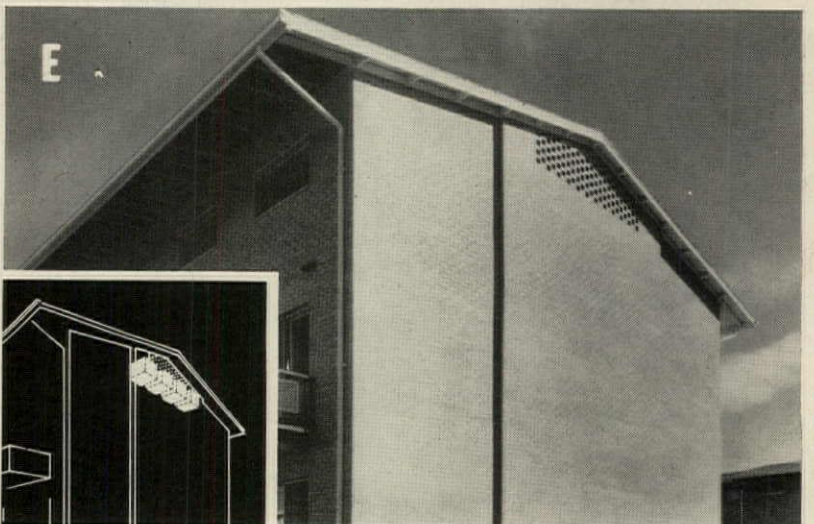
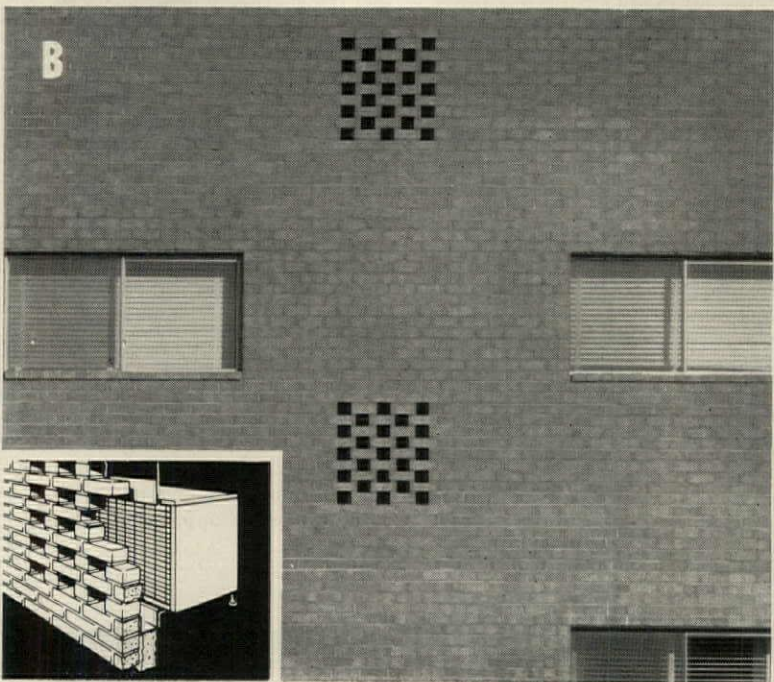
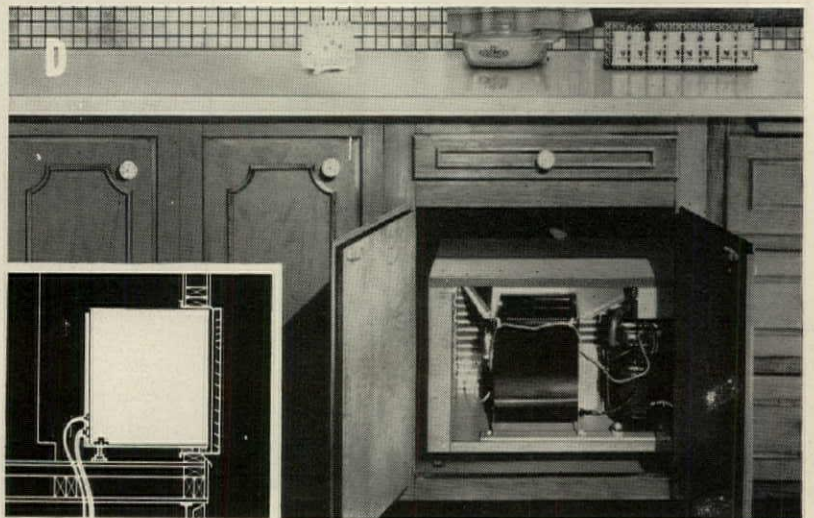
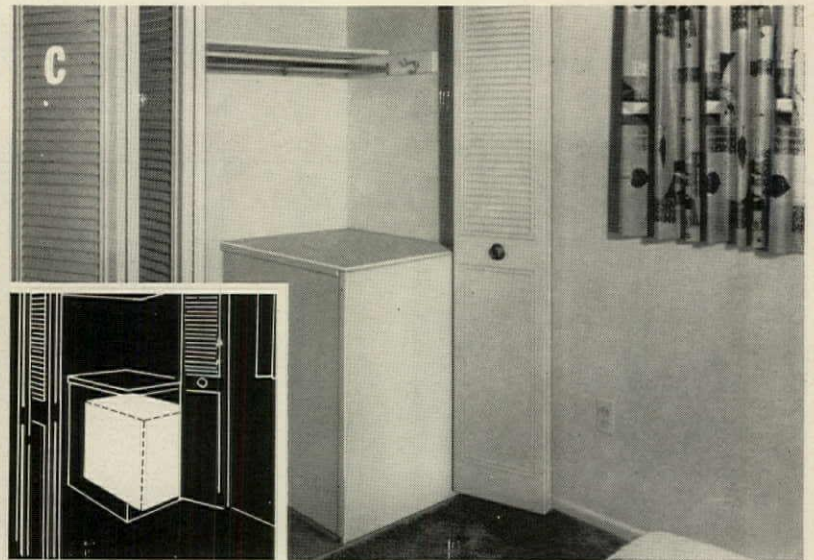
Delayed action switch has adjustable timer that leaves light on temporarily after switch has been turned off. Device can also be used as a regular on-off switch. Unit lists for \$2.95 and fits standard boxes. Ewing, Burbank, Calif.

Circle 215 on Reader Service card



Acoustical tile with class 1 fire rating will absorb 79% to 80% of noise when applied by standard methods. Class 1 Silentex tiles are one foot square and 5/8" thick with T&G edges. They reflect up to 75% of light. National Gypsum, Buffalo, N.Y.

Circle 216 on Reader Service card




5 ways to save space with Moncrief cooling

... and beautify the exterior of your apartments with these exclusive Moncrief ideas. Here is an air-cooled condensing unit so powerful you can conceal it behind an attractive wood (A) or masonry grille (B). At the same time it's so quiet it can be hidden away in the bedroom closet (C) or under the kitchen counter (D) to conserve rentable floor space. You can "gang" them in an attic (E) behind an attractive grille in the peak, or in a vertical stack in an equipment shaft (A); precharged lines up to 40 feet long let you connect with many suites easily from a central loca-

tion. Moncrief cooling equipment teams up with scores of different Moncrief compact furnaces or air handlers. So, before you begin your plans, check with your local Moncrief representative. He has dozens of practical, economical, space-saving ideas that can help you increase rentability and lower costs. Ask him for your free copy of the Moncrief "Full Line Brochure," or write direct.

MONCRIEF
The Henry Furnace Co., Medina, Ohio
Division of The C. A. Olsen Mfg. Company—Elyria, Ohio



Upstairs they're shooting up the Last Chance saloon.

Downstairs everyone's fast asleep.

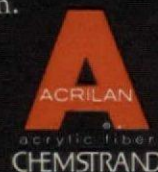
This kind of privacy happens when apartment houses are carpeted.

Carpeting absorbs 50% to 60% of all airborne sound. Do you wonder that many builders make a point of carpeting in their basic plans? Or that many tenants expect it to be standard equipment? Builders find carpeting made with Acrilan® acrylic fiber in the pile has the most advantages for them.

Acrilan looks like wool. But tests prove Acrilan more resilient and more durable than wool. It resists fading and staining. It will not nourish moths. It is non-allergenic.

Want to know more about this beautiful silencer? And tenant-getter?

Write Contract Carpet Merchandising, Chemstrand, 350 Fifth Avenue, New York 1, N. Y.



CHEMSTRAND - GENERAL OFFICE: 350 FIFTH AVENUE, NEW YORK 1 - DISTRICT SALES OFFICES: NEW YORK 1; AKRON, OHIO; CHARLOTTE, NORTH CAROLINA - CANADA: CHEMSTRAND OVERSEAS, S.A., TORONTO - CHEMSTRAND MAKES ACRILAN® ACRYLIC FIBER AND CUMULOFT® NYLON FOR AMERICA'S FINEST MILLS. CHEMSTRAND, A DIVISION OF **Monsanto** THESE ARE AMONG THE MILLS NOW LICENSED BY CHEMSTRAND FOR ACRILAN: BARWICK, BIGELOW, CABIN CRAFTS, CALLAWAY, CORONET, CRESTLINE, DOWNS, FORREST, HARDWICK & MAGEE, HIGHTSTOWN, KARAGHEUSIAN, JAMES LEES, LOOMWEVE, MAGEE, MASLAND, MONARCH, PHILADELPHIA CARPET, ROXBURY, WUNDA WEVE. IN CANADA: HARDING CARPETS.

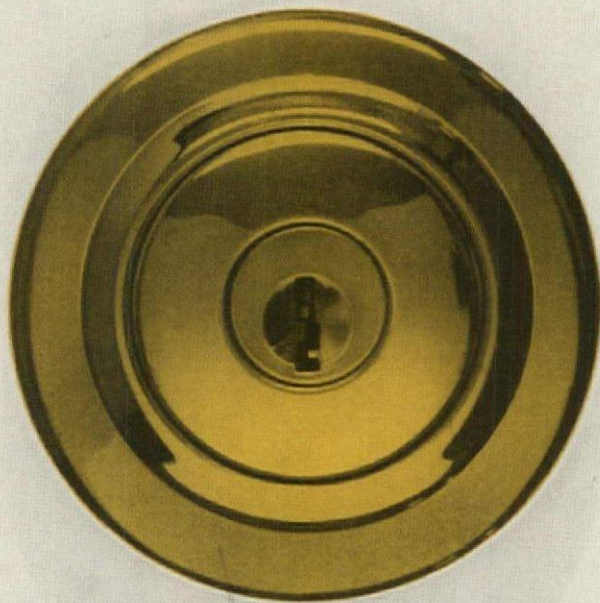
HOUSE MOVER

To help builders sell their homes, Kwikset's new ProtectoKey® locksets offer the most important selling feature since key-in-knob locking convenience. For ProtectoKey offers the home owner added security...and you can demonstrate it!

It works like this: Once the home owner uses his personal key in a Kwikset ProtectoKey lockset, all other keys are **automatically** and **permanently** locked out. This ends the home owner's worry about any sub-contractor's keys in circulation. And builders are protected against responsibility for any unauthorized entrance into the home after it is sold.

The operation of the fool-proof ProtectoKey mechanism carries the same guarantee of dependable workmanship and performance that covers all Kwikset products.

Write today for complete information on how new Kwikset ProtectoKey locksets can help move houses!



America's largest selling residential locksets

kwikset **K** *locksets*

Kwikset Sales & Service Company, a Subsidiary of The American Hardware Corporation, Anaheim, California

HERE'S HOW
KWIKSET'S*
PROTECTOKEY
SYSTEM
WORKS:

*TRADE MARK
PATENT PENDING

1. During construction, builder keys (used by sub-contractors) align pin tumblers in lockset. Cylinder turns easily, and lock opens.



2. Once home is completed and home owner's ProtectoKey turns cylinder in lock...



3. Four tiny, steel balls in pin tumbler chamber drop into blind "pocket" in cylinder, changing pin tumbler combination.



4. When the builder's key is reinserted into lockset, the change in pin tumbler combination prevents cylinder from turning and lock from opening.

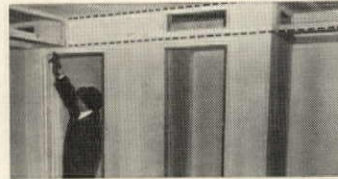
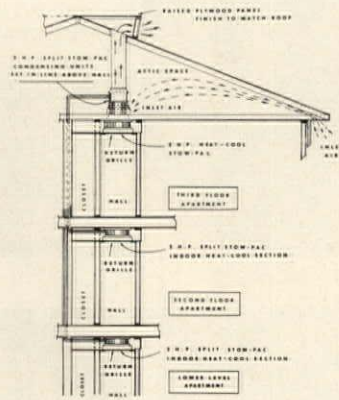


5. Home owner's key, however, continues to work perfectly, forever.



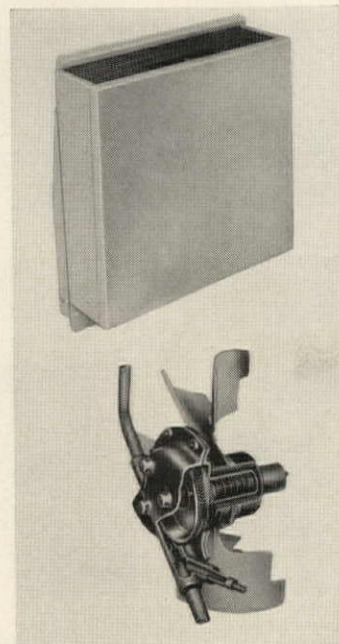
Heating and Cooling

Gas boiler is only 29" high, 20½" deep and from 19½" to 40½" wide depending on capacity (from 60,000 to 200,000 Btuh). Sunnyday 102 series is fully assembled in the factory to cut installation time. It is also sold under the National U.S. label as the 99 Series. Crane, New York City.
 Circle 217 on Reader Service card

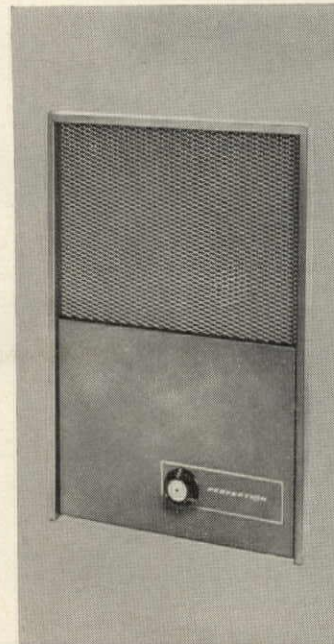


Air conditioning system can be installed as a self-contained unit in single story building or as a split system in a multi-story building (see drawing). Dropped hall ceiling replaces conventional duct work. Stewart Warner, Lebanon, Ind.
 Circle 223 on Reader Service card

Pressurized burner in Solar-Pak gas furnaces withstands even a 40 mph wind-down-the-flue test with no pilot outage. Gas and oil fired models are available with outputs ranging from 35,000 to 65,000 Btuh. High velocity 200° air delivery permits use of 12" x 3" ducts. Coleman, Wichita, Kan.
 Circle 218 on Reader Service card



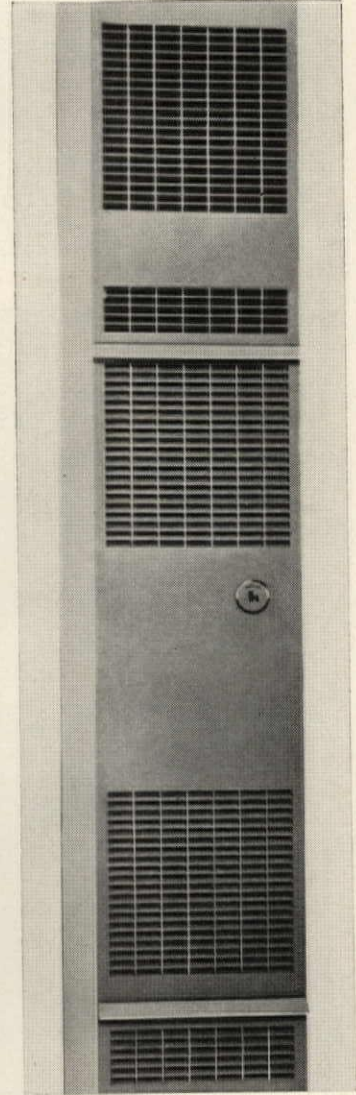
Electric wall heater has 750- or 1500-watt heating element, heavy duty fan and built-in thermostat. Unit has 12" x 14" grilles and fits in a 10¼" x 13" x 4" steel housing that goes between studs. Unit has built-in fasteners. Broan Mfg., Hartford, Wis.
 Circle 219 on Reader Service card



Cooling zone valve for chilled water systems features sealed mercury switches, removable operating mechanism, quiet 24-volt synchronous motor and complete shutoff at 35 psi. Edwards Engineering, Pompton Plains, N.J.
 Circle 220 on Reader Service card

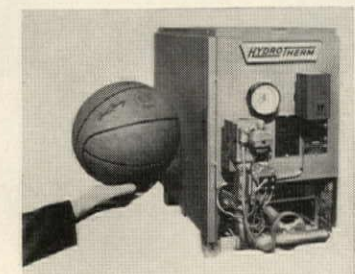
Hydronic cooling and heating system uses sealed water turbine with magnetic drive to air-circulating fan in room unit. Each thermostatically controlled unit is supplied with water from a central chiller-heater. Iron Fireman-Webster, Cleveland.
 Circle 224 on Reader Service card

Direct vent heater needs no chimney for combustion gases. Gas-fired unit is rated at 10,000 Btuh input, is only 23½" high and 14⅞" wide. Model SV-110 comes as either a recessed or surface mounted unit. Perfection, Waynesboro, Ga.
 Circle 225 on Reader Service card



Compact air conditioner is designed to heat and cool areas of 600 to 800 sq. ft. The Bel-Aire is a 50,000 Btuh gas heater combined with an 18,000 Btuh cooling unit. Prefabricated ducts are available. Holly-East, Centralia, Ill.
 Circle 226 on Reader Service card

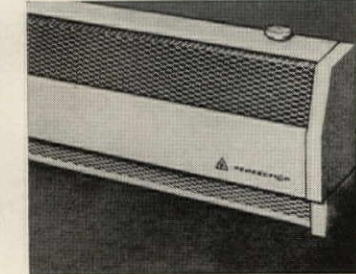
Condensing units for remote installation range from 7½- to 20-ton capacity. Low profile units are only 33½" high and are said to be among the lightest weight air-cooled units made (690 to 1,725 lbs.) Worthington/Climatrol, Milwaukee, Wis.
 Circle 221 on Reader Service card



Compact boiler has 65,000 Btuh input yet measures only 19" high, 12½" wide and 21¾" deep. Gas-fired model HC-65 is pressure tested at 250 lbs. Each unit is factory fired and carries a 25-year guarantee. Hydrotherm, Northvale, N.J.
 Circle 227 on Reader Service card



Silent fin-tube heating units have aluminum fins bracketed with continuous plastic channels to deaden internal popping sounds. Baffle-Fin speeds installation because expansion cradles can be located anywhere. Radiant-Ray, Newington, Conn.
 Circle 228 on Reader Service card



Gas baseboard with through-the-wall venting is said to save up to 90% of installation costs compared with conventional heaters. Spacemaker baseboard is 5⅞" deep, 10½" high and 67" long. It is AGA approved. Hupp, Waynesboro, Ga.
 Circle 229 on Reader Service card

12 questions to ask when you select
the siding for your homes:



Will it need paint



dent



fade



chip



blister



scratch



crack



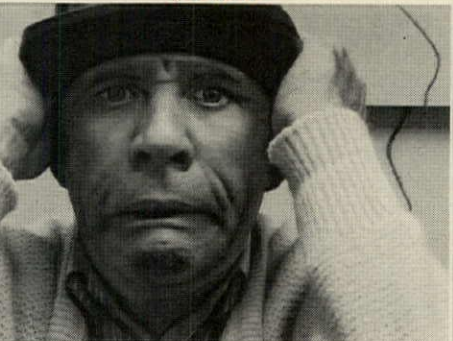
burn



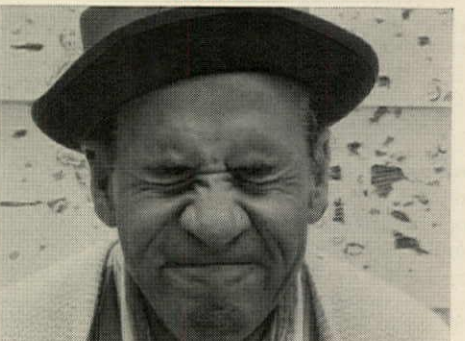
rust



rot



entertain insects



or peel off ?

Monsanto Solid Vinyl Siding won't!

Make extra selling points for your homes, with the most durable, most maintenance-free siding ever developed. Monsanto Vinyl Siding is solid vinyl through and through. Keeps looking like-new for years and years...no other siding is so weather-proof. Goes beautifully with any style house. And it's a snap to install with regular tools. Monsanto also offers your customers a 20-year guarantee. Send coupon today for more information.



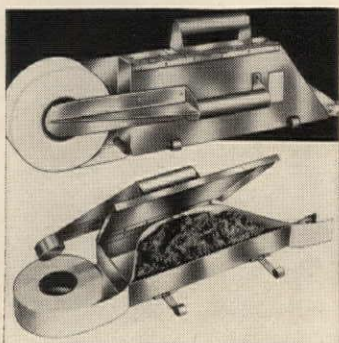
MONSANTO, Dept. 804WI
800 N. Lindbergh Ave., St. Louis, Mo. 63166
Please send complete information on vinyl siding.

Name _____
Company _____
Address _____
City _____ State _____ Zip _____

NEW PRODUCTS

start on p. 103

Tools & equipment



Dry-wall taper is said to cut taping time up to 50%. It dispenses cement-coated tape, adjusts for thickness of cement and can be loaded in ten seconds. Heavy-gauge stainless taper sells for \$59.50. Ilten & Taeye, Cedar Rapids, Iowa.

Circle 230 on Reader Service card



Wheel forklift comes with 14', 5,000-lb. mast or 21', 2,500-lb. mast. Both tilt 7° forward and 12° backward. Model 2010 has gas or Diesel power. Accessories include dozer blade, block fork and loader bucket. John Deere, Moline, Ill.

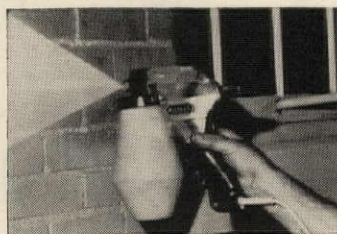
Circle 231 on Reader Service card



Trencher has four-wheel drive, three-speed digging chain, hydraulic steering and hydraulic backfill blade. J-4 Ditch Witch has 12½ h.p. engine, digs at speeds to 15 fpm, depths to 5', widths to 12". Charles Machine Works, Perry, Okla. (Circle 232 on Reader Service card)

Airless spray gun of high-pressure type atomizes primers, paints, stains and other fluids to a fine spray. Mistral-C has sintered metal pump, volume control and suction pipe with filter. It lists for \$94.95. Trittech, Warwick, R.I.

Circle 233 on Reader Service card



Electric plant provides 1,500 watts of 120-volt, 60-cycle A.C. current. Model 105PC weighs only 86 lbs., has a two-outlet box and rubber-mounted feet to reduce vibration. List price is \$269. Onan Div., Studebaker Industries, Minneapolis.

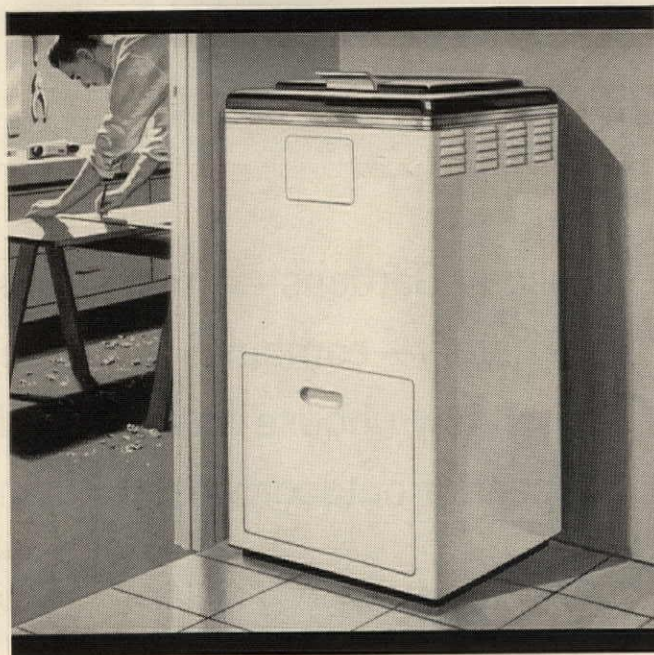
Circle 234 on Reader Service card



Portable radial saw has all controls in front for operator safety. Delta 10" saw cuts 3"-thick stock, rips to center of 50" panel, has turret arm for 360° saw swing and yoke so motor can be tilted for beveling. Rockwell Mfg., Pittsburgh.

Circle 235 on Reader Service card

Why it pays to include MODERN GAS INCINERATORS in your homes



In the highly competitive business of selling homes, the smart builder is ever alert to new features—to pluses that will impress potential buyers. A modern Gas incinerator is just such a plus.

🔥 Homes in a cleaner, quieter, more modern setting . . . this important selling point can be yours with a modern Gas incinerator that eliminates noisy, unsightly garbage cans.

🔥 An obviously attractive point to housewife prospects—and to their husbands, too—is eliminating the mess and nuisance of daily garbage and trash carrying, by installing modern Gas incinerators.

🔥 Your prospects will be impressed by the fact that it will cost less for trash disposal, thanks to a modern Gas incinerator which takes care of all burnable garbage and trash.

🔥 Economical to buy and install, and operate, modern Gas incinerators are smokeless, odorless, automatic.

AMERICAN GAS ASSOCIATION

Check your local Gas company for full details.

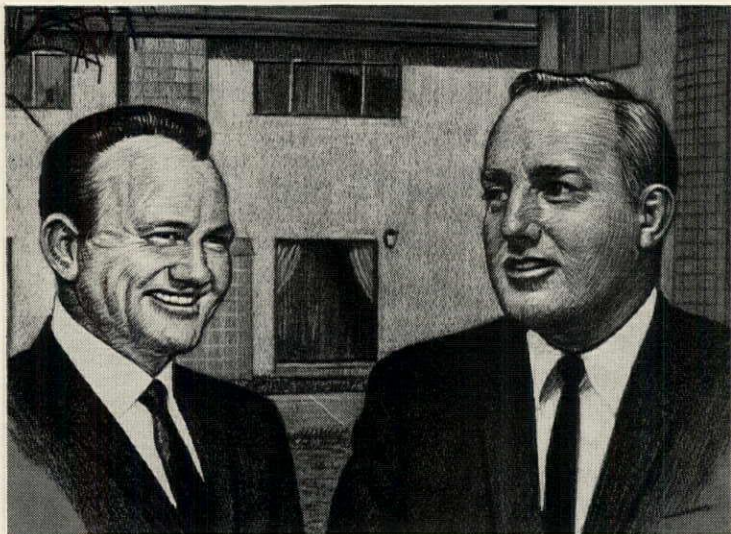
House hunters know they can



LIVE MODERN
FOR LESS
WITH . . .

GAS

New products continued on p. 117



"The appeal appliances apartments

say Henry Maxwell (left) and


Holiday Gardens—a real success story—combines an eastern town house flavor with the appeal of outdoor western living!

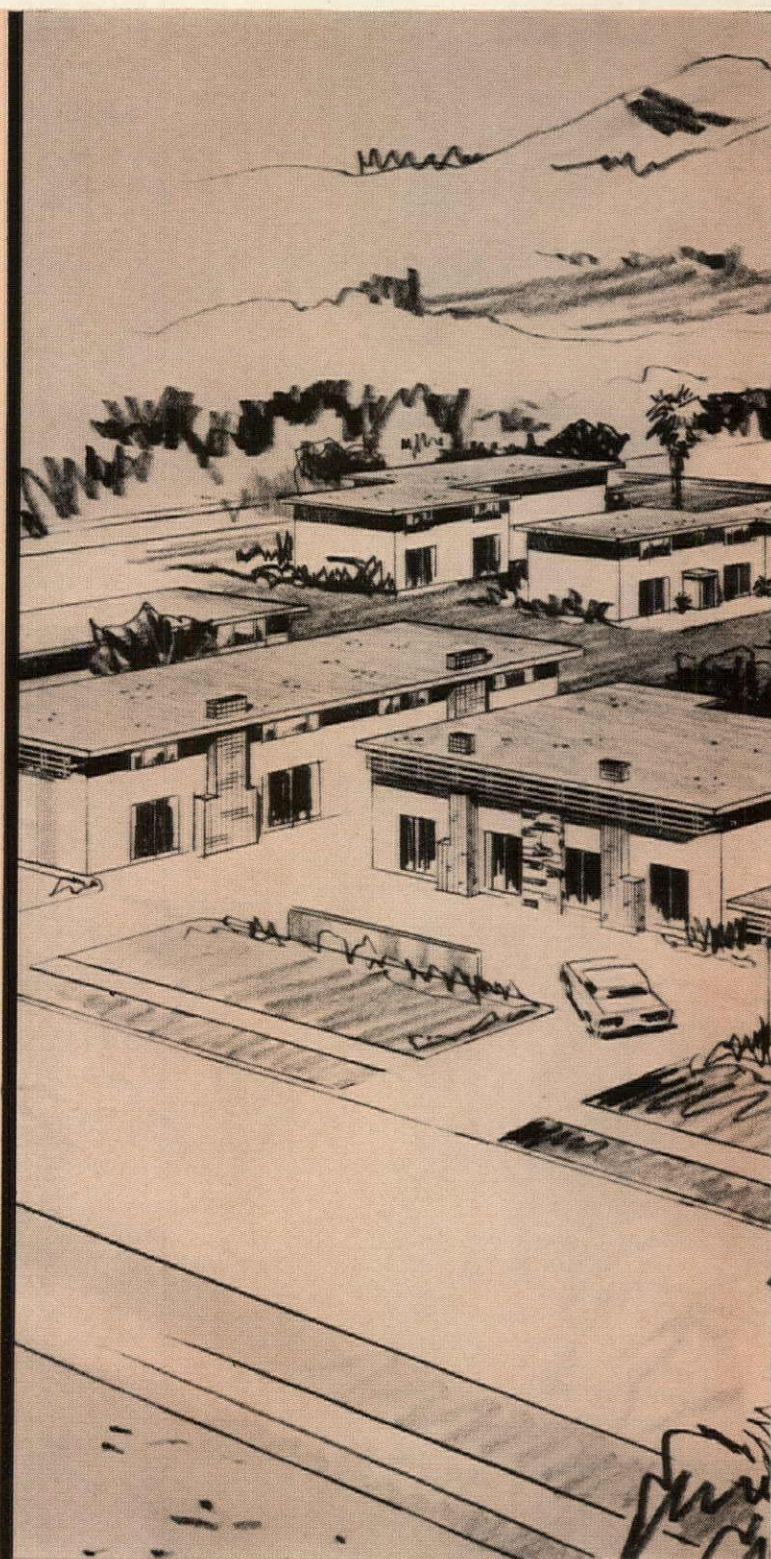
And prospects love it! At right is an architectural sketch of one of the recreational centers at Holiday Gardens with a large pool, sauna baths, shuffleboard courts, even a putting green. Each apartment is tastefully decorated with fireplace, spacious bathroom, bedrooms, living area and lovely color-coordinated kitchen featuring RCA WHIRLPOOL built-in oven, surface unit or free-standing range, refrigerator, washer, matching dryer and air conditioner. Builders Maxwell and Tuthill have installed RCA WHIRLPOOL appliances in their kitchens since 1960. They like the idea of *one dependable source* for all their kitchen appliances, gas or electric . . . how it saves them time and paper work. "It's a prestige brand; it means quality to our prospects", they added. Find out how RCA WHIRLPOOL appliances can add that extra touch of value to your homes and apartments; call your RCA WHIRLPOOL distributor today.



Contract and Builder Sales Division, Administrative Center, Benton Harbor, Michigan

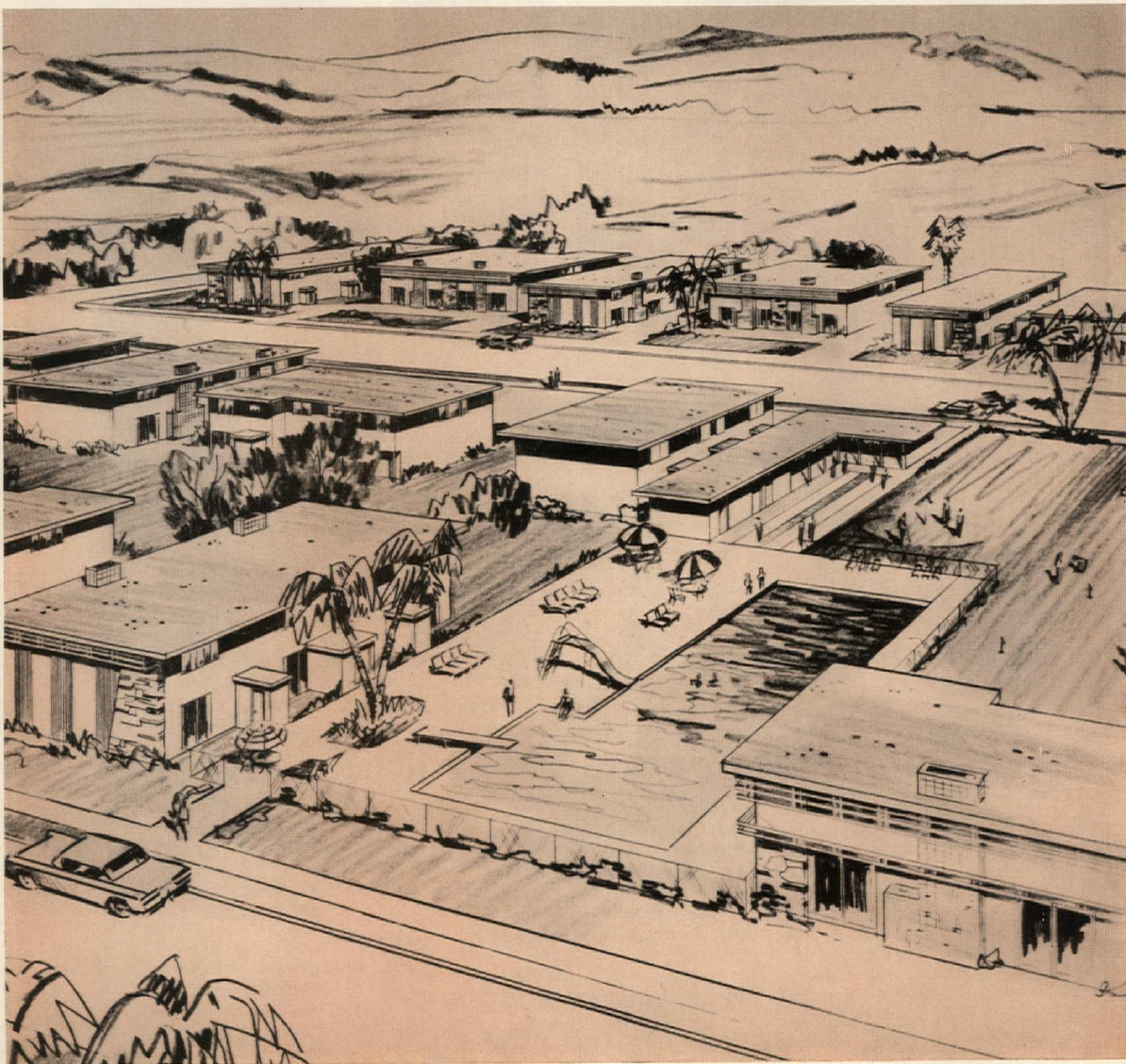
Manufacturer of RCA WHIRLPOOL Automatic Washers • Wringer Washers
• Dryers • Washer-Dryers • Refrigerators • Freezers • Ice Cube Makers • Ranges
• Air Conditioners • Dishwashers • Food Waste Disposers • Dehumidifiers

Use of trademarks  and RCA authorized by trademark owner Radio Corporation of America



of RCA WHIRLPOOL
helped us rent 1/3 of our
on opening day”..

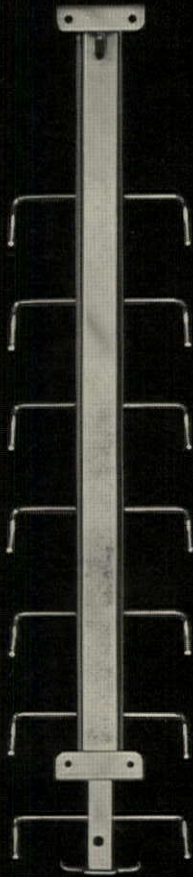
Richard Tuthill, co-owners of Peg-Con Development Corp., San Diego, Calif.



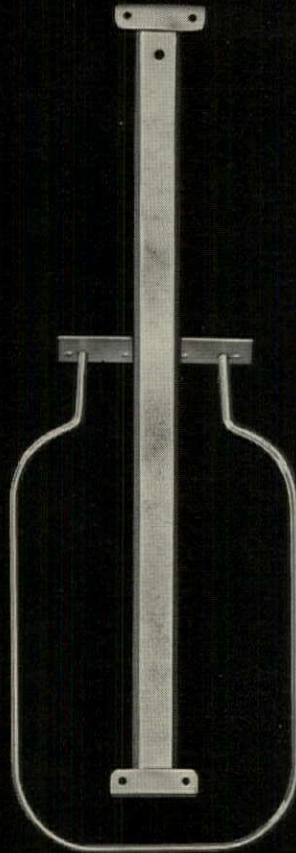


KAY VEE SAYS:

"Ladies love the little luxuries!"



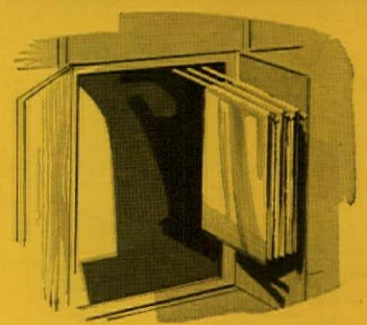
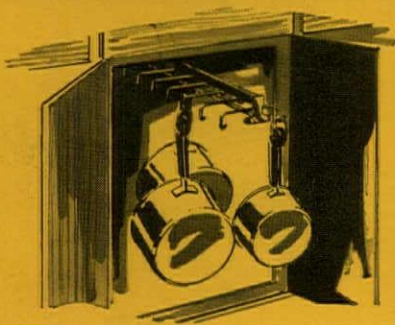
K-V 790, 14-hook Pan Rack



K-V 796 Wastebasket Rack



K-V 793 Three-bar Towel Rack



Three little ways to bigger kitchen sales!

Providing the small, thoughtful touches women want in kitchens can put you ahead of the competition! And, as kitchens become more and more luxurious, the little extras you include become increasingly important sales tools.

Out-of-sight storage for the wastebasket and racks for pots, pans and towels are the time-savers and conveniences many kitchen planners won't think of—but women will! Best of all, K-V fixtures are inexpensive and can be installed in minutes. And they last a lifetime!

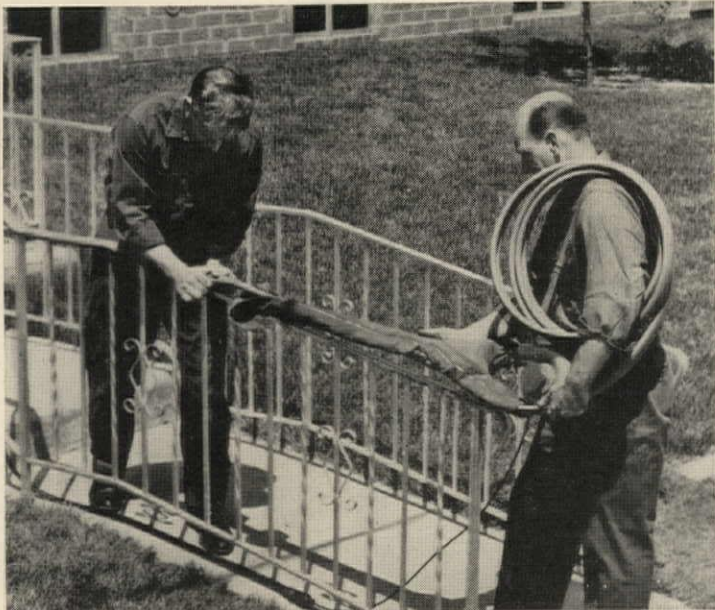
Before you plan or build your next kitchen, contact your K-V distributor for details about the full line. Or, write for our catalog. It's crammed full of kitchen and home storage ideas and it's yours free of charge.



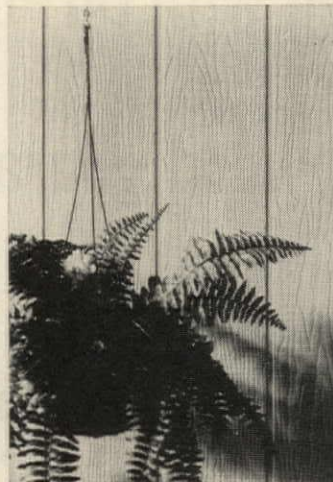
**KNAPE & VOGT
MANUFACTURING
COMPANY**

Grand Rapids, Mich.

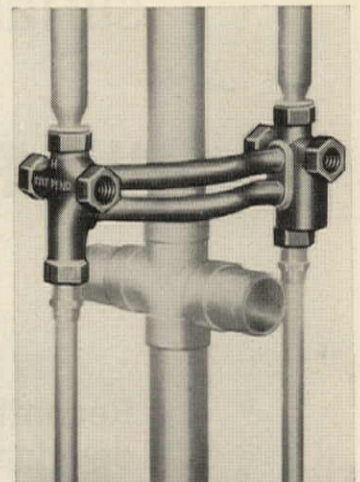
Miscellaneous



Vinyl handrail cover fits over iron or aluminum railing to form an easy-to-maintain wearing surface. Rucorail comes in a wide choice of colors and is easy to install when warmed by heater (above). Rubber Corp., Hicksville, N.Y. (Circle 236 on Reader Service card)



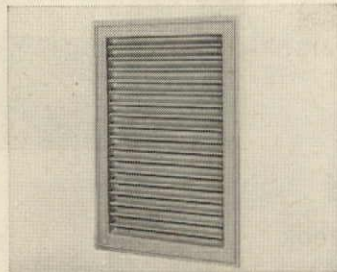
Hardboard siding with rough-sawn texture is face-primed and back-sealed at the factory. Ruf-X-ninety panels are 4' wide, 7', 8', 9' or 16' long, and either grooved or ungrooved. Also available as 12" lap siding. Masonite, Chicago. (Circle 241 on Reader Service card)



Plumbing manifold for back-to-back installations eliminates nine ells, two tees, five nipples and two pieces of cut pipe plus at least one hour's labor. Bac-2-Bac is made of cast bronze and copper tubing. JMJ Corp., Portland, Ore. (Circle 242 on Reader Service card)



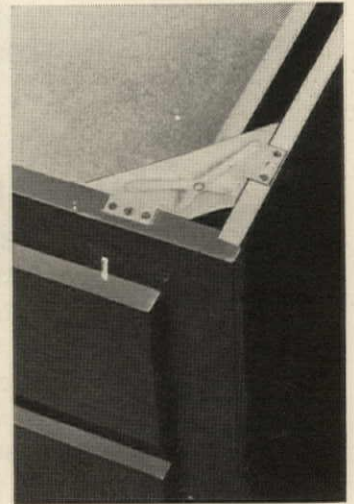
Single-knob faucet uses the same ball principle of water control that is used in this manufacturer's single-handle faucet. New 502 Series allows selection of any desired water temperature before tap is turned on. Delta Faucet, Greensburg, Ind. (Circle 237 on Reader Service card)



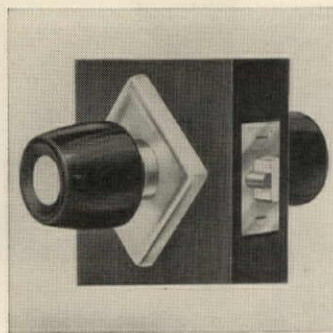
Plastic wall louver can be installed flush or recessed depending on which side faces out. Plas.T.Louvers are made of a tough off-white plastic that can be painted or left natural. Six sizes are offered. Leslie Welding, Franklin Park, Ill. (Circle 238 on Reader Service card)



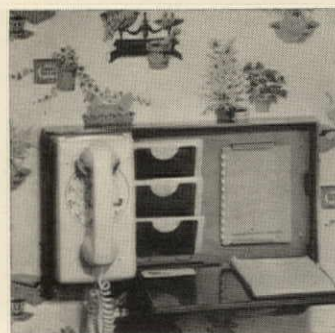
Corner brace for cabinets, boxes and shelves cuts labor cost, increases strength, forms perfect 90° corners and eliminates corner glue blocks. Corner Lock Braces are made of 20-gage galvanized steel. Sanford Prods., Pompano Beach, Fla. (Circle 243 on Reader Service card)



Corner lavatory saves space in small bathrooms. Corner Minette measures 16¼" from front to back with a 12" x 8½" bowl. A similar compact straight Minette is available. Both come in white and colors. American-Standard, New York City. (Circle 239 on Reader Service card)



Wooden knobs are available for manufacturer's heavy duty cylindrical locksets. Knobs are offered in rosewood, walnut, coco-bolo and stratawood with a choice of round, square or concave trim in standard finishes. Challenger, Anaheim, Calif. (Circle 240 on Reader Service card)



Telephone caddy is offered in seven colors to match Caloric ranges. Next to the phone the unit has a hinged cover that opens to form a compact desk complete with pad, pencil and three small filing compartments. Caloric, Wyncote, Pa. (Circle 244 on Reader Service card)



Nonflammable adhesive for contact bonding of plastic laminates and other materials can be trowel, brush, roller or sprayer applied. Called Nonflammable Contact Adhesive, it has no objectionable odor. Armstrong Cork, Lancaster, Pa. (Circle 245 on Reader Service card)

Sales prove it: Home buyers pay more for siding surfaced with Du Pont TEDLAR®. Why?

U. S. Plywood guarantees Weldwood PF-15 siding,

Recently, in a medium-sized development, more than half the homes sold in the first 90 days had TEDLAR® PVF film on the siding—and better than one in four customers who had a choice of lower-cost siding paid extra to get TEDLAR. TEDLAR has obvious advantages: it's tough, smooth, fade- and chalk-resistant, is hard to stain, easy to clean. Plus this clincher: U. S. Plywood's written guarantee that Weldwood† PF-15 siding, surfaced with TEDLAR, will be paint-free for 15 years.



Home buyers want guaranteed long-term economy. Home buyers look beyond the immediate price of a house to its long-term cost. They know conventionally finished siding will need repainting three, maybe four, times in the next fifteen years. U. S. Plywood guarantees, in writing, that Weldwood PF-15 siding will not need painting for 15 years. So although it costs more initially, home buyers who choose TEDLAR save considerably in the long run.



surfaced with TEDLAR, won't need painting for 15 years!



Home buyers want the convenience of TEDLAR. With TEDLAR, economy and convenience go hand in hand. Home buyers resent the time and trouble it takes for house maintenance. When their siding is pre-finished with TEDLAR, they know they're freed from both the expense and nuisance of exterior maintenance. TEDLAR is exactly what they want on their labor-saving, easy-to-run, up-to-date homes.



Home buyers like the easy maintenance of TEDLAR. Home buyers like a new home to go on looking new—and that's exactly what siding surfaced with TEDLAR does. Whatever the weather, Weldwood PF-15 retains its original appearance better than any other pre-finished siding. When other finishes have deteriorated badly, TEDLAR needs only a wash-down to look fresh, smooth and handsome. Mail the coupon below to learn more about this remarkable new film finish.



*Du Pont registered trademark.

†U. S. Plywood registered trademark.

Better Things for Better Living . . . through Chemistry

To: E. I. du Pont de Nemours & Co. (Inc.)
Film Department
Building Materials Sales Division
Box 901E, Wilmington, Delaware 19898

Please send me further information about siding surfaced with TEDLAR.

Name _____

Address _____

City _____ State _____ Zip _____

Profiles in total-electric living— by General Electric



General Electric's program for total-electric Medallion Homes and Apartments has speeded sales and construction for these builders. It can do the same for you.

As a starter, you'll enjoy the advantages of General Electric quality and dependability.

General Electric experts will help you plan an advertising and merchandising program tailored to your market and your project.

Along with the promotional aid, you receive invaluable technical assistance from experienced G-E Design and Application engineers... and that includes kitchen and laundry designs.

With this kind of support, your Homes and Apartments will sell faster, rent faster and be easier to build—when they are Medallion Homes, equipped by General Electric.

GENERAL  ELECTRIC

**Construction Market Development Operation
General Electric Co., Appliance Park, AP-6, 230
Louisville 1, Kentucky**

I'm interested in General Electric's program for Medallion Homes. Please send me more information.

Name _____

Company _____

Address _____

City _____ State _____

HH-9-1



Belmont Village, Syracuse (Liverpool), New York, will offer 616 Gold Medallion townhouses featuring electric resistance heating and General Electric appliances. Builder John L. (Roy) Bellinger, president of Bellinger Construction Company, finds customer reaction to total-electric living to be a "big plus" in his sales program.



Heritage Colony, Memphis, Tennessee, where Pat and Vernon Kerns are recreating Colonial Williamsburg—to Gold Medallion standards. Each of the homes will offer a complete General Electric kitchen and a Weathertron® heat pump for year-round climate control and greater sales appeal.



City of Sunset, Sacramento, California, being built by the Sunset International Petroleum Corporation on the famous 12,000-acre Spring Valley Ranch, will include 400 Medallion homes, recreational activities, community facilities and an industrial park—a complete new city.



Gently Apartments, New Orleans, Louisiana, where results were so successful that owner David Craig is planning another Medallion project. The 65 Gold Medallion units are built with courtyards, one with swimming pool. Individual metering permits separate tenant billing.



Georgetown South, Manassas, Virginia, is a unique townhouse-in-the-country project located 30 miles from downtown Washington, D.C. Since opening in April, sales have already exceeded 200 homes, according to Lee G. Rubenstein and D. Jay Hyman of Merit Developers of Washington.



Fountain View Apartments, Chicago, Illinois, built by Dunbar Builders, Inc., feature electric heating and cooling and complete General Electric kitchens. The introduction of Gold Medallion condominium apartments in Chicago by Dunbar Builders has led to wide acceptance of this new type of housing.



Cast iron soil pipe is nailproof! Prevents costly repairs due to accidental puncturing of drain lines hidden in walls.

Cast iron soil pipe resists corrosive household chemicals and the acids and alkalis in bathroom wastes.

Cast iron soil pipe withstands vibration and heavy weight—unbeatable for house sewer lines to the street sewer.

Cast iron soil pipe is sound absorbing. It absorbs pipe vibration and flushing water noises. No embarrassment to you.

Cast iron soil pipe joints are permanent. Root entry is stopped. Infiltration of storm water into house sewer lines is prevented.

New modern NO-HUB hubless (potrel pressing) cast iron soil pipe. Fits neatly in 2x4 walls. Avoids using substitute piping.

Why Cast Iron Soil Pipe for Your Plumbing Drainage System?

Shown here are some of the reasons why you should insist on lines in your new home. Cast iron soil pipe is thick-walled, strong. Its joints remain permanently watertight and gasketing, yet are flexible enough to compensate for house settling. Protects your family's health. Saves you money because it is maintenance free for the life of your home. The symbol on the pipe stands for the high standards of quality developed for your protection by the Cast Iron Soil Pipe Institute. For eye-opening facts about rugged cast iron soil pipe, consult your plumbing contractor or your builder. Meanwhile, mail the coupon for free literature.

CAST IRON SOIL PIPE INSTITUTE
1824-26 Jefferson Place, N.W., Washington, D. C. 20006

MAIL THIS COUPON

Cast Iron Soil Pipe Institute, Dept. H
200 M. Taylor Drive
Chicago, Ill. 60616

Customer: Please send FREE illustrated literature about Cast Iron Soil Pipe for my new home.

Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____

BONUS FOR YOU! Cast Iron Soil Pipe Advertising to Home Buyers!

When homes you build feature Cast Iron Soil Pipe plumbing drainage systems, you have a lot going for you—a trouble-free sanitary system for the life of the house...a quality selling feature that impresses and convinces prospects...plus a *bonus*—our hard-selling national advertising to home buyers!

Our advertising sells by education. It shows why Cast Iron Soil Pipe is necessary if the home buyer is to enjoy a lifetime of trouble-free, maintenance-

free plumbing drainage and house sewer service. And it is aimed at the most highly concentrated market of prime home planners and buyers in the nation...the readers of the six leading home buyers' guides—more than 2,500,000 families who have home owning uppermost in mind!

We urge them to insist on a Cast Iron Soil Pipe plumbing drainage system in the home they buy, and back our recommendation with convincing facts.

CAST IRON SOIL PIPE INSTITUTE

1824-26 Jefferson Place, N.W., Washington, D. C. 20006



MEMBERS OF THE INSTITUTE

- Alabama Pipe Company
- The American Brass & Iron Foundry
- American Foundry
- Anniston Foundry Company
- The Buckeye Steel Castings Company
- Buffalo Pipe & Foundry Corp.
- The Central Foundry Company
- Charlotte Pipe and Foundry Company

- Clay & Bailey Mfg. Co.
- East Penn Foundry Co.—Subsidiary of Tyler Pipe and Foundry Company
- Glamorgan Pipe & Foundry Co.
- Krupp Division—Buffalo Pipe & Foundry Corp.
- Rich Manufacturing Company
- Russell Pipe and Foundry Co., Inc.

- Shafer & Son Foundry, Inc.
- Tyler Pipe and Foundry Company
- United States Pipe and Foundry Company
- Universal Cast Iron Manufacturing Company
- Western Foundry Company
- Williamstown Foundry Corporation

ANNOYING NOISES—CAST IRON SOIL PIPE STOPS THEM!

Can a plumbing drainage system have social impact? It can—and does! The noise of flushing water heard through walls embarrasses both family and guests. But never if the piping is thick, sound-absorbing  Cast Iron Soil Pipe! This advantage of Cast Iron is quickly understood by women, and it is a big help to you in selling a 100%  quality installation—for drain, waste, vent; also for house sewer. Write for free selling-help literature.



More Features!

- Puncture-proof
- Resists corrosion
- Stops roots
- Won't crush
- Lasts a lifetime
- Every code O.K.'s 5-ft. lengths
- Now made in 10-ft. lengths —needs fewer joints
- Plumber installed
- 1st choice for big buildings and homes

"You Can See...Feel... Hear the Difference!"



Cast Iron Soil Pipe Institute, Dept. K
1824-26 Jefferson Place, N.W., Washington, D.C. 20006

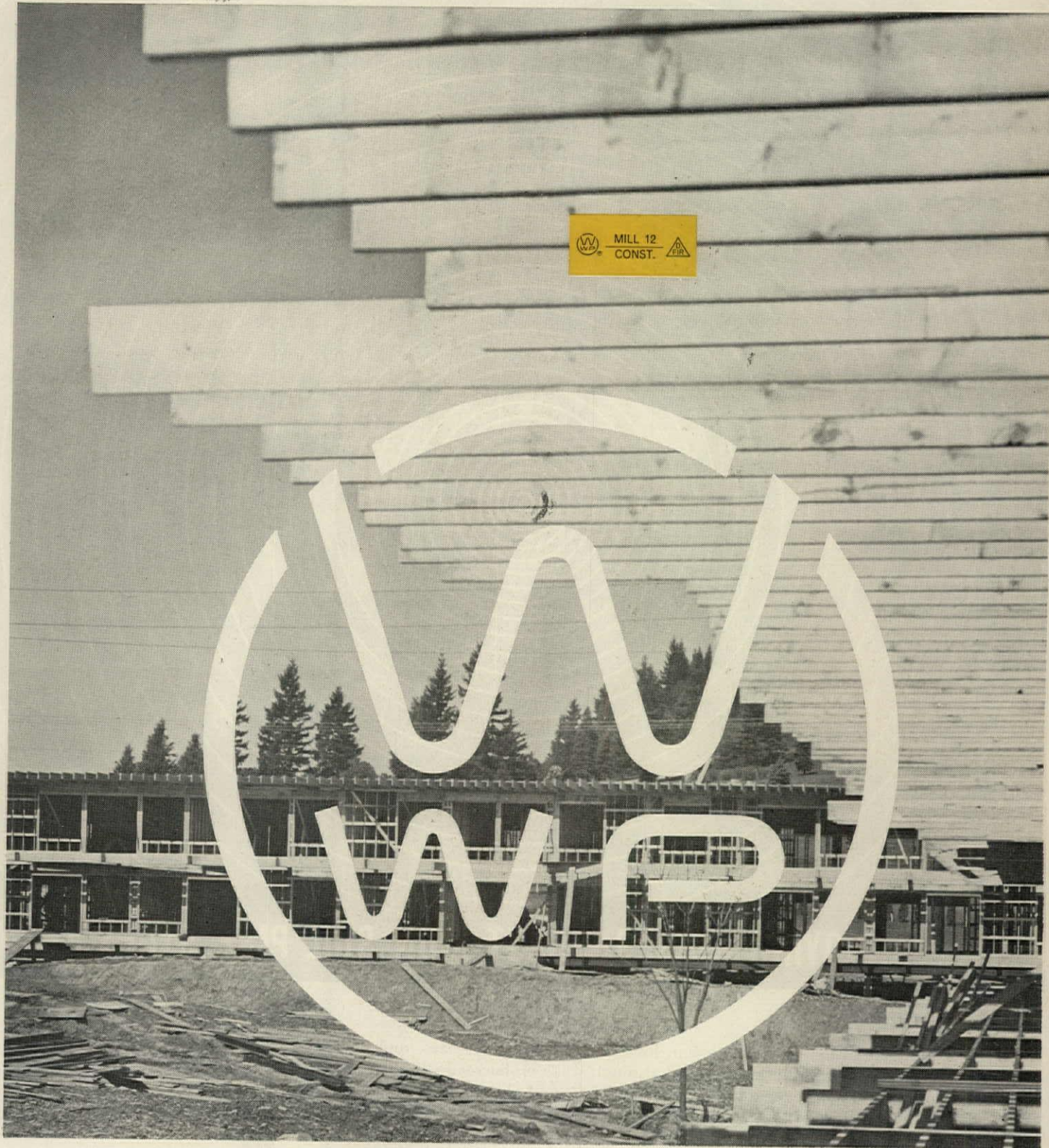
Send a supply of your FREE literature for distribution to our prospects. We can use _____ copies.

Firm name _____

Your name, title _____


Address _____

City _____ State _____ Zip Code _____



Western Wood Products
YEON BUILDING, PORTLAND, OREGON

From the Members of the West Coast Lumbermen's Association



Economical GARDEN APARTMENT


Here's a practical and profitable building idea made easy through use of the standard sizes and grades of Western Lumber. It's a 60-unit suburban garden court apartment that features the luxury look of 1" x 8" Western Red Cedar tongue-and-groove siding at very economical cost.

Framing is of three grades of Western lumber. Joists are in two standard sizes. Interior and exterior wall framing for the two and three-bedroom units is 2x4's spaced 16" o.c.

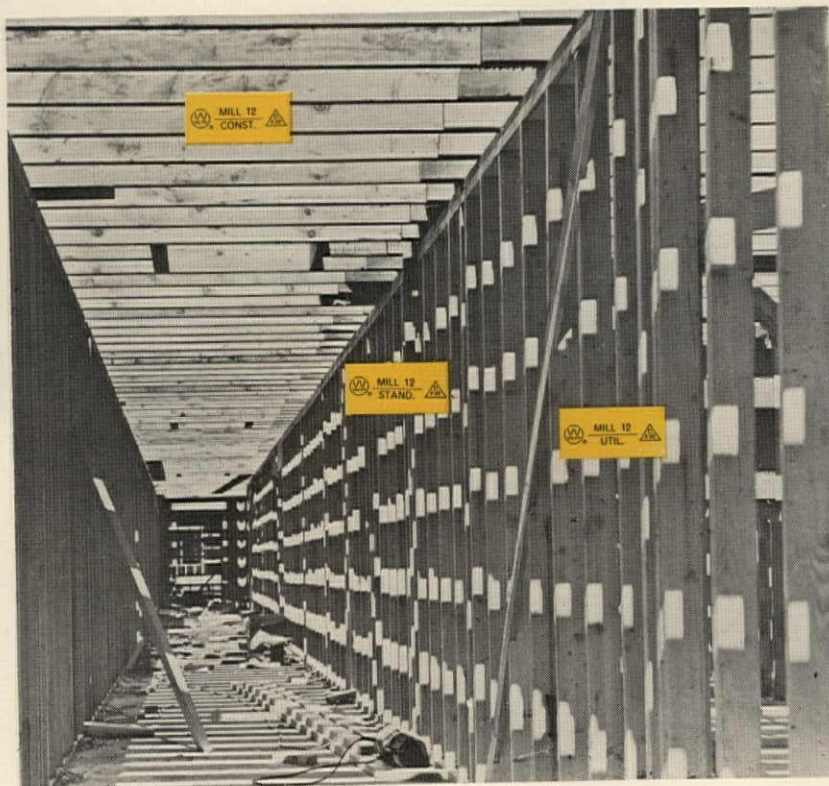
This apartment shows clearly how the adaptability of Western Lumber can provide profits for builders of many types of buildings. When a choice of lumber sizes and grades exists for every purpose, economy can be mixed with quality in perfect proportions.

Western Lumber is available from your nearby retail lumber dealer. Ask him for the right grades and sizes for your next job.

 2"x12" joists,
first and
second floors,
2"x10" roof joists, spaced
16" o.c.

 2"x4" wall
studs spaced
16" o.c. for
interior and exterior walls.

 2"x4" studs
and plates
interspersed
with Standard grade of the
same size.



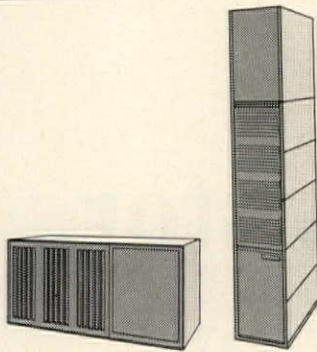
ARCHITECT: James Gardiner, A.I.A.

DOUGLAS FIR
WESTERN HEMLOCK
WESTERN RED CEDAR
SITKA SPRUCE
WHITE FIR

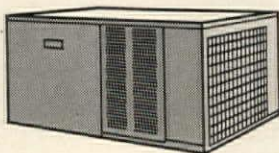
**Heating and cooling apartment buildings,
town houses, shopping centers
and office buildings
calls for a big central plant
with its necessary equipment rooms
and cooling towers.
That's one answer.**

Janitrol has at least four more

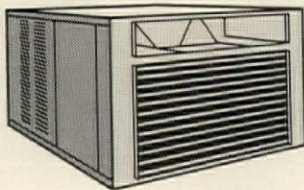




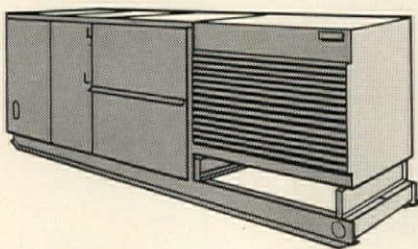
570 Series Year 'Round Comfort Package. With this compact-sized but big performing package you can fit each individual apartment or new house with its own, self contained heating and cooling system. Four heating capacities (50,000, 80,000, 100,000 and 125,000 Btu/hr. input), three cooling capacities (16,000, 24,000 and 33,000 Btu/hr.). Largest unit takes less than 5 sq. ft. of floor space, stands less than 7 ft. high. Separate condensing unit can be vented through wall or installed outside on rooftop or slab. Pre-charged refrigerant lines with sealed, quick-connect couplers permit fast, easy installation.



EGC Series Package Heating and Cooling Units. Compact units for rooftop and outdoor installation which pack up to 5 tons of cooling and 150,000 Btu-hr. input of heating into a single package only 72" x 46" x 28 1/2". Unit heats with gas, cools with electricity. Rooftop installation means no inside space is needed. Power exhaust eliminates need for flue. One or more units may be used to provide simple, efficient zone-controlled comfort system, with each unit controlled by its individual thermostat. Air cooled, it needs no water or sewage service. Factory charged and wired . . . ready to plug in and run.



46 Series Package Heat Pumps. Positive change-over feature turns cooling to heating automatically when the temperature drops, maintains steady, comfortable indoor climate in every season. 2, 2.5, 3, 4, 5, 7.5 and 10-ton cooling and heating capacity. Supplemental electric heating strips can be added which make these heat pumps practical for wider temperature ranges. Provides individual zone-controlled comfort system, with each unit controlled by its individual thermostat. Eliminates need for equipment rooms and cooling towers. Each store, office, apartment or house has its own self-contained heating and cooling system.



Skyliner Series Rooftop Units. Heavy-duty rooftop heating and cooling units provide broad cost and comfort advantages for modern rambling single and two story shopping centers and office buildings. Janitrol Skyliner units circulate year 'round conditioned air through a ceiling diffuser located beneath the unit or into a ducted system. Gives you lowest system installation cost. Wide range of capacities in heating and cooling combinations—cooling units only—and heating units only—let you balance loads easily, provide for exact heating and cooling needs in widest variety of situations.

JANITROL DIVISION
Midland-Ross Corporation
Columbus, Ohio Phoenix, Arizona



Detailed information and product specifications on Janitrol's complete line of heating and cooling products are available through your local Janitrol district manager or franchised Janitrol dealer. Contact him. The name's in the Yellow Pages.

Janitrol gives you more to work with

What would you pay for this G-E all-transistor, built-in radio/intercom?

Consider these points...

The Manufacturer. Made by General Electric, America's #1 home appliance manufacturer.

The System. A master station, one indoor and one outdoor remote station, rough-in boxes. Transformer and all necessary wiring.

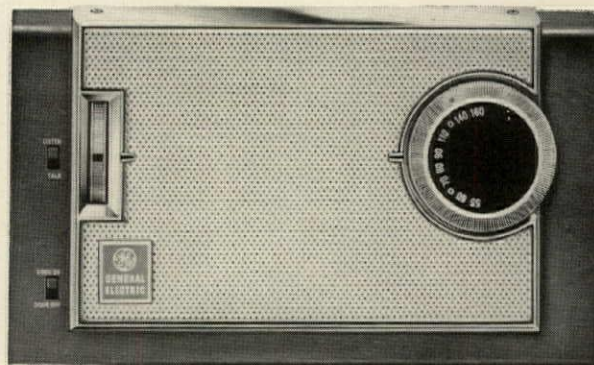
The Looks. You don't have to be an interior decorator to appreciate G.E.'s innovative styling. Quality appearance with chrome-plated, die-cast grills and Texon case. No cheap, stamped-metal look.

The Performance. New all-transistor design. Low-voltage transformer operation.

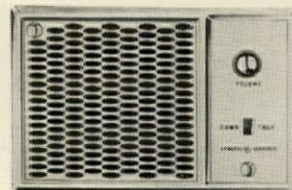
The Service. One-year warranty on parts and labor through always dependable G-E major appliance service.

The price? Less than \$50.

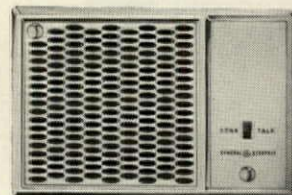
For the name of the supplier nearest you, contact your General Electric Major Appliance Distributor or write to: General Electric Company, Built-In Electronic Products, 1001 Broad Street, Utica, N.Y.



Model W-360 AM Radio Intercom



Indoor Remote



Outdoor Remote

GENERAL  ELECTRIC

NOW LOCALLY FABRICATED



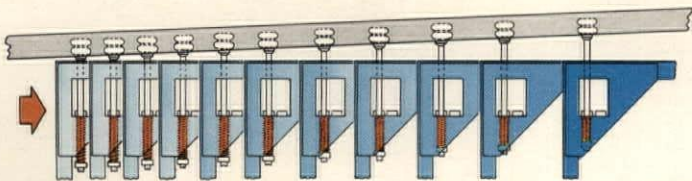
Slimdor bi-fold in full-length mirrors

FOR LOW PRICE, FAST DELIVERY
IMMEDIATE SERVICE

SLIMDOR

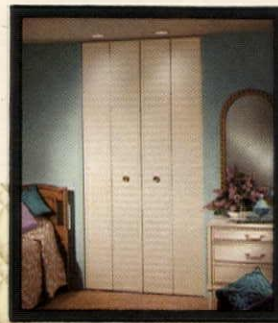
by Heatilator®

America's finest closet doors are now available at *local fabricator prices*. That also means *reliable local service* and *instant delivery*. The new Slimdor fills all decorative needs . . . including size, textures, colors. Available in standard 2 and 4 panel bi-fold or by-pass units, up to 8' heights. Complete custom size flexibility. Silent in service, warp-proof for life.



Exclusive, pre-hung hardware works effortlessly where others bind and stop . . . even when openings are out-of-plumb or not square. For further information, mail the coupon today.

FABRICATOR OPPORTUNITIES AVAILABLE Write on your letterhead.



Slimdor Vinyl bi-fold in Cameo beige pattern



Slimdor bi-fold in paintable Hardboard



Slimdor bi-fold in Luan Mahogany



Slimdor by-pass in paintable Hardboard



VEGA INDUSTRIES, INC.

91554 E. Brighton Ave.
Syracuse, New York 13205

Please rush full details on Slimdor closet doors plus name and address of my local Slimdor fabricator. (Please Print Clearly)

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ CO. _____ STATE _____

It's No Longer a Question of When . . .



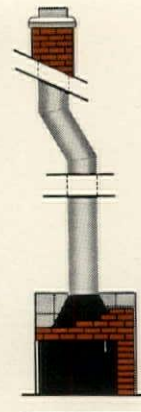
Uni-bilt
MODEL 5900

Uni-bilt
MODEL 4300

Uni-bilt
MODEL 4500



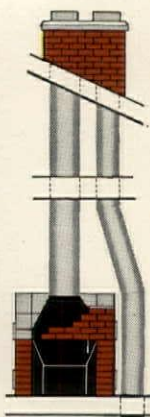
Heat-circulating Model . . . proven in use everywhere



7" or 10" UL
chimneys for separate
installation or . . .



500 Series . . . in open-corner or standard models



. . . in combination
with other heating
system or appliance

. . . It's Simply a Decision of Which

Heatilator[®] FIREPLACE

for the Size, Style and
Price Range of the Home

Now capitalize on proven "fireplace sales appeal" with Heatilator, the most respected name in fireplaces. It's the one complete line, with unlimited flexibility in style, price range and size . . . plus low-cost installation. Choose from modern designs in inexpensive Uni-bilt . . . the new 500 Series that halves masonry fireplace costs . . . or 35-year-famous Heat Circulating forms. Also complete lines of 7" and 10" All-Fuel U/L approved Chimneys, too. One dependable source supplies them all. Write today.



VEGA INDUSTRIES, INC.
594 E. Brighton Ave., Syracuse, N.Y. 13205

Please send information on all Heatilator Fireplaces
and Chimneys.

(Please Print Clearly)

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ CO. _____ STATE _____

Choice of Authentic Housings . . .

GUARANTEED
Heatilator Circulating
and 500 Series fire-
places are guaranteed
to provide smoke-free
operation under nor-
mal operating circum-
stances when installed
according to directions
attached to the unit.



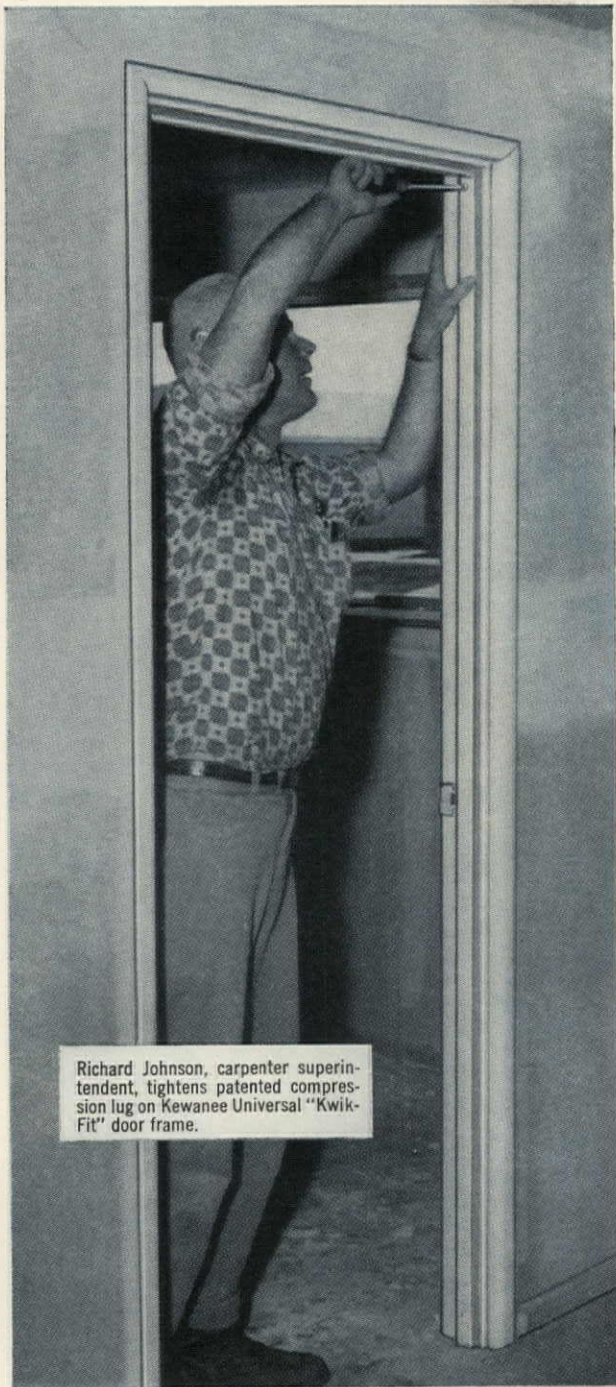
CUSTOM—
gray primed



CUSTOM—white
or red brick



DOUBLE—white
or red brick



Richard Johnson, carpenter superintendent, tightens patented compression lug on Kewanee Universal "Kwik-Fit" door frame.



Richard Livings, Livings Builders Hardware Co., Chicago, Illinois, shown with George Felsenthal, Kewanee representative, before one of the model homes in Merrion's Country Club Hills community.

Kewanee UNIVERSAL "KWIK-FIT" STEEL DOOR FRAMES

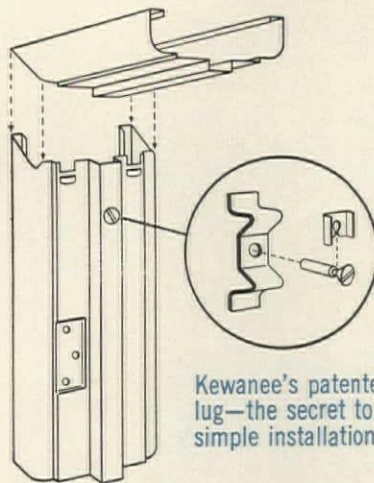
*save builder 1½ hours
in installation time,
per opening!*

"Sure they cost a little more, but look what we save on installation," says Richard Johnson, carpenter superintendent for J. E. Merrion Company, nationally known land developers and builders.

"All we have to do is slap the three sections in position—strike jamb, header, hinge jamb—nail the tabs at bottom of jambs, and the complete frame is installed. It's that simple. No special skills are required.

"We also like Kewanee's patented compression lug feature, which secures the frame in place and locks the miters at the same time."

That's about the story we hear from builders everywhere, once they switch to Kewanee's "Kwik-Fit" frame. Write today for literature and find out how we can help you reduce installation costs and eliminate call-backs. Remember, if a door begins to bind, the homeowner merely turns a screw to make the adjustment.



Kewanee's patented compression lug—the secret to fast, simple installation.

PLEASE SEND KEWANEE "KWIK-FIT" LITERATURE TO:

NAME _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____

SINCE 1919
kewanee Manufacturing Co.
964 Brown Avenue • Kewanee, Illinois 61443



Photo contributed by Daniel J. Ransohoff

This youngster represents the millions who receive help each year from the agencies and services of your United Campaign. He is a symbol of their hope, their need, their gratitude. And he serves to remind us of the work that is yet to be done in every community: of homeless children who crave love, of the elderly who seek dignity and fulfillment, of crippled and handicapped people who simply want a chance to help themselves, of families that need guidance, of the distressed who want friendship, of the thousands of sick who must be healed. When you think about it, the United Way poster boy is really our conscience. How can we deny him?



Published as a public service
in cooperation with
The Advertising Council

One gift works many wonders/Give the United Way



*quality
silica sands
for the
Building Materials
Industry*

CONNECTICUT SILICA COMPANY

*Special grades of high quartz
chips for ...*

- EXPOSED AGGREGATES
- PRECAST PANELS
- LANDSCAPING
- ROOFING GRANULES

*Also glass sand, fine grain sands
for plastering, sandblasting,
lithography, various fillers,
autoclaving.*

*Plant located near Old Mystic,
only a few miles from
New London, Connecticut.*

**DIRECT CUSTOMER SERVICE
BY TRUCK OR RAIL**

PURE QUARTZ



**CONNECTICUT SILICA
COMPANY**

P.O. Box 226

MYSTIC, CONNECTICUT 06355

Area Code 203, 536-2618

*Division of Ottawa Silica Company,
producer of the world's
finest silica for over 60 years.*

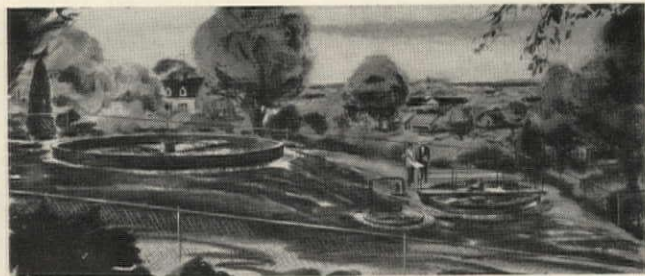


Go ahead, build!

Dorr-Oliver's CompleTreator takes care of the waste water treatment problem. It's the most compact, most reliable and easiest to maintain on-site treatment system you can use. The CompleTreator® process consumes 85% to 95% of the waste, producing an effluent that is chemically and biologically stable and safe for disposal.

End of on-site treatment objections!

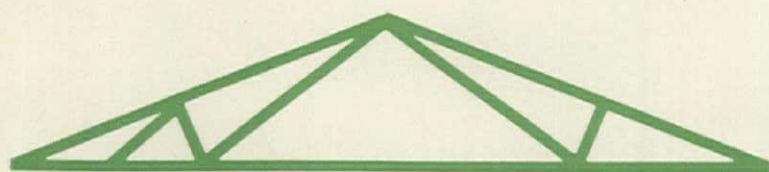
Why restrict your building projects to land within reach of city sewers . . . why worry about drainage fields . . . water table . . . type of soil? **Go ahead and build** with CompleTreator! Address: Dorr-Oliver Incorporated, CompleTreator Division, 77 Havemeyer Lane, Stamford, Connecticut.



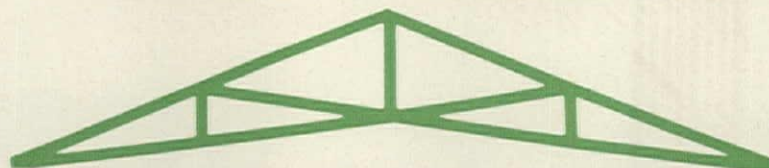
For as little as \$300 a house (in the average 200-house development), a CompleteTreator plant gives you the sales plus of low-cost, odor-free and trouble-free on-site sanitary treatment.

Land area used is amazingly small. Even the largest system—it'll handle 600 homes—takes up only 50' x 100'. The smallest CompleteTreator (big enough for 30 homes) can be delivered, fully assembled, on a trailer truck. Write for bulletin—No. 73 "Compact Sewage Treatment Plants."

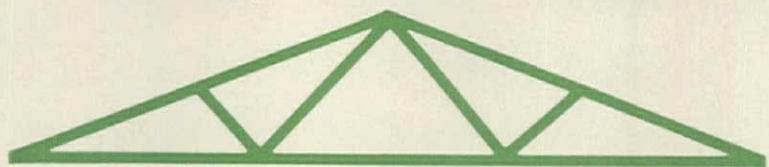
 **DORR-OLIVER**
WORLD-WIDE RESEARCH • ENGINEERING • EQUIPMENT



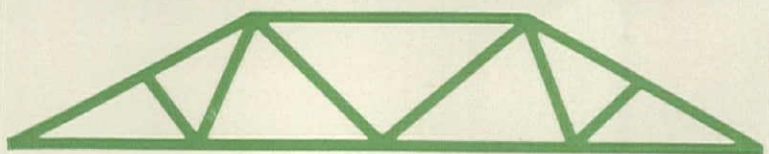
IF YOU ARE A VOLUME BUILDER . . . YOU



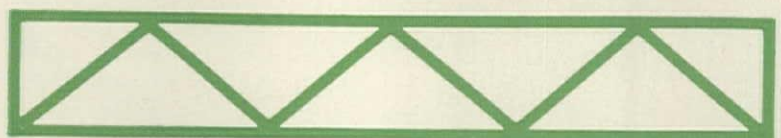
CAN SAVE \$50 PER HOUSE OR MORE BY



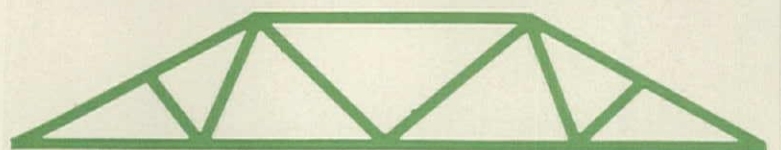
ASSEMBLING YOUR OWN ROOF TRUSSES



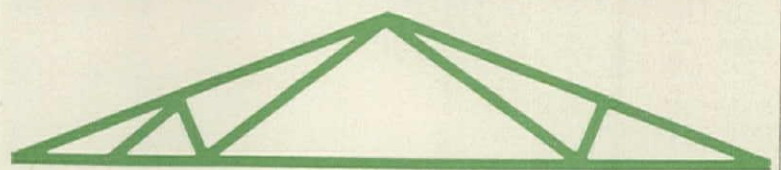
WITH PRECISION PRE-CUT PARTS FROM



WOOD COMPONENTS . . SAVES TIME, TOO.



INVESTIGATE THIS NEW CONCEPT IN



ECONOMY AND CONTROL TODAY!

WOOD COMPONENTS CO.
POST OFFICE BOX 133B, EUGENE, OREGON
SEND ADDITIONAL INFORMATION IMMEDIATELY!

NAME _____

ADDRESS _____

CITY & STATE _____

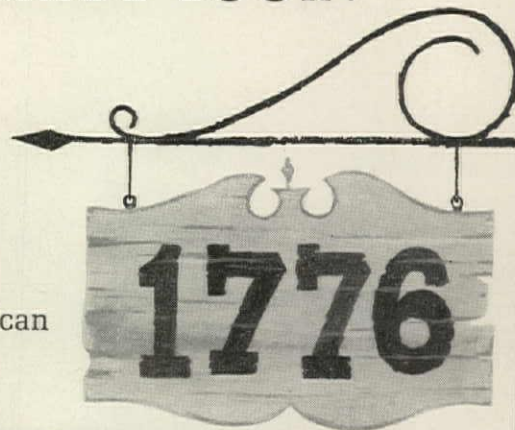
NUMBER OF HOUSES ANNUALLY _____

WOOD COMPONENTS

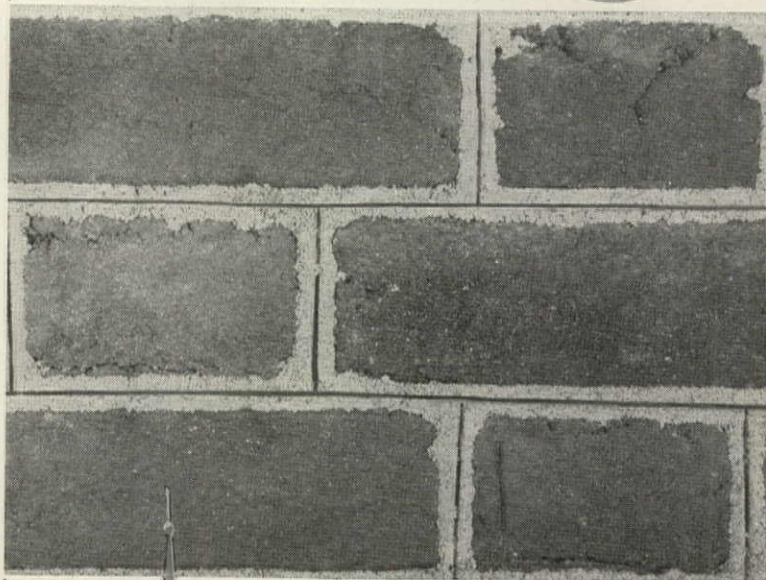
P.O. BOX 133B EUGENE, OREGON
TELEPHONE 342-3341 AREA 503



**BRICK THAT'S RUSTIC
AND ROUGH WITH A
HANDMADE LOOK!**



as authentic
as its
Early American
inspiration



The "1776" range of Glen-Gery Brick recaptures the charm of Colonial America—adds a feeling of warmth to contemporary styling—builds the kind of house most buyers want.

Write today for full information—no obligation.
Address: Glen-Gery Shale Brick Corporation,
P. O. Box 206, Shillington, Reading, Pa.

FROM THE KILNS OF

Glen-Gery
SHALE BRICK CORPORATION

DISTRIBUTORS THROUGHOUT EASTERN UNITED STATES

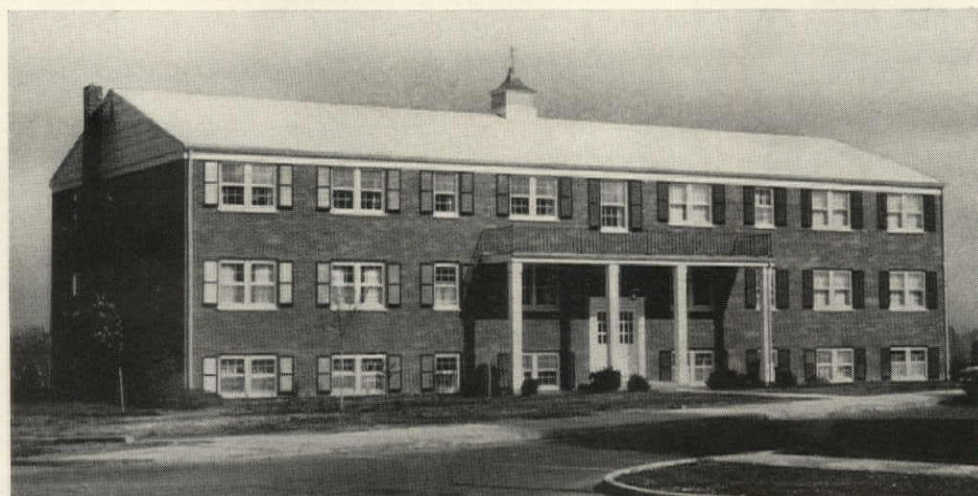
*P*residential® *...designs and engineering create sales and rentals...*



THE STOCKTON - BUILT BY W. MICHAEL CONNELLY INC. DOWNINGTOWN, PENNA.

AUTHENTIC COLONIALS

The Stockton is only one of the over 100 standard designs available. All are market tested proven sellers, imaginatively styled and engineered so that they can be built efficiently and economically.



THE WARWICK - BUILT BY ROBERT V. HOOEY CONSTRUCTION CO. CORNING, N. Y.

APARTMENTS & TOWN HOUSES

The eleven (11) unit Warwick is but one of the new types of apartments and town houses available. Designed with style that rents easily and engineered for fast and economical construction.



"The Sign of Excellence"

Since 1940, over 30,000 houses have been manufactured in Presidential's 150,000 sq. ft. plant at Pemberton, N. J. . . . giving Presidential Homes an enviable reputation throughout the industry for superior architecture and quality engineering. Presidential's know-how and experience can help you sell more houses. Fill out and mail the coupon below or call 609 TW 4-8201 in Pemberton, N. J.



**CLIP
& MAIL
TODAY**

MAIL TO: PRESIDENTIAL HOMES, PEMBERTON, N. J.

Please rush additional information on houses & apartments

Name Company

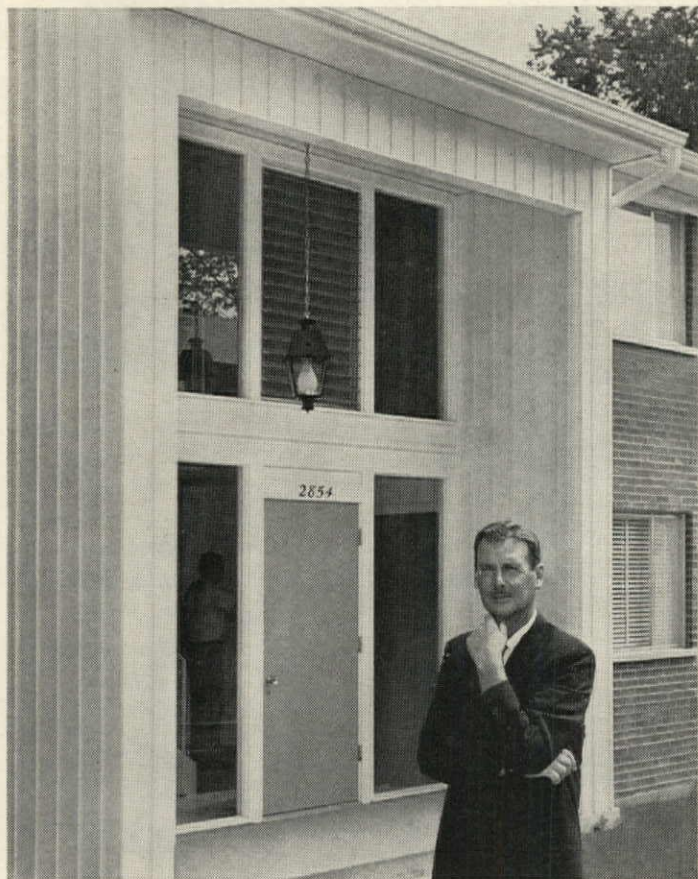
Address City State

We are interested in: We build:

Houses	<input type="checkbox"/>	Development	<input type="checkbox"/>	5 to 15 houses per yr.	<input type="checkbox"/>
Apartments	<input type="checkbox"/>	Scattered Lot	<input type="checkbox"/>	15 to 40 houses per yr.	<input type="checkbox"/>
				Over 40 houses per yr.	<input type="checkbox"/>

Pease Ever Strait Doors[®]

"THESE DOORS WON'T WARP!"



"For over a year we've had no call-backs due to warped doors; and have virtually eliminated heat loss in our apartment project. These doors have more than paid for themselves," says Raymond F. Hare, President, Hare & Son Builders, Cincinnati, Ohio.

Pease Ever-Strait steel exterior doors will never warp. Additionally, they feature a thick solid foam core; magnetic, refrigerator-type weather stripping; and a non-frosting thermal break between door facings. Result? Effective insulation, without storm doors. Ever-Strait doors come as a complete unit: pre-hung and primed in a wood frame—including a new, adjustable universal sill and threshold to fit any floor condition.

The complete line of Pease Ever-Strait doors includes twenty-four contemporary and colonial designs, with or without lights. For full information, contact Pease Woodwork Company or your nearest Ever-Strait Door Distributor... eliminate call-backs; lower your costs in homes or apartments.

EVER-STRAIT DOOR DISTRIBUTORS

Morgan-Wightman Supply Co.
9910 Pago Blvd., St. Louis 66, Mo.

Morgan-Wightman of Chicago
10525 Waveland Ave., Franklin Park, Ill.

Minnesota Wood Specialists
Box M, St. Paul Park, Minn.

O'Connor Lumber Co.
Southampton Rd., Westfield, Mass.

Pease Woodwork Co.
900 Forest Ave., Hamilton, Ohio

Walled Lake Mfg. Co.
2700 E. West Maple Rd.,
Walled Lake, Mich.

Whitmer-Jackson Co., Inc.
1996 W. Third St., Cleveland, Ohio
16th St. & Harsch Ave., Massillon, O.
275 N. Union St., Rochester, N. Y.
367 Hamburg St., Buffalo 4, N. Y.

Whitjax Ltd.
33 Ingram Drive, Toronto 15, Ont.
4600 Forest Ave., Montreal North, P. Q.

Joint-free
Steel Facings

Rigid Dylite[†]
Foam Core

Thermal
Break



**BUILD FAST—BUILD EASY
BUILD QUALITY
AND VARIETY WITH**

FORD HOMES

FAST, because you get a more completely fabricated house with more items factory assembled into larger sections.

FLOOR PANELS may be as large as 8 x 28 feet and come to you with finish flooring laid, sanded and filled.

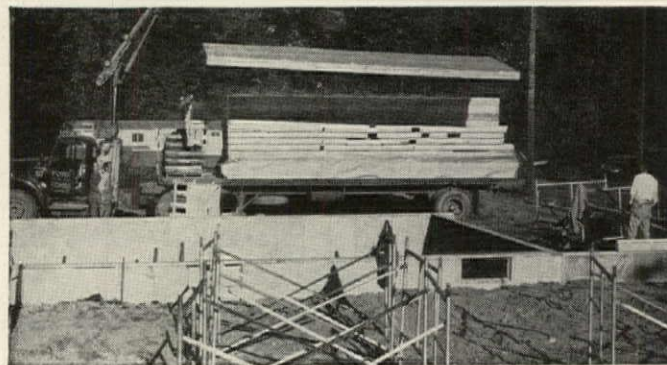
WALL PANELS up to 16 feet long with sheathing and drywall applied and insulation, rough wiring, doors, windows and trim all factory installed.

CEILING PANELS 8 feet wide with drywall applied to underside of joists and insulation and rough wiring installed.

ROOF PANELS with rafters 16" o.c. and plywood sheathing applied.

EASY because the sections are swung into place with an hydraulic crane that is mounted on one of the tractor-trailers that delivers the house.

QUALITY because Ford Homes are engineered for structural soundness and are built of top grade, brand name products.



VARIETY because Ford Homes are available in all styles including ranch, cape cod, split-level, split-foyer and two story.

And FORD Homes are under roof in one day!

Get your share of the quality market, with the complete Ford Quality Package. Write today!

IVON R. FORD, INC.
375 W. Main Street, McDonough, N.Y.

**Pease
Ever Strait Doors[®]**

[®]Patent Pending [†]Reg. TM. Koppers Co.

PEASE WOODWORK COMPANY • HAMILTON, OHIO

for



constant
resistance to cold
and dampness

longer
life for
floor coverings

sound
conditioning

over-all
lower cost...

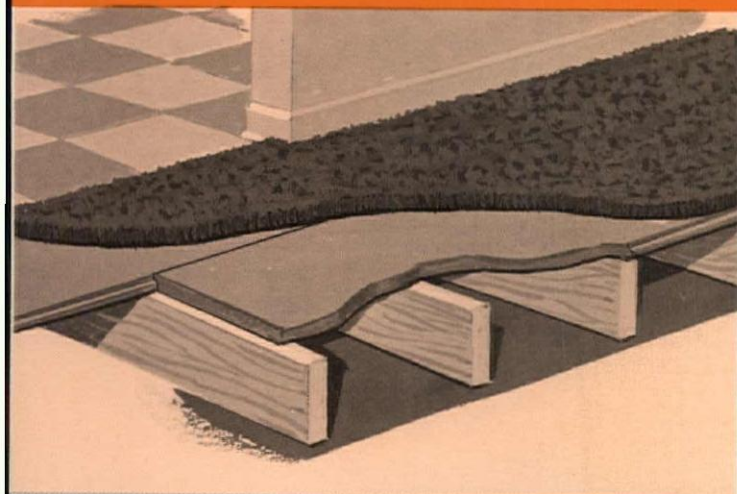
homasote

offers your choice

of **4**

Resilient Underlayments

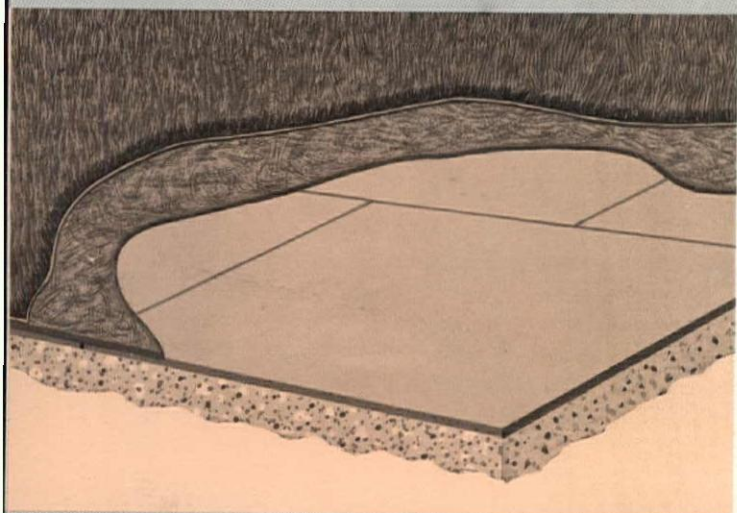
There's a **HOMASOTE UNDERLAYMENT** to meet every price and purpose



"4-Way" Floor Decking with built-in underlayment

For garden and low-rise apartments, motel and the better quality home. Panels 2' x 8', with T&G edges and 1 $\frac{1}{32}$ " thick, are nailed directly to joists and provide sub-floor, underlayment, sound deadening and weatherproof protection. Partitions can be set directly over the "4-Way" deck—wall-to-wall carpeting and pad can be installed right on it.

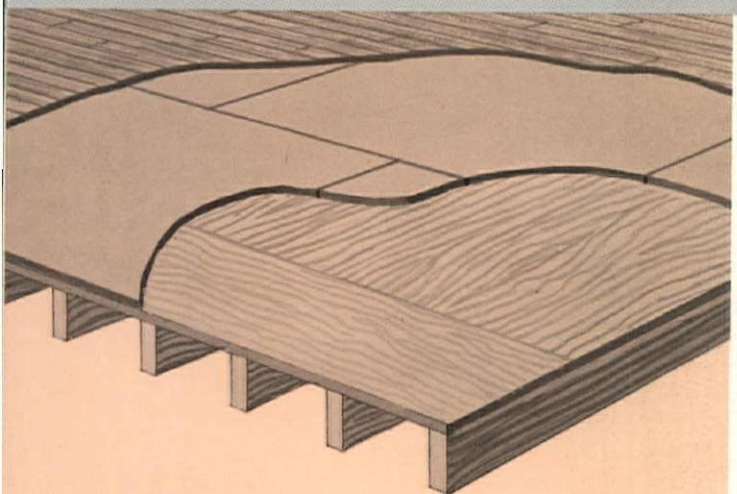
IMPACT NOISE RATING* + 9



$\frac{3}{8}$ " and $\frac{5}{8}$ " resilient underlayments over concrete floor for pad and wall-to-wall carpeting

Two Homasote thicknesses in convenient 4' x 4' panels for installation on concrete above grade. Homasote's resiliency gives a cushioned effect to walking and helps to lengthen the life of carpeting or other floor coverings. Floors are always comfortable because Homasote is insulating and resists dampness penetration.

IMPACT NOISE RATING* + 19



$\frac{1}{2}$ " Homasote over plywood or other wood construction

Regular Homasote, in 4' x 4' or 4' x 8' panels, is a modern "comfort companion" for carpet and padding over plywood and other wood construction—especially where sound deadening is important. Extra-tough, all wood-fibre Homasote is easily handled and can be installed either by nailing or gluing. Natural resiliency and great compression strength of Homasote make it the ideal underlayment for new hardwood floors or carpeting (even over old hardwood floors!).

IMPACT NOISE RATING* + 8 (with 2 layers plywood)
+ 1 (with 1 layer plywood)

HOMASOTE COMPANY, Dept. 4-310
Trenton 3, N. J.

Please forward literature and samples on your Resilient Underlayments, as checked: $\frac{3}{8}$ " $\frac{1}{2}$ " $\frac{5}{8}$ " 1 $\frac{1}{32}$ "
 Please advise name of nearest supplier of Homasote Underlayments.

NAME.....

FIRM.....

ADDRESS.....

CITY.....STATE.....

4-310

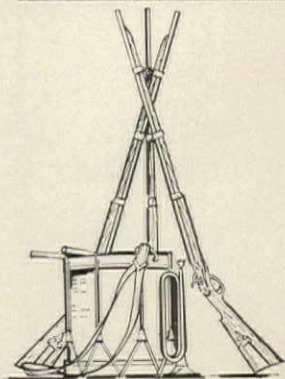
*Tested in accordance with FHA #750 (Test reports available on request)

HOMASOTE COMPANY

TRENTON 3, NEW JERSEY

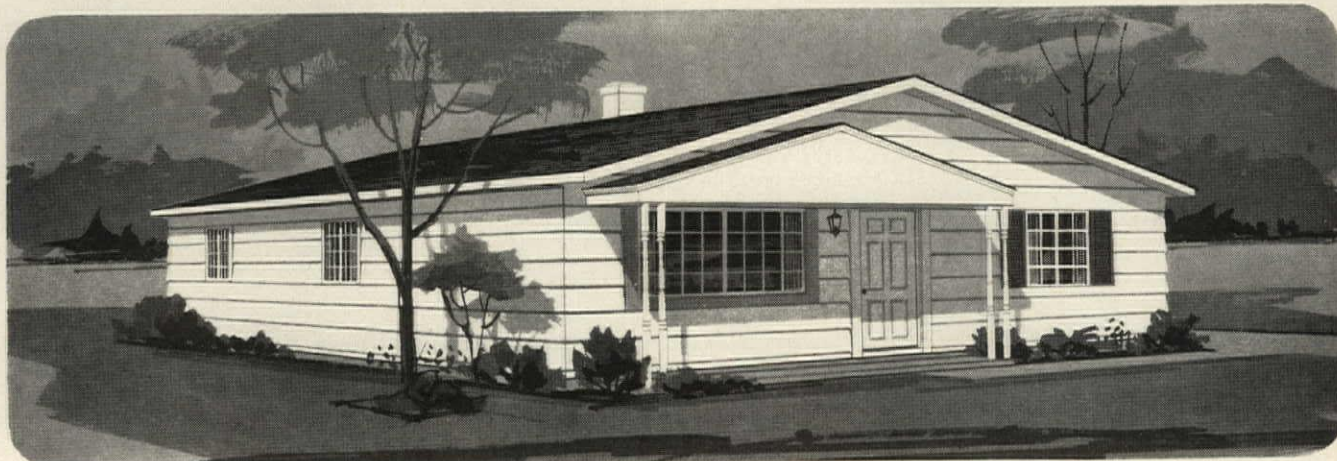


American Ranch



VANGUARD

... New full-value homes by INLAND



Southern Colonial

VANGUARD VALUE PACKAGE MEANS VOLUME SALES

- 10 basic designs
- 8 garage models
- 3 bedrooms
- Kiln dried lumber
- Nailable sheathing accepts any siding
- Solid 2 x 4 construction
- All architectural exterior trim furnished
- 884 square feet
- Available options, such as
Tappan "400" range
Birch wood cabinets
Mahogany doors

PLAN AHEAD, BE SALES AHEAD with Inland's new Vanguard series and Proven Step-by-Step Selling Program. Get mortgage processing at no cost, permanent and/or construction financing through Inland Mortgage Corp. Extended co-op advertising plan generates open house traffic. In the field professional assistance on market analysis, site selection, model, furniture and salesmen training programs all included. Contact Inland Homes Corporation, Dept. H-9, Piqua, Ohio.

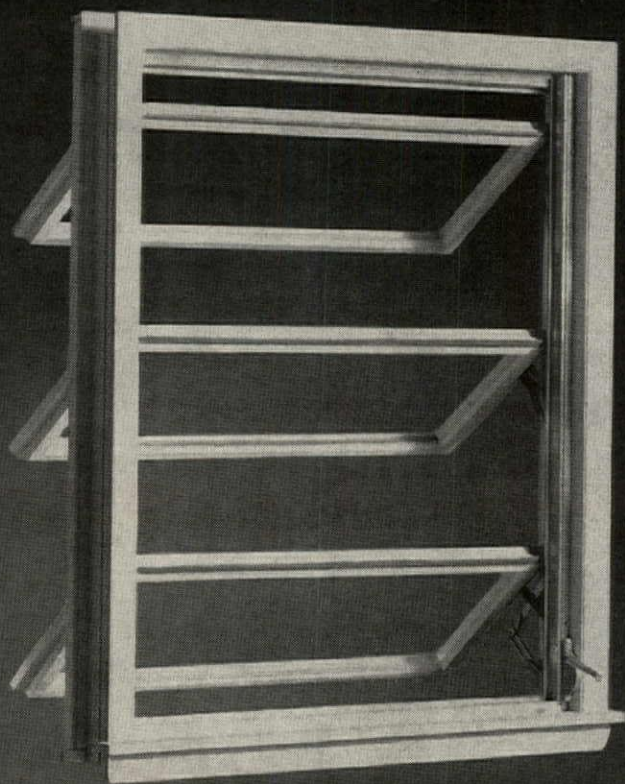
ATTENTION SOUTHERN BUILDERS! For Details on mortgage processing and financing, contact John H. Barry, Mgr., Inland Mortgage Corp. Branch Office, Suite 1005, 101 Marietta Street Bldg., Atlanta, Georgia. Telephone: Area Code 404-525-7751.

**INLAND
HOMES**



INLAND HOMES CORPORATION
Manufacturer of America's Finest Homes
Plants in Piqua, Ohio; Hanover, Pennsylvania;
Clinton, Iowa; Cedartown, Georgia

© 1964-Inland Homes Corporation



We make 11 great windows ...this is our best

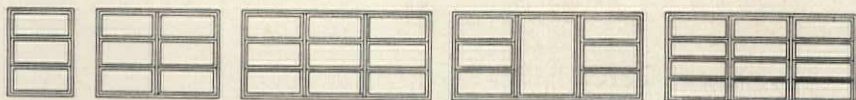


The E-Zee Loc. It looks like other awning windows. But notice. There is only one rotor. It operates all the vents at one time. Opens them up to ninety percent. The vents overhang. Air is scooped in and up, but rain just can't get in. What else? The vents drop slightly when opened, making it easy to wash the outside from the inside. Another refinement. Delayed action in the lower vent allows ten percent ventilation even when upper vents are fully closed. One more turn of the rotor and the whole unit locks tight. There's more. Woodco's own aluminum hardware. It fits

right. And double weather-stripping. And aluminum screens. And kiln-dried ponderosa pine frames. Options, too. Storm panels and insulating glass.

The E-Zee Loc awning window adds immeasurably to the sales potential of any house. It demonstrates its way into the heart of your prospect. Given a choice in the matter they won't want anything else.

The E-Zee Loc is available in both contemporary and traditional designs. Drop us a note for a complete description and specifications.



Woodco E-Zee Loc awning windows, casement windows, and others, are available in a full range of styles and sizes as shown in Sweet's Catalog.



*for the Beautiful
point-of-view... ®*

WOODCO CORPORATION (DEPT. B1), NORTH BERGEN, NEW JERSEY

INFORMATION FOR THE ASKING

Use these postpaid Reader Service Cards (1) to obtain more information on the products and services described in this issue including . . .



Advertised materials, equipment and services.
New products described in the "New Products" pages.
Latest publications listed in the "New Literature" pages.

(2) to subscribe to House & Home



Check appropriate boxes at bottom of Reader Service Card.

HOW TO USE THE READER SERVICE CARD

1 Circle the key number on the card corresponding to the number under each advertisement, new product item or manufacturer's literature item on which you would like more information.

2 Clearly print or type your name, title, firm, type of business and business address at the bottom of the card.

3 Check box indicating your occupation.

4 Mail—at House & Home's expense. The information you want will come to you directly from the manufacturer.

Two cards are provided. One is for you; one for an associate who may read your copy of House & Home. **Note:** Cards are valid until December 31.

SUGGESTION:

Consult Sweet's Catalog Files first. The product information you want may already be conveniently available to you there.

Circle Key Numbers and TYPE OR PRINT Name and Address on this card

(Good until 12-31-64). Issue 9

ADVERTISED PRODUCTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160	161	162	163	164	165

NEW PRODUCTS

200	201	202	203	204	205	206	207	208
209	210	211	212	213	214	215	216	217
218	219	220	221	222	223	224	225	226
227	228	229	230	231	232	233	234	235
236	237	238	239	240	241	242	243	244
245	246	247	248	249	250	251	252	253
254	255	256	257	258	259	260	261	262
263	264	265	266	267	268	269	270	271
272	273	274	275	276	277	278	279	280

NEW LITERATURE

300	301	302	303	304	305	306	307	308
309	310	311	312	313	314	315	316	317
318	319	320	321	322	323	324	325	326
327	328	329	330	331	332	333	334	335
336	337	338	339	340	341	342	343	344
345	346	347	348	349	350	351	352	353

NAME _____

TITLE _____

COMPANY _____

TYPE OF BUSINESS _____

BUSINESS ADDRESS _____

CITY _____

ZONE _____

STATE _____

Please enter my subscription to House & Home for
 1 year, \$6; 3 years, \$12; new; renewal.

U.S. and possessions and Canada only.

Subscriptions accepted from those active in the building industry.

OCCUPATION (please check)

- Builder/Contractor
- Subcontractor
- Distributor—Retail
- Distributor—Wholesale
- Architect/Designer
- Consulting Engineer
- Other (specify) _____

Do you subscribe to House & Home?

Yes No

FIRST CLASS

Permit No. 24544

Philadelphia, Pa.

BUSINESS REPLY CARD

No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

House & Home

Reader Service Department

P. O. Box 8324

Philadelphia 1, Pa.



PRODUCT INFORMATION FOR THE ASKING!

FIRST CLASS
Permit No. 24544
Philadelphia, Pa.

BUSINESS REPLY CARD

No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

House & Home
Reader Service Department
P. O. Box 8324
Philadelphia 1, Pa.



These convenient Reader Service Cards make it easy for you to obtain copies of latest manufacturers' literature and more information on the products and services advertised in this issue. See directions on reverse side.

SUGGESTION:

Consult Sweet's Catalog Files first. The product information you want may already be conveniently available to you there.

Circle Key Numbers and TYPE OR PRINT Name and Address on this card

(Good until 12-31-64). Issue 9

ADVERTISED PRODUCTS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70 71 72 73 74 75
76 77 78 79 80 81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100 101 102 103 104 105
106 107 108 109 110 111 112 113 114 115 116 117 118 119 120
121 122 123 124 125 126 127 128 129 130 131 132 133 134 135
136 137 138 139 140 141 142 143 144 145 146 147 148 149 150
151 152 153 154 155 156 157 158 159 160 161 162 163 164 165

NEW PRODUCTS

200 201 202 203 204 205 206 207 208
209 210 211 212 213 214 215 216 217
218 219 220 221 222 223 224 225 226
227 228 229 230 231 232 233 234 235
236 237 238 239 240 241 242 243 244
245 246 247 248 249 250 251 252 253
254 255 256 257 258 259 260 261 262
263 264 265 266 267 268 269 270 271
272 273 274 275 276 277 278 279 280

NEW LITERATURE

300 301 302 303 304 305 306 307 308
309 310 311 312 313 314 315 316 317
318 319 320 321 322 323 324 325 326
327 328 329 330 331 332 333 334 335
336 337 338 339 340 341 342 343 344
345 346 347 348 349 350 351 352 353

NAME _____
TITLE _____
COMPANY _____
TYPE OF BUSINESS _____
BUSINESS ADDRESS _____
CITY _____ ZONE _____ STATE _____

OCCUPATION (please check)

- Builder/Contractor
 Subcontractor
 Distributor—Retail
 Distributor—Wholesale
 Architect/Designer
 Consulting Engineer
 Other (specify) _____

Do you subscribe to House & Home?
Yes No

Please enter my subscription to House & Home for
 1 year, \$6; 3 years, \$12; new; renewal.

U.S. and possessions and Canada only.

Subscriptions accepted from those active in the building industry.

FIREPLACES OF MODERN CONCRETE

Clip for your **BUILDER'S IDEA FILE**

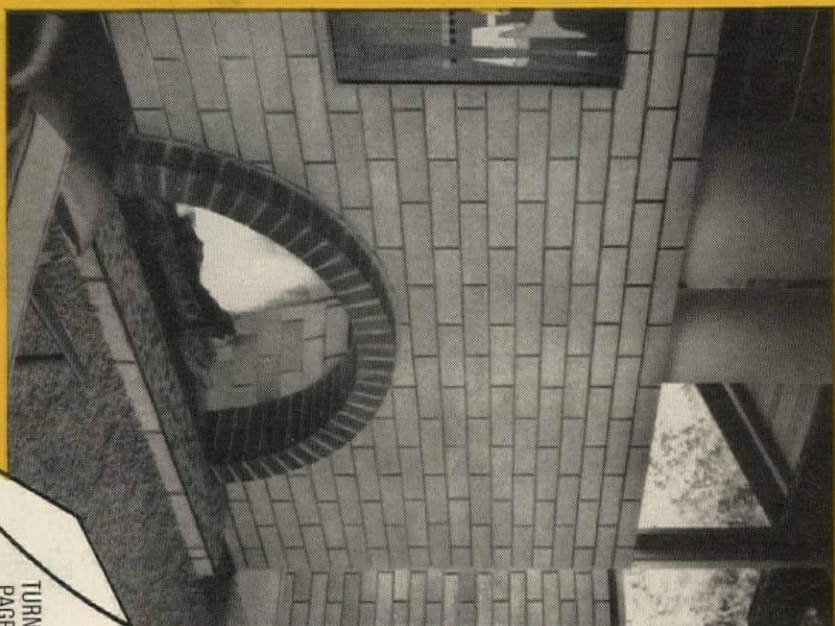
Focus your sales appeal with a distinctive fireplace of modern concrete

A center of interest that never loses its attraction for home buyers is a well-designed fireplace. The versatility of concrete, today, makes it easy to design one that brings out the best in your model homes. A fireplace

of concrete can be quietly conservative—or dramatically spectacular. Patterns, textures and colors are almost limitless. Let your imagination—and these examples—be your guide.

Design for new elegance. Smooth surfaces of these square units and the bold joint treatment provide a fireplace that goes beautifully with contemporary decor, forms the perfect background for flames.

Accent an entire wall. An attractive arch sparks up this running bond of 4-inch high concrete masonry units. The same pattern is repeated in the other walls of the room.



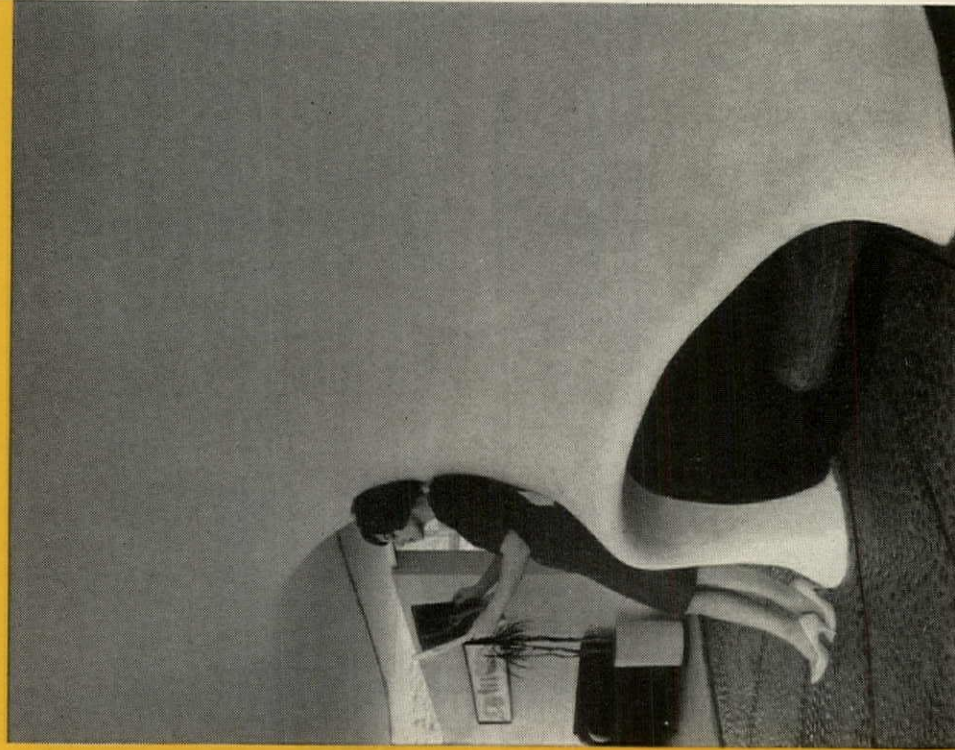
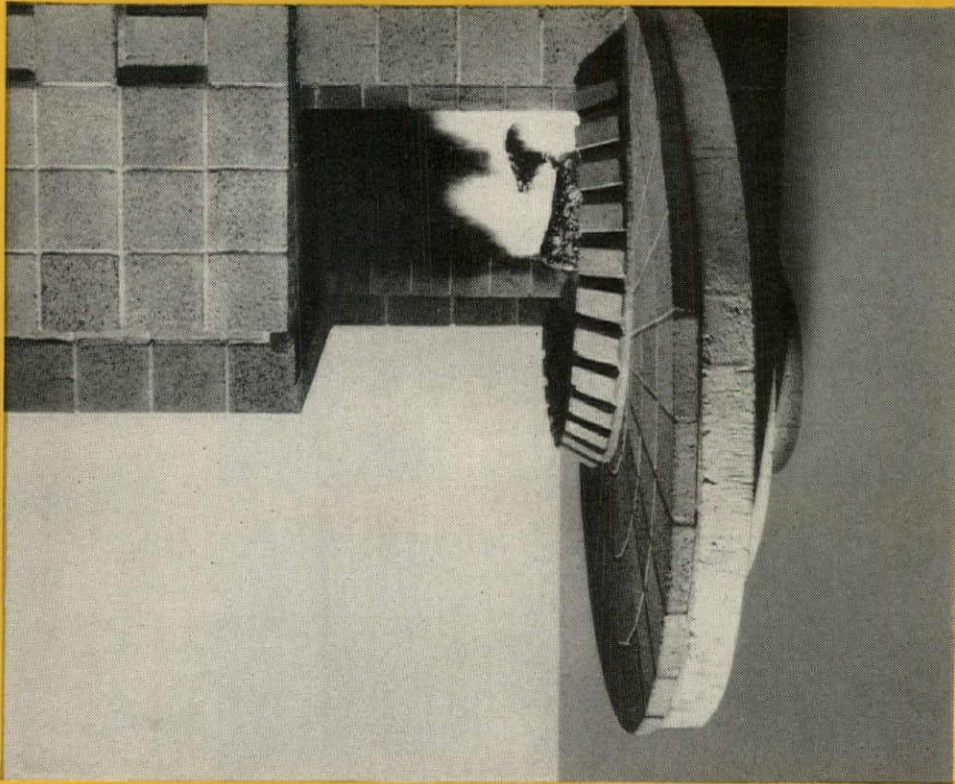
VERSATILE CONCRETE... THE ONE MATERIAL THAT DOES IT ALL

TURN
PAGE
FOR
MORE
IDEAS

FIREPLACES OF MODERN CONCRETE

Make the most of form and texture. The simplicity of a stacked bond pattern in 8-inch square units points up the more intricate design of the circular, raised hearth. Use of the same texture throughout provides unity.

Free-form for style and flair. Shaped to follow the contour of a concrete shell roof, this unusual fireplace was sprayed with shotcrete over metal lath. It is accented by a hearth of pebbled concrete containing black aggregate.



VERSATILE CONCRETE... THE ONE MATERIAL THAT DOES IT ALL

THE BASIC HOUSE Walls, Roofs, Floors, Basements, Fireplaces
LANDSCAPE PAVING Driveways, Patios, Walks
OUTDOOR LIVING Pools, Sight screens, Planters, Sculpture, Barbecues

PORTLAND CEMENT ASSOCIATION

An organization to improve and extend the uses of concrete

**Here's how G-E
Central Air Conditioners
solved the problem
of even cooling in the
multi-room apartments
of Robert Schmertz**



"Our apartments, which range up to 1,000 sq. ft. and have as many as four rooms, are laid out so that we prefer 1½- and 2-ton G-E Central Systems to give us even distribution of cooling through ductwork at a low operating cost," says Bob Schmertz of Leisure Village, Lakewood, N.J.



"Because some folks feel the heat more than others, they appreciate the fact that with individual central systems, each apartment has its own separate climate control.

"Of course," Mr. Schmertz says, "we chose G.E. in the first place because we know G.E. makes the most reliable products. And with G.E.'s top engineering design, we can count on the most dependable equipment. We're selling well, thanks in great part to G.E."

**Quiet,
low-cost G-E
Zoneline Air Conditioners
solved Ben Cogen's
Sherwood Park Apartments
cooling problems**



"G-E Zoneline through-the-wall air conditioners are amazingly quiet, and their low-installation costs fit our needs perfectly," says Ben Cogen, owner of handsome, new low-rise apartments in Lima, Ohio. "Zonelines are attractive, too, both on the exterior and the interior."



"Our apartments are laid out so that a single G-E Zoneline can air condition our three-room suites, and two G-E through-the-wall units take care of our larger four-room apartments. Each tenant can control the temperature in his own apartment. If repairs are needed, it requires shutting down just one unit, and it slides out of its through-the-wall case in seconds. Actually, we're so satisfied with G-E Zonelines, we're putting 40 more in our new apartments."

There's a General Electric air conditioning system that's right for your installation. Get full details from your G-E representative or write Air Conditioning Department, General Electric, Appliance Park, Louisville, Kentucky.

GENERAL  ELECTRIC

SEND FOR THIS FREE



136
PAGE

CATALOG

Largest Selections of
Quality Building Materials,
Newest Styles, Rocket-Fast
Service at Rock-Bottom
Wholesale Prices

PLUS

New Low 5%* PRE-PAID FREIGHT PLAN

Pin-point your shipping costs
in advance.

Wherever shipping costs are
less than 5%, the savings
are yours.

*10% West of Continental Divide.

FREE DELIVERY within 100 miles of our
3 Automated Distribution Centers...

- ST. LOUIS, 9910 Page Blvd.
(314) HA 8-9700
- CHICAGO, 10525 Waveland
Franklin Park
(312) 625-2800
- MILWAUKEE,
6900 N. Teutonia Ave.
(414) FL 2-0400



P.O. BOX NO. 1 • DEPT. HH • ST. LOUIS, MO., 63166

NAME _____

FIRM _____

TYPE OF BUSINESS _____

CITY _____ STATE _____

Send Me M-W 1964 Catalog

NEW LITERATURE

A homebuilders' guide to successful apartment building

Apartment building has become, if anything, even more risky than building houses, and the only way to minimize the risk is to build apartments that fit closely the needs and desires of the renter.

Starting with this premise, which he calls the "total marketing approach," William R. Smolkin has written *A Marketing Plan for Apartment Builders*, a comprehensive, concise guidebook to apartment building that should be read not only by builders contemplating the market, but also by builders already in it—particularly those who have vacancy problems. Smolkin begins with a long-range view of the apartment potential (multi-family housing will maintain its present share of the market through at least 1970, he predicts), then takes the reader on a step-by-step tour that starts with finding a market; includes the selection of site, design, size and rental; offers sample merchandising programs and timetables and ends with a chapter on managing the apartment after it is built.

Smolkin is best known as a market researcher (he is president of William R. Smolkin & Assoc. marketing consultants), so it is not surprising that his book stresses the importance of good research—preferably by a professional. The cost is not high, he says: in cities of up to one million people, research for a proposed site should cost no more than \$3,000, a general citywide study no more than \$5,000.

Author Smolkin draws heavily on his own research experience. But instead of offering specific market facts, he stresses the type of facts needed and suggests where they can be obtained. Two items:

1. *To evaluate a city as a possible apartment market, check these factors:* population growth, immigration figures, the multi-family vs. single-family ratio, absorption rate of apartments over the past ten years, vacancy rates and the growth of the city's economic base. All this information is available through

U.S. Government documents or municipal records.

2. *To evaluate an area's potential, shop the competition.* Managers and owners of other projects will provide nonsensitive information—number of units, size, parking spaces, etc.; municipal, FHA and mortgage company records will provide data on site layouts, cost estimates, etc.; and tenant surveys will show the strengths and weaknesses of existing apartment units.

While much of the information gained by such methods has validity only for a specific market, some applies to almost all markets. Two examples:

1. *"Close to work," says Smolkin, is the key phrase in picking an apartment site.* Four out of five apartment dwellers walk or drive to work, so proximity to the business district or a major highway is much more important than proximity to public transportation.

2. *Nearness to schools is almost never significant in picking a site.* Even in medium-rental units, school-age children are rare.

One chapter, entitled "Test for feasibility," should be of particular interest to a builder planning his first apartment project. Through the use of charts, tables and formulas, Smolkin shows the relationship that must exist between building costs, operating costs and income if an apartment project is to be economically feasible. FHA or a private lender will apply the same yardstick to a proposed project before approving it, but if the builder can first rough it out for himself, he will be spared the expense of taking the project up to this approval stage.

A Marketing Plan for Apartment Builders is a joint effort. It was written by Smolkin for NAHB's marketing department and published by Allied Chemical's Barrett Division.

Copies, priced at \$7.50, may be obtained by writing: Mrs. Wells, Marketing Dept., National Association of Home Builders, 1625 L Street, N. W., Washington, D.C.

For copies of free literature, circle the indicated number on the Reader Service card, page 129.

CATALOGS

DRAWER SLIDES. 8 pages. Metal and nylon tracks and guides, anti-friction pads, glass door slides. Specifications and installation drawings. Hardware Designers, Pleasantville, N.Y. (Circle 300 on Reader Service card)

FIREPLACE FURNISHINGS. 32 pages. Specifications and illustrations of ready-made and custom flexible fire screens, firesets, andirons, log dogs and accessories. Bennett-Ireland, Norwich, N.Y. (Circle 301 on Reader Service card)

RESIDENTIAL LIGHTING FIXTURES. 8 pages. Color photos of 35 Empire (19th century French) pendants, chandeliers, post lights and wall brackets. Thomas Industries, Louisville, Ky. (Circle 302 on Reader Service card)

HOODS AND VENTILATING FANS. 20 pages. Specifications, colors and accessories. Miami-Carey, Middletown, Ohio. (Circle 303 on Reader Service card)

CRAWLER AND WHEEL TRACTORS. Two pocket catalogs. Illustrations and brief specifications of 55 major equipment items. John Deere, Moline, Ill. (Circle 304 on Reader Service card)

LOCKSETS. 16 pages. Styles and features plus keying kits, door trim, installation tools, promotion materials and related cabinet hardware. Weslock, Huntington Park, Calif. (Circle 305 on Reader Service card)

SEWAGE PLANTS. 12 pages. Design, application and performance data in relation to population equivalents. Dravo, Pittsburgh. (Circle 306 on Reader Service card)

LIGHTING FIXTURES. 8 pages. Finishes including antiqued cast brass, hand-blown charcoal glass, Tole and hobnail glass. Virden, Cleveland. (Circle 307 on Reader Service card)

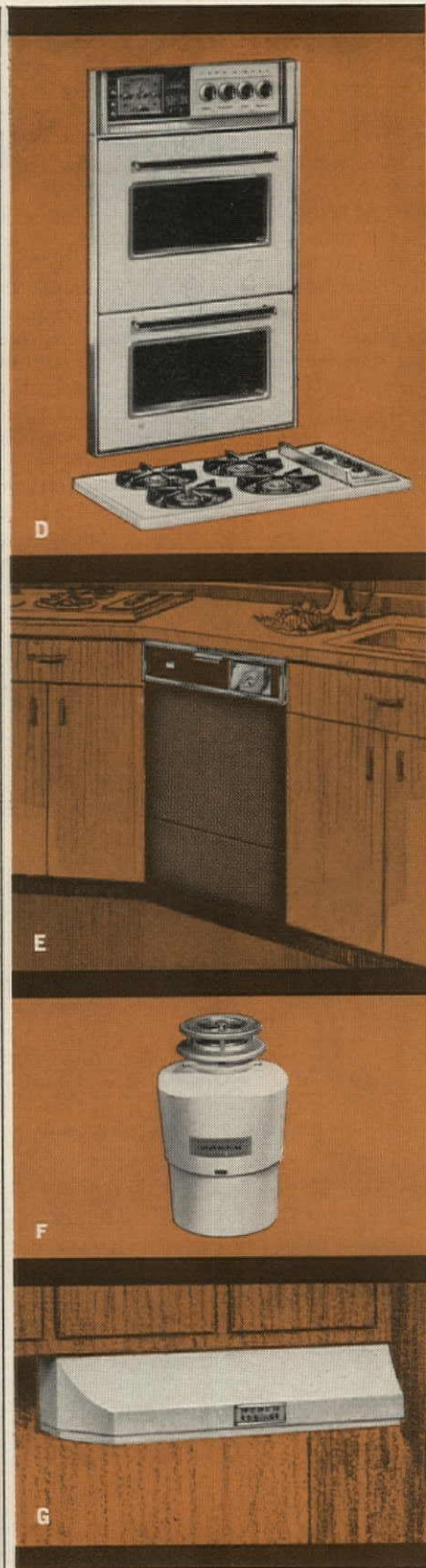
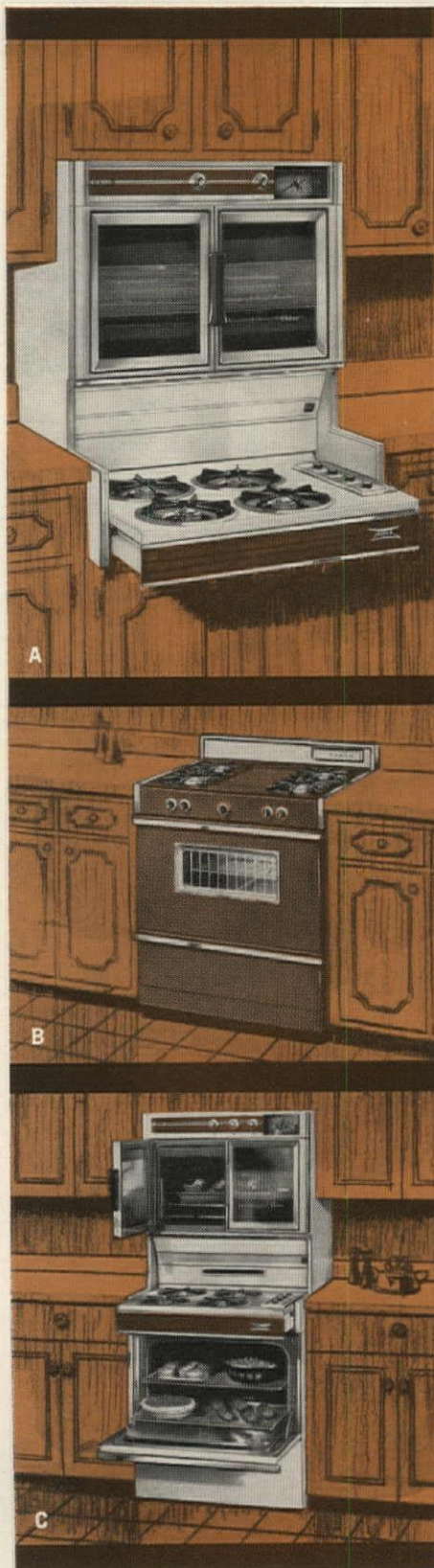
BATHROOM HARDWARE. 8 pages. Chrome-plated or gold-plated concealed screw, semi-concealed screw and exposed screw bathroom fittings. Prices and dimensions. Sea-Chrome, Los Angeles. (Circle 308 on Reader Service card)

CRAWLER TRACTORS. 24 pages. Specifications, operating methods for series 1000 D loader, power tilt dozer and power angling dozer, plus accessories for other uses. J. I. Case, Racine, Wis. (Circle 309 on Reader Service card)

STEEL CABINETS. 8 pages. Dimensional guide with drawings shows regular and special purpose cabinets and accessories. Photos show commercial and residential applications. Geneva Industries, Geneva, Ill. (Circle 310 on Reader Service card)

New literature continued on p. 136

New trend:



More and more builders are choosing a Roper Kitchen package

Because Roper gives builders greater flexibility with a full line of gas and electric ranges that are *completely interchangeable* in either fuel. No complicated planning or costly carpentry, because there's no difference in dimensions—gas or electric. This brilliant Roper range line, plus other quality appliances, provides truly practical versatility in choice of styles, options and custom colors . . . are tailored to the price level and market value of your homes. You enjoy more leeway in kitchen planning, can offer buyers a wider choice. And Roper is famous for the one thing that does more to move homes today—*quality!*

Gas and Electric Ranges by

ROPER

Geo. D. Roper Sales Corporation,
Kankakee, Illinois

A Charm—Eye-level bake/broil oven. Slide-out cook top.

B Counter Built-Ins—Economical slide-in installation. Choice of 5 custom colors.

C Charm II—Double-oven range with eye-level broiler. Only 30 inches wide.

D Custom Built-Ins—Vast selection of ovens and companion cook tops.

E Dishwasher—Silent Swirl dual-level washing. No pre-rinsing, no filters or screens. Fits under gas cook-top—space saver.

F Food Waste Disposers— $\frac{1}{3}$ H.P. and $\frac{1}{2}$ H.P. models. Replacement guarantee.

G Hoods—Quiet, smooth operating. Vented and non-vented.

Color-matched sinks also available.

NEW LITERATURE

starts on p. 134

PRODUCT BULLETINS

STRIPED CERAMIC TILE. 4 pages. 8½" x 4¼" striped tiles come in ten colors. Trim pieces are shown. Stylon, Milford, Mass. (Circle 311 on Reader Service card)

DISHWASHER DISPOSER. Data sheet, features, dimensions and specifications for Modern Maid model DW 346. Tennessee Stove Works, Chattanooga, Tenn. (Circle 312 on Reader Service card)

TRACKED LOADER. 8 pages. Series 933 Traxcavator. Describes engine, power train, undercarriage, hydraulic system and accessory equipment. Caterpillar Tractor, Peoria, Ill. (Circle 313 on Reader Service card)

TRAVERTINE VINYL ASBESTOS TILE. 4 pages. Embossed color reproductions of floor tile. Johns-Manville, New York City. (Circle 314 on Reader Service card)

CERAMIC-FINISHED SIDING. 4 pages. Color charts, features and test results of cement-asbestos mineral fiber side wall shingles and clapboards. Philip Carey, Cincinnati. (Circle 315 on Reader Service card)

PREFABRICATED FIREPLACE. Data sheet. Color photos of round, free-standing Dyna Flame gas log fireplace. Dyna Mfg. Co., Los Angeles. (Circle 316 on Reader Service card)

SUSPENDED CEILINGS. Two data sheets show wood-grain metal grid system and tee-grid. Installation steps are shown. K-S-H Plastics, St. Louis. (Circle 317 on Reader Service card)

FLAT WOOD TRUSSES. 6 pages. Drawings and photos show how to use flat trusses in light commercial construction. Sanford Truss, Pompano Beach, Fla. (Circle 318 on Reader Service card)

ONE-COAT WALL SYSTEM. 5 pages. Architectural specifications and installation photos. Bestwall Gypsum, Paoli, Pa. (Circle 319 on Reader Service card)

VANITIES. Data sheet. Color photos show Bronzeglow Birch and Royal Birch finishes. H. J. Scheirich, Louisville, Ky. (Circle 320 on Reader Service card)

WASTE TRAP. Data sheet. Floor Flush aluminum door opens to duct to basement rubbish bin. Ketch-All Mfg. Co. Akron, Ohio. (Circle 321 on Reader Service card)

WALL HUNG ELECTRONIC BARBECUE. Data sheet. Quartzbroil installs on wall, folds flat to only 4" thick. Description, specifications, dimensions. Purcarb, New York City. (Circle 322 on Reader Service card)

TECHNICAL LITERATURE

SOUND CONTROL. 48 page pocket book. An illustrated handbook covering: 1) the nature of sound, its transmission and its effects; 2) the principles of sound control in architecture and building and 3) specific applications of these principles. U.S. Gypsum, Chicago. (Circle 323 on Reader Service card)

SOUTHERN PINE GRADE-USE GUIDE. 12 pages. Specifications, seasoning, sizes, stress grades, grade descriptions and examples of typical uses of each grade. Southern Pine Association, New Orleans. (Circle 324 on Reader Service card)

CONCRETE ROOF DECKS. 8 pages. Specifications, characteristics and installation instructions for various lightweight concrete systems. Zonolite, Chicago. (Circle 325 on Reader Service card)

CONSTRUCTION JOINTS. 8 pages. Proper joint design to take maximum advantage of elastomeric sealants. General Electric, Waterford, N.Y. (Circle 326 on Reader Service card)

WATERTIGHT CONCRETE. 6 pages. Requirements, design and specifications. Master Builders, Cleveland. (Circle 327 on Reader Service card)

Here is the number to call to get ANY number in the Progress Lighting Catalog



- ALABAMA**
Birmingham...Lighting & Lamps Whsers, Phone: 323-5842
Wells Lighting Studio, Phone: 322-3424
Huntsville...Huntsville Elec. Supply Co., Phone: 536-6621
- ARIZONA**
Phoenix...Regal Lighting Fixture Co., Phone: 264-7585
- ARKANSAS**
Blytheville...American Elec. Supply, Inc., Phone: PO 3-7023
Ft. Smith...Southern Electric, Inc., Phone: SU 2-6095
Little Rock...Adcock Lighting & Supply, Phone: MO 3-4109
- CALIFORNIA**
Fresno...Consolidated Elec. Dist., Phone: AM 8-6464
Oakland...National Electric Supply, Phone: OL 3-0416
San Francisco...California Elec. Supply Co., Phone: 863-2020
Peerlite Mfg. & Supply Co., Phone: SU 1-4658
Stockton...Consolidated Elec. Dist., Phone: HO 6-2301
- COLORADO**
Denver...Central Electric Supply Co., Phone: 266-3211
- CONNECTICUT**
Hartford...Capitol Light & Supply Co., Phone: 527-8115
Electrical Wholesalers, Phone: 527-3238
West Haven...C. S. Merwick Elec. Sup. Co., Phone: 934-6331
- DELAWARE**
Wilmington...Tecot Elec. Sup. Co., Inc., Phone: OL 5-6591
- DISTRICT OF COLUMBIA**
Washington...Eagle Elec. Supply Co., Phone: 628-0950
- FLORIDA**
Gainesville...Hughes Supply, Inc., Phone: 372-8471
Largo...Atlas Elec. Supply Co., Phone: 584-7604
Orlando...Central Electric Supply, Inc., Phone: 241-5664
Hughes Supply, Inc., Phone: 425-2661
Pensacola...Cesco, Inc., Phone: GL 5-8511
Sarasota...Brookman Elec. Supply, Inc., Phone: RI 7-3171
St. Petersburg...Hughes Supply, Inc., Phone: 862-1041
Tampa...Atlas Lighting, Inc., Phone: 236-5707
- GEORGIA**
Atlanta...Beck & Gregg Hardware Co., Phone: 521-2010
Cain Lighting & Supplies, Phone: 528-2925
Georgia Lighting Supply Co., Phone: TR 5-4759
Dalton...Southern Wholesalers, Phone: 278-1583
Marietta...Cobb Electric Supply Co., Phone: 427-6565
Savannah...Morris Electric Supply Co., Phone: 234-2296
- ILLINOIS**
Chicago...Bright Electrical Supply Co., Phone: AR 6-4601
Brook Electric Supply Co., Phone: AR 6-2800 LA 5-2830
Crystal Lighting Supply, Inc., Phone: 586-0440
Dobkin Electrical Supply Co., Phone: SE 8-3700
Hyland Elec. Supply Co., Phone: AN 3-4100
Westinghouse Elec. Supply Co., Phone: TA 5-5000
Park Ridge...Lighting Showplace, Inc., Phone: 825-3309
Rock Island...Marlin Associates, Inc., Phone: 788-9371
- INDIANA**
Anderson...Dixon Electric Co., Inc., Phone: 643-6650
Aurora...Aurora Supply Company, Phone: 502
Ft. Wayne...Schlatter Hardware Co., Phone: 742-8311
Indianapolis...Central Elec. Supply Co., Phone: ME 5-8605
First Elec. Co. (Sub. of South Bend Elec.), Phone: ME 8-6421
Kulwin Electric Co., Phone: WA 5-9694
South Bend...Midwest Lite Co., Inc., Phone: AT 8-4427
- IOWA**
Dubuque...Universal Electric Co., Phone: 583-1765
Ft. Dodge...Electrical Materials, Phone: 573-7166
Washington...Sillers Elec. Supply, Inc., Phone: OL 3-2123
- KANSAS**
Coffeaville...Tri-State Elec. Sy. Co., Inc., Phone: CL 1-0484
Salina...Kriz Davis, Inc., Phone: TA 7-4497
- KENTUCKY**
Louisville...Belknap Hardware & Mfg. Co., Phone: 584-1341
The Brecher Co., Phone: 897-1561
- LOUISIANA**
Alexandria...Mid State Elec. Co., Inc., Phone: 442-4486
Baton Rouge...Monerret & Brister Appl., Inc., Phone: DI 8-6732
Lafayette...Lafayette Elec. Supply Co., Phone: 232-1434
Lake Charles...Craft-Rushworth, Ltd., Phone: HE 9-9424
New Orleans...Lighting, Inc., Phone: 524-0202
- MAINE**
Bangor...Standard Electric Company, Phone: 942-6713
Lewiston...Lewiston Supply Company, Phone: 784-4083
Portland...Maine Hardware Stores, Phone: 773-5605
- MARYLAND**
Baltimore...Baltimore Gas Light Co., Phone: MU 5-7670
Exeello Public Service Corp., Phone: 944-6700
People's Elec. Supply Co., Inc., Phone: PL 2-5335
Cockeysville...Bales Electric Supply Co., Phone: 666-1234
Salisbury...Arterraft Elec. Supply Co., Phone: 741-6951
Silver Spring...Beacon Elec. Sup. Co., Inc., Phone: JU 7-8900
- MASSACHUSETTS**
Boston...S. Blechner Co., Inc., Phone: LI 2-6493
Ralph Pihl Electric Supply Co., Phone: 423-0121
Lawrence...Finberg Supply Co., Phone: MU 3-8755
Lowell...Atlantic Distributing Co., Phone: 458-6857
West Springfield...George Elec. Supply, Phone: 734-6429
- MICHIGAN**
Detroit...Center Electric Supply Co., Phone: 342-3200
Madison Elec. Co., Phone: TR 1-5160
Puritan Electric Company, Phone: UN 3-0503
Splane Electric Supply Co., Phone: WO 3-4400
Grand Rapids...Lischer's Wholesale Electric, Phone: 458-1385
Monroe...Monroe Electric Supply Co., Phone: 341-6988
Okemos...Modern Wholesale Elec. Supply, Phone: ED 2-6501
- MINNESOTA**
Duluth...Northern Elec. Supply Co., Phone: RA 2-0551
Minneapolis...Northland Elec. Supply Co., Phone: FE 2-4481
St. Paul...Lux Electric Co., Inc., Phone: 227-6601
- MISSISSIPPI**
Greenwood...Delta Pibg & Elec. Supply Co., Phone: GL 3-5623
Gulfport...Gulfport Electric, Phone: 864-7731
Humboldt...Prichard Elec., Inc., Phone: 864-1819
- MISSOURI**
Kansas City
Kansas City Light & Fixture Co., Inc., Phone: VI 2-4201
Tiemann-Hess Electric Supply Co., Phone: BA 1-3368
Springfield...Southern Materials Co., Phone: UN 5-2822
St. Louis...Gross Chandler
Phone: Office & Factory, CE 1-0660 Showrooms, VO 3-1180
- MONTANA**
Great Falls...Glacier State Elec. Supply Co., Phone: 761-4220
- NEBRASKA**
Omaha...United Electric Supply Co., Phone: 553-4554
- NEW JERSEY**
Dover...Dover Electrical Supply Co., Inc., Phone: 366-2800
Ledgewood...Campbell Elec. Supply Corp., Phone: 684-7145
Paterson...Feldman Lighting Fixture Co., Phone: SH 2-7329
Vee Dee Elec. Supply, Inc., Phone: LA 5-2324
Pennsauken...Uhr Elec. Supply Co.
Phone: NO 2-3456—(N.J.) WA 5-3000—(Phila.)
Phillipsburg...Fromm Elec. Supply Corp., Phone: GI 4-1135
Ridgefield Park...Vee Dee Elec. Distr., Inc., Phone: DI 2-5310
Toms River...Goodfriend Elec. Sup. Inc., Phone: DI 9-1400
Union...Surrey Electric Supply, Phone: MU 8-9430
- NEW MEXICO**
Albuquerque...Westinghouse Elec. Supply Co., Phone: 247-3646
Artesia...New Mexico Supply Co., Phone: SH 6-2773
- NEW YORK**
Albany...Tusang-Barhydt, Inc., Phone: 489-5576
Binghamton...Florence Electric Supply Co., Phone: 724-2455
Buffalo...Davis Electric Supply Co., Phone: 896-8903
Chicoes...Ontario Supply Corp., Phone: CE 7-4723
Glens Falls...Hill Electric Supply Co., Phone: RX 3-3436
Hicksville...Aetna Elec. Dist. Corp., Phone: WE 1-4400
Hornell...Florence Elec. Supply Co., Phone: 524-6444
Lynbrook...Fairway Electric Supply Co., Phone: LI 3-5400
Mineola...National Elec. Supply Co., Phone: OL 1-2525
New York...Capitol Elec. Supply Co., Inc., Phone: LE 4-3546
Midway Elec. Supply Co., Inc., Phone: AU 6-2300
U.S. Electric Supply, Phone: CO 7-9472
Riverhead, L.I...R & M Elec. Supply Co., Phone: PA 7-8620
White Plains...Clarfield Electric Supply, Phone: WH 3-8600
Yonkers...Goler Elec. Supply Co., Phone: YO 3-3527
- NORTH CAROLINA**
Charlotte...Southern States Sub. Co., Inc., Phone: FR 5-6081
Sanford...Capt. Rod Sullivan, Inc., Phone: 775-2325
- OHIO**
Cincinnati...Richard Electric Supply Co., Phone: 351-1010
Cleveland...Westinghouse Elec. Supply Co., Phone: 942-0702
Dayton...Westinghouse Elec. Supply Co., Phone: 224-0331
- OKLAHOMA**
Oilton...Economy Supply Company, Phone: UN 2-3224
Oklahoma City...Cook Electric Supply Co., Phone: CE 5-7461
Electric Supply of Oklahoma, Phone: CE 2-2108
Tulsa...Clark Electric Supply Co., Phone: LU 7-0133
Nelson Electric Supply Co., Phone: LU 5-1241
- OREGON**
Portland...Gardner & Beeson Co., Phone: CA 7-1264
Platt Electric Supply, Phone: CA 2-0632
Westinghouse Elec. Supply Co., Phone: 226-7361
- PENNSYLVANIA**
Bethlehem...Fromm Elec. Supply Corp., Phone: 867-0511
Exeter...J. Friedman Elec. Supply Co., Inc.
Phone: 654-3371, GL 7-7241
Gettysburg...M. A. Hartley & Co., Phone: 334-3175
Greensburg...Scott Electric Company, Phone: TE 4-4321
Harrisburg...Fluorescent Supply Company, Phone: 234-4103
Harrisburg...Harrisburg Elec. Supply Co., Phone: 584-5893
Hornell...Raub Supply Co., Phone: 564-1711
United Elec. Supply Co., Phone: 234-5171
Lancaster...Raub Supply Company, Phone: 397-6221
Norristown...Lighting Equip. & Sup. Co., Phone: CE 2-0722
Norristown...Lighting Equip. & Sup. Co., Phone: BR 5-7211, 12
Philadelphia...Eastern Elec. Supply Co., Phone: PO 9-0400
Harry Horn, Inc., Phone: WA 5-6600
Morse & Robbins, Inc., Phone: LO 4-1752
Westinghouse Electric Supply Co., Phone: WA 2-8501
West Phila. Elec. Supply Co., Phone: GR 4-9200
Pittsburgh...Allied Elec. Supply Co., Phone: 391-0200
La Salle Elec. Supply Co., Phone: 322-1450
Pottsville...Scranton Elec. Construction Co., Phone: 622-6041
Prospect Park...Eagle Elec. Supply Co.
Phone: LE 2-0783-4-5 SA 6-3555
Reading...Fromm Elec. Supply Corp., Phone: 373-6231
Williamsport...Raub Supply Co., Phone: 323-3621
York...YESCO (York Elec. Supply Co.), Phone: 81561
- RHODE ISLAND**
Pawtucket...Equitable Elec. Supply Co., Phone: PA 5-2400
Providence...Leavitt-Colson Company, Phone: JA 1-8800
Mastro Elec. Supply Co., Inc., Phone: HO 7-7700, 01, 02
Tops Elec. Supply Co., Phone: UN 1-0695
- SOUTH CAROLINA**
Spartanburg...Lighting, Inc., Phone: 585-6919
- TENNESSEE**
Jackson...Southern Supply Company, Phone: 424-1900
Knoxville...Square Elec. Supply Co., Phone: 525-9346
Memphis...Lighting, Inc., Phone: 682-2426
Nashville...Nashville Elec. Supply Corp., Phone: 242-2601
- TEXAS**
Abilene...Cummins Supply Co., Phone: DR 2-7837
Amarillo...Wilson Supply Company, Phone: OR 3-1705
Corpus Christi...Corpus Christi Hdwe. Co., Phone: TU 4-4555
Dallas...Buffalo Electric Co., Phone: HA 1-7671
Dallas...Meletio Electric Supply Co., Phone: RI 1-3921
Watson Elec. Supply Co., Phone: RI 2-8441
El Paso...Elec. & Mechanical Supply Co., Phone: KE 2-4614
Fort Worth...Cummins Supply Co., Phone: ED 5-9563
Houston...Buffalo Elec. Company, Phone: CA 8-4431
Marlin Associates, Phone: CA 8-8473
Lubbock...Fields & Company, Phone: PO 2-0241
Odessa...Cummins Elec. Supply Co., Phone: FE 2-0953
San Antonio...Central Distributing Co., Phone: DI 4-0103
Wichita Falls...Cummins Supply Co., Phone: 766-0221
- UTAH**
Salt Lake City...Westinghouse Elec. Supply Co.
Phone: DA 2-2441
- VIRGINIA**
Fairfax...Beacon Elec. Supply Co., Inc., Phone: CR 3-3000
Lynchburg...Eastern Elec. Company, Phone: 847-4441
Newport News...Centralite Supply Co., Phone: 247-5874
Norfolk...Electrical Exchange Corp., Phone: KI 5-5441
Electrical Suppliers, Inc., Phone: 627-9531
Winchester...Raub Supply Co., Phone: 662-4134
- WASHINGTON**
Seattle...Stusser Electric Company, Phone: MA 3-1501
Tacoma...Love Electric Company, Phone: FU 3-5551
- WEST VIRGINIA**
Charleston...Goldfarb Elec. Supply Co., Phone: 342-2153
Ronconverte...Blue Grass Electric, Phone: 647-5200
- WISCONSIN**
Fond-du-Lac...Central Elec. Supply Co., Phone: 922-1880
Green Bay...Westinghouse Elec. Supply, Phone: 435-3751
Manitowish...Manitowish Electric Supply, Phone: MU 2-3848
Milwaukee...L. Neher Company, Phone: UP 1-5700
Oshkosh...Electrical Contractors Supply, Inc., Phone: 235-0220



THIS WILL GET YOU ANY NUMBER YOUR CUSTOMER WANTS

Your Progress "cover-to-cover" distributor is the one-stop lighting center for your area. He has every lighting fixture in the comprehensive Progress catalog in his stock for immediate delivery—what you want, when you want it. Progress offers you and your customers the widest choice of popularly-priced, eye-appealing lighting fixtures. And delivery is only as far away as a phone call to your "cover-to-cover" distributor. Life gets simpler every day. That's Progress!

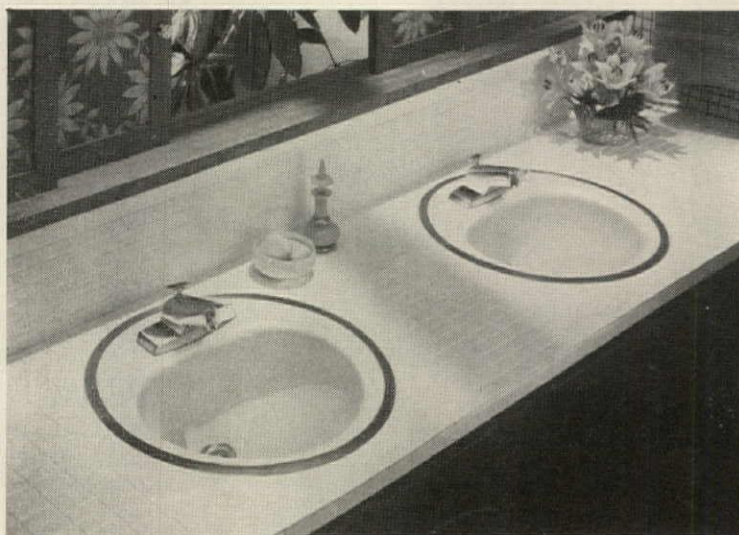
PROGRESS MANUFACTURING CO. INC. **proqress** PHILADELPHIA, PENNA., 19134

American-Standard presents six beautiful ideas in built-ins

These ideas put more bathroom appeal into the homes you build!

Women can't get excited about new bathrooms that look just like their old ones. With these new American-Standard lavatories, *your* bathrooms will be arrestingly different. They are built-ins, with all the luxury that word promises. They're new in shape. New in convenience features. One glance at them carries more selling conviction than a thousand words. Yet their installed price is really not much higher than for a lavatory that just sits there, doing nothing for your salesman.

Want singles to make small bathrooms and powder rooms look bigger? We have them. Want space-saving twins for twice the usefulness, twice the appeal? Here they are. And there are more styles where these come from—all available in lifetime colors and white. For information on new lavatories and modern washerless faucets, ask your American-Standard plumbing contractor. Or write American-Standard, 40 West 40th Street, New York, N.Y. 10018.



IDEA #1—THE CIRCLYN* LAVATORY • Popular 18-inch diameter—designed for fast installation • Lifetime cast iron with fused-on, acid-resisting enamel



IDEA #4—THE OVALYN* LAVATORY • 19 $\frac{1}{4}$ by 16 $\frac{1}{2}$ and 21 $\frac{1}{4}$ by 17 $\frac{1}{4}$ -inch • Also available for rim installation • Solid vitreous china resists chipping, acids and scouring



AMERICAN-Standard and Standard are trademarks of American Radiator & Standard Sanitary Corporation

AMERICAN-Standard
PLUMBING AND HEATING DIVISION



IDEA #2—THE NEW LEDGELYN* LAVATORY • Large 19-by 16-inch size in beautiful classic oval styling • Lifetime cast iron with fused-on, acid-resisting enamel



IDEA #3—THE NEW SPACELYN* LAVATORY • Smart styling, 12 by 20 inches, fits in a 16-inch countertop • Lifetime cast iron with fused-on, acid-resisting enamel



IDEA #5—THE NEW LAURALYN* LAVATORY • 22 by 18 inches. Slanted back ledge brings faucets closer • Solid vitreous china resists chipping, acids and scouring

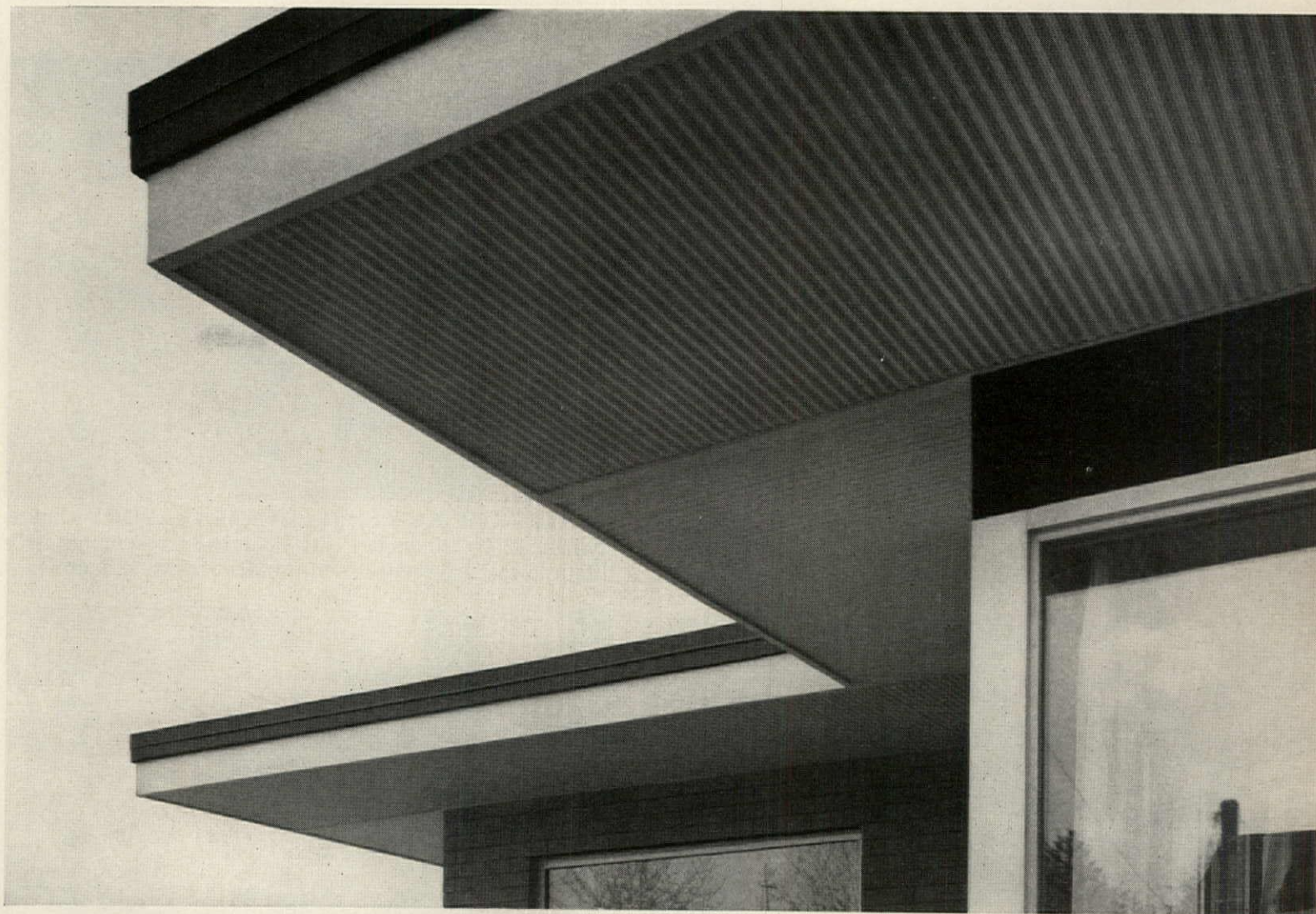


IDEA #6—THE GRACELYN* LAVATORY • 32, 36, and 42 inches long; 18 inches wide. Anti-splash rim • One-piece vitreous china top and bowl; beige wood cabinet

*Trademarks, AR & SS Corp.

*For "The House You Don't Have to Paint..."
The House That Saves You Money, Sells Best...*

REYNOLDS ALUMINUM BUILDING PRODUCTS



Reynolds Aluminum Soffit System. Entirely pre-finished and self-supporting. Eliminates vent strips and lookouts. Reduces need of gable louvers and roof vents.

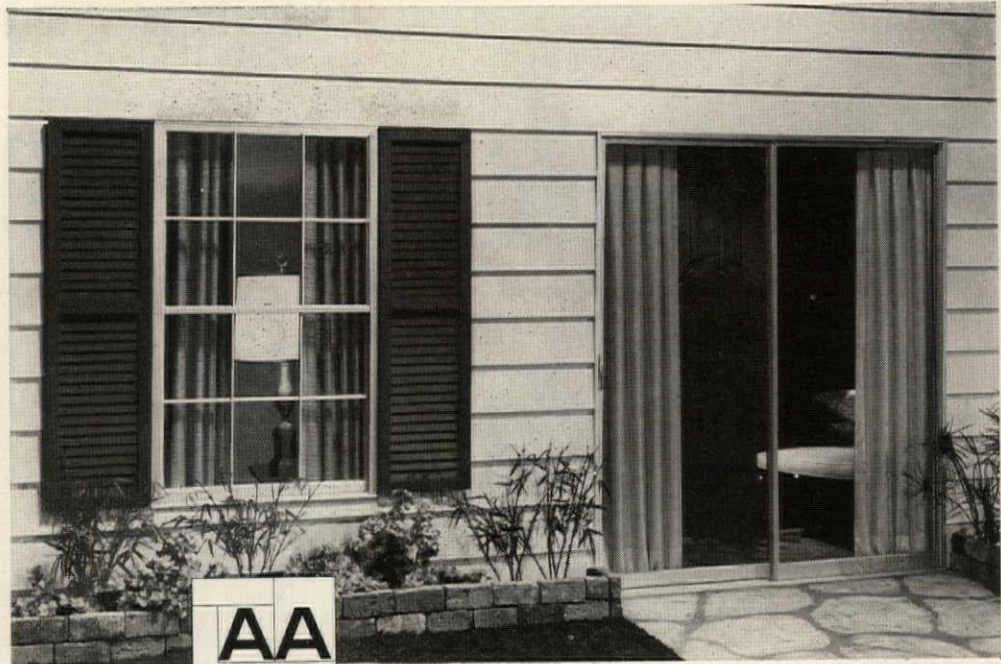
System consists of ribbed aluminum sheet perforated for ventilation (or non-perforated), which slides into place along aluminum fascia and frieze runners. Polyethylene spline seals soffit in place. Variety of runners for sloping, horizontal and extra wide installations. Widths from 12"

to 48" in coils 50' long. Pre-finish is Colorweld® polar white baked enamel.

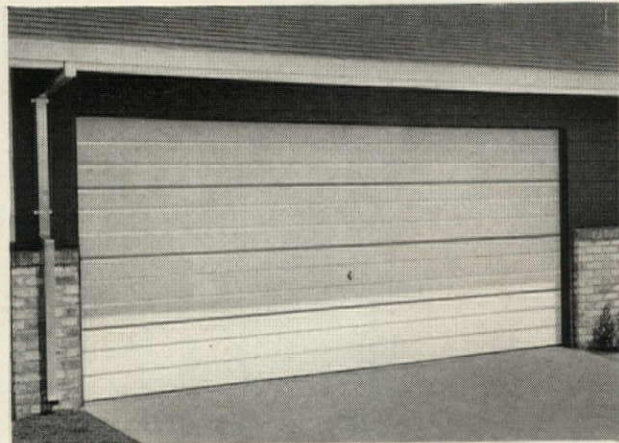
This soffit is also ideal for apartments, carports, walkways. Makes a dramatic selling feature — good-looking, efficient, time-defying, with no need of protective painting by builder or customer. Check coupon for more information. Or contact your nearest Reynolds Aluminum Building Products Dealer. Reynolds Metals Co., Richmond, Va.

Reynolds Aluminum Window and Sliding Glass Doors.

You are doubly assured of the finest in Windows and Sliding Doors by the Reynolds "Mark of Quality" and the "Quality Certified" emblem of AAMA—the Architectural Aluminum Manufacturers Association. Single-Hung, Double-Hung, Traverse, Casement and Awning types. Outstanding in design, in engineering and in precision, manufactured by Reynolds. Each window and door certified to meet the quality standards of the AAMA.



Reynolds Aluminum Rain-Carrying Equipment. These quality gutters and downspouts add homeselling power far beyond their low initial cost. They fit today's trend in eliminating maintenance. Embossed Ogee Gutter with Rectangular Conductor pipe in 4", 5" and 6" sizes (5" also in mill finish). Half-Round Eaves Trough in plain or embossed finish, 5" and 6" sizes. Quality and Workmanship guaranteed in writing. Check coupon. Or see your Dealer.



New Reynolds "Rib-Dor," All-Aluminum Garage Door. Rigid aircraft construction. Each section a full-width aluminum panel lock-rolled into rugged aluminum frames, riveted on four sides. Also riveted to muntin stiffeners. Panels are pre-finished—white inside, choice of white, beige, green outside. Finger-tip operation. In one-car and two-car sizes, packaged complete in one carton. Check the coupon or see your Reynolds Dealer.

► Your Dealer is the Man to See for REYNOLDS ALUMINUM BUILDING PRODUCTS

A complete package of Aluminum Building Products for "The House You Don't Have to Paint."

- Windows • Shingles • Gutters • Downspouts • Exterior Trim & Soffit • Combination Doors • Awnings • Attic Vents & Louvers
- Shutters • Sliding Glass Doors • Thresholds • Weatherstripping
- Ornamental Railing • Nails • Doors • Insulation Flashing
- Storm & Screen Doors

Improved distribution—both in maintenance of dealers' stocks and in prompt servicing from convenient warehouses—is now assured through Reynolds Aluminum Building Products and Supply Division of Reynolds Metals Company. Contact your dealer. Or mail the coupon.

MAIL THIS COUPON

Building Products and Supply Division, Dept. H-H-9
Reynolds Metals Company, Richmond, Va. 23218

Please send me full information on your Reynolds Aluminum
 Soffit Systems Windows Sliding Doors Garage Doors
 Rain-Carrying Equipment Other _____

Company _____

Name _____ Title _____

Street _____

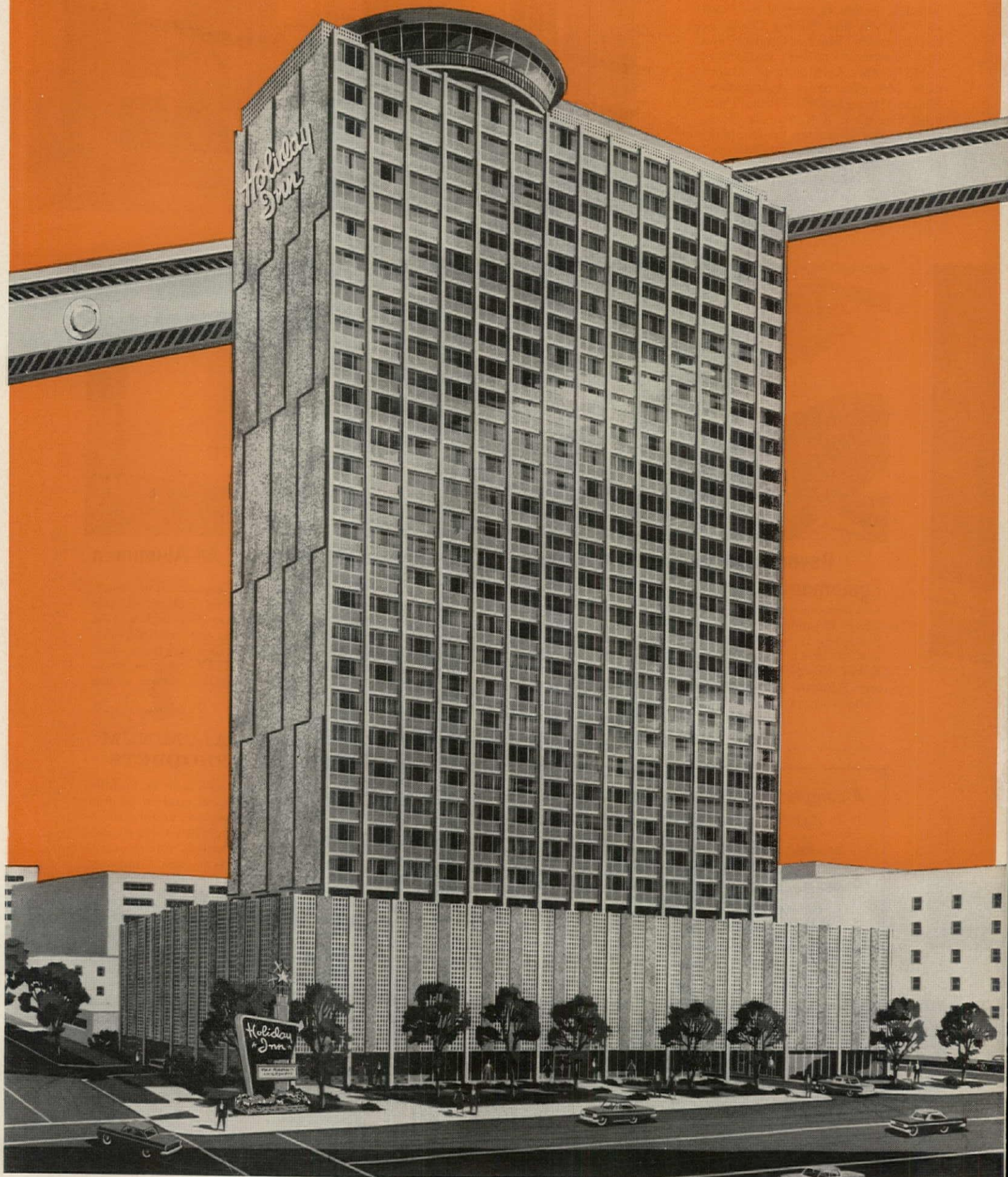
City _____ Zone _____ State _____



REYNOLDS
where new ideas take shape in
ALUMINUM

Watch "The Richard Boone REYNOLDS ALUMINUM SHOW" Tuesdays, NBC-TV

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 is a Hunter engineering triumph. It's NEMA Verified, UL approved, easy to install, completely safe—backed by Hunter's 80 years of experience.

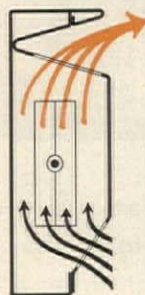
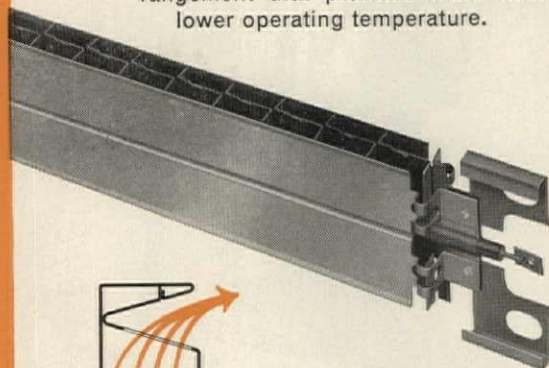
Hunter[®]
ELECTRIC HEAT
It's Matchless!



HUNTER ALSO MAKES CEILING CABLE, WALL,
BATHROOM AND PORTABLE HEATERS

EXTRA HEAT POWER

Patented heat exchanger has unique fin arrangement that provides more heat at lower operating temperature.



TOPS FOR CLEANLINESS

Directional baffles thrust heated air into room, away from walls, for most effective heating and added cleanliness.

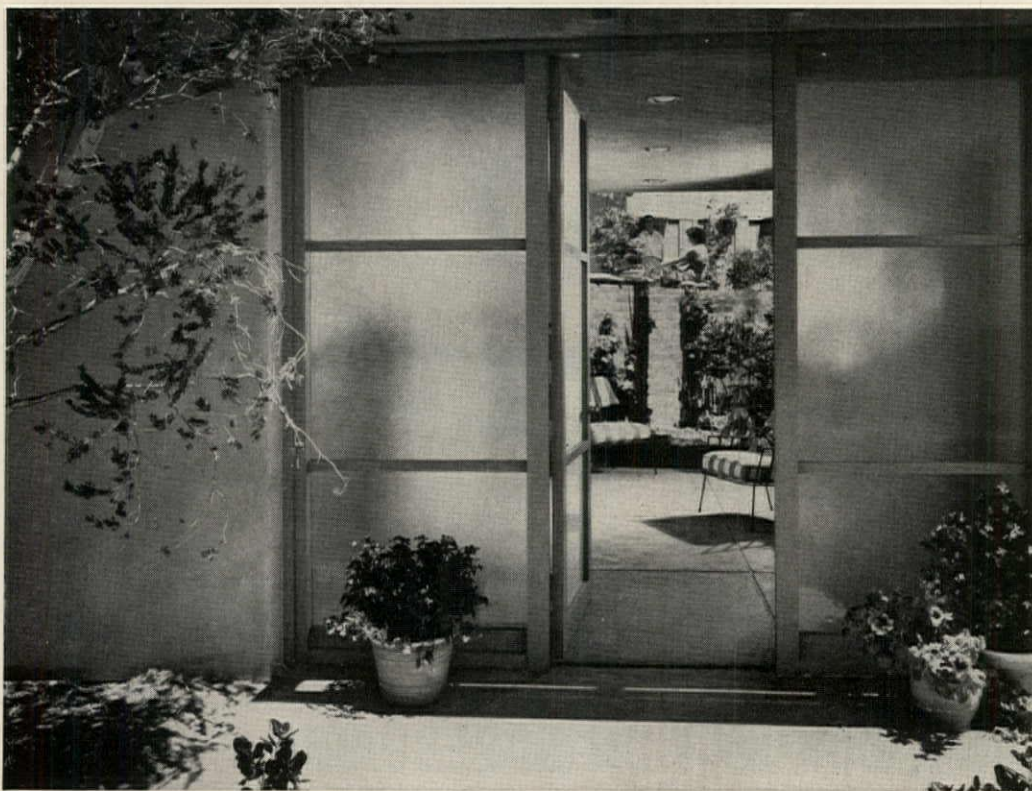
SEND COUPON TODAY FOR CATALOG:

Hunter Division, Robbins & Myers, Inc.
2500 Frisco Ave., Memphis, Tenn.—38114
Please send Hunter Electric Heat catalog to:

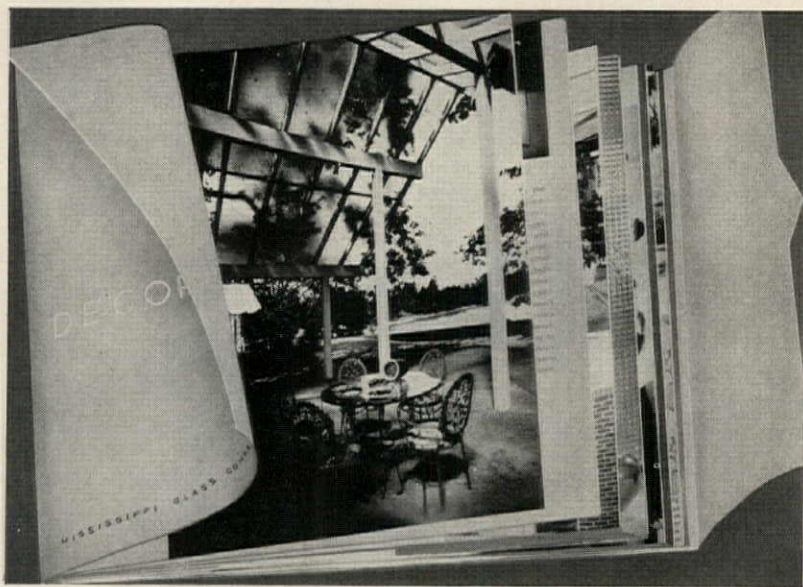
Name _____

Company _____

Address _____



**FREE GLASS BOOKLET OPENS THE DOOR
TO NEW CONCEPTS IN DECOR BEAUTY**



Get this exciting new booklet featuring dramatic textures in patterned glass. Actual photographs, many in color, illustrate countless ways to brighten and beautify homes with translucent, light diffusing glass by Mississippi. Plan now to add lustre to living for your clients with Mississippi Glass . . . the modern material that makes daylight a vibrant, interesting part of any home interior . . . in every room in the house. Send today. Request booklet, "Decorative Glass". Address Department 9.



**MISSISSIPPI
GLASS COMPANY**
88 Angelica Street • St. Louis, Missouri 63147
NEW YORK • CHICAGO • FULLERTON, CALIFORNIA



LARGEST DOMESTIC MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS



A MCGRAW HILL/DODGE PUBLICATION

House & Home

Regional Editions

are now available

to advertisers

Every Month

beginning with the

October 1964

issue



B&G BOOSTER

This is the key unit of *Hydro-Flo* Heating—an electric pump which circulates hot water *quietly* through the heating system. The Booster rushes heat instantly to all rooms when demanded by the thermostat and shuts off when the heat requirement is satisfied.



Hydro-Flo HEATING...FOR PLEASANT LIVING...AND FASTER SELLING

B&G Hydro-Flo Heating adds a *genuine quality touch* to your homes...assures the buyer of more value for his money.

No other heating method can offer so much immediate comfort or so many possibilities for more gracious living in the future. The B&G Hydro-Flo System endows a home with all the essentials of good heating...*radiant sunny warmth*...operating *economy*...and *long-life* of equipment!

It's cleaner heat—doesn't soil wall and draperies. It's *quiet* heat—no fan hum. A Hydro-Flo System can be easily and inexpensively zoned—a particularly important advantage in heating split level homes. And snow melting for sidewalks and driveway is an optional labor-saving feature.

Money can't buy finer, yet the benefits of the B&G Hydro-Flo System are within the cost limits of the modest home. For further information write to ITT Bell & Gossett, Inc., a subsidiary of International Telephone and Telegraph Corporation, Morton Grove, Illinois, Dept. IE-10.

BELL & GOSSETT
a subsidiary of **ITT**

If the kitchen "sells" homes and apartments (you know how often it *does!*), the new Caloric 75 is loaded with lots of 'good sense' features to pull home sales for builders that other double-oven ranges can't! Count 'em—

Bigger, better, faster Ultra Ray broiler burner.* Caloric brings infra-red broiling to peak performance, with an exclusive design burner that focuses intense rays over a much larger area. Reaches broiling heat in seconds—no warm-up, no waiting. Cuts broiling time 30%. Seals in meat juices, gives delicious outdoor broil flavor.

80% larger broiling pan. Ends "staggered" broiling. Takes 4 half chickens, four 1½ pound steaks, 20 lamb chops, 25 hamburgers. And Caloric's new broiler "aims" infra-red cooking rays over every inch . . . outer edges of meats cook as perfectly as in center of pan.

Broiler located at ideal height. It's waist-high, where housewife can easily tend meats, turn them, watch cooking through *Observador®* window. No reaching tiptoe to an upper broiler and risking hot grease splatters on hands, face.



No stooping to a floor-level broiler. Broiling becomes as handy as top-of-range cooking.

Broil and bake in same giant oven compartment. Broiler doesn't "steal" space from baking area. Here's a full 25-inch width, 20-inch depth that can take big roasts, feast-size turkeys, biggest casseroles. Ideal oven for all big baking.

Upper oven equally ideal for "smaller" dishes. Perfect for pies, cakes, pastries . . . for frozen foods, portion-pack delicacies. Quick heat-ups or regular baking. It takes roast and poultry, too. Housewife can cook in *two different* ovens at *two different* temperatures—at the *same* time! And controls are on one side, stay cool-to-the-hand.

Both ovens have Cook and Keep Warm systems. Homemaker can use either oven for automatic cooking exactly to her taste, for keeping food wonderfully dinner-ready for hours without over-cooking.

And that only *begins* to list the 'good sense' features to delight *prospects*, sell more homes for builders.

At last! First double-decker gas range that makes 'good sense' for more home and apartment sales!



Installs easy, too. No problem, no extra cost for you. The Caloric 75 slips right in—has height and width clearances that permit it to fit with conventional cabinetry.

We do big pre-selling job for you! Do it with full page, full color ads in Sunday Supplements reaching 40 key markets—including your immediate area. These ads make sure that people by the millions will know all about the new Caloric 75—and *want* it—*before*—they visit your homes. Ad copy and vivid illustrations highlight all the range's advances and advantages . . . show and explain the 'good sense' features that make this double-oven range so unique, so much more up-to-date, efficient, and convenient. Readers will be pre-sold on it from the inside out! So will millions of TV viewers, coast-to-coast—by compelling commercials on the popular, high-rated Ozzie and Harriet show.

Clinch new home and apartment sales in your kitchens with the new Caloric 75! *Guaranteed for life of range. USA Patent 3,122,197



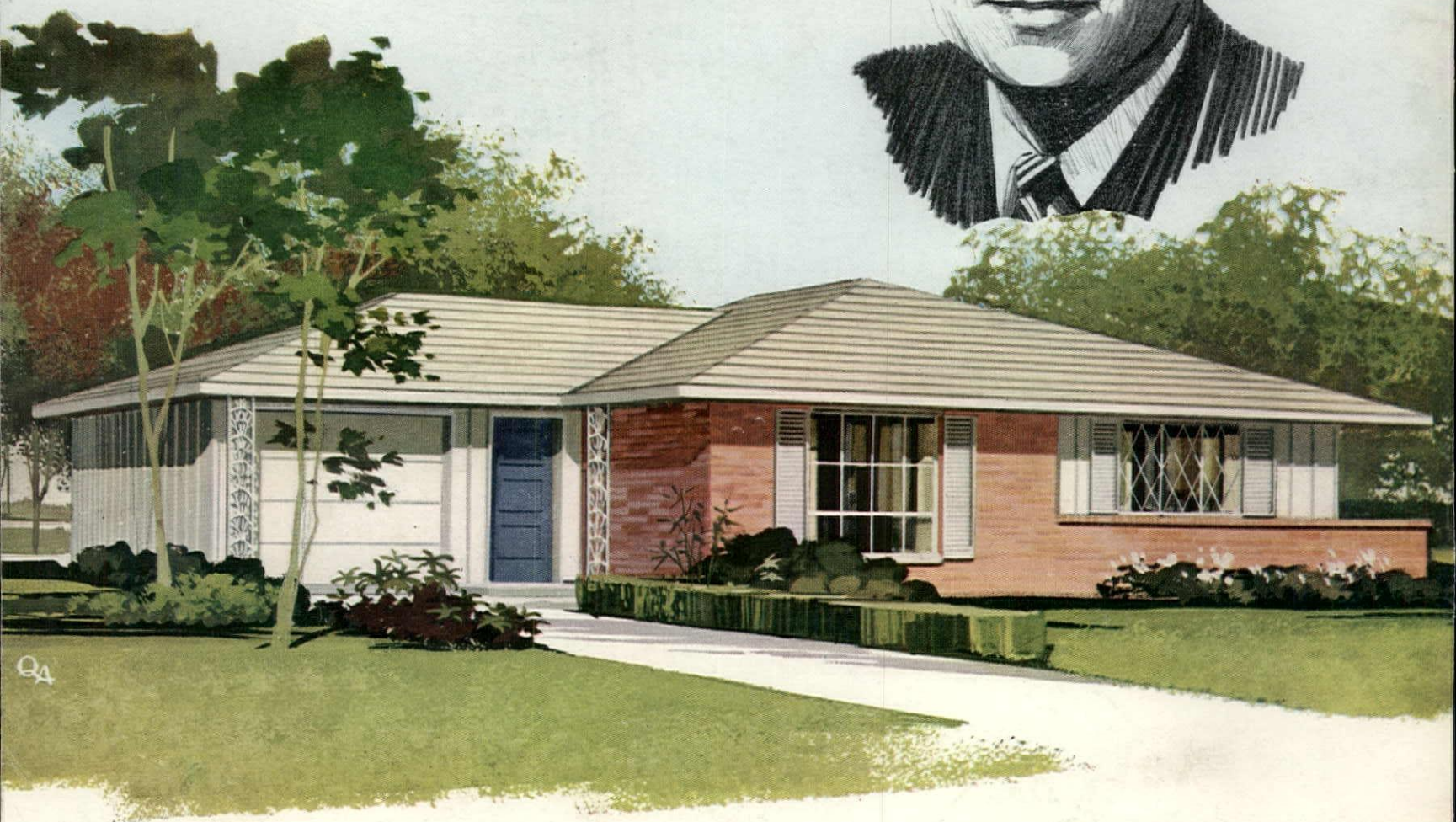
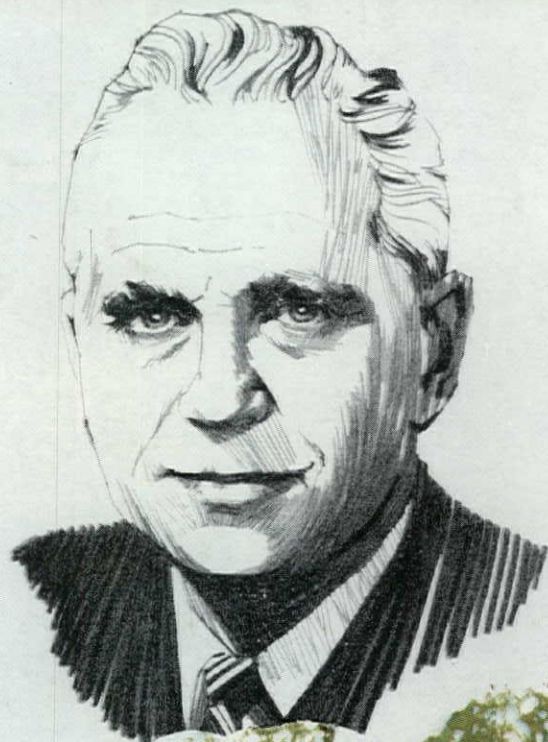
NEW
Caloric 75

CALORIC CORPORATION, Tipton, Pa.

Circle 1 on Reader Service Card

Portrait of a successful builder

Austin O'Toole, of Pembroke, Mass., has been a National Homes builder-dealer since 1957. His success has been steady, his operation expanding. Today, Mr. O'Toole's Greater Boston Builders serves the entire South Shore of Boston.



“Saving people money made my business grow.”

—Austin O'Toole

“It's simply a matter of passing on savings which National Homes has passed on to me,” says Mr. O'Toole. “National can afford to do this because of their tremendous purchasing power. They make it possible for me to build and sell homes at a lower cost, so that I can undersell competition in my market on a wide selection of homes.” From National's complete builder services, Mr. O'Toole also credits advertising

and promotional aids as important to his operation. As he points out, “These important services keep my total costs in line.”

If you'd like to realize the kind of achievement that Austin O'Toole has enjoyed for eight years, you'd be wise to visit your nearest National Homes plant. Call or wire and we'll arrange your visit right away.



National Homes Corporation

Lafayette, Indiana

Horseheads, New York

Tyler, Texas